



# COLLEGE CATALOG

2020-21

[www.cptc.edu](http://www.cptc.edu)

# Table of Contents

Redefining Education at Clover Park .....	5
Welcome to Clover Park Technical College.....	6
Academic Calendar.....	7
Who, Where, and What We Are .....	12
Becoming a Student.....	15
Getting Support.....	19
Financial Aid .....	21
International Students .....	28
Campus Life and Services .....	31
Program Descriptions .....	35
Courses .....	170
Short-Term Training Programs.....	276
Policies and Procedures .....	279
Full-Time Faculty & Administration .....	312





# Redefining Education at Clover Park

At Clover Park Technical College, we have a long tradition of educating tomorrow's workforce. In fact, for more than 75 years we've focused on providing a practical, relevant education to build the skills necessary for students to succeed in their chosen career field. Our hands-on learning approach effectively simulates a real-world working environment so students enter the workforce ready to apply what they learned, and our Guided Pathways approach to education provides even more support to students along the way. With more than 40 programs in seven different school groups, we offer the skills to achieve a career that's both fulfilling and in demand.

# Welcome to Clover Park Technical College

Dear Student,

Welcome to Clover Park Technical College!

Whether you're entering college for the first time or returning to college to prepare yourself for a career change, we're excited to have you here and want you to know that CPTC is the place for you. As a college committed to "educating tomorrow's workforce," our program areas focus on the specific training and hands-on experience you'll need to embark on a challenging and rewarding career.

We're here to support you every step of the way. Our Foundation offers quarterly scholarships for financial support, our Entry Services team provides assistance through the enrollment process, and our counselors and advisers are eager to help keep you on track and see you succeed. The faculty members in our more than 40 programs are all experts in their fields who maintain strong bonds with business and industry and who are always looking at ways to improve their students' experience and training to keep pace with current trends.

**As a result, CPTC graduates are regarded highly by employers for their relevant knowledge and technical skills.**

We take a great deal of pride in our long history of providing excellent, affordable education to the Lakewood and South Hill communities. We continue to look ahead to the future to ensure our students the best possible experience and training. Last year we completed a state-of-the-art Center for Advanced Manufacturing Technology and are continuing our work to transition to the Guided Pathways approach to education, which will help simplify and streamline the process for students to pursue a degree or certificate.

CPTC also has much to offer students beyond the classroom, from the Associated Student Government to campus organizations, professional associations, community work-based learning, and more. I encourage you to take advantage of these opportunities to enrich your education and development.

Don't wait! Get started today working toward your educational goals by contacting one of our friendly and helpful Entry Services staff members. They will answer your questions and help you through our enrollment and entry process.

We believe in your future.

*-Dr. Joyce Loveday, President*

# Academic Calendar

For some programs, calendar dates vary, depending on training schedules.

**July 2020**

Summer Quarter Start	Jul 1
Independence Day Observed (College Closed)	Jul 3
Program Information Session (Classrooms, 3 p.m.)	Jul 8
Program Information Session (Classrooms, 3 p.m.)	Jul 22

**August 2020**

Program Information Session (Classrooms, 3 p.m.)	Aug 12
Program Information Session (Classrooms, 3 p.m.)	Aug 26
Financial Aid Deadline for Fall Quarter	Aug 28

**September 2020**

Summer Quarter Ends	Sept 1
Summer Break	Sept 2-25
Labor Day (College Closed)	Sept 7
Fall Quarter Fees Due	Sept 11
New Student Orientation	Sept 24
Professional Service Day	Sept 24
Fall Quarter Start	Sept 28

**October 2020**

Program Information Session (Classrooms, 3 p.m.)	Oct 14
Fall Program Expo (Building 23, 3–7 p.m.)	Oct 28

**November 2020**



Faculty In-Service	Nov 6
Veterans Day Ceremony	TBD
Veterans Day Observed (College Closed)	Nov 11
Thanksgiving (College Closed)	Nov 26- 27

### Winter Quarter Registration

Priority Registration (Running Start, High School, Veterans)	Nov 5
Continuing Student Registration	Nov 9-12
Open Registration	Nov 13- Jan 5

### December 2020

Financial Aid Deadline for Winter Quarter	Dec 4
Program Information Session (Classrooms, 3 p.m.)	Dec 9
Last Day of Fall Quarter	Dec 16
Professional Service Day	Dec 17
Winter Quarter Fees Due	Dec 18
New Student Orientation	Dec 17
Winter Break	Dec 17- Jan 1
Christmas (College Closed)	Dec 24-25

### January 2021

New Year's Day (College Closed)	Jan 1
Winter Quarter Start	Jan 4
Program Information Session (Classrooms, 3 p.m.)	Jan 13
Martin Luther King Day (College Closed)	Jan 18
Program Information Session (Classrooms, 3 p.m.)	Jan 27

### February 2021

Program Information Session (Classrooms, 3 p.m.) Feb 10

President's Day (College Closed) Feb 15

Program Information Session (Classrooms, 3 p.m.) Feb 24

**Spring Quarter Registration**

Priority Registration (Running Start, High School, Veterans) Feb 5

Continuing Student Registration Feb 8-11

Open Registration Feb 12-  
Apr 6

**March 2021**

Financial Aid Deadline for Spring Quarter Mar 5

Faculty In-Service Mar 5

Program Information Session (Classrooms, 3 p.m.) Mar 10

Spring Quarter Fees Due Mar 19

Last day of Winter Quarter Mar 23

Professional Service Day Mar 24

Spring Break Mar 24-  
Apr 2

**April 2021**

Spring Quarter Start Apr 5

Program Information Session (Classrooms, 3 p.m.) Apr 14

Faculty In-Service Apr 23

Spring Program Expo (Building 23, 3 -7 p.m.) Apr 28

**May 2021**

Program Information Session (Classrooms, 3 p.m.)	May 12
Career Conference	May 13
Faculty In-Service	May 21
Program Information Session (Classrooms, 3 p.m.)	May 26
Memorial Day (College Closed)	May 31

### **Summer/Fall Quarter Registration**

Priority Registration (Running Start, High School, Veterans)	May 7
Continuing Student Registration	May 10-13
Open Registration for Summer Quarter	May 14– Jul 7
Open Registration for Fall Quarter	May 14– Sept 28

### **June 2021**

Financial Aid Deadline for Summer Quarter	Jun 4
Program Information Session (Classrooms, 3 p.m.)	Jun 9
Summer Quarter Fees Due	Jun 18
Graduation Ceremony	Jun 22
Last day of Spring Quarter	Jun 22
Quarter Break	Jun 23-Jul 2
Professional Service Day	Jun 23
New Student Orientation	TBD

# Who, Where, and What We Are

As a vital member of Washington’s higher education system, Clover Park Technical College offers more than 40 programs grouped into seven schools: Advanced Manufacturing; Aerospace and Aviation; Automotive and Trades; Business and Personal Services; Health and Human Development; Nursing; and Science, Technology, Engineering, and Design. Clover Park Technical College has two campuses: our main campus in Lakewood and our South Hill Campus just south of Puyallup (adjacent to Thun Field), where our aviation programs are located.

CPTC is here to help students redefine education to meet their needs. The college offers courses online and on campus for students getting ready for their first career, their next step within their career, or a new career. While the college has been part of the Pierce County community since the 1940s, its program and course offerings are consistently reevaluated to provide the most relevant and innovative training for in-demand career areas.

## Board of Trustees

The Clover Park Technical College Board of Trustees is composed of five community college district residents who are appointed by the governor to a five-year term. The board sets policy for the institution and delegates administrative authority to the president of the college.

**Eli Taylor, Chair**  
**Carol Mitchell, Vice Chair**  
**Mark Martinez**  
**Lua Pritchard**  
**Wayne Withrow**

## Our Vision, Themes, Mission, and Values

### Mission

Educating tomorrow's workforce.

### Vision

Strengthening our community through responsive education and services.

### Values

- Access

- Collaboration
- Diversity
- Equity
- Excellence
- Inclusion
- Innovation
- Respect

## Core Themes

### Workforce Preparation

Students will demonstrate the knowledge and skills necessary to access employment in their chosen industry.

- We will refine our method of tracking and measuring graduate employment.
- Each program’s alignment with industry expectations will be reviewed collaboratively with industry partners.
- Programs will actively assess student learning at the course, program, and college level.

### Student Success

Our students will complete their program at equitable rates and on time.

- We will implement high-impact, high-touch retention measures.
- We will eliminate pre-college English and math sequences and faculty will be trained in innovative practices.
- We will recruit diverse faculty and staff to strengthen our inclusive campus and focus on measuring and improving equity in student outcomes.

### Institutional Sustainability

CPTC will operate in a sustainable manner that enables us to prepare an educated workforce for the South Puget Sound.

- We will expand and diversify our revenue streams by implementing new programs and services in response to local needs.
- We will expand outreach efforts to diverse student populations, including international students, Running Start students, and recent high school graduates.
- We will seek national recognition for the excellent work our faculty and staff do in helping students achieve their goals.

## Equity

CPTC will cultivate an inclusive institutional culture and campus climate by valuing diversity and promoting equitable opportunities for all.

- We will address opportunity gaps through data analysis, programming and intentional interventions.
- We will provide support, training, professional development and resources for students, faculty and staff to achieve their full potential.
- We will develop and implement best practices to eliminate disparities and patterns of inequity.

## Accreditation

Clover Park Technical College is accredited by the Northwest Commission on Colleges and Universities.

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by the

Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution.

Individuals may also contact:

Northwest Commission on Colleges and Universities  
8060 165th Avenue N.E., Suite 100  
Redmond, WA 98052 (425) 558-4224 [www.nwccu.org](http://www.nwccu.org)

NWCCU is recognized by the U.S. Department of Education as the authority on the educational quality and institutional effectiveness of higher education institutions in the Northwest region of the United States, including the states of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington, as well as British Columbia, Canada.

Clover Park Technical College first received accreditation through NWCCU in December 1999.

## Program Accreditations and Certifications

Accreditation and certification have been granted to specific programs at Clover Park Technical College by:

- American Dental Association
- American Society of Health Systems Pharmacists
- Commission on the Accreditation of Allied Health Education Programs
- Federal Aviation Administration
- National Accrediting Agency for Clinical Laboratory Sciences
- National Automotive Technicians Educational Foundation
- National League for Nursing Commission for Nursing Education Accreditation
- Washington State Department of Health
- Washington State Department of Licensing
- Washington State Nursing Care Quality Assurance Commission

## Advisory Committees

Each career program at CPTC is guided by an advisory committee composed of employers and employees in the

field. These committees meet at least two times each year to provide recommendations about methods, procedures, equipment, and curriculum and to ensure that each program meets or exceeds the industry standards of that particular occupation.

## Clover Park Technical College Foundation

The Clover Park Technical College Foundation is a 501(c)(3) non-profit organization dedicated to the needs of CPTC students and programs. Established in 1992, the Foundation is overseen by a volunteer board of up to 24 members. Board membership reflects the diversity of the community and the industries served by the college.

The Foundation changes lives by:

- Raising funds for students, programs, equipment, technology, and capital projects.
- Introducing new friends and future supporters to the college.
- Helping students through difficult times, empowering them to stay in school with scholarships and emergency assistance funds.
- Supporting employee growth, development, and appreciation.
- Contributing to college-wide programs and initiatives.

The Clover Park Technical College Foundation Board of Directors is composed of local business and community leaders who volunteer their time and donate their talents and resources to raise friends and funds for the college. The funds raised through their efforts support the college and students through student scholarships and emergency grants, allow the college to acquire state-of-the-art equipment and technology, and offer faculty and staff professional development awards.

### Officers

Lori Banaszak, President  
Joe Lydic Vice President  
Caroline Henry, Secretary  
Mary Green, Treasurer  
David Harkness, Director at Large  
Kathryn Smith, Director at Large

### Directors

Alden Bishop  
Steve Brewer  
Harley Moberg  
Joyce Oubré  
Danielle Perkins  
Shelia Winston

### Ex Officio Directors

Janet Holm Executive Director  
Eli Taylor, CPTC Trustee Liaison  
Dr. Joyce Loveday, CPTC President  
Lisa Beach, CPTC Director of Compliance

# Becoming a Student

## Getting Started at CPTC

### 4 Easy Steps

#### 1. Connect with an Entry Coordinator

- All new students must meet with an Entry Coordinator in the Welcome Center (Bldg. 17).
- Explore career pathways and college services and discuss entry requirements.

#### 2. Apply for Admission & Financial Aid

- Apply for admission online at [www.cptc.edu/apply](http://www.cptc.edu/apply).
- Complete your Free Application for Federal Student Aid (FAFSA) online at [fafsa.ed.gov](http://fafsa.ed.gov) (college code 015984).
- Check FAFSA status on the financial aid portal at [www.cptc.edu/financial-aid/portal](http://www.cptc.edu/financial-aid/portal) and submit all additional documents to the Financial Aid Office (Bldg. 17).

#### 3. Assess & Review Your Placement

- Review placement options with an Entry Coordinator in the Welcome Center (Bldg. 17).
- Select a program, review education plan, and choose your classes.

#### 4. Register for Classes, Pay Tuition, & Buy Books

- Register for classes online at [www.cptc.edu/register](http://www.cptc.edu/register).
- Pay tuition and fees, purchase your books, and get started!

Clover Park Technical College is committed to providing equitable access to College events, programs, trainings and services to individuals with disabilities. If you need any disability related accommodation in order to access programs, trainings and/or services offered by CPTC, please contact the Disability Resources for Students (DRS) at [disabilityresources@cptc.edu](mailto:disabilityresources@cptc.edu). Please be aware that some accommodations require several days to arrange and providing as much advance notice as possible of your need for accommodations will increase the probability that we will be able to provide the accommodation when needed.

**Our staff is here to help you succeed at Clover Park Technical College.**

## Assessment

Students entering technical programs that have academic courses may be required to take the Accuplacer assessment or equivalent test. Assessment results are used to place students in the appropriate academic courses. The assessment test is untimed but generally takes approximately two hours to complete. There is no fee for the Accuplacer if the student is admitted to Clover Park Technical College; however, only the first two attempts are at no charge. For students not admitted to CPTC or students taking the Accuplacer for the third (or more) time, the non-refundable fee is \$19.

Assessment testing is not required prior to being admitted to the college unless the technical program selected requires that a minimum level score be obtained for admission. Do not delay. Allow ample time for assessment, educational planning, and registration prior to the beginning of a quarter.

Assessment testing is available on a drop-in basis. No appointment is necessary. See Enrollment Services to obtain a student ID number. If necessary, pay the testing fee in the cashier's office and then present the receipt and picture ID to the Assessment Center staff. To see office/testing hours go to: [www.cptc.edu/accuplacer](http://www.cptc.edu/accuplacer).

If an assessment test has been taken within the past 24 months at another college or special agency, the test results can be evaluated in the Enrollment Services Office and posted to the student record.

## College Entry

Students are eligible for entry to full-time programs at Clover Park Technical College as follows:

In accordance with WAC 131-12-010, any applicant for admission to Clover Park Technical College shall be admitted when, as determined by the chief administrative office or their designee, such applicant:

1. Is competent to profit from the curricular offerings of the college.
2. Is 18 years of age or older; or

3. Is a high school graduate (diploma or GED certificate); or
4. Has applied for admission under the provisions of a student enrollment options program, such as Running Start, Elective High School, or other local enrollment option program.

Some programs have additional entry requirements, including mandatory advising or additional fees. This information may be found in the program description section of the college catalog or on the program page of the CPTC website.

Clover Park Technical College entry applications are available online at [www.cptc.edu/apply](http://www.cptc.edu/apply), through the Welcome Center in Building 17, the Advising & Counseling Office in Building 17, or at a Program Information Session. Program Information Sessions occur every second and fourth Wednesday of each month when classes are in session.

Visit [www.cptc.edu/info-sessions](http://www.cptc.edu/info-sessions) for details.

## Exceptions

Students age 16 and over who meet the provisions of “Title III-Adult Education Programs” may enroll in certain adult basic education classes. Individuals admitted into such classes will be allowed to continue as long as they are able to demonstrate, through measurable academic progress, an ability to benefit.

Individuals who don’t meet the eligibility criteria for entry may appeal for special admission on a course-by-course basis. Criteria for granting an appeal are competency at an appropriate academic level and/or artistic or technical skill level, as well as the ability to participate in an adult learning environment. The college does not desire to replace or duplicate the functions of the local public schools. Appeals may be filed with the Vice President for Instruction or designee.

## Paying for College/Applying for Financial Aid

- Create a financial plan on how to pay for college, and apply early for possible financial aid, including scholarships, grants, and loans. See if you are eligible for additional funding on the Start Next Quarter website at [www.startnextquarter.org](http://www.startnextquarter.org).
- Submit a Free Application for Federal Student Aid (FAFSA) application at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) or a

Washington Application for State Financial Aid (WASFA) application at [www.readysetgrad.org/wasfa](http://www.readysetgrad.org/wasfa).

- If you apply for financial aid, you must complete all steps of the Financial Aid Application Process by posted deadlines at [www.cptc.edu/financial-aid/steps](http://www.cptc.edu/financial-aid/steps).
- Financial aid information and deadlines are available on the Financial Aid page at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid).
- Opportunity Grant and Basic Food Employment and Training (BFET) funding information is available at [www.cptc.edu/opportunity-grant](http://www.cptc.edu/opportunity-grant) or [www.cptc.edu/bfet](http://www.cptc.edu/bfet).
- Using veteran benefits? Visit our veterans page at [www.cptc.edu/veterans](http://www.cptc.edu/veterans).
- Explore WorkFirst and Worker Retraining Funding on our Workforce Development page at [www.cptc.edu/workforce-development](http://www.cptc.edu/workforce-development).
- Receive assistance with FAFSA, WASFA, loan applications and document fee by contacting the EOC Advisor at [eoc-advisor@cptc.edu](mailto:eoc-advisor@cptc.edu).

## Agency-Funded Students

Persons who qualify for assistance from the Division of Vocational Rehabilitation of the State of Washington or neighboring states, the Department of Labor and Industries, the Washington State Department of Social and Health Services, WorkSource, or the Employment Security Department may attend programs at Clover Park Technical College.

Agencies or students must provide the College with documentation for funding before classes begin.

The funding coordinator is available to answer your questions 8 a.m.-4:30 p.m., Monday-Friday, in Bldg. 17, Rm. 103E, or can be reached at 253-589-5663 or [agencyfunding@cptc.edu](mailto:agencyfunding@cptc.edu).

## Title IV Student Complaint Process

The Higher Education Act (HEA) prohibits an institution of higher education from engaging in a “substantial misrepresentation of the nature of its educational program, its financial charges, or the employability of its graduates.” 20 U.S.C. §1094(c)(3)(A). Further, each state must have “a process to review and appropriately act on complaints concerning the institution including enforcing applicable



State laws.” 34 C.F.R. § 600.9. The Washington State Board for Community and Technical Colleges (SBCTC) maintains a process to investigate complaints of this nature brought by community and technical college students in the state of Washington. For more information, contact the SBCTC Student Services Office at 360-704-4315.

## Continuing Education

The Workforce Development & Community Education Department at Clover Park Technical College offers seminars, workshops and credit and non-credit courses. We invite Pierce County residents of all ages to explore opportunities for lifelong learning for personal, professional, and community development. Seminars, workshops, and courses are offered in face-to-face, fully-online, and hybrid modes. For information on the department’s most current offerings and possible funding sources, please call 253-589-5575 or visit the Continuing Education page at [www.cptc.edu/workforce-development/continuing-ed](http://www.cptc.edu/workforce-development/continuing-ed). The office is open 8 a.m.-5 p.m., Monday- Friday, in Bldg. 16, Rm. 105, on the Lakewood Campus.

## Dual Credit for High School Students

Dual credit may be accepted for high school learning experiences where formal articulation agreements are in place. Contact Enrollment Services at 253-589-5638 or Pierce County Careers Connection at 253-583-8803. Courses that have Dual Credit Articulation agreements with the Pierce County Careers Connection are marked with an asterisk (\*) in both the program and course description.

## Northwest Career and Technical High School

**253-589-5770**

Northwest Career & Technical High School is a school of choice on the Clover Park Technical College campus that provides a rigorous educational program combined with career guidance and high-quality career and technical education. Students:

- Earn a high school diploma from Northwest Career & Technical High School.
- Earn a certificate of initial competencies in their chosen career path.

- Are prepared to articulate into postsecondary education and training opportunities.
- Can earn a certificate or a degree if they enroll in the Elective High School option.

## Adult High School Completion

**253-589-5770**

Adult High School classes are offered for persons 20 years of age or older who are not enrolled in a regular high school and want to earn an Adult High School diploma. These classes are academic in nature and meet Washington State requirements for High School Completion. Students enrolled in a regular high school may take Adult High School classes with the permission of their high school counselor; however, they must pay all class costs, including full tuition. More information is available from Northwest Career & Technical High School at 253-589-5770 or in Building 14.

## Running Start

**253-589-5701**

CPTC works closely with area high school counselors to plan appropriate educational experiences. Running Start is a statewide community and technical college program that was developed for academically qualified high school juniors and seniors who wish to enroll in courses that fulfill high school graduation requirements. If you have chosen a career direction and can benefit from college instruction, Running Start at Clover Park Technical College may be right for you.

Please note that Running Start students are held to the same expectations as all other college students. Attendance, participation, behaviors, and quality of work are to meet college standards.

The Running Start program is designed for high school students who are ready for college-level work, want to get a start on their career training, and want to receive both college and high school credit while attending high school.

Qualified students may enroll in programs, tuition-free, up to a maximum of 15 credits per quarter. This is determined by the combined high school and college enrollment on their Running Start Enrollment Verification Form obtained from their high school counselor.

Additionally, Running Start students will pay for all fees associated with their college enrollment including

laboratory fees, security & safety fees, books, tools, consumables, transportation, etc. Running Start students may obtain a waiver for additional credits; please see the Running Start adviser for more information.

High school students who attend during the summer quarter will pay adult tuition and fees. Interested students must meet with the Running Start adviser to receive appropriate paperwork prior to enrolling.

If you meet the following criteria, you may be eligible for Running Start:

- Be between the ages of 16 and 21.
- Be identified as a high school junior or senior.
- Meet minimum assessment testing scores.
- Be identified as eligible by your school.

## Veterans Education Benefits

### 253-589-5581

In compliance with the Harry W. Colmery Veterans Educational Assistance Act of 2017 and RCW 28B.15.624 Early Course Registration for Eligible Veterans and National Guard Members, Clover Park Technical College provides early course registration for eligible veterans and spouses using VA education benefits. Visit [www.cptc.edu/veterans](http://www.cptc.edu/veterans) for more information; scroll to the bottom of the page. Please see the Academic Calendar for priority registration for veterans and spouses using VA education benefits.

Most programs offered by Clover Park Technical College are fully approved for benefits under the following Veterans Administration regulations:

Chapter 30—Montgomery GI Bill®

Chapter 31—VA Rehab (pre-approved by VA)

Chapter 32—VEAP

Chapter 33—Post 9/11 GI Bill®

Chapter 35—Dependents

Chapter 1606—Reserves

Chapter 1607—Reserves Active

Selected programs of study at Clover Park Technical College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

Clover Park Technical College does not and will not

provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any persons or entities engaged in any student recruiting or admissions activities or in making decisions regarding the award of student financial assistance.

Schools should limit student enrollment to 85 percent veteran enrollment per cohort. In the event that a veteran wishes to enroll in a class that has already reached the 85 percent cap, he or she may do that but will not be eligible for VA funding. Chapter 35 and 31 students may still enroll even if the 85 percent has been realized.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill>.

## WorkSource Co-Located Staff

WorkForce Innovation and Opportunity Act (WIOA) funding for Pierce County residents is available to assist dislocated workers and low-income adults with their educational costs. Options for additional funds may also be available for students who are currently on unemployment benefits or who have drawn unemployment benefits in the past. In addition to providing funding information, the WorkSource co-located staff member can direct students to jobs found in the statewide WorkSource system and other websites, as well as provide tips for job searching, resume writing, and interviewing.

For more information, contact the CPTC co-located WorkSource counselor at 253-589-5781.

# Getting Support

## Advising and Counseling Office

**253-589-5548**

The Advising & Counseling Office provides several resources to support student success such as education planning, career exploration, goal setting, reviewing academic progress, and getting connected to on and off campus resources. Students can meet face to face with a counselor by appointment, at designated drop-in times, meet through email, phone call, or through a virtual lobby. Limited personal counseling services are available for students struggling with a personal issue interfering with a student's ability to be successful in school. The Advising & Counseling Office is located in Bldg. 17, Rm. 150, on the Lakewood Campus, or call 253-589-5548.

## Disabilities Accommodations

**253-589-5767**

Clover Park Technical College wants to help all students succeed. The college is committed to providing reasonable accommodations to qualified students with disabilities. Reasonable accommodations will be provided to qualified students with disabilities for recruitment, the application process, enrollment, registration, financial aid, course/module work, counseling, programs, and services. A request for accommodations must be made, and documentation of disability is required.

To arrange accommodations, students should contact the Disability Resources for Students Office at 253-589-5767 or [disabilityresources@cptc.edu](mailto:disabilityresources@cptc.edu). Requests for accommodations should be made as far in advance as possible. Lack of advance notice may delay the availability of an accommodation. The complete Clover Park Technical College Policies and Procedures for Reasonable Accommodations for Students with Disabilities under ADA/504 is available in Bldg. 17, Rm. 103.

## Tutoring Center

**253-589-5591 or 253-589-5702**

The Tutoring Center is located in Bldg. 15, Rm. 113K, and is open 8 a.m.-4:00 p.m., Mondays, Tuesdays, Thursdays, and Fridays (closed Fridays during Summer Quarter only), and 8 a.m.-6 p.m. Wednesdays, for current CPTC students. The center is open during the quarter and closed over

breaks and holidays. When face-to-face services are unavailable, the Tutoring Center is available through the CPTC's Virtual Lobby. CPTC students also have access to eTutoring's free 24/7 online tutoring services at [www.etutoring.org](http://www.etutoring.org).

The tutors in the center specialize in assisting students with math and English coursework, as well as other common subjects and study skills. The Tutoring Center is a drop-in environment where students can come in as they need assistance. Students are encouraged to visit the center early in the quarter to receive the maximum benefits.

## Adult Basic Skills/English as a Second Language (Transitional Studies)

**253-589-5702**

The Adult Basic Education program offers day, evening, and online classes in Adult Basic Education, English as a Second Language, High School Completion (HS+) and high school equivalency (GED®) testing preparation. Classes offered enhance career, educational, and personal opportunities for individuals. The program offers integrated math, reading, writing, oral communication, digital literacy, and employment skills toward High School Completion credentials, college admission, and/or career changes. The curriculum is based on Career and College Readiness Standards. Students are placed in classes based on their current skill level. Students are served on a first-come, first-served basis. More information is available in the Basic Skills Office in Bldg. 10, Rm. 102, or call 253-589-5702 for more details. There is a \$25 tuition per quarter for each student enrolled in Basic Skills classes. Tuition waivers are available for eligible students.

## High School Equivalency Testing (GED®)

**253-589-6035 or 253-589-5702**

For the most current information on preparing for high school equivalency testing, please contact the Transitional Studies department at 253-589-5702. In order to sign up for testing, please create an account at [www.ged.com](http://www.ged.com). From the site, students can schedule exams, access study materials, learn about the testing experience, and access

additional information. GED® Test scores completed prior to Jan. 1, 2014, are no longer valid.

Testing is computer-based, and the testing software is easy to navigate. Testers between 16-18 years of age need to bring a signed release from their district high school to the testing center before scheduling exams (homeschoolers will need a signed affidavit). Debit or credit card users may pay online. For other forms of payment, please call 253-589-6035 for assistance.

All testers must present valid, government-issued, Photo ID in order to test. If the ID is not issued by Washington State, testers must show proof of residency. Testing times vary; please visit [www.cptc.edu/pearson-vue](http://www.cptc.edu/pearson-vue) for current hours.

#### Test Appointment Lengths:

- Reasoning through Language Arts (155 minutes)
- Social Studies (75 minutes)
- Science (90 minutes)
- Mathematical Reasoning (120 minutes)

## Refund Policy

1. Fees for tests or assessments offered in the Testing Center are non-refundable (there is no fee for the Accuplacer assessment).
2. For state-funded classes, the tuition and laboratory/supply/computer use fee will be refunded for a payment period upon official withdrawal according to the following schedule:
  - a. 100% Prior to the sixth day of instruction.
  - b. 50% The sixth through 20th day of instruction.
  - c. 0% Twenty-first calendar day through the end of the payment period.
3. Financial aid recipients are subject to the Title IV Return of Funds policy stated in this catalog.
4. For Workforce and Community Education courses and programs:
  - a. 100% Any time class is cancelled by the College.
  - b. 100% If you withdraw 48 hours before the first class meeting. Certain consumable and pass-through fees (e.g. credit card transaction fees) are

not refundable.

- c. 0% If you fail to attend class for any reason without prior notice. Roll-overs to future classes in lieu of refund will not be permitted.
  - d. Students receiving funding through a third party must adhere to the rules of the funding source (e.g., employer, Workforce funding, Labor & Industries)
5. Programs canceled by the college will be refunded at 100 percent of the fees paid but unused as of the cancellation date.
  6. Refunds will not be granted for students withdrawn for disciplinary reasons.
  7. Students called for military active duty will be granted a refund of tuition and fees paid for the current payment period, subject to the rules and regulations of their respective funding sources and payment methods. Presentation of written confirmation (orders) is required.
  8. Students who do not attend the first two class sessions and/or comply with the established attendance policy for the class or program may forfeit the right to continue and may be subject to administrative withdrawal without refund.
  9. Upon official withdrawal, refunds will be made by mail to the student or his or her respective funding agencies.

## Refund Exception

Exceptions to the refund policy must be requested in writing to the Associate Dean for Student Success before the last day of the quarter in which payment was made. The petition form is available in the Enrollment Services Office in Building 17 or online at [https://cptc.col.qualtrics.com/jfe/form/SV\\_6nwweVQseiL7ILT](https://cptc.col.qualtrics.com/jfe/form/SV_6nwweVQseiL7ILT)

Eligible requests must have detailed information and supporting documentation attached when the request is submitted.

# Financial Aid

Clover Park Technical College believes that every individual should have the opportunity to achieve their educational goals. The Student Aid & Scholarships Office is located in Building 17 on the Lakewood Campus and provides financial assistance to students who would otherwise not be able to attend school.

Financial assistance may be available to students from various sources in the form of grants, scholarships, loans, and employment. Aid is awarded according to federal, state, and institutional guidelines. No student will be denied aid on the basis of race, color, national origin, sex, sexual orientation, disability, or age.

All prospective students are encouraged to apply for aid. Student Aid & Scholarships staff will discuss opportunities with you and help you with the application process. Eligibility is determined through a careful assessment of the student's financial situation, taking into account their and/or their family's income, assets, debts, number of dependents, and the estimated cost of attending Clover Park Technical College.

## Eligibility

The following programs are NOT eligible for traditional financial aid: Adult Basic Education (ABE), High School Equivalent Exam prep, Quick Start programs, personal enrichment continuing education, Running Start, and High School Completion.

To qualify for financial aid, a student must:

- Be admitted to the college in an eligible degree or certificate program;
- Have a high school diploma or High School Equivalency;
- Be a U.S. citizen or an eligible non-citizen;
- Be registered with the Selective Service (if required to do so);
- Not owe any repayments on previous Title IV assistance and not be in default on any federal student loans;
- Demonstrate a need for financial assistance.

Financial aid is normally awarded based on full-time

enrollment (12 credits or more). If students plan to enroll in fewer than 12 credits for any quarter, they must give the Student Aid & Scholarships Office advance written notification to allow for their award to be revised.

## How to Apply for Financial Aid and Application Deadlines

We strongly recommend that students submit their Free Application for Federal Student Aid (FAFSA) to the Federal Processor THREE MONTHS PRIOR TO OUR DEADLINE DATES or, at a minimum, two weeks before the deadline dates below. Most funds are available on a first-come, first-served basis, so apply early.

To apply for all available federal, state, and institutional financial assistance, students must complete the CPTC financial aid application process. Read the instructions carefully. Students who complete the application process prior to the deadline for a quarter will have their applications reviewed prior to the start of the quarter. The application instructions are available at the Student Aid & Scholarships Office and at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid).

1. New students must apply for admission to the college and declare an eligible degree or certificate program.
2. Create a Federal Student Aid ID. You must do this by visiting <https://fsaid.ed.gov/npas/index.htm>. The FSA ID allows you to sign the FAFSA or renewal FAFSA online as well as access other Federal Student Aid secure websites. If you are required to provide your parents' information on the FAFSA, one of your parents will also need to create a Federal Student Aid ID.
3. Complete one of the following and submit it to the Federal Processor on the web: FAFSA or Renewal FAFSA at <https://fafsa.ed.gov/>.

After your FAFSA is processed, the Federal Processor will send you a paper Student Aid Report (SAR), an electronic SAR, or a SAR Information Acknowledgement, depending on how you submitted your FAFSA and whether or not you provided a valid email address on your FAFSA. If you do not receive your SAR within two weeks of submitting your application, call the Federal Processor at 1-800-4FED-AID to check on the status of your application. Remember you can always check the status of your file at the student portal by clicking on the link to the Financial Aid Student Portal at [www.cptc.edu/financial-aid/portal](http://www.cptc.edu/financial-aid/portal).

4. Both continuing and new students must submit all additional required documents by the deadline.

After the Federal Processor sends the Student Aid & Scholarships Office a copy of your processed FAFSA data, we will post information to the Financial Aid Student Portal explaining what additional documents we need to complete your file and/or what actions you must take (e.g. CPTC data sheet, IRS Tax Transcript, Verification Worksheets). If you don't see that the Student Aid & Scholarships Office has received your FAFSA information, come to the Student Aid & Scholarships Office. Please make sure to update your mailing address with both Enrollment Services and Student Aid & Scholarships. Submit all additional required documents and take care of all required actions as instructed by the following deadline dates to ensure your application is reviewed prior to the start of the quarter you begin classes. If all required documentation is not submitted by the deadline dates below, your financial aid may be delayed, and you may be required to pay your tuition, fees, books, and supplies until your file is reviewed.

<b>Summer Quarter 2020</b>	<b>May 31, 2020</b>
<b>Fall Quarter 2020</b>	<b>August 28, 2020</b>
<b>Winter Quarter 2021</b>	<b>December 4, 2020</b>
<b>Spring Quarter 2021</b>	<b>March 5, 2021</b>

5. Complete Direct Stafford Loan Master Promissory Note and required counseling.

### **First-Time Borrower**

If you are new to the college, or have not received a Federal Direct Stafford Loan from Clover Park Technical College in the last year, you are required to complete Entrance Counseling and a Master Promissory Note (MPN). To complete these steps, go to [www.studentloans.gov](http://www.studentloans.gov). The school will be notified electronically within three to five business days from the time of completion. You can check your student portal to

see when Clover Park has received notification that this requirement has been completed.

Please Note: Students who are first-time borrowers at CPTC must serve a 30-day waiting period and will not receive the first disbursement of their loans until approximately the 35th day of the quarter. This applies only to the first quarter of attendance that student receives loan funds.

### **Returning Borrower**

Continuing students must complete Financial Awareness Counseling every academic year by visiting <https://studentloans.gov/myDirectLoan/index.action>. The school will be notified electronically within three to five business days from the time of completion. You can check your student portal to see when Clover Park has received notification that this requirement has been completed. If you previously received a direct loan for a prior year, you do not need to complete an entrance counseling and Master Promissory Note. The Department of Education allows a borrower to receive additional direct loans on a single Master Promissory Note for up to 10 years.

### **Federal Direct Parent Plus Loans:**

To read more information about the Stafford Loans, please visit [www.cptc.edu/financial-aid/stafford](http://www.cptc.edu/financial-aid/stafford). Parent Plus Loans are federal loans to help you pay for the cost of your child's education expenses. Parent Plus Loans are only available for Dependent Students. To apply for a Federal Parent Plus Loan, go to <https://studentloans.gov/myDirectLoan/index.action> and complete a Parent Plus Application and Parent Plus Master Promissory Note. The school will be notified electronically within three to five business days from the time of completion.

Click "read more" under the "Apply for Federal Direct Stafford Loan" link.

Students who are taking nursing (LPN or RN) academic prerequisites do not qualify for grant assistance. They qualify for student loans only, and only for a period of 12 consecutive months. (Nursing Assistant program is not eligible for federal student loans.)

Student Aid & Scholarships Office:  
4500 Steilacoom Blvd SW  
Lakewood WA 98499-4004  
Building 17, Room 130  
253-589-5660, Fax: 253-589-5618  
School code: 015984

## Cost of Attending College

The following budget figures have been approved by the Washington Financial Aid Association and Clover Park Technical College. They are provided as a guide to estimate what it would cost to attend Clover Park Technical College for nine months (three quarters) and average 20 credits per quarter.

	<b>Dependent Living with Parent/Relative</b>	<b>Independent Living with Parent/Relative</b>	<b>Resident Not Living with Parent/Relative</b>
<b>Tuition</b>	\$5,271	\$5,271	\$5,271
<b>Books &amp; Supplies</b>	\$900	\$900	\$900
<b>Room &amp; Board</b>	\$3,360	\$8,100	\$10,170
<b>Transportation</b>	\$1,200	\$1,590	\$1,200
<b>Personal</b>	\$1,920	\$1,980	\$2,160
<b>Total</b>	\$12,651	\$17,841	\$19,701

## Determining Financial Need

The amount of assistance students receive is based on the student's demonstrated need.

Cost of attending college – Expected family contribution = Need

Financial need is defined as the difference between educational expenses (tuition, fees, books, tools, supplies, room and board, personal, and transportation) and the amount the student and their family can afford to pay as determined by the information on the Free Application for Federal Student Aid (FAFSA).

## Yearly FAFSA Timelines

Students must apply for financial aid once every academic year. For financial aid purposes, the year starts July 1 and ends June 30 (Summer Quarter through Spring Quarter). The FAFSA application will be available starting October 1 for the following academic year. If a student starts classes in Winter or Spring Quarters, two FAFSAs must be completed: one for the current school year and one for the

upcoming school year.

## Description of Aid Programs

### Federal and State Grants

CPTC offers both federal grants (Pell Grant, Supplemental, and Educational Opportunity Grant) and state grants (Washington State Need Grant). Grants are considered a form of gift aid because they do not have to be repaid, provided students attend their classes, do not reduce their enrollment on or before the 10th business day of the quarter, do not make a 100-percent withdrawal, do not stop attending their classes, and do not complete zero credits for a quarter.

### Work-Study

Federal and state work-study programs offer students the opportunity to gain valuable work experience while earning money for college. Both on-campus and off-campus positions are available.

Students receive their work-study funds in the form of a paycheck from the employer based on their hourly wage and the number of hours worked in any given pay period. Because work-study funds must be earned, they are not available at the beginning of the quarter to help students pay their tuition and fees or purchase their books.

### Student Loans

**Federal Direct Subsidized Stafford Loans** are need-based loans. The term “subsidized” means the federal government pays interest on the loan on the student's behalf until the student enters repayment.

#### Maximum Eligibility Period to Receive Direct Subsidized Loans

There is a limit on the maximum period of time (measured in academic years) you can receive Direct Subsidized Loans. In general, you may not receive Direct Subsidized Loans for more than 150 percent of the published length of your program. This is called your “maximum eligibility period.” You can usually find the published length of any program of study in the catalog.

*For example, if you are enrolled in a 4-year bachelor's degree program, the maximum period for which you can receive Direct Subsidized Loans is 6 years (150% of 4 years = 6 years). If you are enrolled in a 2-year associate degree program, the maximum period for which you can*

*receive Direct Subsidized Loans is 3 years (150% of 2 years = 3 years).*

Your maximum eligibility period is based on the published length of your current program. This means that your maximum eligibility period can change if you change programs. Also, if you receive Direct Subsidized Loans for one program and then change to another program, the Direct Subsidized Loans you received for the earlier program will generally count against your new maximum eligibility period.

**Federal Direct Unsubsidized Stafford Loans** are non-need based loans. The term “unsubsidized” means the federal government does not pay interest on the loan until the student enters repayment; students are responsible for paying all accrued interest. Interest can be paid while the student is in school, or it can be deferred until the student enters repayment. If deferred, the unpaid interest that accrues is added to the loan amount the student borrowed, a process known as capitalization.

## Scholarships

Many businesses, services, and professional organizations, as well as individuals in the community, contribute funds to be used as grants (awards based on need) or as scholarships (awards based on merit, need, or other criteria). Applications are accepted at various times throughout the year. Eligibility criteria and application procedures are posted on the Scholarship Board located outside the Student Aid & Scholarships Office in Building 17 and at [www.thewashboard.org](http://www.thewashboard.org) and [www.fastweb.com](http://www.fastweb.com).

Scholarships are also available from the Clover Park Technical College Foundation. For more information, visit the Foundation website at <http://friendsofcloverpark.org/cptc-foundation-scholarships/>.

## Agency Funding

Persons who qualify for assistance from the Division of Vocational Rehabilitation of the State of Washington or neighboring states, the Department of Labor and Industries, WorkSource, the Washington State Department of Social and Health Services, or the Employment Security Department should contact and work with their funding agencies before and throughout the enrollment process.

## Opportunity Grant

253-589-4311

### Opportunity Grant web page

Clover Park Technical College’s Opportunity Grant may assist eligible students with educational expenses such as tuition, fees and books, and wrap-around support services for a maximum of 45 credits over a three-year period. Awards are based on student need and grant availability and, thus, may vary from quarter to quarter.

### Eligible Opportunity Grant programs:

- Accounting
- Aviation Maintenance Technician
- Computer Programming
- Dental Assistant
- Early Care & Education
- Environmental Sciences & Technology
- Health Unit Coordinator
- Hemodialysis
- Heating & Air Conditioning/Refrigeration Service Technician
- I-BEST Programs
- Mechatronics
- Medical Assistant
- Medical Histology Technician
- Medical Laboratory Technician
- Network Operations & System Security (*formerly Computer Networking & Information Systems Security*)
- Nondestructive Testing
- Nursing Assistant
- Pharmacy Technician
- Practical Nurse (LPN)
- Surgical Technology
- Welding Technology

### Eligibility Criteria:

- Complete the Free Application for Federal Student



Aid (FAFSA) OR the Washington Application for State Financial Aid (WASFA); demonstrate unmet financial need.

- Be a Washington State resident.
- Be admitted into one of the eligible OG program pathways.
- Make satisfactory academic progress and maintain a cumulative 2.0 grade point average. (Students must not be in financial aid suspension or in student loan default.)
- Meet family low-income guidelines.

For more information, please call or visit the Workforce Development Eligibility Office in Bldg. 16, Rm. 105. Hours: 8 a.m.-5 p.m. Monday-Thursday and 11 a.m.-5 p.m. on Friday.

## Basic Food Employment and Training (BFET)

**253-589-4311**

Basic Food Employment and Training web page

Basic Food Employment and Training (BFET) provides employment training, funding, and services to individuals who receive federal Supplemental Nutrition Assistance Program (SNAP) benefits or who are eligible to apply for SNAP. Clover Park BFET participants may receive:

- Financial assistance for tuition, books, required educational expenses, and emergencies. (Financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status, and grant fund availability.)
- Ability to apply for child care subsidies through DSHS, connection with other college and community resources, and ongoing mentoring and support.
- Most CPTC programs are eligible, including High School Completion, Running Start, Continuing Education classes, and Adult Basic Education programs.
- Maintain satisfactory academic progress according to CPTC's financial aid policies. (Students must not be in financial aid suspension or in student loan default.)

Individuals who receive TANF cash benefits from DSHS are not eligible for BFET.

For more information, please call or visit the Workforce Development Eligibility Office in Bldg. 16, Rm. 105. Hours: 8 a.m.-5 p.m. Monday-Thursday and 11 a.m.-5 p.m. on Friday.

## WorkFirst

**253-589-4311**

WorkFirst Main Page

The WorkFirst Program serves families receiving Temporary Assistance for Needy Families (TANF) and are required participants through the Department of Social and Health Services (DSHS); helping them start, continue, or finish their education and training, leading to employment and self-sufficiency.

- WorkFirst may assist with tuition and books for most CPTC programs including High School Completion, Running Start, Continuing Education, and Adult Basic Education.
- Students who qualify for WorkFirst may also be eligible for WorkFirst Work Study.
- Maintain satisfactory academic progress according to CPTC's financial aid policies. (Students must not be in financial aid suspension or in student loan default.)

For more information, please call or visit the Workforce Development Eligibility Office in Bldg. 16, Rm. 105. Hours: 8 a.m.-5 p.m. Monday-Thursday and 11 a.m.-5 p.m. on Friday.

## Worker Retraining

**253-589-5825**

Worker Retraining web page

The Washington Worker Retraining Program provides training and funding for unemployed workers who want to upgrade their skills or train for a new career. Worker Retraining support may be available if you meet any of the following:

- Facing a layoff and eligible to collect unemployment benefits.
- Currently collecting unemployment benefits.
- Exhausted unemployment benefits within the past 48 months.
- Displaced homemaker within the past 24 months.

- Self-employed and now unemployed with the past 24 months.
- Honorably discharged veteran within the past 48 months.
- Stop-gap employments.
- Active-duty military with an official order of separation.

#### Eligibility Criteria:

- Complete the Free Application for Federal Student Aid (FAFSA) OR the Washington Application for State Financial Aid (WASFA).
- Worker Retraining funds may be applied to tuition, books, transportation, and childcare assistance. (Financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status, and grant fund availability.)
- WRT funding is typically awarded for one quarter. Students should have a funding plan for subsequent quarters. Additional funding may be available on a case-by-case basis.
- Allowable programs include all CPTC's High Wage/High Demand professional/technical programs, and programs funded by Worker Retraining.
- Students who have earned Bachelor degrees will be reviewed on a case-by-case basis.
- Maintain satisfactory academic progress according to CPTC's financial aid policies. (Students must not be in financial aid suspension or in student loan default.)

For more information, please call or visit the Workforce Development Eligibility Office in Bldg. 16, Rm. 105. Hours: 8 a.m.-5 p.m. Monday-Thursday and 11 a.m.-5 p.m. on Friday.

## Early Achievers Grant (EAG)

**253-589-6088**

Early Achievers Grant Main Page

Early Achievers Grant (EAG) is a student financial aid resource that allows for funding priority to students who are employed by Early Achievers facilities. The grant's goal is to help employed child care providers and early learning educators complete stackable certificates that build into an associate degree in Early Childhood Education (ECE). Clover Park EAG recipients may

receive:

- Financial assistance for tuition, books, and wrap-around student services. (Financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status, and grant fund availability).
- Ability to receive one-on-one academic supports through Workforce Development and the ECE faculty instructor.

The CPTC Early Childhood Education stackable state certifications and degree are eligible for EAG funding.

For more information, please call Jen Weinmann at 253-589-6088

## Financial Aid Student Portal

Students must use the portal to view the status of financial aid file and award amounts.

Visit [www.cptc.edu/financial-aid/portal](http://www.cptc.edu/financial-aid/portal).

## Rights and Responsibilities

As a financial aid recipient, students have the following rights:

1. Access to accurate and timely information on financial aid deadlines and procedures.
2. Access to personal financial aid records and information as defined by the Buckley Amendment of 1974.
3. The choice of accepting all or only part of the assistance offered.
4. Access to a review of the award package should the student's financial situation change. Included in this right is the opportunity to appeal.

Along with these rights, students have the following responsibilities:

1. To provide accurate information to be used in the aid process. Misrepresenting information is a violation of the law and could result in indictment under the U.S. Criminal Code.
2. To inform the Student Aid & Scholarships Office of any significant changes to a student's financial situation (scholarships, gifts, earnings, funding, etc.) in excess of \$200 that were not listed in the

application or any other change in circumstances, such as a change in student status or marital status, that may influence the award. Failure to report these changes can result in federal legal action to recover aid funds.

3. To understand the loan obligation. With a loan as part of the student's package, future earnings are pledged to pay present school costs. Loan conditions should be read carefully; ask questions.
4. To maintain satisfactory academic progress toward the completion of the degree/certificate program.
5. To repay any financial aid received when students were not eligible.
6. To continue receiving financial aid, students must reapply each academic year.

federal and state regulations. Repayments can be owed to the college, the U.S. Department of Education, and/or the Washington Student Achievement Council. Students who owe a repayment are notified in writing. The complete repayment policy can be found on the Student Aid & Scholarships Office website at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid).

The first days that students can drop to zero (withdraw from all classes, stop attending all classes, or a combination of both) without owing a repayment as a result are:

<b>Summer 2020</b>	<b>August 10, 2020</b>
<b>Fall 2020</b>	<b>November 16, 2020</b>
<b>Winter 2021</b>	<b>February 22, 2021</b>
<b>Spring 2021</b>	<b>May 24, 2021</b>

## Satisfactory Academic Progress

Federal and state financial aid regulations require schools to set minimum standards for satisfactory academic progress and to hold students accountable for meeting the standards. Satisfactory Academic Progress is checked prior to awarding aid, even if students did not receive financial aid in past quarters. It is also checked at the end of every quarter aid is received.

The Satisfactory Academic Progress policy includes the following:

1. Cumulative pace of progression towards degree or certificate must be at least 66.67 percent.
2. Cumulative Grade Point Average requirement of 2.0 or greater.
3. Credit limit requirement.

Copies of the complete Satisfactory Academic Progress policy are available on the Student Aid & Scholarships Office website at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid) as well as at the Student Aid & Scholarships Office front counter.

## Withdrawal and Repayment Policies

Students who withdraw from all classes, stop attending all classes, or a combination of both before completing 61 percent of the quarter (measured in calendar days), or students who complete zero credits, may be required to repay a portion of the financial aid they received for that quarter. This applies to grant funds as well as student loans. Repayments are computed in accordance with

# International Students

We welcome international students from around the world to Clover Park Technical College. We provide personalized assistance to our international students every step of the way, from entry to graduation. We also offer airport pickup, free internet access, and free tutoring.

## Entry

To start your application process, please contact us and take the first step toward a bright future. Join other international students who have discovered the outstanding programs at Clover Park Technical College.

You can become an international student at Clover Park Technical College by following these easy steps:

1. Fill out the Admission Application and the Financial Responsibility forms:
  - a. Available online at [www.cptc.edu/international](http://www.cptc.edu/international), or
  - b. Request an application packet by email at [international@cptc.edu](mailto:international@cptc.edu). We will send you digital copies of the documents, or
  - c. Request an application packet by phone at 253-589-6089.
2. Send the completed Admission Application and the Financial Responsibility forms, along with other required documents, by mail with your \$70 non-refundable application fee, payable by personal check, money order (in U.S. dollars), or credit card.
3. Attach a passport-size color photo to the top right corner of the application.

## English Proficiency Requirements

No TOEFL or IELTS is required for entry if students successfully complete the highest level of Intensive English program at CPTC or at another accredited college/language school.

If students wish to enter directly into one of our professional technical programs without completing the Intensive English program, we accept the following English proficiency test scores:

- TOEFL: A minimum of iBT 61/CBT 173/PBT 500.
- IELTS Academic: A minimum of 5.5 overall band

score with no component band score lower than 5.0 (Note: The IELTS component band score requirement may be waived with advisor permission only. Contact the International Education Programs for more information)

We may consider other proof of English proficiency. Please contact us for more information.

Once we receive the above items and you meet all the entry criteria, we will mail Form I-20 to you. Take the Form I-20 with you to the U.S. Consulate in your country and apply for a student visa. If you have questions about the application process, please contact our office at [international@cptc.edu](mailto:international@cptc.edu) or 253-589-6089.

## English Language Training at CPTC

CPTC offers a high quality Intensive English program for international students who need to develop their English skills to a college level for academic study, or who simply want to learn more English. A small class size allows instructors to provide you personalized attention and support. The Intensive English program will prepare you for academic study at CPTC as well as for a real life in the United States. Our highly qualified instructors have many years of experiences in teaching English to second language learners.

## No TOEFL or IELTS Required for Admission

If you apply for the Intensive English program, no TOEFL or IELTS score is required for admission. Successful completion of Level 4 provides a pathway into one of the many professional technical programs offered at CPTC. Some programs may have additional admission requirements. Please contact the International Education Programs at [international@cptc.edu](mailto:international@cptc.edu) for more information.

There are four levels in the program and you will develop all four English skills - reading, writing, listening and speaking. All levels are 16 credits and 20 - 22 hours a week depending on a quarter.

**Level 1: Beginner**

IEN 020: English Fundamentals I (2 credits)

IEN 045: Reading & Writing I (7 credits)

IEN 047: Listening & Speaking I (7 credits)

**Level 3: Upper Intermediate**

IEN 023: English Fundamentals III (2 credits)

IEN 085: Reading & Writing III (7 credits)

IEN 087: Listening & Speaking III (7 credits)

**Level 2: Lower Intermediate**

IEN 021: English Fundamentals II (2 credits)

IEN 065: Reading & Writing II (7 credits)

IEN 067: Listening & Speaking II (7 credits)

**Level 4: Advanced**

IEN 025: English Fundamentals IV (2 credits)

IEN 095: Reading & Writing IV (7 credits)

IEN 097: Listening & Speaking IV (7 credits)

**Transfer of CPTC Credits**

Credits earned at Clover Park Technical College may transfer to other two-year colleges and to some four-year colleges and universities. Please discuss your educational goals with the International Education Programs Office staff.

**Dates to Remember**

- Fall Quarter begins September 28, 2020
- Winter Quarter begins January 4, 2021
- Spring Quarter begins April 5, 2021
- Summer Quarter begins July 6, 2021 — subject to change
- Graduation is June 22, 2021

Please note that some programs have fall and/or spring start dates only.

**Cost of Tuition & Fees**

International students pay non-resident tuition. Visit [www.cptc.edu/tuition](http://www.cptc.edu/tuition) for 2020-2021 rates.

- International Student Health Insurance is \$365.13 per quarter (3 months) — subject to change.

- Some programs require additional quarterly fee(s). Please visit [www.cptc.edu/tuition](http://www.cptc.edu/tuition) for more information.
- Additional fees may be charged for a specific class and are listed at the end of the course descriptions in the Quarterly Class Schedule.

Tuition and fees may change based on State of Washington legislative guidelines.

- Housing and other college fees are not inclusive.
- Non-refundable CPTC international admission application fee is \$70.
- Books and supplies vary by program.

**Housing Services**

There are three housing options for international students:

**1. Homestay (recommended for all new students)**

Living with an American host family provides you many benefits including learning English quicker. Your host family will provide you a safe living environment and a home away from home, and help you get a smooth transition to the American way of life. They also help you with various basic needs, such as opening a bank account, obtaining a WA driver's license or WA identification card, teaching you how to ride a bus, etc. Experience American cultures, traditions and holiday celebrations with your host family.

There is a homestay application fee of \$275.00, which is non-refundable except in the case of visa denial.

**Standard Full Homestay**

The standard full homestay option comes with a fully furnished private room, free Wi-Fi, and two meals per day. The standard full homestay fee is \$700 a month.

**Partial Homestay**

The partial homestay option comes with a fully furnish private room, free Wi-Fi, but no meal. The partial homestay fee is \$500 a month.

Contact the International Office staff when you wish to apply for homestay.

**2. Residence Hall Living**

Clover Park Technical College partners with the Pierce College Center for Global Scholars (CGS) Residence Hall

and CPTC international students are eligible to apply. The CGS Residence Hall is located 2.5 miles from CPTC Lakewood Campus. Both CPTC Lakewood Campus and CGS Residence Hall are conveniently located next to the bus stop for easy bus access and commute.

All eligible CPTC students can get a FREE bus pass from CPTC Department of Student Life.

Room Type & Price for 2020-2021. You may choose from four room options. A student must contract separately during Winter Break: 6 p.m. on December 10, 2020 through 9 a.m. on December 28, 2020. Below are the fees for each room type:

Room Type	# of Roommate	Cost (Fall, Winter & Spring)	Cost (Summer)	Cost of One Year (4 quarters)	Winter break, Dec 10-28 (optional)
Double Room	1	\$2,100 per quarter	\$1,575	\$7,875	\$330
Triple Room	2	\$1,700 per quarter	\$1,260	\$6,360	\$260
Quad Room	3	\$1,500 per quarter	\$1,135	\$5,635	\$235
Single Room	0	\$2,600 per quarter	\$1,890	\$9,690	\$405

A student must contract separately during Winter Break: 6pm on December 10, 2020 through 9am on December 28, 2020. Below is the fee for each room type:

	Single Room	Double Room	Triple Room	Quad Room
Winter Break (Dec. 10 – 28)	\$405 USD	\$330 USD	\$260 USD	\$235 USD

To apply for the residence hall, a \$300 non-refundable application fee is required

For more information on the residence hall living or the residence hall application process, please contact CPTC

International Education Programs at [international@cptc.edu](mailto:international@cptc.edu).

### 3. Independent living in apartments near the college (NOT recommended for newly arrived students)

The average monthly rent ranges from \$750 to \$1,500, depending on number of bedrooms, size, location, and amenities.

Additionally, students pay for their own food and utilities. Assistance is available for students who pay the International Housing Application Fee (currently \$150, non-refundable, subject to change). Housing and other college fees are not inclusive. Costs are subject to change based on the local housing market.

### For Additional Information for International Students

Contact the International Education Programs Office at:

Tel: 253-589-6089

Fax: 253-589-6056

Email: [international@cptc.edu](mailto:international@cptc.edu)

Mail: Clover Park Technical College  
International Education Program  
4500 Steilacoom Blvd SW  
Lakewood, WA 98499-4004

Website: [www.cptc.edu/international](http://www.cptc.edu/international)

# Campus Life and Services

## Associated Student Government

### Student Council

This council is an advocate of the student voice and a partner with other governing units. The Student Council oversees the administration of the Associated Student Government (ASG). Council meetings, which are open to the public, are held on a regular basis while CPTC is in session during the fall, winter, and spring quarters.

### Campus Activities Board

The activities board promotes and coordinates a well-balanced program of student-initiated activities that enhance health and wellness, cultural, social and recreational needs of the Associated Students outside the classroom aimed at enhancing student life.

### Clubs & Organizations

The ASG coordinates the management of student clubs, which operate specifically to promote individual programs with respective industries, special interest groups, and related professional organizations within the community.

## Department of Student Life

**253-589-5780**

The Department of Student Life is the administrative entity that advises and directs the efforts of student leadership development, the student center facilities, and the ASG. Stop by the Student Leadership & Service Center located in Building 23 to find out more about upcoming campus events, activities and job opportunities. Employment opportunities for the upcoming academic year are conducted each spring and as needed throughout the year. For more information about the department, visit us in the Student Center, call us or visit us online at [www.cptc.edu/involvement](http://www.cptc.edu/involvement).

## Student Leadership and Service Center

**253-589-5780**

The Student Leadership & Service Center (SLSC) is your portal to the campus, whether you are a student or a community member. The student staff members know what's happening on campus, provide maps to locate

particular campus locations or services, and administer the many service features and activities of the SLSC.

For more information about the Office of Student Life and ASG, call 253-589-5780, stop by the Student Leadership & Service Center, Bldg. 23, Rm. 211, or visit us online at [www.cptc.edu/involvement](http://www.cptc.edu/involvement).

## Fitness Center

**253-589-5780**

The Fitness Center provides currently enrolled students access, free of charge, to a variety of cardio, and weight lifting equipment, during the academic quarter. For more information about the Fitness Center and our hours of operation please visit [www.cptc.edu/fitnesscenter](http://www.cptc.edu/fitnesscenter).

## Center for Diversity, Equity & Civic Engagement

**253-589-5780**

This center is designed to engage the entire campus community. The center will serve as a place that provides a space where people can share and celebrate their authentic selves through dialogue and activities. Students will have the opportunity to learn about social justice and civic engagement as well as participate in local, regional, and global advocacy initiatives.

## Student Identification Cards

**253-589-5780**

Student Identification Cards are available in Building 23 at the Student Leadership & Service Center during the regular scheduled hours of the center. The first ID is complimentary. Replacement ID's cost \$5 and should be paid at the cashier's window in Building 17. Picture ID and CPTC Student ID number are required to be issued a Student Identification Card.

## Bookstore

**253-589-5614**

The bookstore carries textbooks, school supplies, course-required tools and kits, medical supplies and scrubs, auto and welding supplies, chef supplies, calculators, reference materials, and assorted imprinted items. The bookstore also

carries snack, beverage, and lunch items. The bookstore can order most books and supplies not available in the store. The bookstore gladly offers refunds and exchanges on textbooks (with receipt and in the condition sold) bought and returned within the first week of the current quarter

### Rentals

Rentals are one of several cost-saving options offered to students. Customers can rent selected textbooks in store or online and save up to 80 percent off the new book selling price. Students simply rent the book through the bookstore website or in the bookstore and then check the book in at the end of the term. Visit the bookstore website at [www.cptc.bncollege.com](http://www.cptc.bncollege.com) for more details.

### Used Book Buy Back

A Book Buy Back service is offered for students who do not wish to keep their textbooks. The value of a book is determined by the demand for that title nationally. Students can receive up to half the current value. The bookstore does buyback on a daily basis, but the best time is during the last 2-3 weeks of each quarter. The prices paid back to students and the selected titles are based on a number of criteria. See the bookstore for details.

The bookstore is located in Building 23

## Food Services

The Clover Park Technical College Culinary Arts students offer lunch in the Rainier Room in Building 31, Wednesday-Friday, 11 a.m.-12:45 p.m. (offered periodically during the quarter). Food is also available at Bon Sucre Bistro, Divine Decadence Coffee Shop, food trucks on campus, vending machines, and the bookstore. Visit [www.tacomaculinary.com](http://www.tacomaculinary.com) for more information.

## Health Services

CPTC does not offer direct health services on campus. Information about community services is available in the resource book housed in the Advising & Counseling Office at the Lakewood Campus, Bldg. 17, Rm. 150.

## Insurance

Clover Park Technical College provides information regarding accident and health insurance to interested students. Contact your program faculty or the Advising & Counseling Office in Building 17 for a brochure.

## Parking and Transportation

**253-589-5557**

Pierce County transit buses make regular stops at CPTC. To see specific routes, visit [www.piercetransit.org](http://www.piercetransit.org). All CPTC students are eligible to receive a CPTC ORCA Card for each quarter they are enrolled at the college. For more information, visit the Student Leadership and Service Center in Building 23 or visit [www.cptc.edu/involvement/buspass](http://www.cptc.edu/involvement/buspass).

White-striped areas are designated for student parking. Yellow-striped areas are restricted to the following: disabled, authorized staff, and visitors. The campus speed limit is 10 miles per hour, unless otherwise posted. Vehicles improperly parked on campus are subject to a fine for each offense and/or will be towed at the owner's expense. Students are also subject to a fine for each offense for parking in unauthorized areas, blocking or obstructing traffic, and parking in fire lanes or tow-away zones. Parking in a designated handicapped space without a state-issued handicapped parking permit carries a campus fine or a higher fine if cited by the Lakewood Police Department.

Students who violate driving or parking rules may be required to leave their vehicles off campus. Clover Park Technical College is not responsible for damage to or loss of vehicles parked on campus.

## Library and Computer Labs

**253-589-5544 or 253-589-6067 for Library instructional classes or orientations**

The Clover Park Technical College Library, Technology Commons Lab, and eLearning Lab are located in the Learning Resource Center, Building 15.

Library website

The library provides access to a wide variety of materials, such as electronic databases for journal articles, books, eBooks, multimedia equipment and resources, and other resources that support instructional and academic efforts of students, faculty, and staff. Besides the collection, the library has a wide range of study areas to meet student needs, including large, small, and quiet study rooms, and tables for individual study. All currently enrolled students are eligible to use the library/ computer lab spaces and services for college-related activities. A variety of software and hardware is available to help students with assignments and to accommodate students with special needs. The Learning Resource Center staff are



available to provide individual or group assistance.

Printing, copying, and scanning services are available to current students through their WiFi account. The library provides a fee-based fax machine service. And for after-hours convenience, there is an outside book return on the east end of Building 15.

## Security

**253-589-5682 (emergency) or 253-589-5557 (non-emergency)**

The CPTC Security Department places students and staff at the center of all we do. We are committed to providing a safe and secure environment through the following services: campus patrol, parking/traffic enforcement, emergency response, incident investigation, lost and found management, basic first aid, escort services to or from your vehicle, battery boosts, building access, and the assignment of keys and alarm codes. Our officers are non-commissioned, and the Lakewood Police Department has jurisdiction on our Main Campus in Lakewood, while the Pierce County Sheriff's Office has jurisdiction at the South Hill Campus.

Visit <http://cptc.edu/risk/security> for information about:

- Sex offender notification
- Clery Act
- Campus crime statistics

## Early Care and Education

### **Affiliated Child Care Center Program**

**Contact 253-589-4516 for more information.**

Early Care and Education offers on-site instruction and customized courses focusing on Early Childhood Education (ECE) to affiliated child care centers.

Staff at child care centers are eligible to combine on-site training, attendance at on-campus classes, workshops, and courses to earn college credit or meet STARS continuing education requirements. This includes the opportunity to earn onsite Washington State ECE Stackable certificates meeting the education requirements to start your career in the ECE profession. These services are currently provided to more than 50 child care centers.

Clover Park Technical College is authorized by the Council for Early Childhood Professional Recognition to provide instruction for the Child Development Associate (CDA) Professional Preparatory Program and Direct Assessment Program. Students interested in the process for earning a CDA from the National Credentialing Program can call the council at 1-800-424-4310.

### **On-Campus Child Care**

**253-589-5531 or 253-589-5511**

The Hayes Child Development Center at Clover Park Technical College's Lakewood Campus provides services for children ranging in age from four weeks to five years. We are here to support CPTC students and staff needing child care. We accept DSHS, Military Fee Assistance, and cash payments.

We are proud to be a National Association for the Education of Young Children (NAEYC)-accredited facility. NAEYC-accredited centers are high-quality programs that provide a safe and nurturing environment while promoting the development of young children. NAEYC-accredited programs show their quality by meeting the 10 NAEYC Early Childhood Program Standards, which are based on the latest research on education and development of young children.

In addition to our national accreditation, we've been rated by the Washington State Quality Rating System Early Achievers as a level 4. Level 4 showcases the high quality childcare services Hayes Child Development Center offers children and families in our college community.

If you have questions about Hayes Child Development Center, please call 253-589-5531 or email [hayes@cptc.edu](mailto:hayes@cptc.edu).

### **ECEAP Preschool**

***Family Support 253-589-5721***

CPTC offers a full-day Early Childhood Education and Assistance Program (ECEAP) program to eligible families with children three and four years old.

The four main focus areas of this state-funded program are early child education, health, family involvement, and family support services.

Families are involved in adult education and program

planning/operating activities. Getting involved with the policy council is a great way to gain work experience as well as learn to advocate for decisions that make the program successful. These early learning programs seek to provide comprehensive developmental services for children from low-income families.

Registration information is available at <https://www.cptc.edu/childcare>.

# Program Descriptions

**Prerequisite(s):** Some programs have unique prerequisites. If prerequisites are required, they are listed with each program in the pages that follow and are in addition to college entrance requirements.

A core of academic classes is an integral part of all CPTC preparatory programs. Students may waive classes below the 100 level by meeting the Prerequisite Accuplacer score or equivalent using multiple measures for placement. Course descriptions are in the next section. Listed for each program are college quarter credit hour equivalents.

Program completion is dependent on satisfactory progress and successful achievement of all course requirements and student outcomes with an overall GPA of 2.0 or greater. It should be recognized that the number of quarters and hours identified for each program on the following pages is approximate; some students may need additional quarters to meet graduation requirements.

## Certificates at CPTC

Program certificates are a great way to get your foot in the door in a new industry or to advance your skill levels and stay current with industry standards. Most of our programs offer short-term certificates, many of which can be completed in one year or less

## Degrees at CPTC

The Bachelor of Applied Science (BAS) degree is awarded for completion of at least 90 credits of appropriate 300- and 400-level coursework. An applied associate degree, AAS-T, Direct Transfer Associate degree or equivalent with a required distribution of academic course work is a prerequisite for program admission. A detailed list of program admission requirements can be found online.

The Associate of Applied Technology (AAT) degree is awarded to students who complete programs that are 90 credits or more in length and include a core of 15 college-level academic credits. The bulk of the credits are in specific career/technical fields. The required general education courses in communication, quantitative reasoning and social sciences are designed to prepare students for work.

The Associate in Applied Science - T (AAS-T) degree is also a workforce degree with a core of general education courses. The difference is that the AAS-T degree requires a minimum of 20 credits of general education courses

commonly accepted in transfer, including a minimum of five credits in English composition (ENGL& 101), five credits in quantitative reasoning, five credits in social science, and five additional credits in social science, humanities, or natural science.

The Associate in Pre-Nursing Direct Transfer Agreement Major Related Program (DTA/MRP) degree is awarded by Clover Park Technical College to students who have completed specified curriculum with the intent of transferring to one of Washington's four-year institutions.

DTA/MRP degrees prepare students with general education requirements necessary to pursue further study. They do not alter the admission criteria established by the baccalaureate institution, nor do they guarantee admission to the institution. Students should contact an advisor at the potential transfer institution regarding their interests and specific course choices.

If specific licensure or other eligibility requirements are necessary for employment in a career field offered by Clover Park Technical College, the program description provided in this section of the catalog will identify those requirements. Unique requirements for employment and advancement within the profession or occupation are also described. Certification obtained through the completion of all program requirements does not guarantee job attainment or reciprocity of credentials in another state or country.

## Operations Management

### Bachelor of Applied Science in Operations Management

#### BACHELOR OF APPLIED SCIENCE DEGREE

CPTC's Bachelor of Applied Science in Operations Management (BAS-OPM) degree has been designed to meet the needs of students who want to move into supervisory and management roles in industry.

In the BAS-OPM program, students will learn about operations management tools and techniques, develop core business skills, and apply them to solve problems in industry. Focused-study courses and individual and group capstones help develop the critical thinking skills required for a successful career in an operations management role.

This degree has been designed to meet the educational

needs of working adults. It is based on a combination of web-based instruction with study groups meeting at times convenient to students.

### Program Learning Outcomes

Upon successful completion of the Bachelor of Applied Science in Operations Management degree, students will be able to:

- Use mathematical tools required for operation managements, including acceptance sampling, decision theory, probability theory, linear programming, planning and scheduling.
- Formulate applied forecasting techniques including quantitative and qualitative methods to increase quality management performance.
- Practice how to plan, implement, and manage a comprehensive quality management program within an organization.
- Apply lean terminology and concepts, including value-stream mapping, workplace organization and standardization, 5S and cellular flow, kanban, total productive maintenance, and gap analysis.
- Develop a written proposal for a newly designed or modified facility, including a financial justification for the project, and carry out a verbal presentation of the results.
- Use key terms used in statistical process control (SPC) including control charts, continuous improvement, acceptance sampling, and the design of experiments.
- Develop project management techniques, including realistic and comprehensive project plans, risk areas, monitoring, and problem solving.
- Analyze projects, alternatives, and business decisions based on economic principles, such as time value of money, internal rate of return, and cost-benefit ratios.
- Develop acceptable resolution of ethical dilemmas in the workplace.
- Organize layout of industrial facilities, materials

handling systems, and warehousing for the most efficient flow of raw materials, work-in-process, and final product.

- Apply guidelines for the management of health and safety in the workplace.

### Program Length

The program is approximately six-to-eight quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall quarter or by instructor's permission.

### Completion Requirements

#### Prerequisite(s)

#### Admission to the Program

Admission to the program may occur when the following can be documented:

- Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent from a regionally accredited institution with an overall minimum 2.3 GPA.
- A minimum grade of 2.0 is required in all general education coursework.
- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 college-level credits in a transferable social science course.

#### Admission to the Junior Year

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 5 credits of MATH& 146 or another higher-level statistics class
- 5 credits in a humanities subject – CMST&220 recommended
- 10 credits in natural sciences with at least one science

course with a lab component. Recommended courses: CHEM& 110 (with lab), CHEM& 121 (with lab), PHYS& 114 (with lab), and another transferable science or transferable math course other than MATH& 146.

- 5 credits in any college-level lower division General Education courses: English Composition, Social Science, Humanities, or Natural Science

These requirements can be satisfied by coursework completed before admission to the BAS-OPM program, or during a “bridge” quarter included within the BAS-OPM program. The bridge quarter can include up to 25 credits as required. Bridge courses may be taken concurrently with upper-level BAS classes.

### Graduation Requirements

To successfully complete the degree, students must maintain a minimum grade of 2.0 in all coursework, including “bridge” quarter courses, program courses, and general education courses.

#### Program Course List

MAT 311	Mathematical Techniques for Operations Management	5
MAT 413	Measurement and Statistical Process Control	5
OPM 312	Forecasting and System Design	5
OPM 313	Quality Management	5
OPM 314	Logistical Planning & Supply Chain Management	5
OPM 315	Lean Concepts and Applications	5
OPM 411	Facility Layout and Materials Handling	5
OPM 412	Workplace Health and Safety Management	5
OPM 491	Focused Study I	5
OPM 492	Focused Study II	5
OPM 493	Focused Study III	5
OPM 498CAP	Individual Capstone Project	5
	Or	
OPM 495	Internship	5
OPM 499CAP	Group Capstone Project	5
BUS 310	Project Management	5
ECON 310	Managerial Economics	5
ENG 310	Business Communications	5

PHIL 310DIV	Professional Ethics	5
PSYC 311DIV	Industrial & Organizational Psychology	5

**Subtotal: 90**

*OPM 498CAP: With instructor’s permission, OPM 495 – Internship – can be substituted for OPM 498.*

*Note: Total credits for the degree do not include the bridge quarter (if needed).*

## Pre-Nursing

### Associate in Pre-Nursing

#### DIRECT TRANSFER AGREEMENT/MAJOR RELATED PROGRAM (DTA/MRP)

Designed for the student who plans to transfer to a Bachelor of Science in Nursing (BSN) program at a four-year university, the Associate in Pre-Nursing offers a broad spectrum of academic courses that prepare students for upper-division coursework leading to the Bachelor of Science, Nursing degree (entry-to-practice/basic BSN). Pre-nursing graduates are prepared to apply to BSN programs at various institutions across Washington state, including the following baccalaureate institutions that are participants in this agreement with the community and technical college system: University of Washington, Seattle; Washington State University; Northwest University; Seattle University; Seattle Pacific University; Pacific Lutheran University; Walla Walla University; and the Washington State University Intercollegiate College of Nursing (WSU-ICN), a consortium whose members include Eastern Washington University, Gonzaga, and Whitworth. Associate degree transfers to WSU-ICN are admitted through WSU, not through the other consortium institutions.

Meeting the minimum requirements for this DTA/MRP does not guarantee admission a BSN program. Admission deadlines for transfer institutions vary, and students are required to meet the transfer admission deadline. Nursing-related programs are competitive and may require a higher GPA than a 2.0 overall. Minimum GPA requirements may vary among nursing programs.

It is recommended that students pursuing the Pre-Nursing degree contact their potential transfer institutions early in their program regarding specific course choices in each area where electives are listed.

To receive the DTA degree, students must have earned a minimum of a cumulative college-level GPA of at least a 2.0 and have completed at least 90 quarter hours of

transferable credit, including a minimum of 60 quarter hours of general education courses as shown below.

CPTC does not offer every course each quarter. It is the student's responsibility to discuss sequencing and work out their individual schedule with a program counselor, located in the Advising and Counseling Office. Any developmental coursework a student may be required to complete may increase the program length.

### Program Length

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Students are required to be proficient in intermediate algebra, which is a prerequisite to the math courses included in this program. Individual courses may have prerequisites.

#### Program Course List

##### Communication (10 Cr.)

ENGL& 101	English Composition I	5
ENGL& 102	Composition II	5
ENGL& 235	Technical Writing	5

Walla Walla University requirement: The second English Composition course must be a research writing course. ENGL& 102, or equivalent, fulfills this requirement.

##### Quantitative and Symbolic Reasoning (5 Cr.)

MATH& 146	Introduction to Statistics	5
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UW Seattle requirement: Requires 5 additional credits in college algebra, pre-calculus, or logic.

Seattle University requirement: Requires 5 additional credits in college algebra or pre-calculus.

##### Humanities (15 Cr.)

Five (5) credits in Public Speaking, Interpersonal Communication, or Intercultural Communication

Ten (10) credits in other Humanities courses

CMST& 220	Public Speaking	5
	Humanities Elective	5
	Humanities Elective	5

##### Humanities Electives Available Through CPTC

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
	Or	
ASL& 122	American Sign Language II	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5

*Note: Only one 100-level language course may be used to meet the humanities requirement.*

Washington State University requirement: Requires curriculum that provides students with an understanding of and sensitivity to human diversity. The Humanities distribution area provides an opportunity to meet this requirement. For potential choices go to and select UCORE category "DIVR":

<https://ucore.wsu.edu/students/categoriesand-courses/#DIVR>

##### Social Sciences (15 Cr.)

PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
SOC& 101DIV	Introduction to Sociology	5

Washington State University requirement: Requires curriculum that provides students with an understanding of and sensitivity to human diversity. The Social Sciences distribution area provides an opportunity to meet this requirement. For potential choices go to and select UCORE category "DIVR":

<https://ucore.wsu.edu/students/categoriesand-courses/#DIVR>

Walla Walla University requirement: Requires a course in General Sociology.

##### Natural Sciences (35 Cr.)

BIOL& 160	General Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5

BIOL& 260	Microbiology	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
NUTR& 101	Nutrition	5

University of Washington requirement: Requires a minimum cumulative GPA of 3.0 for three Natural Sciences courses or a minimum cumulative GPA of 2.8 for four Natural Sciences courses.

**Electives (10 Cr.)**

A specific elective course may be credited toward no more than one distribution or skill area requirement. A maximum of 5 elective credits may be in college-level courses as defined by CPTC, and the remainder shall be fully transferable as defined by the receiving institution. Select courses appropriate for intended major and intended bachelor’s institution. Students should contact an advisor at the potential transfer institution regarding their interests and specific course choices.

Elective	5
Elective	5

College Success Course (3 Cr.)		
COLL 102	College Success for All	3

Computer Literacy Course (3 Cr.)		
	Computer Literacy	3
		<b>Subtotal: 96</b>

University of Washington requirement: Requires 100 hours of healthcare experience.

**Advising Notes**

1. Students should check with their potential transfer institutions for admission requirements, some admission requirements may not be met by this DTA/MRP. Some transfer institutions may require additional courses before starting the BSN.
2. Some transfer institutions may require additional courses before starting the BSN.
3. Students must apply to graduate at the community or technical college to be awarded this DTA/MRP.
4. Many BSN programs recommend a public speaking course. Students should contact their transfer institution(s) to find out if a public speaking course is

preferred.

5. Students are encouraged to consult with the transfer institution(s) regarding the Humanities courses that best prepare them for a BSN and for admission to the institution(s).
6. Students are encouraged to take courses that provide them with an understanding of and sensitivity to human diversity.
7. Introductory survey courses or review courses do not meet the content level expectations for the Natural Sciences distribution area. Six-credit courses may be used in place of five-credit courses in the Natural Sciences distribution area. Extra credits may apply toward the Electives distribution area.
8. In order to better prepare for successful transfer, students are encouraged to consult with the institution(s) to which they wish to transfer regarding the humanities courses and other electives that best support or may be required as prerequisites to their nursing curriculum.

## Accounting

### Accounting Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Prepares students for careers in accounting with starting positions such as a junior-level accountant, entry-level accounting supervisor, full-charge bookkeeper, fiscal technician, accounting assistant, or other entry-level accounting clerks. Positions may also include specialty areas such as payroll, income taxes, and QuickBooks applications.

Participate in realistic training through internships. Technical course curriculum is based on current industry standards. Course delivery varies between live, hybrid and online methods.

**Program Learning Outcomes**

Upon successful completion of the Accounting degree, students will be able to:

- Apply accounting methods, tools, and concepts in an ethical and legal manner.
- Analyze accounting information according to industry standards, generally accepted accounting

principles, or governmental financial reporting standards.

- Develop appropriately formatted accounting reports for both internal and external users.
- Analyze internal control issues in accounting policies and procedures.
- Prepare appropriate federal income tax forms by applying basic tax principles to various scenarios.
- Evaluate financial information provided by reports generated from different forms of business.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of MAT 094 and ENG 091 or equivalent or instructor’s permission.

**Program Course List**

ACTG 110	Bookkeeping I	4
ACTG 115	Bookkeeping II	4
ACTG 120	Electronic Business Math	2
ACTG 135	Accounting Spreadsheets I	5
ACTG 141	QuickBooks I	2
ACTG 143	QuickBooks II	3
ACTG 160	Payroll & Business Taxes	5
ACCT& 201	Principles of Accounting I	5
BUS& 201	Business Law	5
ACCT& 202	Principles of Accounting II	5
ACTG 222	Fundamentals of Individual Income Tax Accounting	4
ACCT& 203	Principles of Accounting III	5
ACTG 224	Fundamentals of Governmental/Nonprofit Accounting	5
ACTG 211	Principles of Accounting I Lab	2
ACTG 212	Principles of Accounting II Lab	3
ACTG 213	Principles of Accounting III Lab	3
ACTG 236	Accounting Spreadsheets II	3
ACTG 241	QuickBooks III	4
ACTG 260	Business Office I	5
ACTG 262CAP	Business Office II	5
ACTG 291	Individual Income Tax Accounting	5
ACTG 293	Individual Income Tax Accounting Lab	5
CAS 121CL	Word I	3
CAS 141CL	PowerPoint	3
CAS 151CL	Access I	3

**ACTG 110, ACTG 115 and ACTG 120: Courses are articulated with high schools for dual credit.**

Plus Select 5 Credits from Options (Below)

ACTG 271	Internship I	5
ACTG 295	Individual Income Tax Internship	5

**Subtotal: 103**

AAT Requirements

Technical Course Requirements	103
AAT General Education Requirements	18

**Subtotal: 121**

*AAT General Education Requirements: See list below*

AAS-T Requirements

Technical Course Requirements	103
AAS-T Degree General Education Requirements	23

**Subtotal: 126**

*AAS-T Degree General Education Requirements: See list below*

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science - Transfer (AAS-T). The different requirements for each degree are listed below.

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
Or		
CMST& 220	Public Speaking	5
MAT 103	Business Mathematics	5
Or		
Any 100-Level Math Class		5
PSYC& 100DIV	General Psychology	5
Or		
SOC& 101DIV	Introduction to Sociology	5
Or		
PSY 112DIV	Psychology of the	5



	Workplace		
COLL 102	College Success for All	3	
AAS-T Degree General Education Requirements (23 credits)			
All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:			
5 credits in communication			
ENGL& 101	English Composition I	5	
5 credits in quantitative reasoning:			
MATH& 107	Math in Society	5	
MATH& 141	Precalculus I	5	
MATH& 142	Precalculus II, Functional Trigonometry	5	
MATH& 146	Introduction to Statistics	5	
MATH& 151	Calculus I	5	
5 credits in a social science that meets the diversity requirement			
PSYC& 100DIV	General Psychology	5	
SOC& 101DIV	Introduction to Sociology	5	
5 credits in social science, humanities, or science			
Choose one from the following:			
ART& 100	Art Appreciation	5	
ASL& 121	American Sign Language I	5	
ASL& 122	American Sign Language II	5	
BIOL& 160	General Biology w/Lab	5	
BIOL& 175	Human Biology w/Lab	5	
BIOL& 241	Human A & P I	5	
BIOL& 242	Human A & P II	5	
BIOL& 260	Microbiology	5	
CHEM& 110	Chemical Concepts w/Lab	5	
CHEM& 121	Intro to Chemistry	5	
CHEM& 131	Introduction to Organic/Biochemistry	5	
CMST& 220	Public Speaking	5	
GEOL& 110	Environmental Geology with Lab	5	
HIST& 146	US History I	5	
HIST& 147	US History II	5	
HIST& 148	US History III	5	
HUM& 101	Introduction to Humanities	5	

MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:		
COLL 102	College Success for All	3

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

### Program Length

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All courses must be completed with a minimum “C” grade to graduate.

### Admission Dates

Recommended fall and spring quarters or by instructor’s permission. Students with prior learning or experience should contact the instructor prior to enrolling for individual start dates, class schedule and options.

## Bookkeeping Clerk Certificate

Prepares students for employment as accounts receivable, accounts payable, payroll clerks, or other bookkeeping clerk positions. Introduces bookkeeping and accounting theory complemented with Microsoft Office applications and automated accounting software. Enhances the skills of an office clerk. Technical course curriculum is based on current industry standards. Course delivery varies between live, hybrid and online methods.

### Program Learning Outcomes

Upon successful completion of the Bookkeeping Clerk certificate, students will be able to:

- Apply bookkeeping and accounting theory according to industry standards.
- Use automated accounting software according to industry standards.
- Develop financial and management reports with computer software according to professional

accounting standards.

- Perform basic functions of maintaining financial records for a business according to industry standards.
- Process documents required for accounts payable, accounts receivable and payroll positions.

### Program Length

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All courses must be completed with a minimum “C” grade to graduate.

### Admission Dates

Recommended fall and spring quarters or by instructor’s permission. Students with prior learning or experience should contact the instructor prior to enrolling for individual start dates.

### Completion Requirements

#### Prerequisite(s)

Successful completion of MAT 094 and ENG 091 or equivalent or instructor’s permission.

#### Program Course List

ACTG 110	Bookkeeping I	4
ACTG 115	Bookkeeping II	4
ACTG 120	Electronic Business Math	2
ACTG 135	Accounting Spreadsheets I	5
ACTG 141	QuickBooks I	2
ACTG 143	QuickBooks II	3
ACTG 160	Payroll & Business Taxes	5
ACCT& 201	Principles of Accounting I	5
ACTG 211	Principles of Accounting I Lab	2
ACTG 236	Accounting Spreadsheets II	3
CAS 121CL	Word I	3
CAS 141CL	PowerPoint	3
COLL 102	College Success for All	3

**Subtotal: 44**

*ACTG 110, ACTG 115 and ACTG 120: Courses are articulated with high schools for dual credit.*

## Architectural Engineering Design

### Architectural Engineering Design Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Prepares students for employment in the field of architectural design or a related technical field, such as drawing for product manufacturers, contractors, engineering or design firms. Prior graduates have entered engineering technician positions in computer-aided drafting and design (CADD); project management; specification writing; cost estimating; residential design, site planning, and developing; customer sales and service; and performing structural calculations and computations for engineering of wood trusses and joists. Students participate in realistic training activities as a part of their educational experience.

### Program Learning Outcomes

Upon successful completion of the Architectural Engineering Design degree, students will be able to:

- Create drawings and building models with the latest computer aided drafting (CAD) software, such as Revit, AutoCAD, Civil 3D, and SketchUp.
- Create a complete set of construction documents that satisfy permitting requirements for a single-family home.
- Design a home for a client based on their ideas, needs, budget, timeline, and site features.
- Apply construction management skills throughout the three phases of design: schematic design, design development, and construction documents.
- Assess engineering components of building materials and physical forces upon them with statics and dynamics.
- Research products used within the construction industry to ensure project quality control.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 091 and MAT 092.

*Computer skills are highly recommended prior to starting*

ARC courses.

**Subtotal: 103**

Program Course List		
ARC 120	Residential Drafting & Design I	4
ARC 124	Residential Drafting & Design II	5
ARC 126	Residential Drafting & Design III	5
ARC 146	Detailing and Light Construction	4
ARC 150	Construction Materials Research	4
ARC 171	Drafting Technologies I	5
ARC 175	Civil Engineering	4
ARC 183CL	Introduction to CAD Drafting	4
ARC 192	Engineering Mechanics of Materials	4
ARC 219	Residential Drafting & Design IV	4
ARC 223	Design Project I	5
ARC 225CAP	Design Project II	5
ARC 231	Cost Estimating	3
ARC 255	Employment Research	1
ARC 262	Intro to 3D Modeling	3
ARC 282	Intro to Building Information Modeling	5
ARC 286	Advanced Building Information Modeling	5
ARC 293	Engineering Statics	5
	Plus 5 credits from the list of electives below	5

**Subtotal: 80**

Electives:		
ARC 227	Special Intern Project	5
ARC 229	Special Design Project	5
ARC 288CL	Applied CADD	5

AAT Requirements		
	Technical Course Requirements	80
	AAT General Education Requirements	18

**Subtotal: 98**

*AAT General Education Requirements: See list below*

AAS-T Requirements		
	Technical Course Requirements	80
	AAS-T Degree General Education Requirements	23

*AAS-T Degree General Education Requirements: See list below*

***Clover Park Technical College and Washington State University (WSU) have agreed upon a Customized Articulation Agreement, which states that students who complete the Architectural Engineering Design AAS-T at Clover Park with at least a 3.0 cumulative grade point average will be certified as Architectural Studies majors at WSU and will be granted junior standing.***

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
MAT 103	Business Mathematics	5
	Or	
MAT 105	Mathematics for Industrial Professionals	5
	Or	
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication  
ENGL& 101 English Composition I 5

5 credits in quantitative reasoning:  
MATH& 107 Math in Society 5  
MATH& 141 Precalculus I 5  
MATH& 142 Precalculus II, Functional Trigonometry 5  
MATH& 146 Introduction to Statistics 5  
MATH& 151 Calculus I 5

NOTE: MATH& 141 preferred.

5 credits in a social science that meets the diversity requirement  
PSYC& 100DIV General Psychology 5  
SOC& 101DIV Introduction to Sociology 5

5 credits in social science, humanities, or science

Choose one from the following:  
ART& 100 Art Appreciation 5  
ASL& 121 American Sign Language I 5  
ASL& 122 American Sign Language II 5  
BIOL& 160 General Biology w/Lab 5  
BIOL& 175 Human Biology w/Lab 5  
BIOL& 241 Human A & P I 5  
BIOL& 242 Human A & P II 5  
BIOL& 260 Microbiology 5  
CHEM& 110 Chemical Concepts w/Lab 5  
CHEM& 121 Intro to Chemistry 5  
CHEM& 131 Introduction to Organic/Biochemistry 5  
CMST& 220 Public Speaking 5  
GEOL& 110 Environmental Geology with Lab 5  
HIST& 146 US History I 5  
HIST& 147 US History II 5  
HIST& 148 US History III 5  
HUM& 101 Introduction to Humanities 5  
MUSC& 105 Music Appreciation 5  
PHYS& 114 General Physics I with Lab 5  
POLS& 202 American Government 5  
PSYC& 200 Lifespan Psychology 5  
PSYC& 220 Abnormal Psychology 5

3 credits in College Success:  
COLL 102 College Success for All 3

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to

graduation. This includes courses that meet the capstone project, diversity and computer literacy requirements.

### Program Length

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

## Architectural CAD Drafting Certificate

Prepares students for entry-level careers in computer-aided drafting within the construction industry. Students will learn to create drawings and plans that show the technical details of an architectural structure from all angles.

CAD drafters use information provided by engineers, architects and clients to develop technical drawings that visually present the project and include essential details.

The certificate is a pathway to the Architectural Engineering Design associate degree program.

### Program Learning Outcomes

Upon successful completion of the Architectural CAD Drafting certificate, students will be able to:

- Create drawings with the latest computer aided drafting (CAD) software, such as AutoCAD, Civil 3D, and SketchUp.
- Create a complete set of construction documents that satisfy permitting requirements for a single family home.
- Research products used within the construction industry to ensure project quality control.

### Program Length

This three-quarter certificate is specifically developed to provide students with assistance in gaining the skills they will need to be successful in the industry.

### Admission Dates

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 091 and MAT 092.

*Computer skills are highly recommended prior to starting ARC courses.*

**Program Course List**

ARC 120	Residential Drafting & Design I	4
ARC 124	Residential Drafting & Design II	5
ARC 126	Residential Drafting & Design III	5
ARC 146	Detailing and Light Construction	4
ARC 150	Construction Materials Research	4
ARC 171	Drafting Technologies I	5
ARC 175	Civil Engineering	4
ARC 183CL	Introduction to CAD Drafting	4
ARC 262	Intro to 3D Modeling	3
COLL 102	College Success for All	3

**Subtotal: 41**

*Note: English Composition or higher*

**Automotive Collision Technician**

**Automotive Collision Technician Associate of Applied Technology Degree**

Skilled automotive collision technicians may be employed in new car dealerships, independent auto collision shops, and industrial and government agency motor pools.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Program Learning Outcomes**

- Perform high-quality repairs based on diagnosis of collision damage.
- Apply professional automobile painting and refinishing skills.
- Create collision repair estimates with computer software.

- Use industry standards at all times in the shop.
- Perform correction of finish imperfections/defects to industry standards.
- Use vehicle detailing skills post-repair to return to pre-accident condition.
- Perform repairs on damaged panels with industry approved techniques.
- Apply manufacturer guidelines when making repairs.

**General Degree Requirements**

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer-literacy requirements.

Students entering the Automotive Collision Technician degree from the Ford Maintenance & Light Repair Technician program will not be required to repeat equivalent courses upon entering the Automotive Collision Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.

**Program Length**

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or

Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

#### Introduction To Automotive List

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

#### Program Course List

ACT 102	Fundamentals of Collision Repair	3
ACT 106	Body Shop Equipment	3
ACT 110	Welding, Heating, & Cutting	4
ACT 115	Plastics/SMC Repair	4
ACT 120	Glass, Trim, & Hardware	5
ACT 125	Introduction to Metal Straightening	3
ACT 132	Panel Replacement	6
ACT 133	Panel Repair	6
ACT 134CAP	Auto Collision Major Repair	5
ACT 141	Auto Body Aluminum Repair	4
ACT 145	Collision Estimating	5
ACT 151	Refinish Equipment Preparation	6
ACT 154	Topcoat Refinishing	8
ACT 156	Pre-Prime Preparation	5
ACT 157	Post-Prime Preparation	5
ACT 166CAP	Surface Imperfections/Exterior Trim	5
ACT 171	Plastic Refinishing	5
ENGL& 101	English Composition I	5
Or		
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
Or		
SOC& 101DIV	Introduction to Sociology	5

Or		
PSY 112DIV	Psychology of the Workplace	5
	Computer Literacy Requirement	3
COLL 102	College Success for All	3

**Subtotal: 122**

#### NOTE:

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**ACT 120: Articulated courses with high schools for dual enrollment**

## Refinishing Technician Certificate

Skilled automotive collision refinishing technicians may be employed in new car dealerships and independent auto collision shops, as well as industrial and government agency motor pools.

Graduates of this program will enter the trade with considerable practical skills gained through hands-on repair experience throughout the program.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

Students entering the Refinishing Technician certificate from the Ford Maintenance & Light Repair Technician program will not be required to repeat equivalent courses upon entering the Refinishing Technician certificate. They will be required to take IAUT 140 Basic Automotive Welding.

### Program Length

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

## Completion Requirements

### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

Introduction To Automotive List		
IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4
		<b>Subtotal: 19</b>

Program Course List		
ACT 141	Auto Body Aluminum Repair	4
ACT 145	Collision Estimating	5
ACT 151	Refinish Equipment Preparation	6
ACT 154	Topcoat Refinishing	8
ACT 156	Pre-Prime Preparation	5
ACT 157	Post-Prime Preparation	5
ACT 166CAP	Surface Imperfections/Exterior Trim	5
ACT 171	Plastic Refinishing	5
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 80</b>

## Structure Repair Technician Certificate

Skilled automotive collision structure repair technicians may be employed in new car dealerships and independent auto collision shops, as well as industrial and government agency motor pools.

Graduates of this program will enter the trade with considerable practical skills gained through actual hands-on repair experience throughout the program.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

### Program Length

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

Introduction To Automotive List		
IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension &	5

	Brakes		
IAUT 130	Automotive HVAC	2	
IAUT 140	Basic Automotive Welding	4	
			<b>Subtotal: 19</b>
<b>Program Course List</b>			
ACT 102	Fundamentals of Collision Repair	3	
ACT 106	Body Shop Equipment	3	
ACT 110	Welding, Heating, & Cutting	4	
ACT 115	Plastics/SMC Repair	4	
ACT 120	Glass, Trim, & Hardware	5	
ACT 125	Introduction to Metal Straightening	3	
ACT 132	Panel Replacement	6	
ACT 133	Panel Repair	6	
ACT 134CAP	Auto Collision Major Repair	5	
ACT 141	Auto Body Aluminum Repair	4	
ENGL& 101	English Composition I Or	5	
CMST& 220	Public Speaking	5	
	Any 100-Level Math Class	5	
PSYC& 100DIV	General Psychology Or	5	
SOC& 101DIV	Introduction to Sociology Or	5	
PSY 112DIV	Psychology of the Workplace	5	
COLL 102	College Success for All	3	
			<b>Subtotal: 80</b>

**NOTE:**

***ACT 120 is articulated with high schools for dual enrollment.***

## Automotive Restoration and Customization – Finishing Certificate

Focuses on exterior repair and restoration, customization, preparation for paint, stock, and/or custom finishing.

Designed to provide entry-level knowledge and skills necessary to restore and/or customize vehicles.

Students will participate in realistic training activities as part of their educational experience and/or will work on

their own projects.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

### Program Learning Outcomes

Upon successful completion of the Automotive Restoration & Customization – Finishing certificate, students will be able to:

- Operate panel forming equipment safely.
- Manufacture repair/replacement panels.
- Apply custom surface finishes.
- Disassemble projects in an organized manner.
- Assemble vehicles to restoration/show standards.
- Create replacements for obsolete parts.
- Map out repair/customizing plan.
- Perform correction of finish imperfections/defects to show or display standards.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

### Program Length

This program is approximately four to six quarters long after meeting prerequisites, depending on the time students need to satisfactorily complete all graduation requirements and prerequisites, master the skills and techniques covered, and finish a capstone project.

### Admission Dates

Summer, fall, winter, and spring quarters, by instructor’s permission only.



## Completion Requirements

### Prerequisite(s)

Instructor Permission Only. Students must also have successfully completed the entire Automotive Collision Program or equivalent. A valid driver's license is required.

#### Program Course List

ARCF 103	Fundamentals & Shop Equipment	3
ARCF 109	Welding & Metal Skills	4
ARCF 114	Basic Repairs & Assembly	8
ARCF 119	Custom Fabrication	6
ARCF 124	Refinishing Equipment	4
ARCF 129	Refinish Preparation	7
ARCF 134	Custom Refinishing	6
ARCF 141	Surface Imperfections/Show & Shine	4
ARCF 154	Automotive Restoration & Customization Finishing Lab	4-9
ARCF 167	Custom Paint Application	3
ARCF 168	Applied Metal Skills	3
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

**Subtotal: 70-75**

#### Recommended Electives

ARCF 130	Advanced Paint Application	4-6
ARCF 133	Fiberglass/Composites Techniques	4-6
ARCF 159	Metal Straightening & Shaping	4-6
ARCF 170	Custom Refinishing Special Projects	4-6

## Automotive Technician

### Automotive Technician Associate of Applied Technology Degree

This ASE-certified program prepares students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification. Cooperative work experience is available with instructor's permission. Credits will depend on time spent in co-op.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

#### Program Learning Outcomes

Upon successful completion of the Automotive Technician degree, students will be able to:

- Apply appropriate industry standards and practices to diagnose and repair customer-owned vehicles.
- Use modern automotive diagnostic and repair equipment appropriately.
- Use printed and computer-based service repair information.
- Use hand and power tools appropriately in an automotive repair environment.
- Apply appropriate mathematical skills in the process of diagnosis and repair of automobiles.
- Model ethical and professional behavior including customer communication skills essential to the requirements of the automotive repair workplace.
- Demonstrate hands-on competency in the eight Automotive Service Excellence task areas.

#### General Degree Requirements

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This

includes courses that meet the capstone project, diversity and computer literacy requirements.

**Program Length**

This program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring. Summer and winter quarters with instructor’s permission only.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

**Introduction To Automotive List**

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4
		<b>Subtotal: 19</b>

**Program Course List**

AUT 147	Automotive Brakes	6
AUT 149	Automotive Suspension, Steering, & Wheel Alignment	7
AUT 157	Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab	6
AUT 174	Engine Minor Mechanical Repair	6
AUT 175	Engine Major Mechanical Repair	7
AUT 178	Engine Mechanical Lab	3
AUT 209	Electronic Systems	7
AUT 212	Electrical Systems	9

AUT 217	Automotive Ignition Systems	7
AUT 223	Automotive Fuel Systems	7
AUT 236	Automotive Emissions Systems	7
AUT 239	Automotive Clutches & Manual Transmissions	9
AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6
AUT 246	Manual Drive Trains & Axles Lab	4
AUT 247	Automatic Transmissions	7
AUT 250	Automatic Transaxles	7
AUT	Automatic	4
251CAP	Transmission/Transaxle Lab	
AUT 255	Automotive Air Conditioning, Heating & Ventilation	6
AUT 270	Introduction to Hybrid Safety	4
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
	Computer Literacy Requirement	3
COLL 102	College Success for All	3
		<b>Subtotal: 159</b>

**NOTE:**

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**AUT 147-236 must be taken in consecutive order.**

**Students must take AUT 209 and AUT 212 prior to AUT 255 .**

**Optional Course**

AUT 295	On-the-Job Training/Work-Based Learning	1-2
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**Optional Electives**

Students may also choose to take any course in the following programs as an optional elective for this program: Auto Collision, Auto Restoration and

Customization, and Automotive Hybrid.

Students entering the Auto Technician degree from the Ford Maintenance & Light Repair Technician program will not be required to repeat equivalent courses upon entering the Auto Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.

### Drive Train Technician Certificate

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

#### Program Length

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Summer, fall, winter, and spring quarters.

#### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

#### Introduction To Automotive List

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4
		<b>Subtotal: 19</b>

#### Program Course List

AUT 239	Automotive Clutches & Manual Transmissions	9
AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6
AUT 246	Manual Drive Trains & Axles Lab	4
AUT 247	Automatic Transmissions	7
AUT 250	Automatic Transaxles	7
AUT 251CAP	Automatic Transmission/Transaxle Lab	4
ENGL& 101	English Composition I	5
Or		
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
Or		
SOC& 101DIV	Introduction to Sociology	5
Or		
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 74</b>

### Electrical, Electronics and AC/Heating Technician Certificate

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

### Program Length

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

#### Introduction To Automotive List

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4
		<b>Subtotal: 19</b>

#### Program Course List

AUT 209	Electronic Systems	7
AUT 212	Electrical Systems	9
AUT 255	Automotive Air Conditioning, Heating & Ventilation	6
COLL 102	College Success for All	3
		<b>Subtotal: 44</b>

## Engine Repair and Engine Performance Technician Certificate

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

By instructor’s approval.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

#### Introduction To Automotive List

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

**Program Course List**

AUT 174	Engine Minor Mechanical Repair	6
AUT 175	Engine Major Mechanical Repair	7
AUT 178	Engine Mechanical Lab	3
AUT 209	Electronic Systems	7
AUT 212	Electrical Systems	9
AUT 217	Automotive Ignition Systems	7
AUT 223	Automotive Fuel Systems	7
AUT 236	Automotive Emissions Systems	7
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 90</b>

*NOTE:*

*AUT 174-AUT 236 must be taken in consecutive order.*

### Ford Maintenance and Light Repair Technician Associate of Applied Technology Degree

Designed by Ford Motor Company to prepare students with the basic skills needed to gain employment as a maintenance and light repair technician.

In addition to Ford training, students receive hands-on experience working with Ford vehicles and using the latest Ford diagnostic tools.

The program is also designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training that prepares them for pre-apprenticeship training and ASE certification. Cooperative

work experience is available with instructor’s permission. Credits will depend on time spent in co-op.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

### Program Learning Outcomes

Upon successful completion of the Ford Maintenance & Light Repair Automotive Technician degree, students will be able to:

- Apply appropriate industry standards and Ford practices to diagnose and repair automotive vehicles.
- Use modern automotive diagnostic and repair equipment properly.
- Use printed and computer-based Ford service repair information for vehicle repair procedures.
- Use hand and power tools appropriately in an automotive repair environment.
- Apply appropriate mathematical skills in the process of diagnosis and repair of automobiles.
- Model ethical and professional behavior including customer communication skills essential to the requirements of the automotive repair workplace.
- Demonstrate hands-on competency in the areas of steering and suspension, electrical systems, brake systems, and climate control.

### General Degree Requirements

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Program Length**

This program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Students transferring to the Automotive Technician degree program may need to withdraw for one or two quarters to finish their program of study.

**Admission Dates**

Fall, winter, and spring quarters, or by instructor’s permission.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in FAUT. Valid driver’s license is required.

**Program Course List**

FAUT 120	Ford Introduction to Automotive	2
FAUT 144	Ford Basic Electrical Systems Diagnosis and Testing	6
FAUT 147	Ford Automotive Brakes	6
FAUT 149	Ford Automotive Suspension, Steering, & Wheel Alignment	7
FAUT 157	Ford Automotive Brakes, Suspension, Steering, & Alignment Lab	5
FAUT 172	Ford Base Steering, Suspension, & Alignment	6
FAUT 179	Ford General Maintenance & Tires	7
FAUT 185	Ford Brake Systems Diagnosis	2
FAUT 209	Ford Electronic Systems	7
FAUT 212	Ford Electrical Systems	9
FAUT 255	Ford Air-Conditioning, Heating & Ventilation	6
IAUT 140	Basic Automotive Welding	4
AUT 174	Engine Minor Mechanical Repair	6
AUT 175	Engine Major Mechanical Repair	7
AUT 178	Engine Mechanical Lab	3
AUT 217	Automotive Ignition Systems	7
AUT 223	Automotive Fuel Systems	7
AUT 236	Automotive Emissions Systems	7
AUT 239	Automotive Clutches & Manual Transmissions	9

AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6
AUT 246	Manual Drive Trains & Axles Lab	4
AUT 247	Automatic Transmissions	7
AUT 250	Automatic Transaxles	7
AUT 251CAP	Automatic Transmission/Transaxle Lab	4
AUT 270	Introduction to Hybrid Safety	4
ENGL& 101	English Composition I Or Public Speaking	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology Or Introduction to Sociology	5
SOC& 101DIV	Introduction to Sociology Or Psychology of the Workplace	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All Computer Literacy Requirement	3 3

**Subtotal: 167**

*NOTE:*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Optional Course**

AUT 295	On-the-Job Training/Work-Based Learning	1-2
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**Optional Electives**

Students may also choose to take any course in the following programs as an optional elective for this program: Auto Collision, Auto Restoration and Customization, and Automotive Hybrid.

**Ford Maintenance and Light Repair Technician Certificate**

Designed by Ford Motor Company to prepare students with the basic skills needed to gain employment as a maintenance and light repair technician.

In addition to Ford training, students receive hands-on

experience working with Ford vehicles and using the latest Ford diagnostic tools.

The program is also designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training that prepares them for pre-apprenticeship training and ASE certification.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. Students must also successfully complete ENG 094 and MAT 094 by the end of the second quarter.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Students continuing with the Ford Maintenance and Light Repair Technician degree program may need to withdraw for one or two quarters depending on sequence of courses offered.

**Admission Dates**

Fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Valid driver’s license is required.

Upon completion of the Ford MLR program, students may transfer to the Automotive Technician or the Automotive Collision degree program. Four additional quarters would be required to complete the AAT degree. Students entering the Automotive Technician program or the Automotive Collision program from the Ford MLR program will not be required to repeat equivalent courses. Students will be required to take IAUT 140 Basic Automotive Welding.

**Program Course List**

FAUT 120	Ford Introduction to Automotive	2
FAUT 144	Ford Basic Electrical Systems Diagnosis and Testing	6
FAUT 147	Ford Automotive Brakes	6

FAUT 149	Ford Automotive Suspension, Steering, & Wheel Alignment	7
FAUT 157	Ford Automotive Brakes, Suspension, Steering, & Alignment Lab	5
FAUT 172	Ford Base Steering, Suspension, & Alignment	6
FAUT 179	Ford General Maintenance & Tires	7
FAUT 185	Ford Brake Systems Diagnosis	2
FAUT 209	Ford Electronic Systems	7
FAUT 212	Ford Electrical Systems	9
FAUT 255	Ford Air-Conditioning, Heating & Ventilation	6
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

**Subtotal: 81**

**Front End and Brakes Technician Certificate**

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians.

Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks and tools by the start of the third week of classes.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of Introduction to Automotive, Ford Maintenance & Light Repair Technician certificate, or equivalent.

Introduction To Automotive List			
IAUT 104	Introduction to Automotive Electrical	4	
IAUT 105	Introduction to Automotive Trades	4	
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5	
IAUT 130	Automotive HVAC	2	
IAUT 140	Basic Automotive Welding	4	
			<b>Subtotal: 19</b>

Program Course List			
AUT 147	Automotive Brakes	6	
AUT 149	Automotive Suspension, Steering, & Wheel Alignment	7	
AUT 157	Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab	6	
COLL 102	College Success for All	3	
			<b>Subtotal: 41</b>

*Note: AUT 147, AUT 149 and AUT -157 must be taken in consecutive order.*

**Hybrid and Alternative Fuel Vehicle Technician Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This ASE-certified program prepares students for entry-level positions as automotive technicians. This degree builds upon the Automotive Technician program by providing an additional quarter of study focused specifically on hybrid and alternative fuel vehicles.

Students participate in realistic training that prepares them for employment and ASE certification.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver’s license is required.

Introduction To Automotive List			
IAUT 104	Introduction to Automotive Electrical	4	
IAUT 105	Introduction to Automotive Trades	4	
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5	
IAUT 130	Automotive HVAC	2	
IAUT 140	Basic Automotive Welding	4	
			<b>Subtotal: 19</b>

Program Course List			
AUT 147	Automotive Brakes	6	
AUT 149	Automotive Suspension, Steering, & Wheel Alignment	7	
AUT 157	Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab	6	
AUT 174	Engine Minor Mechanical Repair	6	
AUT 175	Engine Major Mechanical Repair	7	
AUT 178	Engine Mechanical Lab	3	
AUT 209	Electronic Systems	7	
AUT 212	Electrical Systems	9	
AUT 217	Automotive Ignition Systems	7	
AUT 223	Automotive Fuel Systems	7	
AUT 236	Automotive Emissions Systems	7	
AUT 239	Automotive Clutches & Manual Transmissions	9	
AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6	
AUT 246	Manual Drive Trains & Axles Lab	4	
AUT 247	Automatic Transmissions	7	
AUT 250	Automatic Transaxles	7	



AUT	Automatic	4
251CAP	Transmission/Transaxle Lab	
AUT 255	Automotive Air Conditioning, Heating & Ventilation	6
AUT 270	Introduction to Hybrid Safety	4
AUTH 105	Hybrid/Alternate Fuel Introduction & Safety	2
AUTH 110	Alternate Fuel Vehicle Systems	2
AUTH 115	Toyota Hybrid System Overview	2
AUTH 120	Toyota Prius Hybrid System	2
AUTH 125	Honda Hybrid System Overview	2
AUTH 130	Honda Civic IMA Hybrid System	2
AUTH 135	Ford Escape/Mercury Mariner Hybrid System Overview	2
AUTH 140	General Motors & Other Hybrid Systems Overview	2
AUTH 145	Advanced Lab & Final Exam Preparation	2

**Subtotal: 156**

*Note: Must take AUT 209 and AUT 212 prior to AUT 255.*

**AAT Requirements**

Technical Course Requirements	156
Computer Literacy Requirement	3
AAT General Education Requirements	18

**Subtotal: 177**

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

*AAT General Education Requirements: See list above*

**AAS-T Requirements**

Technical Course Requirements	156
Computer Literacy Requirement	3
AAS-T Degree General Education Requirements	23

**Subtotal: 182**

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

*AAS-T Degree General Education Requirements: See list above*

**General Degree Requirements**

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C (2.0) GPA or higher.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*NOTE: CMST 220 or higher*

*PSYC 100DIV: PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement*

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

**5 credits in communication:**

ENGL& 101	English Composition I	5
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**5 credits in quantitative reasoning:**

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

**5 credits in a social science that meets the diversity requirement:**

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity and computer literacy requirements.

Students entering the Hybrid & Alternative Fuel Vehicle Technician degree from the Ford Maintenance & Light Repair Technician program will not be required to repeat equivalent courses upon entering the Auto Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.

### Program Length

This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

### Admission Dates

Fall and spring quarters. Summer and winter quarters with instructor's permission only. Hybrid courses are taught summer quarter only.

## Hybrid and Alternative Fuel Vehicle Technician Certificate

This certificate covers the history and evolution of hybrid, electric and alternate-fuel vehicles; general safety precautions and procedures; and required and recommended tools for servicing. This certificate is designed to give students the theory and hands-on experience needed to safely and confidently service this growing vehicle population.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and must have the required tools by the start of the second quarter.

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

### Admission Dates

Hybrid courses are taught summer quarter only. Fall and spring admission to the Automotive Technician program.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required. Graduation from an ASE/NATEF certified program or two years of industry experience with instructor's permission. Must have approved safety glasses, coveralls and high-voltage gloves.

**Program Course List**

AUTH 105	Hybrid/Alternate Fuel Introduction & Safety	2
AUTH 110	Alternate Fuel Vehicle Systems	2
AUTH 115	Toyota Hybrid System Overview	2
AUTH 120	Toyota Prius Hybrid System	2
AUTH 125	Honda Hybrid System Overview	2
AUTH 130	Honda Civic IMA Hybrid System	2
AUTH 135	Ford Escape/Mercury Mariner Hybrid System Overview	2
AUTH 140	General Motors & Other Hybrid Systems Overview	2
AUTH 145	Advanced Lab & Final Exam Preparation	2

**Subtotal: 18**

## Aviation Maintenance Technician

### Aviation Maintenance Technician Associate of Applied Technology Degree / Associate in Applied Science – T Degree

This FAA-approved program is designed to prepare students for entry-level positions in the aircraft-maintenance industry. Graduates will meet Federal Aviation Administration (FAA) requirements for the issuance of airframe and powerplant certificates. Aviation maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft, including airplanes and helicopters and their propulsion systems. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification upon completion of required technical credits.

Future employment may include positions with major and regional airlines, aircraft and rotorcraft repair and maintenance facilities, airline and corporate jet refurbishing repair stations, and aircraft and component manufacturing.

Courses are offered at the South Hill Campus in Puyallup.

#### Program Learning Outcomes

Upon successful completion of the Aviation Maintenance

Technician degree, students will be able to:

- Interpret a variety of Federal Aviation Regulations used in the aerospace industry.
- Identify a variety of airframe and powerplant systems and components found on general and commuter airline aircraft.
- Practice safety with aviation equipment, special tooling, and human factors training.
- Create troubleshooting techniques for airframe and powerplant systems based on symptoms analysis.
- Perform maintenance, alterations, and inspections on aircraft propellers and procedures for approving them for return to service.
- Employ expanded rotary wing maintenance training as an integral part of the Aviation Maintenance Technician program.

#### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

AMT 104	Basic Mathematics, Basic Physics, and Weight & Balance	5
AMT 109	Basic Electricity	4
AMT 116	Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings	5
AMT 119	Materials & Processes	4
AMT 125	Advanced Electricity	4
AMT 127	Maintenance Forms & Records, Publications, and Mechanics Privileges & Limitations	4
AMT 132	Wood Structures, Aircraft Coverings, & Finishes	4
AMT 133	Aircraft Fuel Systems, Ice & Rain Control Systems, & Fire Protection Systems	4
AMT 135	Sheet Metal Structures	3
AMT 136	Welding, Position & Warning Systems	4
AMT 137	Non-Metallic Structures	4
AMT 138	Aircraft Inspections	4

AMT 139	Assembly & Rigging	4
AMT 140	Aircraft Landing Gear	3
AMT 141	Hydraulic & Pneumatic Power Systems	3
AMT 142	Hangar Operations & Maintenance	3
AMT 143	Airframe Electrical Systems	5
AMT 144	Engine Electrical Systems	5
AMT 145	Cabin Atmosphere Control Systems	3
AMT 146	Aircraft Instrument, Communication & Navigation Systems	3
AMT 208	Helicopter Operations & Maintenance Practices	4
AMT 210	Basic Rotor Systems Maintenance & Repair	4
AMT 212	Advanced Rotor Systems Maintenance & Repair	4
AMT 215	Helicopter Systems	4
AMT 217	FAA Testing & Turbine Engines	7
AMT 219	Engine Lubrication Systems	4
AMT 221	Engine Instrument Systems	4
AMT 224	Powerplant Reciprocating Engine Theory	6
AMT 225	Powerplant Maintenance & Operation	6
AMT 226	Engine Fuel System & Fire Protection	1
AMT 228	Engine Fuel Metering Systems	5
AMT 229CAP	Propellers & FAA Final Testing	4
AMT 231	Engine Inspection	4
AMT 233	Engine Ignition & Starting Systems	4
AMT 235	Induction, Airflow, Cooling & Exhaust Systems	3
AMT 239	Advanced Hangar Operations & Maintenance	3
<b>Subtotal: 146</b>		

AAT Requirements		
Technical Course Requirements		146
AAT General Education Requirements		18
Computer Literacy		3
<b>Subtotal: 167</b>		

*AAT General Education Requirements: See list above*  
*Computer Literacy Requirements: Complete an approved*

*computer literacy course or successfully pass the computer literacy exam*

AAS-T Requirements		
Technical Course Requirements		146
AAS-T Degree General Education Requirements		23
Computer Literacy Requirement		3
<b>Subtotal: 172</b>		

*AAS-T Degree General Education Requirements: See list above*

*Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Note: AMT 142, AMT 239, and the general education courses are required by the college for completion of the Associate of Applied Technology Degree, but are not subject to approval by the FAA.**

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.

AAT Degree General Education Requirements (18 credits)		
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*Note: CMST 220 or higher*  
*PSYC 100DIV: PSY 112DIV, SOC& 101DIV, or other social science or humanities course that meets the diversity requirement*

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:		
ENGL& 101	English Composition I	5

5 credits in quantitative reasoning:		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

Choose one from the following:		
ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:		
COLL 102	College Success for All	3

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone

project, diversity, and computer-literacy requirements.

### Employability Requirements

Graduates must meet Federal Aviation Administration certification exams and pass literacy requirements.

### Program Length

This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

## Airframe Maintenance Technician Certificate

This FAA-approved program is designed to prepare students for entry-level positions in the aircraft maintenance industry. Graduates will meet FAA requirements for the issuance of an airframe certificate. Aviation maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft, including airplanes and helicopters. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification upon completion of required technical credits.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Note:** Graduates must meet FAA literacy requirements and complete technical credits for FAA certification.

### Employability Requirements

Graduates must meet Federal Aviation Administration certification exams and pass literacy requirements.

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

**Completion Requirements****Prerequisite(s)**

None.

**Program Course List**

AMT 104	Basic Mathematics, Basic Physics, and Weight & Balance	5
AMT 109	Basic Electricity	4
AMT 116	Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings	5
AMT 119	Materials & Processes	5
AMT 125	Advanced Electricity	4
AMT 127	Maintenance Forms & Records, Publications, and Mechanics Privileges & Limitations	4
AMT 132	Wood Structures, Aircraft Coverings, & Finishes	4
AMT 133	Aircraft Fuel Systems, Ice & Rain Control Systems, & Fire Protection Systems	4
AMT 135	Sheet Metal Structures	4
AMT 136	Welding, Position & Warning Systems	3
AMT 137	Non-Metallic Structures	4
AMT 138	Aircraft Inspections	4
AMT 139	Assembly & Rigging	4
AMT 140	Aircraft Landing Gear	3
AMT 141	Hydraulic & Pneumatic Power Systems	3
AMT 142	Hangar Operations & Maintenance	3
AMT 143	Airframe Electrical Systems	5
AMT 145	Cabin Atmosphere Control Systems	3
AMT 146	Aircraft Instrument, Communication & Navigation Systems	3
AMT 208	Helicopter Operations & Maintenance Practices	4
AMT 210	Basic Rotor Systems Maintenance & Repair	4
AMT 212	Advanced Rotor Systems Maintenance & Repair	4
AMT 215	Helicopter Systems	4
ENGL& 101	English Composition I	5

CMST& 220	Or Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 108</b>

**Powerplant Technician Certificate**

This FAA-approved program is designed to prepare students for entry-level positions in the aviation engine maintenance industry. Graduates will meet FAA requirements for the issuance of a powerplant certificate. Aviation maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft propulsion systems. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification upon completion of required technical credits.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Note:** Graduates must meet FAA literacy requirements and complete technical credits for FAA certification.

**Note:** Transfer students will have their transcripts evaluated by the Aviation Maintenance staff in accordance with FAR Part 147 to determine their qualification and placement in any of the Aviation Maintenance Technician programs.

**Employability Requirements**

Graduates must meet Federal Aviation Administration certification exams and pass literacy requirements.

**Program Length**

This program is approximately five quarters long, depending on the time students need to satisfactorily

complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

AMT 104	Basic Mathematics, Basic Physics, and Weight & Balance	5
AMT 109	Basic Electricity	4
AMT 116	Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings	5
AMT 119	Materials & Processes	5
AMT 125	Advanced Electricity	4
AMT 127	Maintenance Forms & Records, Publications, and Mechanics Privileges & Limitations	4
AMT 142	Hangar Operations & Maintenance	3
AMT 144	Engine Electrical Systems	5
AMT 217	FAA Testing & Turbine Engines	7
AMT 219	Engine Lubrication Systems	4
AMT 221	Engine Instrument Systems	4
AMT 224	Powerplant Reciprocating Engine Theory	6
AMT 225	Powerplant Maintenance & Operation	6
AMT 226	Engine Fuel System & Fire Protection	1
AMT 228	Engine Fuel Metering Systems	5
AMT 229CAP	Propellers & FAA Final Testing	4
AMT 231	Engine Inspection	4
AMT 233	Engine Ignition & Starting Systems	4
AMT 235	Induction, Airflow, Cooling & Exhaust Systems	3
	English Composition	5
	Or	
	Public Speaking	5

	Any 100-Level Math Class	5
	General Psychology	5
COLL 102	College Success for All	3

**Subtotal: 101**

*NOTE:*

*English Composition or higher*

*General Psychology or other social science or humanities class*

## Avionics Technician

### Avionics Technician Certificate

This two-quarter program is designed to provide students with a foundation in aircraft electronics and digital instrument systems and prepare individuals to apply technical knowledge and skills to repair, service, and maintain operating, control, and electronic systems including instruction in flight instrumentation, aircraft communications and homing systems, radar and other sensory systems, navigation aids, and specialized systems for various types of civilian and military aircraft.

Students will receive an introduction to schematic reading, OSHA/FAA/Basic electrical safety, tools of the trade, and basic electrical components. Students will also learn introductory techniques for troubleshooting and repairing aircraft electronic instrument systems.

#### Program Learning Outcomes

Upon successful completion of the Avionics Technician certificate, students will be able to:

- Perform repairs and general maintenance on aircraft electronic system.
- Interpret applicable FAA and FCC regulations, aircraft service records, original equipment manufacturer technical manuals, schematics, and directives.
- Apply industry safety standards when performing aircraft electrical maintenance.
- Ensure safety of flight for aircraft navigation systems and aids.
- Troubleshoot electrical based aircraft systems necessary for safe and sustained flight.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring quarters.

**Prerequisite:**

None

**Completion Requirements**

## Program Course List

AVIO 105	Basic Electricity	6
AVIO 107	Circuit Theory	6
AVIO 110	Electrical components	6
AVIO 115	Hazards and Safety	3
AVIO 120	RF Circuits	8
AVIO 125	Digital Logic	5
AVIO 130	Aircraft Maintenance Practices	5
AVIO 135	Aircraft Handling and Testing	2
COLL 102	College Success for All	3

**Subtotal: 44**

**Central Service/Sterile Processing****Central Service/Sterile Processing Certificate**

Graduates of this program are educated and trained in Central Service/ Sterile Processing (CS/SP) technology, under the guidelines of the International Association of Healthcare Central Service Materiel Management and the local Healthcare Advisory Committee.

The structured curriculum consists of basic sciences, infection control, sterilization, human relations and necessary job skills, and clinical internships in area health care facilities. There is an emphasis on care and preparation of surgical instruments. Classroom instruction

and clinical internship prepare the student to assume the role of a CS/SP technician in a variety of health care delivery settings.

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

No student will be allowed at clinical sites without proof of insurance.

**Program Learning Outcomes**

Upon successful completion of the Central Services/Sterile Processing certificate, students will be able to:

- Demonstrate proper use of personal protective equipment.
- Demonstrate effective methods of infection control as it relates to personal hygiene, patient care equipment, and surgical asepsis.
- Identify surgical instrumentation.
- Assemble instrument sets to industry standards.
- Apply proper wrapping techniques for surgical instrumentation.
- Apply the principles and practices of decontamination as it relates to surgical instrumentation.
- Apply the principles and practices of sterilization to ensure quality control.
- Apply industry standards for biological monitoring and record keeping.

**Physical Activity Requirements**

This occupation requires the ability to lift 50 lbs. and work on your feet for up to eight hours. Students must be able to meet these physical requirements in order to be assigned to a clinical rotation and meet employment demands.

**Employability Requirements**

High school diploma or equivalent. Upon graduation, students are eligible to sit for the International Association of Healthcare Central Service/Materiel Management Certification Exam, which is honored throughout the world. Must meet facility eligibility requirements, including a criminal background check, in order to apply for employment. Persons with some types of criminal



convictions may not be eligible for hire.

**Program Length**

This program is a combination of on-line, classroom, laboratory and clinical experience, approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 091 or equivalent. Basic computer skills recommended.

In order to participate in the clinical aspect of the program, students must receive a “No Record On File” report from a criminal background check (there are some exceptions; contact instructor for details). A non-refundable fee is charged to each student for the background check. Students must have current immunizations or laboratory verification of immune status. This could include, but may not be limited to, Hepatitis B series, Tdap, 2-Step Tuberculosis Test, Measles/Mumps/Rubella, Varicella, and seasonal flu shot as required by contracts with clinical facilities. Proof of immunity is required by the last week of the first quarter in order to participate in the clinical portion of the program.

Students must provide a transcript showing high school graduation or completion of a high school equivalency diploma. Must complete the American Heart Association’s BLS for health care provider CPR Course prior to the last week of the first quarter (not included in the program).

**Program Course List**

MMN 103	Introduction to the Program & the Health Care Industry	3
MMN 106	Anatomy & Physiology/Medical Terminology	4
MMN 111	Microbiology/Infection Control	3
MMN 124	Surgical Instrumentation	4
MMN 126	Principles and Methods of Cleaning & Disinfecting	6
MMN 129	Principles and Practices of Sterilization	6
MMN 132	Materiel Management/Central Service Applications	3
MMN 213	Clinical Internship I	6

MMN 215	Clinical Internship II	6
COLL 102	College Success for All	3
		<b>Subtotal: 44</b>

## Computer Programming

### Computer Programming Associate in Applied Science – T Degree

This program is designed to prepare students planning to continue their education at a college or university that offers a Bachelor’s degree in Computer Science, Information Systems Management, Software Systems, or related field.

**Program Learning Outcomes**

Upon successful completion of the Computer Programming degree, students will be able to:

- Analyze programs in order to identify and fix defects.
- Document software and methods for technical staff and end users.
- Create an application with iterative software development as part of a team.
- Apply technical skills and standards when working with local industry partners or on a self-proposed project.
- Analyze the architecture of an object-oriented application.
- Develop a relational database’s back end to support a front-end application.

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.

Students pursuing an AAS-T degree for transfer to the University of Washington-Tacoma are required to take additional core academic classes that may or may not be offered at Clover Park Technical College. Please see your instructor for the latest articulation requirements.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Program Length**

Classes will be offered with sufficient frequency that, with reasonable schedule planning, this program may be completed in seven quarters of full-time effort. It may take longer, depending on the student's prior educational preparation and the time it takes to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements****Prerequisite(s)**

Successful completion of ENG 091 and MAT 092 or equivalent and basic competencies with personal computers, Windows- based word processing and spreadsheet software. Touch-typing proficiency of 35 words per minute is recommended.

**Program Course List**

ASL& 121	American Sign Language I	5
COLL 102	College Success for All	3
ENGL& 101	English Composition I	5
ENGL& 235	Technical Writing	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
	Introduction to Music or	5
	Introduction to Art	
	Any Lab-Based Science	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
CPW 101CL	Programming Fundamentals	5
CPW 118	Web Design Principles	5
CPW 142	Java Object-Oriented Programming I	5
CPW 143	Java Object-Oriented Programming II	5
CPW 150	Principles of Relational Databases	5
CPW 205CAP	Object-Oriented Analysis & Design	5
CPW 210	Advanced Database Programming	5

CPW 218	C++	5
CPW 223	Introduction to JavaScript	5
CPW 240	Programming Practicum	5
CPW 245	Data & Logic Structures	5
CPW 252	Phone Programming	5

**Subtotal: 108**

**NOTE:**

*PSYC& 100 or higher, but not PSY 112*

*MATH& 146 or higher*

## Computer Programming Associate of Applied Technology Degree

This program is designed to prepare students for computer programming and web development positions with concentrations in web programming, database programming, or application systems programming.

The coursework prepares individuals for positions such as .NET developer, ASP.NET web developer, application programmers, programmer/analysts, database designers, and other related information technology positions.

Employers may include business and industrial firms, banks and other financial institutions, government agencies, consulting firms, and software and web development companies.

**Program Learning Outcomes**

Upon successful completion of the Computer Programming degree, students will be able to:

- Analyze programs in order to identify and fix defects.
- Document software and methods for technical staff and end users.
- Create an application with iterative software development as part of a team.
- Apply technical skills and standards when working with local industry partners or on a self-proposed project.
- Analyze the architecture of an object-oriented application.
- Develop a relational database's back end to support a front-end application.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities upon which technical

skills are built and personal development is enhanced. Students must take all the academic and programming core courses.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 091 and MAT 092 or equivalent and basic competencies with personal computers, Windows- based word processing and spreadsheet software. Touch-typing proficiency of 35 words per minute is recommended.

**Program Course List**

COLL 102	College Success for All	3
ENGL& 101	English Composition I	5
MATH& 141	Precalculus I	5
PSYC& 100DIV	General Psychology	5
CPW 101CL	Programming Fundamentals	5
CPW 116	.NET Programming	5
CPW 118	Web Design Principles	5
CPW 142	Java Object-Oriented Programming I	5
CPW 143	Java Object-Oriented Programming II	5
CPW 150	Principles of Relational Databases	5
CPW 203	Advanced JavaScript	5
CPW 205CAP	Object-Oriented Analysis & Design	5
CPW 210	Advanced Database Programming	5
CPW 212	Advanced .NET Programming	5
CPW 213	.NET Web Programming	5
CPW 215	Advanced .NET Web Programming	5
CPW 217CAP	Portfolio	5
CPW 218	C++	5
CPW 223	Introduction to JavaScript	5
CPW 240	Programming Practicum	5
CPW 245	Data & Logic Structures	5
CPW 252	Phone Programming	5

**Subtotal: 108**

**General Degree Requirements**

AAT Degree General Education Requirements:

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities upon which technical

skills are built and personal development is enhanced. Students must take all the academic and programming core courses.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy and the capstone project.

**Program Length**

Classes will be offered with sufficient frequency that, with reasonable schedule planning, this program may be completed in six quarters of full-time effort. It may take longer, depending on the student’s prior educational preparation and the time it takes to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Construction Technologies**

**Construction Technologies Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This program is designed to train construction professionals and facilities managers for building applications and systems that consume a minimal amount of non-renewable resources and contribute to environmental and personal health.

This program will prepare graduates for careers in resource energy management, indoor air quality, solar installation, home energy rating systems, and other specialties that support the design, building, and maintenance of sustainable living environments.

Participants will receive a solid foundation in applied mathematics, applied physics, and communication. Students will also receive training in industry-specific applications using energy-efficiency technology to diagnose building deficiencies. Advanced training in sustainable systems, solar (photovoltaic) systems, resource conservation management, and weatherization will prepare graduates for a variety of careers within the construction and utilities industries, including careers as resource conservation managers, energy auditors, weatherization specialists, solar energy specialists, and home energy raters.

### Program Learning Outcomes

Upon successful completion of the Construction Technologies degree, students will be able to:

- Apply code-mandated repairs to various types of buildings.
- Assess a building's structural and physical integrity with appropriate equipment, technology, and software.
- Integrate renewables into the building as specified by the International Building Code.
- Evaluate building systems.
- Perform a building energy audit to include recommendations.
- Perform scheduling tasks while coordinating with different trades.
- Interpret blueprints, plans, and schematics correctly in order to ensure jobs are completed professionally and on time.
- Use industry safety and environmental standards at all times on construction job sites.
- Apply air leakage repairs in a building shell.
- Integrate green building practices into the construction industry.

### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

CONST 102	Safety & Operating Certificates	3
CONST 104	Trades Math & Print Reading for Const.	5
CONST 106	Basic Carpentry Skills	6
CONST 109	Employment Preparation	4
CONST 112	Footings & Foundations	3
CONST 116	Floor Framing	3
CONST 120	Wall Framing, Sheeting & Ceilings	5
CONST 122	Roof Framing	5
CONST 126	Roofing Materials & Installation	3
CONST 134	Exterior Finish	3

CONST 139	Interior Finish I	5
CONST 142	Interior Finish II	3
CONST 144	Electrical and Plumbing Basics	4
CONST 152	LEED	2
CONST 155	Decking	2
CONST 158	Energy Auditor	5
CONST 160	Home Inspector	4
SBS 107	Sustainability Building Basics	4
SBS 121	Survey of Energy Ratings	3
SBS 130	Alternative Energy Systems	5
SBS 142	Building Envelope	4
SBS 150	Moisture Mitigation	3
SBS 174	Basic Diagnostics and Testing	4
SBS 185CAP	Service Learning Project	3
	Computer Literacy Requirement	3

**Subtotal: 94**

*Note: CONST 102-139 are articulated courses with high schools for dual enrollment.*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

#### AAT Requirements

Technical Course Requirements	94
AAT General Education Requirements	18

**Subtotal: 112**

*AAT General Education Requirements: See list above*

#### AAS-T Requirements

Technical Course Requirements	94
AAS-T Degree General Education Requirements	23

**Subtotal: 117**

*AAS-T Degree General Education Requirements: See list above*

#### General Degree Requirements

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5

PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*Note: CMST 220 or higher*

*PSYC 100DIV: PSY 112DIV, SOC& 101DIV, or other social science or humanities course that meets the diversity requirement*

AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5

HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100		5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101		5

3 credits in College Success:

COLL 102	College Success for All	3
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Students pursuing an AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Physical Requirements**

Should be able to lift 40 lbs..

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Construction Technology Certificate**

This certificate program builds on the knowledge and skills students earn in the C-TAPP certificate, which serves as the first quarter of the program, and provides an introduction to residential construction technologies.

Second quarter expands into foundation form work, floor systems and framing, wall and roof framing, leveling and aligning, and sheeting.

**Physical Requirements**

Should be able to lift 40 lbs.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements

**Admission Dates**

Fall and spring quarters.

**Completion Requirements****Prerequisite(s)**

None.

**Program Course List**

CONST 102	Safety & Operating Certificates	3
CONST 104	Trades Math & Print Reading for Const.	5
CONST 106	Basic Carpentry Skills	6
CONST 109	Employment Preparation	4
CONST 112	Footings & Foundations	3
CONST 116	Floor Framing	3
CONST 120	Wall Framing, Sheeting & Ceilings	5
CONST 144	Electrical and Plumbing Basics	4
COLL 102	College Success for All	3
<b>Subtotal: 36</b>		

*Note: CONST 102-139 are articulated courses with high schools for dual enrollment.*

## Construction Trades Academy Pre-Apprenticeship Program (C-TAPP) Certificate

This apprenticeship readiness program prepares students with the knowledge and skills necessary for employment in the construction industry.

This one-quarter program covers safety, hand and power tool use, math, carpentry trades, print and plan reading, and employment preparation.

Students entering the one-quarter Pre-Apprenticeship Construction Trades program will be required to complete entry and quarterly assessments while enrolled in the program. These assessments will not determine eligibility for the program.

**Physical Requirements**

Should be able to lift 40 pounds.

**Program Length**

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements****Prerequisite(s)**

None.

**Program Course List**

CONST 102	Safety & Operating Certificates	3
CONST 104	Trades Math & Print Reading for Const.	5
CONST 106	Basic Carpentry Skills	6
CONST 109	Employment Preparation	4
<b>Subtotal: 18</b>		

*Note: CONST 102-139 are articulated courses with high schools for dual enrollment.*

## Cosmetology

### Cosmetology Associate of Applied Technology Degree

Educating students in all aspects of professional cosmetology and hair design. Providing services to the hair, head, neck, or scalp. It includes conditioning treatments, haircutting, hairstyling, hair coloring, chemical texturizing services, and skin and nail care. Successful graduates are prepared for the Washington State Department of Licensing Cosmetology examination, and upon licensing will be qualified for positions as cosmetologists. Students will participate in realistic training in the student-operated salon. Clover Park Technical College uses an interactive system of training, utilizing hands-on applications, as well as up to 25 percent online training to support student learning. This model is considered a world leader in beauty education and provides innovative, high-quality educational systems that promote excellence in the hair and beauty industry.

**Program Learning Outcomes**

Upon successful completion of the Cosmetology degree, students will be able to:

- Generate salon-quality hair services to industry standards.
- Apply infection control principles, practices, and safety as mandated by state regulations.
- Develop a plan for successful business principles.
- Analyze client expectations during a consultation in the context of cosmetology art and science principles.

- Summarize the test standards and information in order to pass Washington State board examination for licensure.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), social sciences (psychology, sociology), and COLL 102 that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Employability Requirements**

To qualify for a cosmetologist license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program options and pass both the written and practical examinations required by the Washington Department of Licensing.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Day Program: Summer, fall, winter, and spring quarters.

**Accreditation**

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Department of Licensing.

**Mailing Address:**

**Professional Licensing Support Services  
Department of Licensing  
PO BOX 9026  
Olympia, WA 98507-9026**

**Phone: 360-664-6645**

**Email: [plssunit@dol.wa.gov](mailto:plssunit@dol.wa.gov)**

**Program Note**

COSMO 183, 189 and 233 will only be offered in the Fall and Spring quarters

**Completion Requirements**

**Prerequisite(s)**

A mandatory orientation is required prior to admission to the program.

**Program Course List**

COSMO 112	Infection Control Principles & Practices	2
COSMO 117	Trichology	4
COSMO 137	Application of Haircutting, Hairstyling, and Thermal Styling	13
COSMO 146	Chemical Texture Services	5
COSMO 159	Lab Clinic I	7
COSMO 163	Lab Clinic II	9
COSMO 167	General Science of Hair Coloring	6
COSMO 172	Lab Clinic III	10
COSMO 175	Cosmetology Salon Business Practices	3
COSMO 181	Artificial Hair	2
COSMO 183	General Science of Nails	7
COSMO 189	General Science of Skin	7
COSMO 226	Advanced Hair Coloring	8
COSMO 232	State Board Practical Preparation	6
COSMO 233	Lab Clinic V	6
COSMO 234	Lab Clinic IV	9
COSMO 237	State Board Written Test Review	2
COSMO 245CAP	Cosmetology Capstone	2
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
MAT 111	Math for Cosmo/Esth Professionals Or 100-level math class	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All Computer Literacy Requirement	3 3

**Subtotal: 128-132**

*NOTE:*

*MAT 111: preferred*

*Computer Literacy Requirements: Computer Literacy Course that meets the degree requirement, or successfully pass the computer literacy exam*

Students not meeting state licensure hours requirements will take one or more of the following internship courses:

COSMO 248	Internship I	1
COSMO 250	Internship II	2
COSMO 252	Internship III	3
COSMO 254	Internship IV	4
COSMO 256	Internship V	5

## Hair Design Associate of Applied Technology Degree

Educating students in all aspects of professional hair design. Providing services to the hair, head, neck or scalp. It includes conditioning treatments, haircutting, hairstyling, hair coloring, and chemical texturizing. Successful graduates are prepared for the Washington State Department of Licensing Hair Designer examination, and upon licensing will be qualified for positions as hair designers. Students will participate in realistic training in the student-operated salon. Clover Park Technical College uses an interactive system of training, utilizing hands-on applications as well as up to 25 percent online training to support student learning. This model is considered a world leader in beauty education and provides innovative, high-quality educational systems that promote excellence in the hair and beauty industry.

### Program Learning Outcomes

Upon successful completion of the Cosmetology Hair Designer degree, students will be able to:

- Demonstrate proficiency in salon-quality hair services, including shampoo/condition, hair design, hair cutting, chemical texture services, hair coloring, and artificial hair.
- Follow effective protocols of infection control, hygiene, and safety, according to state laws.
- Complete and pass all courses offered in curriculum with a passing grade of 75 percent or better to achieve AAT degree.
- Develop strategies for a successful salon business.
- Apply science and art of beautifying and improving hair.
- Show skills and preparedness for WA State practical

and written examinations for licensure.

- Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), social sciences (psychology, sociology), and COLL 102 that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
- The hair designer license is a new option for those wanting to specialize in hair design. This program does not include nail or skin care. Hair designers may return for the skin and nail care quarter. Student must pass the Washington State Department of Licensing written and practical examinations to receive the cosmetology licensure.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), social sciences (psychology, sociology), and COLL 102 that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The hair designer license is a new option for those wanting to specialize in hair design. This program does not include nail or skin care. Hair designers may return for the skin and nail care quarter. Student must pass the Washington State Department of Licensing written and practical examinations to receive the cosmetology licensure.

### Employability Requirements

To qualify for a cosmetologist license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program options and pass both the written and practical examinations required by the Washington Department of Licensing

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Day Program: Summer, fall, winter, and spring quarters.

### Accreditation

This school is licensed under chapter 18.16 RCW.



Inquiries, concerns, or complaints regarding this school can be made to the Department of Licensing.

**Mailing Address:**

**Professional Licensing Support Services**

**Department of Licensing**

**PO BOX 9026**

**Olympia, WA 98507-9026**

**Phone: 360-664-6645**

**Email: plssunit@dol.wa.gov**

**Completion Requirements**

**Prerequisite(s)**

A mandatory orientation is required prior to admission to the program.

**Program Course List**

COSMO 112	Infection Control Principles & Practices	2
COSMO 117	Trichology	4
COSMO 137	Application of Haircutting, Hairstyling, and Thermal Styling	13
COSMO 146	Chemical Texture Services	5
COSMO 147	Wet Styling and Long Hair Design	5
COSMO 159	Lab Clinic I	7
COSMO 163	Lab Clinic II	9
COSMO 167	General Science of Hair Coloring	6
COSMO 172	Lab Clinic III	10
COSMO 175	Cosmetology Salon Business Practices	3
COSMO 181	Artificial Hair	2
COSMO 226	Advanced Hair Coloring	8
COSMO 232	State Board Practical Preparation	6
COSMO 234	Lab Clinic IV	9
COSMO 237	State Board Written Test Review	2
COSMO 245CAP	Cosmetology Capstone	2

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
MAT 111	Math for Cosmo/Esth Professionals	5
	Or	
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	Computer Literacy Requirement	3

**Subtotal: 114-119**

*NOTE:*

*MAT 111: preferred*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

Students not meeting state licensure hours requirements will take one or more of the following internship courses:

COSMO 248	Internship I	1
COSMO 250	Internship II	2
COSMO 252	Internship III	3
COSMO 254	Internship IV	4
COSMO 256	Internship V	5

**Culinary Arts**

**Culinary Arts Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

Graduates are prepared to enter the fast-paced and exciting culinary field as entry-level cooks, lead cooks, or kitchen station supervisors.

Emphasizes fine-dining food production skills combined with professional service training and food-management techniques. Food production courses emphasize quality food preparation.

Potential employers include fine-dining establishments, hotels, resorts, catering kitchens, clubs, and executive dining services. In combination with additional study and experience, this degree can place graduates on a career ladder that could lead to positions such as restaurant manager, catering/banquet manager, sous-chef and executive chef.

Students train in aspects of culinary arts food service operations and management. The program emphasizes preparation of food for healthy lifestyles and is designed to exceed the standards set by the American Culinary Federation and the National Restaurant Association’s Professional Management Development Program. The program combines classroom study and work-site learning in college restaurant operations.

**Program Learning Outcomes**

Upon successful completion of the Culinary Arts degree, students will:

- Use culinary tools, equipment, and food products according to the principles of food production and safety.
- Apply food safety and sanitation procedures in preparation of food products in the kitchen.
- Plan menus for a variety of food service events.
- Use principles of nutrition to ensure maximum nutrient retention during food preparation.
- Demonstrate the ability to manage and lead other students by acting as lead cook and sous chef.
- Perform business math skills when using bookkeeping systems employed in the restaurant industry.
- Use leadership, customer service, and interpersonal skills in support of management of a kitchen.
- Summarize the test standards and information in order to pass the ServSafe examination.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CUL 104	Sanitation in Food Service Operations	3
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CUL 107	Professional Cooking I	7
CUL 109	Cooking Methods I	7
CUL 111	Food Preparation I	3
CUL 113	Introduction to Baking	3
CUL 117	Professional Cooking II	7
CUL 119	Food Preparation II	3
CUL 123	Cooking Methods II	7
CUL 127	Professional Cooking III	7
CUL 132	American Regional Cuisine	3
CUL 135	Food Preparation III	3
CUL 139	Cooking Methods III	7
REST 103	Food & Beverage Cost Control	4
REST 107CAP	Kitchen & Dining Management	3
REST 109	Marketing/Public Relations	3
REST 112	Restaurant Dining	7
REST 115	Catering Production	3
REST 119	Operations Management	4
REST 122	Food Service Nutrition	4
REST 126	Finance & Accounting	4
REST 131	Business Plan Development	4
REST 133	Beverage Service Management	4
REST 137	Hospitality Law	4
	<b>Subtotal:</b>	<b>104</b>

**AAT Requirements**

Technical Course Requirements	104
AAT General Education Requirements	18
Computer Literacy Requirement	3
<b>Subtotal:</b>	<b>125</b>

*AAT General Education Requirements: See list below*

*Computer Literacy Requirement: CAS 130 (Excel I) recommended to meet computer literacy degree requirement or successful completion of computer literacy exam*

**AAS-T Requirements**

Technical Course Requirements	104
AAS-T Degree General Education Requirements	23
Computer Literacy Requirement	3
<b>Subtotal:</b>	<b>130</b>

*AAS-T Degree General Education Requirements: See list below*

*Computer Literacy Requirement: CAS 130 (Excel I)*

*recommended to meet computer literacy degree requirement or successful completion of computer literacy exam*

**General Degree Requirements**

The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*Note: CMST& 220 or higher*

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other social science or humanities course that meets the diversity requirement*

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science  
choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100		5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101		5

3 credits in College Success:

COLL 102	College Success for All	3
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Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

**Program Length**

This program is a combination of online, classroom, and practical experience in our on-campus restaurant. This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements. In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Basic Cooking Skills Certificate**

Designed to train students in basic cooking skills, this certificate program includes portions of the Culinary Arts degree program.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CUL 104	Sanitation in Food Service Operations	3
CUL 107	Professional Cooking I	7
CUL 109	Cooking Methods I	7
CUL 111	Food Preparation I	3
CUL 113	Introduction to Baking	3
CUL 117	Professional Cooking II	7
CUL 119	Food Preparation II	3
CUL 123	Cooking Methods II	7
CUL 127	Professional Cooking III	7
CUL 132	American Regional Cuisine	3
CUL 135	Food Preparation III	3
CUL 139	Cooking Methods III	7
	English Composition	5
	Or	
	Public Speaking	5
	Any 100-Level Math Class	5
	General Psychology	5
COLL 102	College Success for All	3

**Subtotal: 78**

*NOTE:*

*English Composition or higher*

*General Psychology or other social science or humanities class*

**Restaurant Management Certificate**

Prepares student for management careers within the food and beverage industry. Coursework is based on the professional management development program endorsed by the National Restaurant Association.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

### Program Length

This certificate is a combination of online, classrooms and practical experience in our on-campus restaurant or bistro. This certificate can be completed in as little as two quarters, but may take longer.

### Admission Dates

Summer, fall, winter, and spring quarters, based on availability.

### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

REST 103	Food & Beverage Cost Control	4
REST 107CAP	Kitchen & Dining Management	3
REST 109	Marketing/Public Relations	3
REST 112	Restaurant Dining	7
REST 115	Catering Production	3
REST 119	Operations Management	4
REST 122	Food Service Nutrition	4
REST 126	Finance & Accounting	4
REST 131	Business Plan Development	4
REST 133	Beverage Service Management	4
REST 137	Hospitality Law	4
<b>Subtotal:</b>		<b>44</b>

## Dental Assistant

### Dental Assistant ADA Accredited Associate of Applied Technology Degree

Designed to prepare students for positions in the dental field, including both front-office and dental-assistant career tracks. Graduates of the program will have a foundation of knowledge of dental sciences, dental assisting skills, dental materials, dental laboratory procedures, radiography, infection control, and dental business office-management skills.

Students will develop an understanding of the role of the dental assistant and dental business office assistant within the dental care team. Graduates are qualified for entry level positions as expanded-duties dental assistants and coordinating assistants, as well as dental business office assistants within a dental office.

This program is accredited through the American Dental Association (ADA). The last Friday in each of the final three quarters of study, students will be required to take one of the three components of the Dental Assistant National Board (DANB) Certification Examination. Completing the appropriate component of the exam is a prerequisite for continuing into the third and fourth quarters of study in the Dental Assistant program.

In addition, successful completion of the first component (Infection Control), completed at the end of the second quarter of study, is a prerequisite to entering the fourth quarter clinical experience. The second and third components of the exam are requirements for graduation from the program. Successfully completing these exams will result in the student receiving their national certification from DANB, entitling them to use the title of certified dental assistant.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities upon which technical skills are built and personal development is enhanced.

Students are strongly encouraged to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

### Program Learning Outcomes

Upon successful completion of the Dental Assistant degree, students will be able to:

- Plan for the dentist’s needs based on the procedure being performed.
- Summarize the test standards and information in order to pass the Dental Assistant National Board exam.
- Determine the location of landmarks and anatomy intraorally, extraorally, and on radiographs.
- Establish aseptic technique and apply maintenance of infection control throughout patient care according to OSHA regulations and CDC Standards.
- Assemble appropriate instruments, materials, and equipment for various dental procedures.
- Produce quality digital and film radiographs for

diagnostic or treatment purposes.

- Plan daily routines, work assignments, and scheduled procedures with effective time management skills.

Apply American Dental Association standards and state and federal law for conduct in a clinical setting. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

### Employability Requirements

To be employed as a dental assistant, you must apply for registration and become registered with the Washington Department of Licensing. You must also complete seven hours of AIDS/HIV education and hold a current and valid Health Care Provider Basic Life Support (BLS) certification. If newly hired, you must obtain the required certification within 45 days of the date hired (WAC 246-817-720).

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

### Completion Requirements

### Prerequisite(s)

In order to participate in the program, students must have current immunizations or laboratory verification of immune status. This includes, but is not limited to, Hepatitis B series, including a positive titer, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, and Varicella as required by contracts with clinical facilities and CDC recommendations. Students must have a current Basic Life Support (CPR) card for health care providers, a First Aid card, and a current dental examination form completed by their dentist.

To enter the program, a student must be eligible the first quarter to take MAT 094, college-level English, and psychology or another social science or humanities course.

In order to participate in the externship, students must have all general education requirements completed and receive a "No Record On File" report related to crimes against

persons from the Washington State Patrol. Students must be at least 18 years of age and have a high school diploma or high school equivalency diploma (per ADA standards).

### Program Course List

DAS 104	General Studies	3
DAS 107	Biomedical Sciences	4
DAS 112	Dental Sciences I	4
DAS 114	Dental Assisting Skills I	4
DAS 117	Foundations of Clinical Dentistry	2
DAS 121	Dental Sciences II	2
DAS 123	Dental Assisting Skills II	5
DAS 126	Dental Specialties I	3
DAS 131	Principles of Radiography	6
DAS 133	Certification Review I	2
DAS 207	Dental Sciences III	4
DAS 209	Dental Assisting Skills III	5
DAS 213	Dental Specialties II	5
DAS 215	Certification Review II	2
DAS 220CAP	DAS 220CAP	6
DAS 225	Clinical Experience III	6
DAS 230	Certification Review III	2
DAS 237CAP	Clinical Experience I	1
DBOA 103	Dental Terminology & Procedures	4
DBOA 111	Dental Charting, Scheduling and Recall Management	5
DBOA 119	Dental Documents and Inventory Systems	4
DBOA 135	Dentrix Advanced Training	2
ENGL& 101	English Composition I	5
	Or	
	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

**Subtotal: 102**

*Dental Assistant Computer Skills Elective: See list below*

*NOTE:*

*PSYC& 100DIV or higher*

### Recommended Electives

CAS 105	Keyboarding	3
CAS 115CL	Introduction to Computing	3
CAS 121CL	Word I	3
CAS 125CL	Word II	3
CAS 130CL	Excel I	3
CAS 135CL	Excel II	3
CAS 141CL	PowerPoint	3
CAS 145CL	Publisher	5

CAH 105CL Computer Applications 5

## Digital Entertainment Design and Production

### Digital Entertainment Design and Production Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Digital Entertainment Design and Production is a multidisciplinary subject combining elements of art, computer science and communications. If it is on a screen, we are the ones who put it there. From videos and commercials to ads and games, today’s world is run by media.

The Clover Park Digital Entertainment Design and Production degree provides students with fundamental skills that apply to careers in the film, game design and digital illustration fields. We do this by giving the students a foundation in basic art and design skills before proceeding into the medium of their choice. Whether that medium is games, film, or digital illustration, students begin building skill sets that allow them the type of self-expression that makes a portfolio stand apart.

This program prepares students for a wide variety of career options, including production assistant, digital photographer, digital editor, digital effects artist, animator, video game developer, video game tester, level designer, and 3D artist.

#### Program Learning Outcomes

Upon successful completion of the Digital Entertainment Design and Production degree, students will be able to:

- Defend artistic decisions that fit with the mood and atmosphere suitable for needs of the client(s) or project(s).
- Create professional design work with the elements of design, composition, and color theory.
- Assemble a complete production book that will cover the necessities of all aspects of the full production cycle for the project(s).
- Delegate tasks that best fit within the needs of the project(s) or client(s).
- Write a full production breakdown according to the

type of project(s).

- Analyze technical issues and design solutions through written, oral, and visual means.
- Demonstrate professional competencies with care and use of industry standard equipment.
- Show through oral, written, and graphic design a skill demonstration.
- Assess the needs and timelines of the client(s) and/or project(s).
- Justify artistic and technical choices that have been made through production and communication.
- Establish a production that follows a schedule and production book to construct a story.
- Produce a professional project that summarizes the practice of the technical, artistic technique, and skills.

#### Completion Requirements

#### Prerequisite(s)

Enrollment in or successful completion of ENG 091.

#### Program Course List

DED 102	Genre Studies	3
DED 104	General Art	4
DED 106CL	Digital Art I	4
DED 108	Screenwriting	3
DED 110	Digital Photography I	4
DED 112	Digital Art II	4
DED 120	Digital Photography II	4
DED 125	Digital Video I	4
DED 127	Advanced Media Creation	4
DED 130	Storyboarding	3
DED 135	Motion Graphics I	4
DED 138	Advanced Development Tools	4
DED 140	Digital Video II	4
DED 145	Digital Editing	4
DED 147	Advanced Design Theory	4
DED 150	3D Modeling I	4
DED 152	Motion Graphics II	4
DED 154	Game Design I	3
DED 158	3D Modeling II	4
DED 159CAP	Capstone/Internship	4
DED 170	3D Modeling III	4
DED 172	Scene Design	4
DED 174	3D Animation	4
DED 175	Development Project	4

DED 183	Interactivity Guidance	4	5 credits in communication		
		<b>Subtotal: 96</b>	ENGL& 101	English Composition I	5
AAT Requirements			5 credits in quantitative reasoning		
	Technical Course	96	MATH& 107	Math in Society	5
	Requirements		MATH& 141	Precalculus I	5
	AAT General Education	18	MATH& 142	Precalculus II, Functional	5
	Requirements			Trigonometry	
		<b>Subtotal: 114</b>	MATH& 146	Introduction to Statistics	5
			MATH& 151	Calculus I	5
<i>AAT General Education Requirements: See list above</i>					
AAS-T Requirements			5 credits in a social science that meets the diversity		
	Technical Course	96	requirement		
	Requirements		PSYC&	General Psychology	5
	AAS-T Degree General	23	100DIV		
	Education Requirements		SOC&	Introduction to Sociology	5
		<b>Subtotal: 119</b>	101DIV		
<i>AAS-T Degree General Education Requirements: See list above</i>					
<b>General Degree Requirements</b>			5 credits in social science, humanities, or science;		
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science – T (AAS-T). The different requirements for each degree are listed below:			choose one from the following		
			ART& 100	Art Appreciation	5
			ASL& 121	American Sign Language I	5
			ASL& 122	American Sign Language II	5
			BIOL& 160	General Biology w/Lab	5
			BIOL& 175	Human Biology w/Lab	5
			BIOL& 241	Human A & P I	5
			BIOL& 242	Human A & P II	5
			BIOL& 260	Microbiology	5
			CHEM&	Chemical Concepts w/Lab	5
			110		
			CHEM& 121	Intro to Chemistry	5
			CHEM& 131	Introduction to	5
				Organic/Biochemistry	
			CMST& 220	Public Speaking	5
			GEOL& 110	Environmental Geology with	5
				Lab	
			HIST& 146	US History I	5
			HIST& 147	US History II	5
			HIST& 148	US History III	5
			HUM& 101	Introduction to Humanities	5
			MUSC& 105	Music Appreciation	5
			PHYS& 114	General Physics I with Lab	5
			POLS& 202	American Government	5
			PSYC&	General Psychology	5
			100DIV		
			PSYC& 200	Lifespan Psychology	5
			PSYC& 220	Abnormal Psychology	5
			SOC&	Introduction to Sociology	5
			101DIV		
			3 credits in College Success		
			COLL 102	College Success for All	3

Students pursuing an AAT or AAS-T degree must



complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters. This is an afternoon program.

**Early Care and Education**

**Early Care and Education Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

Prepares students for careers in the Early Care & Education field as child care directors, teachers, leads, and assistant child care providers.

To obtain the degree, a student must complete the required courses and elective credits. Students participate in practicum experiences at the Hayes Child Development Center on the Lakewood Campus or in an approved local early learning program.

Students will complete four practicum experiences. The fourth practicum will be in an area of the student’s choice: Leadership in ECE; Child Development – Infant/Toddler; Child Development – School Age; Family Childcare Professional; or Special Needs. Degree candidates may petition for credits based on possession of a current CDA credential.

Students are required to develop a program portfolio to be completed and presented prior to graduation.

All courses must be completed with a minimum of a “C” grade to graduate. The Foundation Certificate and Washington State ECE Stackable Certificate are embedded in the degree program, so students may earn stepping-stone credentials on their way to completing an associate degree.

**Program Learning Outcomes**

Upon successful completion of the Early Care & Education degree, students will be able to:

- Use child development theories to promote optimum learning outcomes for children.

- Build family and community relationships in an inclusive learning environment.
- Use observation techniques, assessment tools, documentation and planning procedures for all learners.
- Implement a developmentally appropriate assessment cycle which plans for the needs of each child.
- Apply developmentally and culturally appropriate teaching and guidance theories, principles, and practices in an early childhood setting.
- Create curriculum content to foster optimum growth and development of learners.
- Demonstrate professional standards related to early childhood best practice.

Proficiency in reading, writing, and an understanding of the English language are required. ENGL& 101 must be completed by the end of the fourth quarter. Students are required to take the Accuplacer assessment or equivalent before entry into the program and must meet with an ECE faculty advisor. All degree students must fulfill portfolio requirements, which must be completed by the time of graduation from the program.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 091 or equivalent.

**Program Course List**

ECE 120	Interpersonal Skills for the ECE Professional	2
ECE 230	Inclusion In Ece	3
ECE 245DIV	Diversity Awareness & Curriculum Development	3
ECE 290CAP	Portfolio Adventure	2
ECED& 100	Child Care Basics (Stars)	3
ECED& 105	Introduction to Early Childhood Education	5
ECED& 107	Health, Safety & Nutrition	5
ECED& 132	Infants & Toddlers - Nurturing Care	3
ECED& 160	Curriculum Development	5
ECED& 170	Environments for Young Children	3
ECED& 180	Language and Literacy Development	3
ECED& 190	Observation and Assessment	3
ECS 110CL	Computer Essentials for the	4



credits)		
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
MAT 103	Business Mathematics	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

PSYC& 100DIV General Psychology (PSY 112DIV, SOC& 101DIV, or other social science or humanities course that meets the diversity requirement)

*Note:*

*CMST& 220 or higher*

*MAT 103 or higher*

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science

choose one from the following

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5

CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success

COLL 102	College Success for All	3
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Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately 8-to-10 quarters long, depending on the time students need to satisfactorily complete all graduation requirements and hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

## Creating a Green Classroom Certificate

Designed for beginning and experienced Early Care & Education teachers who are eager to increase their skill in creating and maintaining sustainable (green) practices in their work with children of all abilities.

Classes are offered in the evenings with arranged practicum experience.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 091 or equivalent.

#### Program Course List

ECE 126	Nature & Outdoor Classroom	2
ECE 134	Issues & Trends Green	2
ECE 156	From Seed to Table: Gardening with Children	2
ECE 158	Just Recycle It!	2
ECED& 107	Health, Safety & Nutrition	5
ECED& 170	Environments for Young Children	3
ECS 151	ECE Curriculum: Math, Science & Technology	3

**Subtotal: 19**

## Early Childhood Foundation Certificate

This program is offered only to CPTC-affiliated centers in

the community. It prepares students for entry-level positions in the Early Care & Education field. Students participate in experiential learning in an approved local child care center.

ECED& 100 provides students with the basic 30-hour S.T.A.R.S. certification. ECS 121-127 prepares students for the CDA assessment. The program is designed for students to earn a certificate while working in the field.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Requirements:

#### Prerequisite(s)

Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program.

#### Program Course List

ECE 120	Interpersonal Skills for the ECE Professional	2
ECED& 100	Child Care Basics (Stars)	3
ECS 121	Introduction to the Early Childhood Profession	2
ECS 122	Ways to Study How Children Grow/Learn	2
ECS 123	Self, Social and Positive Guidance	2
ECS 124	Productive Relationships with Families	2
ECS 125	Program Management	2
ECS 126	Professionalism	2

ECS 127CAP	CDA Capstone	2
ECS 181	ECE Practicum I	5
ECS 182	ECE Practicum II	5
<b>Subtotal: 29</b>		

## Early Childhood Leadership Certificate

Designed for experienced Early Care & Education teachers seeking leadership positions in their career field. Classes are offered in the evenings with arranged practicum experience.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately two-to-four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a “C” grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

Successful completion of ENG 091 or equivalent.

#### Program Course List

ECED& 139	Administration of Early Learning Programs	3
ECS 235	Issues & Trends	2
ECS 266	Leadership in Early Childhood Education	4
ECS 277	Professionalism & Ethics	2
ECS 286	Practicum IV Leadership	3
ECS 290	Mentoring In ECE	1
EDUC& 150	Child, Family and Community	3
<b>Subtotal: 18</b>		

## School-Age Out-of- School Program Certificate

Designed for staff/teachers of school-age children who are seeking a certificate for quality out-of-school programs.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a “C” grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

Successful completion of ENG 091 or equivalent.

#### Program Course List

ECE 135	School Age Math, Science & Technology	3
ECED& 190	Observation and Assessment	3
ECS 220	Curriculum for School Age	2
ECS 225	School Age Environment	2
ECS 230	ECE Practicum IV School Age	3
ECS 292	Theories of Child Development	3
EDUC& 115	Child Development	5
EDUC& 130	Guiding Behavior	3
EDUC& 150	Child, Family and Community	3
<b>Subtotal: 27</b>		

## Special Needs Certificate

Designed for experienced Early Care & Education teachers who are eager to increase their skill in working with children of all abilities. Explores the many facets of

leadership positions, how to lead staff, and how to advocate for the needs of young children. Classes are offered in the evenings with an arranged practicum experience.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a “C” grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 091 or equivalent. Students are required to take the Accuplacer assessment or equivalent before entry into the program. ASL& 121 American Sign Language requires college-level English.

#### Program Course List

ASL& 121	American Sign Language I	5
ECE 120	Interpersonal Skills for the ECE Professional	2
ECE 230	Inclusion In Ece	3
ECED& 190	Observation and Assessment	3
EDUC& 115	Child Development	5
EDUC& 130	Guiding Behavior	3
EDUC& 150	Child, Family and Community	3
ECS 206	Signing with Infants & Toddlers	2
ECS 235	Issues & Trends	2
ECS 277	Professionalism & Ethics	2
ECS 297	Practicum IV Special Needs	3
COLL 102	College Success for All	3

**Subtotal: 36**

## State Initial Early Childhood Education Certificate Step 1: Washington State ECE Stackable Certificate

Students can earn this certificate as the starting point of their careers or to continue their professional development. The certificate focuses on competencies comparable to those of the Child Development Associate (CDA). This provides the foundation for the ECE State Certificate and associate degree. Courses include a 5-credit Introduction to Early Childhood Education; a 5-credit Health, Safety, and Nutrition course; and a 2-credit practicum to apply learning.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.

### Admission Dates

Fall quarter.

### Completion Requirements

#### Prerequisite(s)

ECED& 100: Child Care Basics (STARS) or equivalent. Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

#### Program Course List

ECED& 105	Introduction to Early Childhood Education	5
ECED& 107	Health, Safety & Nutrition	5
ECED& 120	Practicum: Nurturing	2

Relationships

**Subtotal: 12**

***ECED& 107: Articulated courses with high schools for dual enrollment***

### Short ECE Certificate Of Specialization Certificate Step 2: Washington State ECE Stackable Certificate (Initial Certificate Plus the Following Requirements)

This certificate builds on the Initial Certificate (for a total of 37 credits). At this point, professionals can choose one of five specializations: ECE general, infant-toddler care, school-age care, family child care, and ECE administration. For each specialization, students must take a 5-credit Child Development course, plus a course aligned with the specific specialization.

#### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

#### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

#### Admission Dates

Summer, fall, winter, and spring quarters.

#### Completion Requirements

#### Prerequisite(s)

ECED& 100: Child Care Basics (STARS) or equivalent. Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

#### Courses from Initial Certificate

ECED& 105	Introduction to Early Childhood Education	5
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ECED& 107	Health, Safety & Nutrition	5
ECED& 120	Practicum: Nurturing Relationships	2

#### Program Course List

EDUC& 115	Child Development	5
ECE	Specialization Elective	3
		<b>Subtotal: 20</b>

*ECE Specialization Elective: See list below*

***Note: Articulated courses with high schools for dual enrollment***

#### ECE Specialization Elective

Students must choose one of the following:

ECED& 132	Infants & Toddlers - Nurturing Care	3
ECED& 139	Administration of Early Learning Programs	3
EDUC& 130	Guiding Behavior	3
EDUC& 134		3
EDUC& 136	School Age Care Management	3

### Washington State ECE Stackable Certificate

Prepares students for careers in the Early Care & Education field as lead and assistant childcare providers. Students participate in experiential learning at the Hayes Child Development Center on the Lakewood Campus or in approved local child care centers. The entire credential is broken down into three steps (Initial Certificate, Washington State Short Certificate of Specialization, and remaining ECE Washington State Certificate requirements).

ECED& 100 provides students with the basic 30-hour S.T.A.R.S. certification. The program is designed for students to earn a certificate while working in the field.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities upon which technical skills are built and personal development is enhanced.

#### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law

requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

ECED& 100: Child Care Basics (STARS) or equivalent. Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

#### Program Course List

ECED& 105	Introduction to Early Childhood Education	5
ECED& 107	Health, Safety & Nutrition	5
ECED& 120	Practicum: Nurturing Relationships	2
ECED& 160	Curriculum Development	5
ECED& 170	Environments for Young Children	3
ECED& 180	Language and Literacy Development	3
ECED& 190	Observation and Assessment	3
EDUC& 115	Child Development	5
EDUC& 150	Child, Family and Community	3
ECE	Specialization Elective	3
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5

**Subtotal: 47**

*ECE Specialization Elective: See listing below*

*Note: English Composition or higher*

***ECED& 107: Articulated courses with high schools for dual enrollment***

### ECE Specialization Elective

Students must choose one of the following:

ECED& 132	Infants & Toddlers - Nurturing Care	3
ECED& 139	Administration of Early Learning Programs	3
EDUC& 130	Guiding Behavior	3
EDUC& 134	Family Child Care Management	3
EDUC& 136	School Age Care Management	3

## Electrician Low Voltage Fire/Security

### Electrician Low Voltage Fire/Security Associate of Applied Technology Degree

Prepares students for positions in the electronic fire/security industry as low voltage electrician apprentices, service technicians, or installers.

Students participate in hands-on training with advanced equipment, techniques, and programming related to burglar alarms, fire alarms, card access, and closed-circuit TV. The program prepares students for careers as alarm-system installers and service technicians.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The Electrician Low Voltage Fire/Security Degree Program is approved as a Limited Energy (06) specialty electrical training program in the state of Washington. Upon successful completion of the program, graduates applying to become a Limited Energy (06) specialty electrician can be credited with 1,815 hours of work experience.

#### Program Learning Outcomes

Upon successful completion of the Electrician Low Voltage Fire/Security degree, students will be able to:

- Apply industrial safety standards at all times.
- Design an energized system to the specifications of the National Electrical Code.



- Produce a blueprint of a fire/security system including its wiring diagram.
- Construct a functioning security alarm system.
- Construct a functioning closed-circuit television system.
- Construct a functioning fire alarm system.
- Integrate biometric devices into existing systems.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101 English Composition or CMST& 220 (or higher)

Any 100 level math class

PSYC& 100DIV General Psychology (PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement)

COLL 102 College Success for All

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project. Students are required to pass seven nationally recognized certification exams during the program. All courses must be completed with a minimum “C” grade to receive the certificate.

**Program Length**

This degree program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall, winter, spring, and summer quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of the Electrician Low Voltage Fire/Security certificate, or by instructor’s permission. A mandatory orientation is required before admission to the program.

**Program Course List**

EFS 105	AC/DC Electricity: Basic Theory, Fractions & Ohm's	7
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EFS 106	Law AC/DC Electricity: Series Parallel & Combination Circuits	7
EFS 107	AC/DC Electricity: Electrical Power & Power Applications	7
EFS 108	National Electrical Code Print Reading	7
EFS 109	National Alarm Installer Training Program	7
EFS 110	CCTV Application & Design	7
EFS 118	National Electrical Codes	6
EFS 119	National Fire Codes	6
EFS 121	CCTV Field Service & Installation	7
EFS 124	Washington Administrative Codes	2
EFS 207	Addressable Fire SLC Systems/Design	7
EFS 211	Biometrics Access	7
EFS 216	Advanced Voice Evacuation Fire Alarm Systems	7
EFS 221	Fire Codes, NICET, NFPA	7
EFS 226	High Security Structured Cabling	7
EFS 231CAP	CCTV Digital Network Solutions	7
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	Computer Literacy	3

**Subtotal: 126**

*Computer Literacy: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Electrician Low Voltage Fire/Security Certificate**

Prepares students for positions as low voltage electrician apprentices specializing in the electronic fire/security industry as alarm-system installers and service technicians. Students participate in realistic hands-on training in the classroom on burglar alarms, fire alarms, card access, and closed-circuit TV.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences

(psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The Electrician Low Voltage Fire/Security Certificate Program is approved as a Limited Energy (06) specialty electrical training program in the State of Washington.

Upon successful completion of the program, graduates applying to become a Limited Energy (06) specialty electrician can be credited with 1,089 hours of work experience.

### Program Length

This certificate program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

A mandatory orientation is required before admission to the program.

### Program Course List

EFS 105	AC/DC Electricity: Basic Theory, Fractions & Ohm's Law	7
EFS 106	AC/DC Electricity: Series Parallel & Combination Circuits	7
EFS 107	AC/DC Electricity: Electrical Power & Power Applications	7
EFS 108	National Electrical Code Print Reading	7
EFS 109	National Alarm Installer Training Program	7
EFS 110	CCTV Application & Design	7
EFS 118	National Electrical Codes	6
EFS 119	National Fire Codes	6
EFS 121	CCTV Field Service & Installation	7
EFS 124	Washington Administrative Codes	2
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSY 112DIV	Psychology of the	5

COLL 102	Workplace College Success for All	3
		<b>Subtotal: 81</b>

## Environmental Sciences and Technology

### Environmental Sciences & Technology Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Provides the necessary skills for a wide range of positions in the environmental science field.

Students perform hands-on water-quality monitoring; soil, water, and air sampling; mineral identification; wetland delineation and restoration; geographic information system mapping; and simulated hazardous waste site cleanup operations.

Careers are available in both natural resource conservation and urban/ remediation fields. This program will assist students in preparing for positions with both public and private sector employers. Potential future job titles include environmental technician, natural resource technician, hazardous waste worker, hazardous material handler, fisheries technician, and storm water remediation operator.

### Program Learning Outcomes

Upon successful completion of the Environmental Sciences & Technology degree, students will be able to:

- Interpret a variety of environmental regulations.
- Design a restoration plan using ecosystem assessments.
- Assess a hazardous waste site using site characterization.
- Use personal protective equipment in a variety of occupational settings.
- Assess soil, water, and air quality to industry standards through sampling and analysis.
- Create maps.
- Assess human impacts on the environment.

**Completion Requirements**

**Subtotal: 119**

**Prerequisite(s)**

None.

**Program Course List**

ENV 108	Introduction to Ecology	5
ENV 135	Hazardous Waste Site Operations	8
ENV 141	Orientation to Environmental Science	4
ENV 154	Site Characterization	4
ENV 157	Environmental Site Assessment	4
ENV 161	Environmental Law I	5
ENV 164	General Chemistry with Lab	5
ENV 165	Environmental Chemistry with Lab	5
ENV 230	Rural Technologies	4
ENV 231	Issues in the Urban Environment	5
ENV 240CAP	Internship	10
ENV 245CL	Environmental Law II	5
ENV 246CAP	Environmental Science Capstone	2
ENV 248	Hydrology	6
ENV 250	Introduction to Air Pollution	3
ENV 251	Environmental Critical Areas	7
ENV 260	Introduction to Soils	5
ENV 261	Watershed Analysis	4
ENV 270	Hazardous Materials Transportation	3
GEOL& 110	Environmental Geology with Lab	5
GEO 215	GPS Technologies	2

**Subtotal: 101**

**AAT Requirements**

Technical Course Requirements	101
AAT General Education Requirements	18

**Subtotal: 119**

*AAT General Education Requirements: See list below.*

**AAS-T Requirements**

Technical Course Requirements	101
Additional AAS-T General Education Requirements	18

*Additional AAS-T General Education Requirements: See list below*

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
Or		
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*Note: CMST& 220 or higher*

PSYC& 100DIV General Psychology (PSY 112DIV, SOC& 101DIV, or social science or other humanities course that meets the diversity requirement)

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement

PSYC& 100DIV	General Psychology	5
SOC&	Introduction to Sociology	5

**101DIV**

5 credits in social science, humanities, or science; for this program, this requirement is satisfied by the required program course

GEOL& 110	Environmental Geology with Lab	5
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3 credits in College Success

COLL 102	College Success for All	3
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**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Esthetic Sciences****Esthetic Sciences - Associate of Applied Technology Degree**

The master esthetics program prepares students for entry level positions in salons, day spas, or medical settings such as medi-spas, dermatology offices, or plastic surgery centers. Future skin care professional employment may include positions as estheticians, sales representatives for product lines, or makeup artists.

Students participate in realistic training through the student-operated clinic on campus. Students perform services on live models. Services performed include facials, temporary hair removal, makeup, body wrap techniques, chemical peels, electricity therapies, and microdermabrasion. Curriculum includes all related first aid, safety, and sanitation procedures.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Program Learning Outcomes**

Upon successful completion of the Esthetic Sciences degree, students will be able to:

- Apply principles of microorganisms in order to prevent disease transmission in a salon or spa.

- Apply body treatments for the individual client's image and self-care.
- Use makeup application techniques for the individual client's image and self-care.
- Apply advanced modalities of skin care for the individual client's image and self-care.
- Research chemical products, ingredients, and contraindications that may occur during an esthetic treatment.
- Create a business plan that includes demographics, profit and loss statements, and startup costs.
- Summarize the test standards and information in order to pass written and practical exams for the Department of Licensing.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Employability Requirements**

To qualify for an esthetician's license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program, complete 1,200 hours of technical instruction, and pass both the written and practical exams for the Department of Licensing.

**Program Length**

This program is a combination of online, classroom, laboratory and practical experience in our on-campus spa clinic. It is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Accreditation**

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Department of Licensing.

**Mailing Address:**  
**Professional Licensing Support Services**  
**Department of Licensing**

**PO Box 9026  
Olympia, WA 98507-9026**

**Phone: 360-664-6645  
Email: plssunit@dol.wa.gov**

**Completion Requirements**

**Prerequisite(s)**

A mandatory orientation is required before admission to the program.

**Program Course List**

ES 105	Anatomy and Physiology for Estheticians	2
ES 110	Histology and Physiology of the Skin	3
ES 113	Introduction to Cosmetic Chemistry	3
ES 114	Facial Procedures	5
ES 116	Medical Chart Notation and Medical Terminology for Estheticians	4
ES 118	Temporary Hair Removal	4
ES 120	Skin Diseases and Disorders	5
ES 123	Bacteriology, Salon Safety and Sanitation	4
ES 130	Makeup Applications	2
ES 132	Skin Care and Body Treatments	4
ES 134	Machine Facials	4
ES 136	Microdermabrasion and Superficial Peels	4
ES 137	Spa/Clinical Operations	1
ES 140	Clinical Applications I	7
ES 141CL	Clinical Applications II	5
ES 145	Corrective Concealing Makeup	3
ES 149	Laser Theory and Applications	5
ES 150	Medium Depth Peels	2
ES 153	Advanced Cosmetic Chemistry	3
ES 154	Advanced Skin Care and Massage Techniques	5
ES 157CAP	Business Planning	2
ES 158	State Board Prep	2
ES 159	Introduction to Business Planning and Professional Development	1
CMST& 220	Public Speaking Or	5

ENGL& 101	English Composition I	5
MAT 111	Math for Cosmo/Esth Professionals Or Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
BIOL& 175	Human Biology w/Lab Or	5
BIOL& 160	General Biology w/Lab	5
COLL 102	College Success for All	3

**Subtotal: 103**

*Note: MAT 111: preferred*

**Master Esthetician Certificate**

The evening certificate program prepares a currently-licensed esthetician to gain the knowledge and skill set for becoming a master esthetician in the State of Washington. Courses include business planning, advanced skin care services, laser theory, and preparation for state board exams. Additionally, courses will encompass hands-on components in a student-operated clinic. Clover Park Technical College Esthetic Sciences program is a highly-recognized and respected leader in advanced technical training.

**Employability Requirements**

To qualify for a master esthetician’s license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program, complete 600 hours of technical instruction, and pass both the written and practical exams.

**Program Length**

This program is a combination of on-line, classroom, laboratory and practical experience in our on-campus spa clinic. It is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Dependent on enrollment.

	Business Practice	
ES 234	Pre/Post Procedures	2
ES 236	Evening Clinical Applications	2
	III	

**Subtotal: 39**

**Accreditation**

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Department of Licensing.

**Mailing Address:**

**Professional Licensing Support Services**

**Department of Licensing**

**PO BOX 9026**

**Olympia, WA 98507-9026**

**Phone: 360-664-6645**

**Email: [plssunit@dol.wa.gov](mailto:plssunit@dol.wa.gov)**

**Completion Requirements**

**Prerequisite(s)**

Student must be currently licensed by the Washington State Department of Licensing as an esthetician. High school diploma or equivalency required. A mandatory orientation is required before admission to the program.

**Program Course List**

ES 202	Advanced Esthetic Theory	2
ES 204	Wound Healing/ Inflammation in Esthetics	2
ES 206	Advanced Cosmetic Chemistry	2
ES 208	Advanced Exfoliation Procedures	4
ES 210	Evening Clinical Applications I	3
ES 218	Medium Depth Peels	2
ES 220	Intro to Assessment and Business Practice	2
ES 222	Laser and Light Therapy	4
ES 224	Evening Clinical Applications II	5
ES 228	Evening State Board Preparation	4
ES 230	Corrective Concealing Makeup	2
ES 232	Advanced Assessment and	3

**Graphic Technologies**

**Graphic Technologies - Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

Prepares students for careers within commercial printing companies, web design companies, sign companies, quick print and copy shops, in-plant shops, specialty printing companies, advertising, ePublishing, screen printing, digital imaging, magazine, newspaper, and book printing and packaging companies.

With rapid technological expansion and broadening of the scope of services provided by the Graphic Communications industry today, companies have expanded services to include creative design, e-commerce, web page design and hosting, mailing, variable data, fulfillment, vehicle wrapping, and a host of services well beyond the core printing model.

Innovations in computer technology continue to rapidly change and expand the field of graphics. Therefore, the following courses of study may be subject to change in order to offer training based on current industry standards.

**Program Learning Outcomes**

Upon successful completion of the Graphic Technologies degree, students will be able to:

- Design color graphics, images, logos, and projects with the Adobe suite software on a Macintosh computer.
- Apply topographic terms, vocabulary, and concepts to design, layout, and publish documents.
- Integrate both raster and vector imagery within InDesign documents.
- Create printing plates with halftones with Adobe suite software and raster imaging processing.
- Building effective and active websites with Hypertext Markup Language (HTML), JavaScript, and Cascading Style Sheets (CSS).

- Produce a professional job-hunting package culminating in a portfolio and professional presentation skills.
- Apply color theory and color management to design and production.

**Subtotal: 117**

*AAT General Education Requirements: See list above*

**AAS-T Requirements**

Technical Course Requirements	99
AAS-T Degree General Education Requirements	23

**Subtotal: 122**

*AAS-T Degree General Education Requirements: See list above*

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

GTC 110	Art, Design & Visual Thinking	5
GTC 123CL	Macintosh Operations & Image Acquisition	5
GTC 130	Digital Imaging I: Photoshop	5
GTC 143	Electronic Publishing & Layout	5
GTC 149	Digital Imaging II: Photoshop	5
GTC 164	Prepress I	5
GTC 169	Intro to Vector-Based Illustration Software	5
GTC 174	InDesign I	5
GTC 203	Preflight	5
GTC 209	Advanced Vector Digital Illustration	5
GTC 210	Digital Imaging III: Photoshop	5
GTC 223	Prepress II	5
GTC 225	Advanced Page Layout Principles	5
GTC 254CAP	Capstone Class	5
GTC 260	Web Animation Design	5
GTC 264	Paper, Pricing & Estimating	5
GTC 265	Web Programming Basics	5
GTC 273	Web Graphic Design and User Experience	5
GTC 276	InDesign II	5
GTC 278	Independent Study	4
	Or	
GTC 280	Internship	4
	<b>Subtotal: 99</b>	

**AAT Requirements**

Technical Course Requirements	99
AAT General Education Requirements	18

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

<b>5 credits in communication</b>		
ENGL& 101	English Composition I	5

5 credits in quantitative reasoning		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science

choose one from the following		
ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success		
COLL 102	College Success for All	3

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the

requirements for diversity, computer literacy, and the capstone project.

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

## Health Unit Coordinator

### Health Unit Coordinator Certificate

Health Unit Coordinators are an integral and valuable part of the medical team, providing such services as transcribing physicians' orders, scheduling diagnostic studies and appointments for follow-up care, ordering and maintaining supplies, and maintaining clerical and patient records. This program prepares students for positions as activity coordinators at nursing unit desks. Students will participate in realistic training in the classroom and clinical settings, practicing the responsibilities of the health unit coordinator. Students learn the competencies needed in communications, human relations, anatomy and physiology, medical terminology, health unit coordinator tasks, and unit management. As the communicator for the hospital unit, it is essential that the student has the ability to read, write, understand, and speak English, along with the ability to speak clearly to communicate instructions, directions, and telephone contacts. Health unit coordinators are sometimes referred to as HUC/monitor technicians, patient access technicians, patient assistance coordinators, administrative support partners, front desk receptionists, or scheduling coordinators.

### Program Learning Outcomes

Upon successful completion of the Health Unit Coordinator certificate, students will be able to:

- Apply legal and ethical aspects of unit coordinating in order to support a medical team.
- Use medical terminology in order to communicate effectively with culturally diverse patients and team members.
- Operate a nursing unit communication system.
- Use computer skills in support of the nursing unit.



- Demonstrate leadership skills necessary for unit management.

**Physical Activity Requirements**

It is essential that Health Unit Coordinator students are able to perform a number of physical activities during the clinical portion of the program. This includes walking up and down stairs, lifting 20 lbs. of office supplies, and carrying office supplies and patient charts. Students must also have the ability to sit 75 percent of the time to perform the majority of duties. The clinical experience places students under considerable mental and emotional stress as they undertake responsibilities and duties that impact patients’ lives. Some hospitals may require a drug test before the student is permitted to practice in the hospital. Most clinical sites enforce a no-smoking policy. Smoking at a clinical site may hinder completion of the program.

**Employability Requirements**

High School diploma or equivalent, seven-hour HIV/Blood Borne Pathogens training, pass a criminal background check, current immunizations. Some employers also require drug screens and enforce a no-smoking or nicotine-free environment. Employees must pass a typing test with the ability to type 35 words per minute. Physical requirements can vary by employer. Successful graduates are eligible to take the certification exam by the National Association of Health Unit Coordinators. Persons with some types of criminal convictions may not be eligible for licensure.

**Program Length**

This program is a combination of on-line, classroom, laboratory and clinical experience. It is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Students must attend mandatory orientation/ advising meeting with instructor. Students are required to display basic computer skills that include, but are not limited to, using email, typing 35 WPM, navigating the Internet, word processing, and inputting data into a spreadsheet and database. Students must obtain a current CPR card for health care providers. In order to participate in the clinical

aspect of the program, students must receive during the HUC 108 course a “No Record On File” report from a certified background check related to crimes against persons. A non-refundable fee is charged to each student for the background check. Students must have current immunizations or laboratory verification of immune status. Immunizations could include, but are not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, Varicella, and yearly flu as required by contracts with clinical facilities and CDC recommendations.

Each student is required to carry personal health/medical insurance throughout the program and their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

No student will be allowed at clinical sites without proof of insurance, complete immunizations on file, and having successfully passed a drug screen. Proof of immunizations should be submitted the first week of class unless arrangements have been made with the instructor.

Must be a high school graduate or have a high school equivalency diploma by completion of program. Students must be at least 17½ years of age to begin the program.

**Program Course List**

HUC 106	Anatomy & Physiology for Health Unit Coordinator	3
HUC 108	Introduction to Health Unit Coordinating	6
HUC 112	Unit Coordinator Tasks & Procedures II	4
HUC 113	Introduction to Communication in the Health Unit Coordinator Role	1
HUC 114	Unit Coordinator Tasks & Procedures I	7
HUC 118	Advanced Communications in the Health Unit Coordinator Role	2
HUC 120	Unit Management I	3
HUC 122	Unit Management II	3
HUC 126	Legal/Ethical Aspects of Unit Coordinating	2
HUC 132	Clinical Experience	7
HUC 204	Electrocardiogram Monitor Technician	3
COLL 102	College Success for All	3

**Subtotal: 44**

**Highly Recommended Class:**

(This class could be taken while waiting to start the program)

CAS 105      Keyboarding      3

*NOTE: CAS 105 or Orientation to Computers and MS Office*

## Heating and Air Conditioning/Refrigeration Service Technician

### HVAC - Associate of Applied Technology Degree

Prepares students for positions in the heating, air conditioning, and refrigeration industry. Graduates will be prepared for entry-level positions as service technicians, building maintenance technicians, equipment assemblers, and start-up residential and light commercial installers. Students will participate in work-based training through realistic training activities on campus.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

This program is approved as an HVAC/Refrigeration (06A) specialty electrical training program in the state of Washington.

Upon successful completion of the program, graduates applying to become an HVAC/Refrigeration (06A) specialty electrician can be credited with an estimated 960 hours of work experience. This program is not applicable to any other electrical specialty or sub-category.

**Program Learning Outcomes**

Upon successful completion of the Heating & Air Conditioning Refrigeration Service Technician degree, students will be able to:

- Employ modern practices used in the industry in order to fix and maintain heating, ventilation, air conditioning, and refrigeration equipment.
- Formulate solutions to common problems associated with heating, ventilation, air conditioning, and refrigeration equipment based on knowledge of traditional theory and formulas.

- Use HVAC/R diagnostic equipment and tools skillfully.
- Use industry safety and environmental standards at all times in the shop.
- Troubleshoot residential, commercial, and industrial heating, ventilation, air conditioning, and refrigeration systems in order to conduct repairs.
- Summarize the test standards and information in order to pass national HVAC/R certification tests.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

HAC 102	Basic Electricity	5
HAC 105	Electrical Circuits	4
HAC 120	Advanced Controls & Troubleshooting	4
HAC 162	Electric Motors & Their Applications	4
HAC 163	Refrigeration Controls	3
HAC 164	Electric Motors & Troubleshooting	3
HAC 169	Advanced Motor Theory	2
HAC 170	Heating I	7
HAC 175	Heating I Lab	5
HAC 181	Heating II	6
HAC 184	Heating II Lab	4
HAC 202	Advanced Refrigeration	10
HAC 230	EPA Refrigerant Certification	1
HAC 237	Basic Refrigeration I	7
HAC 242	Basic Refrigeration I Lab	5
HAC 246	Basic Refrigeration II	6
HAC 249	Job Readiness	5
HAC 255CAP	Basic Refrigeration II Lab	3
HAC 257CAP	Commercial Refrigeration/Advanced Refrigeration	7
	Computer Literacy Requirement	3

**Subtotal: 94**

*Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam*

*Note: HAC 102-169 are prerequisites for Heating & Refrigeration.*

AAT Requirements		
Technical Course Requirements		94
AAT General Education Requirements		18

**Subtotal: 112**

*AAT General Education Requirements: See list above*

**Highly Recommended Class**

(class could be taken while waiting to start the program)

CAS 105	Keyboarding	3
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*NOTE: CAS 105 or Orientation to Computers and MS Office*

**General Degree Requirements**

AAT Degree General Education Requirements (18 credits)		
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*NOTE: CMST& 220 or higher*

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement*

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project. Students are required to pass seven nationally recognized certification exams during the program. All courses must be completed with a minimum "C" grade to receive the certificate.

**Program Length**

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Basic HVAC/Refrigeration Service Technician Certificate**

Provides students with the knowledge and skills necessary

for entry-level employment in HVAC service and maintenance.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. Students are required to pass six nationally recognized certification exams during the program. All courses must be completed with a minimum "C" grade to receive the certificate.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

HAC 102	Basic Electricity	5
HAC 105	Electrical Circuits	4
HAC 120	Advanced Controls & Troubleshooting	4
HAC 162	Electric Motors & Their Applications	4
HAC 163	Refrigeration Controls	3
HAC 164	Electric Motors & Troubleshooting	3
HAC 169	Advanced Motor Theory	2
HAC 170	Heating I	7
HAC 175	Heating I Lab	5
HAC 181	Heating II	6
HAC 184	Heating II Lab	4
HAC 230	EPA Refrigerant Certification	1
HAC 237	Basic Refrigeration I	7
HAC 242	Basic Refrigeration I Lab	5
HAC 246	Basic Refrigeration II	6
HAC 255CAP	Basic Refrigeration II Lab	3
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5

PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 87</b>

**NOTES:**

*HAC 102-169 are prerequisites for Heating & Refrigeration.*

### Refrigeration Specialist Certificate

Provides students with the knowledge and skills necessary for entry-level employment in Refrigeration service and maintenance.

Students are required to pass one (1) state recognized certification and four (4) nationally recognized certification exams during the program. All courses must be completed with a minimum “C” grade to receive the certificate.

#### Program Length

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Summer and winter quarters.

#### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

HAC 102	Basic Electricity	5
HAC 105	Electrical Circuits	4
HAC 120	Advanced Controls & Troubleshooting	4
HAC 162	Electric Motors & Their Applications	4
HAC 164	Electric Motors & Troubleshooting	3
HAC 230	EPA Refrigerant Certification	1
HAC 237	Basic Refrigeration I	7

HAC 242	Basic Refrigeration I Lab	5
HAC 246	Basic Refrigeration II	6
HAC 255CAP	Basic Refrigeration II Lab	3

**Subtotal: 42**

*Note: HAC 102, HAC 105, HAC 120, HAC 162, and HAC 164 are prerequisites for HAC 237 Basic Refrigeration I.*

## Hemodialysis

### Hemodialysis Technician Certificate

Prepares students for employment as hemodialysis technicians in outpatient settings such as hospitals or dialysis centers.

Focuses on the hemodialysis technician’s role of providing basic renal care for clients under the supervision of a registered nurse or physician.

Students participate in theoretical and practical preparation in the duties and responsibilities of a hemodialysis technician. The program includes a practicum in a dialysis facility to provide students an opportunity to develop and practice the skills of the hemodialysis technician and participate as a team.

Clinical hours vary, depending on the facility assigned; students may be assigned to day or evening shifts. Clinical sites are located throughout Western Washington.

#### Program Learning Outcomes

Upon successful completion of the Hemodialysis Technician certificate, students will be able to:

- Explain the importance of vascular access.
- Recognize the importance of complying with government CMS standards.
- Describe the basic scientific principles of diffusion and osmosis related to dialysis.
- Compare normal and abnormal kidney function.
- Explain theory, principles, and complications as they relate to end-stage renal failure.
- Demonstrate setup and operation of a dialysis machine per policy and procedure.
- Use computers for patient charting.
- Perform dialysis procedures in a professional manner.

- Prepare dialysate solutions for hemodialysis treatments.
- Use phlebotomy skills to draw blood specimens for analysis in a laboratory

### Physical Activity Requirements

This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.). Technicians are often standing for long periods of time. For safety and protection of patients, student technicians must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations. Must be able to safely assist a patient in moving from a bed to a chair, commode, or cart.

### Employability Requirements

Certified hemodialysis technicians must complete and pass approved program and certification exam. Graduates must meet state eligibility requirements, including a criminal background check. Persons with some types of criminal convictions may not be eligible for certification. Seven hours of AIDS education and training as required under WAC 246-827. Current cardiopulmonary resuscitation (CPR) certification is also required.

### Program Length

This program is a combination of on-line, classroom, laboratory and clinical experience. It program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Day Program: Fall and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Documentation of immunizations, including Hepatitis B series plus positive titer; Tetanus/Diphtheria; 2 step TB test; Measles/Mumps/Rubella (two injections or one injection plus a positive titer for measles, mumps, and rubella); Varicella immunization or positive titer; annual influenza immunization; and H1N1 immunization. Immunization requirements may change based on CDC guidelines and/ or clinical facility policies. All immunization records will be uploaded to Certified Background. All immunizations/prerequisite(s) must be completed before clinical placement (third quarter).

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at clinical sites without proof of insurance.

Students must maintain an 80 percent or above in all tech courses to continue in the program.

Students must have a high school diploma or transcript or high school equivalency diploma prior to program entry. In order to participate in the clinical aspects of the program the student must receive a “No Record On File” report related to crimes against persons from the Washington State Patrol and meet the requirements for the facility that they may be assigned to. (Some clinic sites require that you pass a drug screening and their own background checks.) A non-refundable fee is charged to each student for the background check.

Successful completion of ENG 091 or equivalent and placement scores showing readiness to go into MAT 092 or equivalent.

#### Program Course List

HDT 106	Patient Calculations	2
HDT 108	Health Information Technology in Patient Services	2
HDT 116	Computer Applications/Keyboarding	2
HDT 123	Hemodialysis Terms/Anatomy & Physiology	2
HDT 130	Hemodialysis Principles & Procedures I	5
HDT 142	Water Treatment for Hemodialysis	2
HDT 150	Vascular Access	2
HDT 151	Professional Interaction	3
HDT 153	Hemodialysis Principles & Procedures II	5
HDT 160	Clinical Practicum I	6
HDT 165	Clinical Practicum II	6
PHLEB 114	Phlebotomy Program	4
COLL 102	College Success for All	3

**Subtotal: 44**

## Human Services

### Human Services - Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Prepares students for a variety of entry- and mid-level positions within the field of human services, which focuses on helping others gain the skills to help themselves.

Students will participate in both classroom instruction and a community-based internship experience with a local human services provider. Students who intern at these agencies serve a variety of populations, including the mentally ill, the developmentally disabled, seniors, persons living with HIV/AIDS, homeless, incarcerated adults, at-risk youth, pregnant and parenting teens, foster families, persons with substance abuse issues, and numerous other specialty areas. Students are responsible for choosing and securing their own internship placement and are primarily eligible for employment in the area in which they choose to complete their internship experience. Internship site choice requires instructor's approval.

#### Program Learning Outcomes

Upon successful completion of the Human Services degree, students will be able to:

- Use therapeutic communications in professional relationships.
- Apply counseling theories and techniques in the human service field.
- Develop strategies for personal and client behavioral health and wellness.
- Use effective case management skills and documentation.
- Develop strategies for treating and intervening on behalf of victims of violence.
- Integrate cultural competency standards into the delivery of the human service field.
- Apply proper ethical and legal guidelines of confidentiality of client information.

For an AAT or AAS-T degree, students may complete one of the following specialty options: 1) Human Services Generalist or 2) Human Services Chemical Dependency. The Human Services Generalist option can be completed

in as little as six quarters, while the Human Services Chemical Dependency option will require a minimum of eight quarters, plus prerequisites and general education courses. Program completion generally takes 1.5-2 years to satisfy all degree requirements. Students receiving a "C-" or below in a Human Services class must repeat the class in order to satisfy the Human Services program requirements for graduation.

#### Completion Requirements

##### Prerequisite(s)

Prospective students must attend a mandatory orientation/advising meeting with the instructors prior to being admitted. Students must be high school graduates or have passed a high school equivalency test. Students must be over the age of 18 and agree to the background check in the first quarter. Successful completion or transfer of the following courses is required before enrollment in Human Services courses: ENGL& 101, PSYC& 100, COLL 102, and any 100-level Computer Applications class of 3 credits or more.

\*Students must have an internship site secured no later than the end of the first week of the quarter for the Internship I, II, and III courses. Students are advised that a "No Record On File" report related to crimes against persons is generally required by agencies offering internship or employment. Students understand that some internship sites may not be available due to certain records. A non-refundable fee is charged to each student for the background check. Students who do not meet the internship site requirement within the specified timeline will be dropped from the course.

#### Program Course List

HS 115	Therapeutic Communication Skills	5
HS 120	Soft Skills for the Human Services Professional	3
HS 125	HIV/AIDS/Blood-Borne Pathogens & Brief Risk Intervention for the Chemically Dependent	1
HS 127	Introduction to Human Services	5
HS 152	Internship I	3
HS 222	Applied Counseling for the Human Services Professional	5
HS 225	Survey of Community Resources	3
HS 226	Mental Health Assessment & Evaluation	5

HS 227	Behavioral Health & Wellness	5	Requirement	
HS 230	Case Management	5	Human Services AAT	28
HS 234DIV	Culturally Competent Practice	5	General Education	
HS 237	Law & Ethics for Human Services	3	Requirements	
				<b>Subtotal: 111-131</b>
HS 241	Dynamics of Violence	5	<i>Human Services AAT General Education Requirements: See list above</i>	
HS 245	Internship II	3		
<b>Option 1: Human Services Generalist</b>				
HS 215	Human Development for the Human Services Professional	5	AAS-T Requirements	
HS 240	Survey of Addiction	5	Technical Course	80-106
HS 246	Group Process	3	Requirements	
HS 255	Internship III	3	Computer Literacy Requirement	3
Human Services	Electives	8	Human Services AAS-T	33
				General Education Requirements
				<b>Subtotal: 116-142</b>
				<i>Human Services AAS-T General Education Requirements: See list above</i>
				<b>Subtotal: 80</b>

*Human Services: See list below*

<b>Option 2: Human Services Chemical Dependency</b>		
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
HSCD 134	Introduction to Addictions	5
HSCD 150	The Neuro-Pharmacology of Addiction	5
HSCD 155	Chemical Dependency Counseling I: Individuals & Groups	5
HSCD 180	Addictions Treatment: Ethics & the Law	5
HSCD 215	Case Management & Recordkeeping for the Chemical Dependency Professional	5
HSCD 227	Chemical Dependency Assessment & Evaluation	3
HSCD 229	Suicide Prevention for the Chemical Dependency Professional	1
HSCD 235	Chemical Dependency Practicum	3
HSCD 249	Chemical Dependency Counseling II: Adolescents & Families	5
HSCD 251	Relapse Prevention	3
<b>Subtotal: 106</b>		

<b>AAT Requirements</b>		
Technical Course		80-106
Requirements		
Computer Literacy		3

<b>Approved Human Services Electives (8 Credits Needed)</b>		
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
ASL& 121	American Sign Language I	5
LEADR		1-6
HS HSCD		5

**General Education Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

The different requirements for each degree are listed below.

<b>AAT Degree General Education Requirements (28 credits)</b>		
ENGL& 101	English Composition I	5
CMST& 220	Public Speaking	5
	Or	
ASL& 121	American Sign Language I	5
MAT 103	Business Mathematics	5
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (33 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

**5 credits in communication**

ENGL& 101	English Composition I	5
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**5 credits in quantitative reasoning**

MATH& 146	Introduction to Statistics	5
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**10 credits in a social science that meets the diversity requirement**

PSYC& 100DIV	General Psychology	5
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And

SOC& 101DIV	Introduction to Sociology	5
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**5 credits in social science, humanities, or science**

choose one from the following:

ART& 100	Art Appreciation	5
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ASL& 121	American Sign Language I	5
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ASL& 122	American Sign Language II	5
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BIOL& 160	General Biology w/Lab	5
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BIOL& 175	Human Biology w/Lab	5
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BIOL& 241	Human A & P I	5
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BIOL& 242	Human A & P II	5
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BIOL& 260	Microbiology	5
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CHEM& 110	Chemical Concepts w/Lab	5
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CHEM& 121	Intro to Chemistry	5
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CHEM& 131	Introduction to	5
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Organic/Biochemistry

CMST& 220	Public Speaking	5
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GEOL& 110	Environmental Geology with Lab	5
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HIST& 146	US History I	5
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HIST& 147	US History II	5
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HIST& 148	US History III	5
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HUM& 101	Introduction to Humanities	5
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MUSC& 105	Music Appreciation	5
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PHYS& 114	General Physics I with Lab	5
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POLS& 202	American Government	5
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PSYC& 100DIV	General Psychology	5
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PSYC& 200	Lifespan Psychology	5
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PSYC& 220	Abnormal Psychology	5
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SOC& 101DIV	Introduction to Sociology	5
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**5 credits in**

CMST& 220	Public Speaking	5
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**3 credits in College Success**

COLL 102	College Success for All	3
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**Employability Requirements**

A background check will be conducted in the first quarter of the program to screen for prior convictions prior to internship placement for advising purposes. If pursuing the CD certificate, students will apply directly to the Department of Health for state certification. Persons with some types of criminal convictions may not be eligible for employment at the discretion of the individual employer.

**Program Length**

The Human Services core classes take six-to-eight quarters to complete, depending on the degree option. The length for the completion of the associate degree may vary depending on the time students need to satisfactorily complete all prerequisites, electives, and general academic classes to meet degree requirements, and may vary between one-and-a-half and two years.

**Admission Dates**

Fall and spring quarters.

**Chemical Dependency Option Certificate**

Provides specialized knowledge and training about the generalist scope by introducing students to core concepts related to chemical dependency prevention and treatment for individuals, adolescents, groups, and families.

The certificate will provide students with the academic and technical training background to understand content, models, theories, and research relevant to working with chemically dependent persons and their families and will prepare students for specialized entry-level employment. It is ideal for working professionals who already have a degree but are in need of the specific coursework to obtain state credentials. The required certificate coursework covers the required content areas for the chemical dependency professional credential issued by the Washington State Department of Health (See RCW 246.811 Washington Administrative Code [WAC] Chapter 246-811).

**Employability Requirements**

Persons with some types of criminal convictions may not be eligible for employment as determined by the



Washington State Department of Health.

Employability for the Chemical Dependency Professional Trainee (CDP-T) and Chemical Dependency Professional (CDP) is at the discretion of the Department of Health. The WA State DOH requires a background screening upon application for the CDP-T professional.

Students wishing to become a CDP are advised to apply in quarter one of their program for the CDP-T through the WA State Department of Health to ensure enough time for the DOH background check and processing in time to utilize the CDP-T credential in quarter three of the program.

**Program Length**

This program is a combination of on-line, classroom, laboratory and externship experience This concentrated certificate program is three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Degree program completion generally takes 1.5-2 years to satisfy all degree requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

This certificate is designed for employed human services professionals who are working to obtain their chemical dependency state credential, as well as students completing the human services degree at Clover Park Technical College. Students pursuing the certificate outside of Clover Park Technical College’s degree program must have a completed degree from another institution.

A criminal background check is performed for all students enrolled in a human services internship class for the degree program in the first quarter. A non-refundable fee is charged to each student for the background check. Students with certain types of criminal convictions may not be eligible to participate at certain internship sites.

**Note:** The Human Services background check does not take the place of the CDP-T application. Students are expected to have their CDP-T credential in place before Quarter Three of the program and HSCD 235 CD Practicum.

**Program Course List**

PSYC& 220	Abnormal Psychology	5
PSYC& 200	Lifespan Psychology	5

HS 125	HIV/AIDS/Blood-Borne Pathogens & Brief Risk Intervention for the Chemically Dependent	1
HSCD 134	Introduction to Addictions	5
HSCD 150	The Neuro-Pharmacology of Addiction	5
HSCD 155	Chemical Dependency Counseling I: Individuals & Groups	5
HSCD 180	Addictions Treatment: Ethics & the Law	5
HSCD 215	Case Management & Recordkeeping for the Chemical Dependency Professional	5
HSCD 227	Chemical Dependency Assessment & Evaluation	3
HSCD 229	Suicide Prevention for the Chemical Dependency Professional	1
HSCD 235	Chemical Dependency Practicum	3
HSCD 249	Chemical Dependency Counseling II: Adolescents & Families	5
HSCD 251	Relapse Prevention	3

**Subtotal: 51**

*Note: PSYC& 100DIV is a prerequisite to PSYC& 200 and 220.*

**Interior Design**

**Bachelor of Applied Science in Interior Design**

Take your education a step further and open the door to additional opportunities in the interior design industry with CPTC’s Bachelor of Applied Science in Interior Design degree. Our coursework is designed to help elevate your creative and technical skills and hone your design process. The BASID degree can help boost your career in multiple facets of the interior design industry, including positions at residential and commercial architecture and design firms.

During the BASID degree, students will increase their knowledge of interior design and construction, research current issues and topics affecting the interior design industry, develop business and project management techniques, increase their experience with related technology skills, and apply these to solve problems in the interior design industry.

The hybrid delivery model for this degree has been designed to meet the educational needs of a diverse population including working adults. Mentored study design studios and a capstone course will be used to develop students' independent thought and critical thinking skills to the level expected in a baccalaureate degree.

### Program Learning Outcomes

Upon successful completion of the BAS Interior Design degree, students will be able to:

- Assess building construction, detailing, and systems integration and their effect on interior design.
- Develop concepts and designs for interiors with industry standard technologies.
- Prepare organized contract documents including coordinated interior drawings and product specifications.
- Analyze relevant codes, standards, and design guidelines based on project information and conditions in order to promote the health, safety, and welfare of building occupants.
- Analyze human factors and behavior in the built environment.
- Evaluate principles of environmental sustainability for specific interior design project contexts.
- Evaluate how social, political, economic, cultural and/or physical influences shape the design of built environments in both the local and global community.
- Prepare design work and qualifications for presentation to industry and clients using visual, written, and oral techniques.
- Research design topics in order to collect evidence based information for application to unique interior design solutions.

### Program Length

The program is approximately six-to-eight quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters. This is a hybrid program with minimal face-to-face meetings on evenings and/or weekends.

### Additional Information

Because this is a hybrid program conducted mostly online, students will need regular access to a computer with internet. The following software programs will be used during this program: Autodesk Revit, Adobe Photoshop, SketchUp, and Microsoft Office (or similar). CPTC's Computer Lab in Building 15 is available with access to these software programs during days and times noted on their website: <http://cptc.edu/library>.

### Completion Requirements

#### Prerequisite(s)

#### Admission to the Program

Admission to the program may occur when the following can be documented:

- Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent from a regionally accredited institution with an overall minimum 2.3 GPA.
- A minimum grade of 2.0 is required in all general education coursework.
- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 college-level credits in a transferable social science course.

Applicants must also submit for review by faculty:

- A most current portfolio of interior design and/or related work.
- A formal resume.
- A 400-650 word admission essay describing the candidate's interest in the degree, his or her background and experience in the interior design and/or related industries, how completion of this degree meets his or her personal education and employment goals, his or her understanding of the commitment that will be required to complete the program, and any other information that may support entry to the program.

**Admission to the Junior Year**

Once admitted to the program, the following must be documented before students are considered to be at junior level standing (in addition to the required English Composition and Social Sciences coursework required for program admission):

- 5 credits of MATH& 146 or another higher-level statistics class
- 5 credits in a humanities subject – CMST&220 or ART& 100 recommended
- 10 credits in natural sciences with at least one science course with a lab component. Recommended courses: CHEM& 110 (with lab), CHEM& 121 (with lab), PHYS& 114 (with lab), and another transferable science or transferable math course other than MATH& 146.
- 5 credits in any college-level lower division General Education courses: English Composition, Social Science, Humanities, or Natural Science

These requirements can be satisfied by coursework completed before admission to the BASID program, or during a “bridge” quarter included within the BASID program. The bridge quarter can include up to 25 credits as required. Bridge courses may be taken concurrently with upper-level BAS classes.

**Graduation Requirements**

To successfully complete the degree, students must maintain a minimum grade of 2.0 is required in all coursework, including “bridge” quarter courses, program courses, and general education courses.

**Program Course List**

DSN 310	Interior Construction & Building Systems	5
DSN 312	Building Information Modeling I	5
DSN 314	Building Information Modeling II	5
DSN 316	Environmental & Sustainable Interiors	5
DSN 410	Design Studio I	5
DSN 412	Design Studio II	5
DSN 414	Design Studio III	5
DSN 416	Design Research	5
DSN 418	Design Studio IV	5

DSN 422	Capstone Project	5
BUS 310	Project Management	5
ECON 310	Managerial Economics	5
ENG 310	Business Communications	5
PHIL 310DIV	Professional Ethics	5
PSYC 311DIV	Industrial & Organizational Psychology Plus 15 credits from elective options below	5
DSN 350	Intermediate SketchUp for Interior Design	5
DSN 355	Intermediate Photoshop for Interior Design	5
DSN 360	Independent Study	5
DSN 420	Internship	5

**Subtotal: 90**

NOTE: Total credits for the degree do not include the bridge quarter (if needed).

**Interior Design - Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This program prepares students to work for design and architectural firms, home-furnishing venues, and contractors.

This program is for creative individuals who desire a career in the dynamic profession of interior design. Hospitality, residential, kitchen and bath, and sustainable design are just a few of the many paths an interior designer may pursue. The instructors are active in the design community, bring realistic projects to the classroom, and are committed to providing the most current materials and standards of the interior design profession.

In addition to the degree program, a Kitchen and Bath certificate option is offered every spring and fall quarter. A Sustainable Interior Design certificate option is offered every quarter. New students or continuing program students may enroll for either option.

**Program Learning Outcomes**

Upon successful completion of the Interior Design degree, students will be able to:

- Develop design solutions that incorporate the elements and principles of design in order to enhance the quality of life and culture of the occupants.
- Develop design solutions in response to the building

shell, physical location, and social context of the project.

- Apply the principles of environmental sustainability as they relate to interior environments.
- Create functional design solutions that effectively integrate furnishings, finishes, and other interior products.
- Employ current codes, standards, and design guidelines to promote the health, safety, and welfare of building occupants.
- Produce organized contract documents, including coordinated interior drawings and specifications.

266CAP Presentation

**Subtotal: 105**

**AAT Requirements**

Technical Course Requirements	105
AAT General Education Requirements	18

**Subtotal: 123**

*AAT General Education Requirements: See list above*

**AAS-T Requirements**

Technical Course Requirements	105
AAS-T Degree General Education Requirements	23

**Subtotal: 128**

*AAS-T Degree General Education Requirements: See list above*

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

DSN 105	Drafting I	6
DSN 119	Interior Design & the Creative Design Process	4
DSN 121	Drafting II	5
DSN 123	Materials, Methods and Techniques of Interior Design	4
DSN 124	Color Theory	4
DSN 132	Lighting	5
DSN 136	Introduction to Drawing & Rendering	4
DSN 140	Textiles	4
DSN 145	Residential Planning, Design & Exterior Spaces	5
DSN 152	Furniture & Cabinet Design	2
DSN 153	Drafting III	4
DSN 158	History of Interiors	4
DSN 159	Intro to Technology for Interior Designers	3
DSN 204	Introduction to Commercial Interior Design	4
DSN 216	CAD I	5
DSN 225	Design I	5
DSN 227	Commercial Specifications	4
DSN 231	Historic Preservation 20th Century Design & Philosophy	3
DSN 236	Design II	7
DSN 239CL	CAD II	5
DSN 241	Business Practices	4
DSN 245	Internship	4
DSN 251	Contract Furniture	3
DSN	Portfolio/Professional	7

**Optional Electives**

DSN 202	Elements of Kitchen & Bath Design	5
DSN 206	20/20 Drafting	5
DSN 208	Materials & Estimating	4
DSN 211	Business Procedures & Sales	4
DSN 215	Sustainable Design: An Overview	5
DSN 224	Sustainability for Residential & Commercial Applications	4
DSN 226	Sustainable Strategies in Design	5
DSN 229	Sustainable Interiors & the Integrated Design Process	5
DSN 265	(Optional) Independent Study	3
DSN 270	(Optional) Independent Study	4
DSN 275	(Optional) Independent Study	5

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
Or		
CMST& 220	Public Speaking	5

	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

**5 credits in communication**

ENGL& 101	English Composition I	5
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**5 credits in quantitative reasoning**

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

**5 credits in a social science that meets the diversity requirement**

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

**5 credits in social science, humanities, or science**

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5

CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

**3 credits in College Success:**

COLL 102	College Success for All	3
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Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Program Length**

The degree program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Kitchen and Bath Certificate**

This certificate program covers the principles and elements of design for kitchen and bathroom interiors.

**Program Length**

One quarter.

**Admission Dates**

Fall and Spring quarters. This is an evening program with hybrid and online components.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

DSN 202	Elements of Kitchen & Bath Design	5
DSN 206	20/20 Drafting	5
DSN 208	Materials & Estimating	4
DSN 211	Business Procedures & Sales	4
<b>Subtotal: 18</b>		

**Sustainable Interior Design Certificate**

This certificate program covers sustainable design topics of the built environment, with a focus on interiors.

**Program Learning Outcomes**

Upon successful completion of the Sustainable Interior Design certificate, students will be able to:

- Explain concepts, principles, and theories of sustainability as they pertain to the built environment.
- Identify local and national laws and regulations related to sustainable design.
- Analyze sustainability and green building rating systems for their availability and applications.
- Examine a broad range of case studies and product options for their impact and contributions to sustainability.
- Develop their own unique sustainable design solution for a given project.
- Defend design ideas and solutions clearly in visual and written communications.

**Program Length**

One quarter.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

DSN 215	Sustainable Design: An Overview	5
DSN 224	Sustainability for Residential	4

**& Commercial Applications**

DSN 226	Sustainable Strategies in Design	5
DSN 229	Sustainable Interiors & the Integrated Design Process	5
<b>Subtotal: 19</b>		

**Manufacturing Technologies**

**Manufacturing Technologies - Associate of Applied Technology Degree**

Provides students with the knowledge and skills necessary for employment in the manufacturing/metalworking industry as a machinist, machinist apprentice, or machinist helper.

Students will learn how to set-up and operate conventional machine tools and Computer Numerical Control (CNC) machine tools.

Advanced students will be proficient in programming, setting up, and operating CNC machining centers. Students will develop proficiency in blueprint reading, shop math, precision measuring, tool and cutter grinding, CAD/CAM (Computer-Aided Drawing & Computer-Aided Machining), and CNC turning centers and milling machines.

**Program Learning Outcomes**

Upon successful completion of the Manufacturing Technologies degree, students will be able to:

- Perform precision machining operations according to industry standards.
- Inspect machined parts for quality according to industry standards.
- Apply lean principles to a manufacturing shop setting.
- Design parts and programs for computer numeric controlled machines.
- Develop a professional portfolio of machined parts or complete an internship.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students pursuing an AAT or AAS-T degree must

complete all college degree requirements prior to graduation. This includes courses that meet the capstone-project, diversity, and computer-literacy requirements.

### General Degree Requirements

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone-project, diversity, and computer-literacy requirements.

### Program Length

This program is approximately six-to-seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Day program: Summer and Winter

### Completion Requirements

#### Quarter 1 - Preparation

FSME 101	Workshop Safety	3
FSME 110	Quality Principles, Inspection and Test	4
FSME 114	Fabrication Fundamentals I	4
FSME 116	Fabrication Fundamentals II	4

#### Program Core

MCH 115	Standard Operating Procedures - Lathes & Mills	8
MCH 123	Lathes & Mills II	5
MCH 129	Surface Grinding	4
MCH 135	Tool & Cutter Grinding	4
MCH 197	Introduction to CAD/CAM	4
MCH 199	Industrial Survey	6
MCH 204	Introduction to CNC	8
MCH 207	Inspection Techniques	4
MCH 209	Metallurgy & Heat Treatment	4
MCH 212	Advanced CAD/CAM	4
MCH 214	Intermediate CNC	6
MCH 220	Advanced CNC	10
MCH 235CAP	Capstone Portfolio	5

	Or		
MCH 241	Internship		5
ENGL& 101	English Composition I		5
	Or		
CMST& 220	Public Speaking		5
MAT 105	Mathematics for Industrial Professionals		5
PSYC& 100DIV	General Psychology		5
	Or		
SOC& 101DIV	Introduction to Sociology		5
COLL 102	College Success for All		3

**Subtotal: 105**

#### NOTES:

*MCH 105, MCH 117, MCH 121: Articulated courses with high schools for dual enrollment.*

#### Optional Courses

MCH 240	Training & Practice	2--10
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*Note: MCH 240 Training & Practice is designed for specific skills enhancement with the purpose of reentering the manufacturing workforce. Credit will be assigned based on mutually agreed upon goals and practicum hours. .*

## Massage Studies

### Massage Studies - Associate of Applied Technology Degree

Prepares successful students for employment and practice in a variety of workplace settings. Graduates from this program are qualified for positions at spas, clinics, hospitals and successful private practices.

Students develop a strong foundation in Swedish massage and deep tissue techniques. Clinical massage students benefit from advanced training in treatment applications and assessment. Teaching techniques are varied, addressing a wide variety of learning styles.

All students enrolled in the program are required to participate in the exchange of applied massage techniques in a supervised and professional setting. As part of the participation, students must be able to stand for up to two hours to perform massages. In addition, students must be able to support and smoothly move the limbs of their

partner's body, including the head and neck. Participation in the student-operated massage clinic allows students to gain experience in the profession while under instructor supervision.

Topics covered include, but are not limited to, massage theory and practice, anatomy, physiology, pathology, kinesiology, orthopedic assessment, pregnancy massage, sports massage, deep tissue, myofascial techniques, lymphatic drainage, on-site seated massage, hydrotherapy, hot-stone massage, and mini-spa applications.

Business classes introduce the skills and theories necessary for successful employment, such as professional ethics, goal setting, business planning, insurance billing, networking and communicating with health care professionals, marketing, job networking, resume writing, and interviewing.

### **Program Learning Outcomes**

Upon successful completion of the Massage Studies degree, students will be able to:

- Implement a plan for the treatment of a variety of different skeletal-muscular pathologies.
- Interpret a kinesiology evaluation for use in treatment planning and implementation.
- Perform a variety of massage techniques that are tailored specifically to the client's wants and needs.
- Summarize the test standards and information in order to complete a Washington State approved certification exam for massage.
- Employ successful business strategies and professional ethics related to a career in massage therapy.
- Adapt treatment applications to provide massage to those with chronic pain and illness.
- Use complimentary modalities such as hydrotherapies, hot stones, and essential oils safely in treatment sessions.

Included in the associate degree program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. These classes are offered at various times outside the regular Massage program hours.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

### **Physical Activity Requirements**

This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress the wrists, shoulders, back, and neck of practitioners.

### **Employability Requirements**

Graduates are able to apply for licensure from Washington after passing the Federation of State Massage & Bodywork Licensing Examination (MBLEx). State requirements include completion of a minimum 500-hour program, passing the exam, and applying for licensure. A Washington State Patrol background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.

### **Program Length**

The associate degree program may take up to eight quarters, depending on the time students need to satisfactorily complete all graduation requirements. Some students attending full-time day courses complete in four quarters.

### **Admission Dates**

Day program: Fall quarter.

Evening Program: Spring quarter, dependent upon enrollment.

### **Completion Requirements**

#### **Prerequisite(s)**

A medical statement of health status from a primary care provider stating that the student is able to safely participate in all aspects of the class is required to enter the program. That statement must be submitted to the instructor during the first week of class.

Potential students entering the program must test at college level (283 or higher) in reading on the Accuplacer or equivalent or have completed ENG 094. Students must also have documentation of training in standard first aid



and CPR and a four-hour HIV/AIDS/blood-borne pathogens class prior to progressing to second quarter. A Washington State Patrol check will be required during the first quarter of study to progress to the second quarter. Some results from the background check may prevent individuals from participating in certain classes.

**Program Course List**

MASST 146	Kinesiology: Lower Extremity	2
MASST 110	Anatomy, Physiology & Pathology I	5
MASST 111	Anatomy, Physiology & Pathology II	5
MASST 112	Swedish Massage Theory	4
MASST 115	Clinical Massage Techniques	4
MASST 116	Complementary Massage Modalities I	3
MASST 120	Swedish Massage Practice	4
MASST 123	Clinical Application of Massage Therapy	4
MASST 126	Kinesiology: Upper Extremity	2
MASST 130	Kinesiology: Trunk	1
MASST 131	Assessment & Treatment of the Back	2
MASST 132	Deep Tissue Massage Theory	3
MASST 135	Deep Tissue Massage Practice	4
MASST 136	Complementary Massage Modalities II	2
MASST 137	Kinesiology: Head and Neck	1
MASST 139	Clinical Massage Business & Ethics	1
MASST 143	Massage Business & Ethics I	2
MASST 145	Orthopedic Assessment	4
MASST 147	Clinical Massage Anatomy & Physiology I	3
MASST 148	Massage Business & Ethics II	1
MASST 150	Clinical Massage Theory: Special Populations	4
MASST 153	Assessment & Treatment: Upper Extremity	2
MASST 155	Assessment & Treatment: Lower Extremity	2
MASST 157	Assessment & Treatment: Head & Neck	2
MASST 158	Practicum I	3
MASST 159	Clinical Massage Business & Ethics II	1
MASST	Practicum II	3

160CAP		
MASST 162	Student Clinic	2
MASST 163	Clinical Massage Anatomy & Physiology II	3
ENGL& 101	English Composition I	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Computer Literacy Requirement	3
COLL 102	College Success for All	3
MASST 152	Clinical Massage Practice: Special Populations	3

**Subtotal: 103**

*Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Clinical Massage Practitioner Certificate**

This certificate provides advanced study for Licensed Massage Practitioners (LMP) and students who have completed the Swedish Practitioner portion of the Massage Studies program.

Successful students will graduate with a firm understanding of the injury and disease process and will possess the knowledge and treatment techniques to assess and effectively treat their clients.

**Physical Activity Requirements**

This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress practitioners' wrists, shoulders, back, and neck.

**Employability Requirements**

Graduates are able to apply for licensure from Washington state after passing the Federation of State Massage & Bodywork Licensing Examination (MBLEx). State requirements include completion of a minimum 500-hour program, passing the exam, and applying for licensure. A Washington State Patrol background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.

**Program Length**

This certificate can be completed in just over two quarters

for those students in our day (full-time) section. Evening students can transfer to days in spring to pursue the clinical certificate.

### Admission Dates

Spring quarter.

### Completion Requirements

#### Prerequisite(s)

Successful completion of the Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current license as a Washington State massage therapist.

#### Program Course List

MASST 115	Clinical Massage Techniques	4
MASST 123	Clinical Application of Massage Therapy	4
MASST 131	Assessment & Treatment of the Back	2
MASST 139	Clinical Massage Business & Ethics	1
MASST 145	Orthopedic Assessment	4
MASST 147	Clinical Massage Anatomy & Physiology I	3
MASST 150	Clinical Massage Theory: Special Populations	4
MASST 153	Assessment & Treatment: Upper Extremity	2
MASST 155	Assessment & Treatment: Lower Extremity	2
MASST 157	Assessment & Treatment: Head & Neck	2
MASST 158	Practicum I	3
MASST 159	Clinical Massage Business & Ethics II	1
MASST 160CAP	Practicum II	3
MASST 163	Clinical Massage Anatomy & Physiology II	3
MASST 152	Clinical Massage Practice: Special Populations	3

**Subtotal: 41**

## Swedish Practitioner Certificate

The Swedish Practitioner certificate prepares the successful student to enter the massage profession with the knowledge and skills to perform full-body Swedish massage and deep tissue massage.

Completion of this certificate satisfies the Washington Department of Health hours and content requirement, allowing the graduate to take the certification exam and apply for Washington State licensure. In addition to massage theory and practice, we will also be covering all the systems in the body, with emphasis on the muscular system, and successful business practices.

### Physical Activity Requirements

This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress practitioners' wrists, shoulders, back, and neck. Students in the program must be able to support a limb or the head and neck and move it smoothly and safely through the available range of motion.

### Employability Requirements

Graduates are able to apply for licensure from Washington after passing the Federation of State Massage & Bodywork Licensing Examination (MBLEx). State requirements include completion of a minimum 500-hour program, passing the exam, and applying for licensure. A Washington State Patrol background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.

### Program Length

This certificate can be completed in just over two quarters for those students in our day (full-time) section, or three quarters for our evening students.

### Admission Dates

Day Program: Fall quarter.

Evening Program: Spring quarter, dependent upon enrollment.

### Completion Requirements

#### Prerequisite(s)

A medical statement of health status from a primary care provider stating that the student is able to safely participate in all aspects of the class is required to enter the program. That statement must be submitted to the instructor during the first week of class. Potential students entering the program must test at college level (283 or higher) in reading on the Accuplacer assessment or equivalent or

have completed ENG 094. Students must have documentation of training in standard first aid and CPR and a four-hour HIV/AIDS/blood-borne pathogens class prior to progressing to second quarter. A Washington State Patrol check will be required during the first quarter of study. Some results may prevent individuals from participating in certain classes.

#### Program Course List

MASST 110	Anatomy, Physiology & Pathology I	5
MASST 111	Anatomy, Physiology & Pathology II	5
MASST 112	Swedish Massage Theory	4
MASST 116	Complementary Massage Modalities I	3
MASST 120	Swedish Massage Practice	4
MASST 126	Kinesiology: Upper Extremity	2
MASST 130	Kinesiology: Trunk	1
MASST 132	Deep Tissue Massage Theory	3
MASST 135	Deep Tissue Massage Practice	4
MASST 136	Complementary Massage Modalities II	2
MASST 137	Kinesiology: Head and Neck	1
MASST 143	Massage Business & Ethics I	2
MASST 146	Kinesiology: Lower Extremity	2
MASST 148	Massage Business & Ethics II	1
MASST 162	Student Clinic	2
COLL 102	College Success for All	3

**Subtotal: 44**

## Mechatronics

### Bachelor of Applied Science in Mechatronics Engineering Technology and Automation

CPTC's Bachelor of Applied Science in Mechatronics Engineering Technology and Automation (BAS-META) degree is the first Bachelor's degree in mechatronics to be offered anywhere in the Pacific NW. Mechatronics focuses on the convergence of mechanical, electrical and computer controls in complex systems and automation. The BAS-META builds upon associate degree coursework by adding additional engineering math and physics, as well as hands-on work with cutting edge industrial technology and practices such as IIOT, Digital Twins, Sustainable Manufacturing, and Data Analytics.

The BAS-META degree has been designed to meet the needs of students who want to become: Automation engineers, Applications Engineers, Robotic Integrators, PLC Programmers, and a host of other engineering technology related job titles.

Modern life is filled with mechatronic systems: they clean the water you drink, manage the car you drive and are involved in the creation of nearly everything you see around you. Every industry employs some level of mechatronics. BAS-META graduates will possess unique strength in the creation and use of complex systems as they understand the interplay between electrical, mechanical and computerized systems. It is imperative for the sustainable growth of our community and region that there is a qualified workforce to adapt to continuously changing technologies. BAS-META graduates will be prepared to fulfill these needs while driving innovation in our industry forward.

#### Program Learning Outcomes

Upon successful completion of the Bachelor of Applied Science in Mechatronics Engineering Technology and Automation, students will be able to:

- Devise solutions to broadly-defined engineering problems in complex mechatronics systems through the application of knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology.
- Design systems, components, or processes meeting specified needs for broadly-defined engineering problems for mechatronics systems
- Compose written, oral, and graphical communication in broadly-defined technical and non-technical environments
- Evaluate the results of standard tests, measurements, and experiments for the improvement of processes, efficiency, and sustainability in mechatronic systems.
- Build effective technical teams both as a member, as well as a leader.

#### Program Length

A typical full-time student will complete the program in an estimate of 21 months. Half-time students should anticipate completion in an estimated 36-42 months. Full time students should plan to dedicate 45 hours per week to the program.

**Admission Dates**

Fall and Spring quarters, although students may be admitted in other quarters subject to the availability of spaces and at the discretion of program faculty.

**Completion Requirements**

**Prerequisite(s)**

**Admission to the Program**

Admission to the program may occur when the following can be documented:

- Successful completion (or proof of enrollment in the last quarter thereof) of either:
- An articulated Mechatronics Associates degree, including CPTC’s Mechatronics AAS-T
- An earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent in an outside discipline from a regionally accredited institution **and** proof of enrollment in the Mechatronics technical bridge courses (MEC 120, MEC 201, and MEC 202).
- A minimum grade of 2.0 is required in all general education coursework. A minimum GPA of 2.3 is required of all coursework in the transferring Associates degree.
- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 college-level credits of MATH & 141 or equivalent pre-calculus course.

**Admission to the Junior Year**

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 credits of MATH& 141 or equivalent pre-calculus course.
- 5 of Social Sciences course that meets CPTC

diversity requirements.

- 5 credits of any transferrable/common course numbered general education courses 100-level or above: Social Science, Humanities, or Natural Science.

These requirements can be satisfied by coursework completed before or after admission to the BAS-META program, and may be taken concurrently with upper-level BAS classes.

**Graduation Requirements**

To successfully complete the degree, students must maintain a minimum grade of 2.3 in all coursework, including program courses, and general education courses.

**Program Course List**

MEC 300	The Industrial Internet of Things	5
MEC 310	Environmentally Sustainable Manufacturing	5
MEC 320	Fixtures and Workflow	5
MEC 330	Programming for Industry 4.0	5
MEC 450	Mechatronics Project Management Preparation and Planning	2
MEC 490CAP	Mechatronics Project Management	5
ENGL& 235	Technical Writing	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5
PHIL 310DIV	Professional Ethics	5
PSYC 311DIV	Industrial & Organizational Psychology	5
PHYS& 221	Engineering Physics I	6
PHYS& 222	Engineering Physics II	6
	Humanities Elective	5
	Plus 20 credits from electives below	
MEC 361	Process Control	5
MEC 362	Advanced Sensors and	5

	Actuators	
MEC 363	AI and Data Analytics	5
MEC 381	Automation Evaluation and Implementation	5
MEC 382	Machine Vision	5
MEC 383	Dynamics of Machinery and Kinematics	5
MEC 402	Robotic Integration	5
MEC 403	Simulation, Emulation and Digital Twins	5

**Subtotal: 94**

#### Humanities Course Options

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
CMST& 220	Public Speaking	5

## Mechatronics - Associate in Applied Science – T Degree

Mechatronics focuses on the convergence of mechanical, electrical and computer controls in complex systems and automation. It is a multidisciplinary approach combining mechanical engineering, electrical engineering, process control engineering, and software engineering into an integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries including automation and robotics, advanced manufacturing, aerospace and transportation systems, process control, logistics and supply chain management, and agriculture. Modern life is filled with mechatronic systems: they clean the water you drink, manage the car you drive and are involved in the creation of nearly everything you see around you. Every industry employs some level of mechatronics.

Clover Park Technical College's AAS-T Mechatronics degree provides the skills needed to succeed in this exciting field. The program begins with courses that establish a solid base of technical skills and an understanding of the various disciplines that make up mechatronics as well as lean manufacturing and quality standards. Courses are taught with an eye toward linking disciplines together for larger mechatronic systems. Subsequent courses then build expertise in the foundational skills while increasingly integrating all skills into the design, construction, optimization, maintenance, and repair of full mechatronics systems. Students who complete the Mechatronics AAS-T Degree will also have the option to

further their education by enrolling in our BAS in Mechatronics Engineering Technology and Automation (BAS- META), which is the first Bachelor's degree in mechatronics to be offered anywhere in the Pacific NW.

### Program Learning Outcomes

Upon successful completion of the Mechatronics degree, students will be able to:

- Employ safe practices while using fluid power, electrical, mechanical and control equipment.
- Analyze the transmission of power between electrical, mechanical and fluid power.
- Use digital and analogue controls on mechanical, electrical, fluid power, and hybrid systems.
- Construct complex machinery involving multiple forms of power and control.
- Troubleshoot mechatronic systems, including the complex interplay between different power and control variables.
- Validate new and emerging power, control, and communication technologies.
- Prioritize efficiency and environmental sustainability in mechatronic systems and processes.
- Prioritize social benefit from the perspective of mechatronic systems.

### Completion Requirements

#### Prerequisite(s)

To enter the program, a student must be eligible to take college-level English and college-level psychology, or another social science or humanities course.

This program assumes that students will be able to enroll in, or will have passed, MATH& 141 by the start of the third quarter of the program. Any developmental coursework that a student may be required to take to achieve this may increase the program length and is not reflected in credit counts as shown below. Math sequences to meet this requirement must be planned with your advisor prior to program enrollment.

Students must be at least 17½ years of age at the start of the program.

**Program Course List**

**Quarter 1 - Preparation**

FSME 101	Workshop Safety	3
FSME 110	Quality Principles, Inspection and Test	4
FSME 114	Fabrication Fundamentals I	4
FSME 116	Fabrication Fundamentals II	4

**Program Core**

MEC 115	DC Circuits	5
MEC 116	AC Circuits	5
MEC 120	Computer Aided Design I	5
MEC 125	Hydraulics and Pneumatics	5
MEC 128	Applied Statics and Strengths of Materials	5
MEC 130	Electric Motors and Drives	5
MEC 132	Lean Manufacturing	5
MEC 135	Digital Electronics and Networks	5
MEC 140CL	Computer Programming and Logic	5
MEC 150	Mechanical Systems	5
MEC 160CL	Programmable Controls I	5
MEC 163	Industrial Survey	5
MEC 173	Applied Mechatronics	5
MEC 201	Systems Approach	5
MEC 289	Internship/Work Experience	5
MEC 290CAP	Or Mechatronics Capstone Project	5
	Mechatronics Technical Electives	5
	AAS-T General Education Requirements	23

**Subtotal: 118**

*Mechatronics Technical Electives: See list below*

*AAS-T General Education Requirements: see list below*

**Technical Electives:**

Students must take 10 or more credits from the following courses. Other related courses may be approved by faculty.

MEC 121	Computer Aided Design II	5
MEC 165	Robotics	5
MEC 170	Sensors and Actuators	5
MEC 200	Programmable Controls II	5
MEC 210	Metrology and Calibration	5
MEC 220	Maintenance Management	5
MEC 281	Independent Study I	2-5
MEC 282	Independent Study II	2-5
MEC 289CAP		5

**General Degree Requirements**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. Required credits include:

- 5 credits in communication: ENGL& 101 ( or higher)
- 5 credits in quantitative reasoning: MATH& 141 (or higher)
- 5 credits in a social science or humanities course: PSYC& 100DIV; or other transferable social science or humanities course that meets the CPTC diversity requirement.
- 5 credits in a transferable Social Science, Humanities, or Science course
- 3 credits in COLL 102 \*must be taken in first 2 quarters

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5

BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:  
 COLL 102 College Success for All 3

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Program Length**

The program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Mechatronics - Associate of Applied Technology Degree**

Mechatronics is a multidisciplinary approach combining mechanical engineering, electrical engineering, process control engineering, and software engineering into an integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries including automation and robotics, advanced manufacturing, aerospace and transportation systems,

process control, logistics and supply chain management, and agriculture.

Clover Park Technical College’s AAT Mechatronics degree provides the skills needed to succeed in this exciting field. The program begins with courses that establish a solid base of technical skills and an understanding of the various disciplines that make up mechatronics as well as lean manufacturing and quality standards. Courses are taught with an eye toward linking disciplines together for larger mechatronic systems. Subsequent courses then build expertise in the foundational skills while increasingly integrating all skills into the design, construction, optimization, maintenance, and repair of full mechatronics systems.

**Program Learning Outcomes**

Upon successful completion of the Mechatronics degree, students will be able to:

- Employ safe practices while using fluid power, electrical, mechanical and control equipment.
- Analyze the transmission of power between electrical, mechanical and fluid power.
- Use digital and analogue controls on mechanical, electrical, fluid power, and hybrid systems.
- Construct complex machinery involving multiple forms of power and control.
- Troubleshoot mechatronic systems, including the complex interplay between different power and control variables.
- Validate new and emerging power, control, and communication technologies.
- Prioritize efficiency and environmental sustainability in mechatronic systems and processes.
- Prioritize social benefit from the perspective of mechatronic systems.

**Completion Requirements**

**Prerequisite(s)**

To enter the program, a student must be eligible to take college-level English and college-level psychology, or another social science or humanities course.

Any developmental coursework that a student may be

required to take to achieve this may increase the program length and is not reflected in credit counts as shown below. Math sequences to meet this requirement must be planned with your advisor prior to program enrollment.

Students must be at least 17½ years of age at the start of the program.

**Program Course List**

**Quarter 1 - Preparation**

FSME 101	Workshop Safety	3
FSME 110	Quality Principles, Inspection and Test	4
FSME 114	Fabrication Fundamentals I	4
FSME 116	Fabrication Fundamentals II	4

**Program Core**

MEC 115	DC Circuits	5
MEC 116	AC Circuits	5
MEC 120	Computer Aided Design I	5
MEC 125	Hydraulics and Pneumatics	5
MEC 130	Electric Motors and Drives	5
MEC 132	Lean Manufacturing	5
MEC 135	Digital Electronics and Networks	5
MEC 140CL	Computer Programming and Logic	5
MEC 150	Mechanical Systems	5
MEC 160CL	Programmable Controls I	5
MEC 201	Systems Approach	5
MEC 289	Internship/Work Experience	5
MEC 290CAP	Or Mechatronics Capstone Project	5
	Mechatronics AAT	5
	Technical Electives	18
	AAT General Education Requirements	18

**Subtotal: 98**

*Mechatronics AAT Technical Electives: See list below*

*AAT General Education Requirements: See list above*

**Technical Electives:**

Students must take 5 or more credits from the following courses. Other related courses may be approved by faculty.

MEC 121	Computer Aided Design II	5
MEC 128	Applied Statics and Strengths of Materials	5
MEC 163	Industrial Survey	5
MEC 165	Robotics	5
MEC 173	Applied Mechatronics	5
MEC 200	Programmable Controls II	5

MEC 210	Metrology and Calibration	5
MEC 220	Maintenance Management	5
MEC 281	Independent Study I	2-5
MEC 282	Independent Study II	2-5
MEC 289	Internship/Work Experience	5

**General Degree Requirements**

AAT Degree General Education Requirements (18 credits)

ENGL& 101 English Composition or CMST& 220 (or higher)

MAT 105 Mathematics for Industrial Professionals

PSYC& 100DIV General Psychology, or other transferable social science or humanities course that meets the diversity requirement

COLL 102 College Success for All \*must be taken in first 2 quarters

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone-project, diversity, and computer-literacy requirements.

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5

MAT 105	Mathematics for Industrial Professionals	5
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PSYC& 100DIV	General Psychology	5
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COLL 102	College Success for All	3
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*NOTE: CMST& 220 or higher*

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other transferable social science or humanities course that meets the diversity requirement*

*COLL 102: must be taken in first 2 quarters*

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone-project, diversity, and computer-literacy requirements.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete graduation requirements.



### Admission Dates

Summer, fall, winter, and spring quarters.

## Fundamental Skills for Manufacturing and Engineering Certificate

The Fundamental Skills for Manufacturing and Engineering (FSME) certificate is designed to provide students with a foundational set of skills and background knowledge that will equip them for an entry-level position in a manufacturing organization and provide a solid foundation for further technical studies.

Students will learn about occupational safety and health workers in manufacturing and engineering workshops; how to interpret manufacturing drawings and schematics; how to take measurements and analyze data; the properties of common materials used in manufacturing; and the quality principles and terminology employed in modern industry. Basic workshop skills needed to fabricate parts and structures will be covered, and students will be introduced to more advanced manufacturing and engineering fabrication techniques including welding, the use of machine tools, composites, and electrical wiring.

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

FSME 101	Workshop Safety	3
FSME 110	Quality Principles, Inspection and Test	4
FSME 114	Fabrication Fundamentals I	4
FSME 116	Fabrication Fundamentals II	4

**Subtotal: 15**

## Mechatronics Co-Op Certificate A – Power

Mechatronics is a multidisciplinary approach combining mechanical engineering, electrical engineering, process

control engineering, and software engineering into an integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries, including automation and robotics, advanced manufacturing, aerospace and transportation systems, process control, logistics and supply chain management, and agriculture.

Certificate A is a special type of program, called a “Co-Operative Certificate,” in which employees can gain defined skills that help meet their professional talent needs. Employers may offer workers in a co-op certificate program release time (2 days per week) to attend class and engage in studies. Frequently, employers also help fund tuition and other expenses of participating workers. Degree program prerequisites for the Fundamental Skills for Manufacturing & Engineering courses are waived for certificate students. As such, prospective co-op certificate students must demonstrate current employment in a relevant field in industry before admission to the program.

Certificate A focuses on the powering and construction of mechatronic systems. Courses will provide the employee/student with the necessary instruction and guidance to acquire broad skills in areas such as AC/DC circuits, mechanical systems, motors and drives, and computer programming. Students will then benefit from immediately applying those skills on the job with their employer.

### Program Learning Outcomes

Upon successful completion of the Mechatronics Co-op Certificate B, students will be able to:

- Use digital and analogue controls on mechanical, electrical, fluid power, and hybrid systems.
- Troubleshoot mechatronic systems, including the complex interplay between different power and control variables.
- Prioritize efficiency and environmental sustainability in mechatronic systems and processes.
- Correlate the mechatronics systems approach with industry practice and processes.
- Practice the mechatronics systems approach in industrial setting.

### Admission Dates

Summer, fall, winter, and spring quarters.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Completion Requirements****Prerequisite(s)**

None.

**Program Course List****Quarter 1 - Preparation**

MEC 125	Hydraulics and Pneumatics	5
MEC 150	Mechanical Systems	5
COLL 102	College Success for All	3

**Quarter 2**

MEC 115	DC Circuits	5
MEC 140CL	Computer Programming and Logic	5

**Quarter 3**

MEC 116	AC Circuits	5
MEC 130	Electric Motors and Drives	5

**Subtotal: 33**

**Mechatronics Co-Op Certificate B – Control**

Mechatronics is the combination of various engineering disciplines (specifically involving mechanical, electrical, hydraulics, pneumatics, and programmable logic control) taught to create a more well-grounded technician in a complex system, with responsibility for efficient operation of equipment with minimal downtime. The program will prepare students to install, repair, diagnose, and perform routine maintenance in a variety of industries.

Certificate B is a special type of program, called a “Co-Operative Certificate,” in which employees can gain defined skills that help meet their professional talent needs. Employers may offer workers in a co-op certificate program release time (2 days per week) to attend class and engage in studies. Frequently, employers also help fund tuition and other expenses of participating workers. Degree program prerequisites for the Fundamental Skills for Manufacturing & Engineering courses are waived for certificate students. As such, prospective co-op certificate students must demonstrate current employment in a relevant field in industry before admission to the program.

Certificate B focuses on the control and optimization of

mechatronic systems. Courses will provide the employee/student with the necessary instruction and guidance to acquire broad skills in areas such as PLC programming, networking, lean manufacturing, and computer aided design. Students will then benefit from immediately applying those skills on the job with their employer.

**Program Learning Outcomes**

Upon successful completion of the Mechatronics Co-op Certificate B, students will be able to:

- Use digital and analogue controls on mechanical, electrical, fluid power, and hybrid systems.
- Troubleshoot mechatronic systems, including the complex interplay between different power and control variables.
- Prioritize efficiency and environmental sustainability in mechatronic systems and processes.
- Correlate the mechatronics systems approach with industry practice and processes.
- Practice the mechatronics systems approach in industrial setting.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Completion Requirements****Prerequisite(s)**

None.

**Program Course List****Quarter 1**

MEC 135	Digital Electronics and Networks	5
MEC 160CL	Programmable Controls I	5

**Quarter 2**

MEC 132	Lean Manufacturing	5
	Technical Elective	5

Technical Elective: Choose 5 credits from list below

## Quarter 3

MEC 120	Computer Aided Design I	5
MEC 128	Applied Statics and Strengths of Materials	5

**Subtotal: 30**

## Technical Electives

Students must take 5 or more credits from the following courses. Other related courses may be approved by faculty.

MEC 121	Computer Aided Design II	5
MEC 165	Robotics	5
MEC 170	Sensors and Actuators	5
MEC 200	Programmable Controls II	5
MEC 210	Metrology and Calibration	5
MEC 220	Maintenance Management	5
MEC 281	Independent Study I	2-5
MEC 282	Independent Study II	2-5

## Medical Assistant

### Medical Assistant - Associate of Applied Technology Degree

Medical Assistant Program (MAP) graduates may assume positions as multi-skilled allied health professionals who perform a wide range of duties in physicians' offices, clinics, and other outpatient health care settings.

The MAP curriculum includes anatomy and physiology, medical terminology, medical law and ethics, oral and written communication, administrative procedures, financial record keeping, mathematics, insurance billing and medical coding, basic office diagnostic procedures, principles of pharmacology and medication administration, venipuncture, medical and surgical asepsis, and microbiology.

Students are trained in administrative and clinical procedures performed in physicians' offices and/or clinics. Graduates from this program are eligible to take the national certification exam through the American Association of Medical Assistants (AAMA), which is one of the nation wide authorized exams for certification through Washington State. Training will include, but is not limited to, professional telephone techniques, scheduling appointments, interviewing and educating patients, scheduling hospital admissions for patients, maintaining financial records and files, completing insurance forms, preparing and maintaining employees' payroll records, assisting patients in preparing for examinations and procedures, cleaning and sterilizing instruments and equipment, collecting specimens, performing

electrocardiograms, and assisting physicians with examinations, treatments, procedures, and minor office surgeries.

### Program Learning Outcomes

Upon successful completion of the Medical Assistant degree, students will be able to:

- Apply law and ethics relating to the healthcare field focusing on components specific to medical assistants.
- Use medical terminology in order to communicate effectively with culturally diverse patients and team members.
- Use specialized software for the healthcare environment.
- Perform a variety of clinical and administrative tasks safely and effectively according to program accreditation.
- Use the knowledge of the credentialing process to apply for an interim medical assistant certification.
- Create medical records that comply with state and federal laws.

Included in this program are general education courses in math, public speaking, and sociology. These courses broaden students' foundation knowledge base and increase their success in the program. Students must earn a solid "C" (no C-) grade or better in these general education courses to graduate from the MAP.

Additional courses included in the MAP consist of the following: CAH 102 Medical Terminology, COLL 102 College Success for All and CAH 105 Computer Applications. Students must earn a "C" (no C-) grade or better in CAH 102, COLL 102, and CAH 105 courses to satisfy graduation requirements. No MAP course may be taken more than twice. All courses with the MAP prefix must be passed with a "B" (no B-) or better and pass all program accredited psychomotor and affective competencies with at least 80%.

Students will receive HIV/AIDS and HIPAA certifications through the program but must obtain American Heart Association – CPR for Health Care Provider/Professional Card external to the program and prior to externship.

Externship hours will vary and will be completed during

the day hours for both day and evening students. Although Clover Park Technical College cannot guarantee a specific site placement, students' preferences and needs are taken into consideration. Additionally, with the assistance of the instructors and/or clinical placement coordinator, students will have the opportunity to choose and/or secure their own externship site if an affiliation agreement with that entity is approved and in place before the first day of externship. Upon completion of the MAP, students will graduate with an Associate of Applied Technology.

#### Program Accreditation

The Medical Assistant Program at Clover Park Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of Medical Assisting Education Review Board (MAERB):

Commission on Accreditation of Allied Health Education Programs  
25400 US Highway 19 N, Suite 158  
Clearwater, FL 33756  
727-210-2350

#### Physical Activity Requirements

This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.) and handling body fluids. Medical Assistants are often standing for long periods of time. For safety and protection of patients, student medical assistants must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations. Students must be able to safely assist a patient in moving between an exam room table, chair, wheelchair, and/or walker.

#### Employability Requirements

Graduates must meet the state application requirements for medical assistants, which include, but are not limited to: passing one of the authorized national certification exams, seven hours of AIDS education and training as required under WAC 246-824, current cardiopulmonary resuscitation (CPR), and no disqualifying crimes on a criminal background check.

#### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Day program: Summer quarter.

Evening program: Winter quarter.

Once a student begins in either the day or evening program section, they will be unable to change sections without authorization from an instructor. Changing program sections depends on available space.

#### Completion Requirements

##### Prerequisite(s)

Students must attend a mandatory information session/advising meeting with an instructor before or once they have registered for MAP 108.

Students are required to show proof of a high school diploma or high school equivalency diploma upon entry into the MAP. All Medical Assistant Program required courses in quarters one through four and general education courses must be successfully completed before entering the final quarter of the program..

Requirements may vary based upon the requirements of the clinical site(s). To facilitate placements, all immunizations and other site-specific requirements must be completed and submitted at least three (3) months before clinicals are scheduled to start. Immunizations includes, but are not limited to: Tetanus/Diphtheria, Hepatitis B, Measles/Mumps/Rubella, Tuberculosis skin testing, Flu, and Varicella, as required by contracts with clinical facilities and CDC recommendations. Please note that these may change without notice as clinical facilities and the Center for Disease Control (CDC) change their requirements.

In order to participate in the externship, students must receive a "No Record On File" report related to crimes against persons from the Washington State Patrol and/or a Criminal Background Check. A non-refundable fee is charged to each student for the background check. Students must also meet the requirements for the facility that they are assigned to. These requirements may include, but are not limited to, a drug screening and/or a no-smoking policy. Students are required to carry personal health/medical insurance throughout their clinical rotations.

Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.

Program Course List		
CAH 102	Medical Terminology I	5
CAH 105CL	Computer Applications	5
COLL 102	College Success for All	3
MAP 108	Introduction to Medical Assisting	4
MAP 121	Body Systems Theory 101	4
MAP 124	Body Systems Applications 101	3
MAP 146	Body Systems Applications 102	4
MAP 147	Body Systems Theory 102	4
MAP 164	Body Systems Applications 103	4
MAP 166	Body Systems Theory 103	4
MAP 176	Computers for the Healthcare Setting	5
MAP 178	Health Insurance & Coding	6
MAP 181	Financial Practices	4
MAP 182	Patient Reception & Legal Components	4
MAP 184	Medical Records Management	3
MAP 209	Externship Preparation 1	3
MAP 212	Externship Preparation 2	3
MAP 215	Externship	8
MAP 222	Community Employment Opportunities & Locations	1
CMST& 220	Public Speaking	5
MAT 108	Math for Health Occupations	5
SOC& 101DIV	Introduction to Sociology	5

**Subtotal: 92**

## Medical Histology Technician

### Medical Histology Technician - Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Trains students to prepare thin sections of human tissue for microscopic examination.

Prepares students for entry-level employment as medical histology technicians in clinical, veterinary, and research laboratories. This program also serves as a pathway for career advancement in specialized areas in the medical histotechnology profession.

The Medical Histology Technician program stresses practical application and the development of job skills, as

well as medical histotechnology theory.

Designed to enhance students' abilities to reason, understand, and apply correct principles of medical histotechnology by teaching analytical and critical thinking skills, the Medical Histology Technician program prepares students to sit for the National Board Certification Exam.

New entrants into the field, as well as incumbent workers who have not had the advantage of receiving a strong theoretical foundation, will find this course of study beneficial. Students will be involved in classroom/ lab work for the first three quarters of the program, with the remaining time spent in a clinical rotation.

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.

May be required to travel to the greater Seattle for summer clinical experience, expenses for commuting and parking is the responsibility of the student.

### Program Learning Outcomes

Upon successful completion of the Medical Histology degree, students will be able to:

- Plan to sit for the national certification exam.
- Explain the national requirements of continuing education to maintain certification.
- Perform a variety of histology skills safely and efficiently
- Demonstrate effective communication, both verbally and in writing, with coworkers, supervisors, clients, and physicians.
- Demonstrate the medical professional code of conduct.
- Produce industry quality and performance standards in all areas of histology.
- Interpret documentation of a scientific nature related to histology.
- Perform to increase professional standards and quality.

**Completion Requirements**

**Prerequisite(s)**

Before starting the program, students must have a high school diploma or high school equivalency diploma and complete all the general education courses.

Histology Technicians rely heavily on color appearance. Each student will need to successfully take a color blindness self-test. Please contact your advisor or instructor for details.

In order to participate in the clinical aspect of the program, students must receive a “No Record On File” Report related to crimes against persons on a criminal background check. They must obtain CPR certification and have current immunizations or laboratory verification of immune status, which includes, but is not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations is required by the last day of class in fall quarter, without exception. Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.

Our program advisory committee and area clinical sites have identified the following attributes of a successful Histology student:

Maintain a professional appearance and attitude at all times

Be willing to accept the challenges of the program and dedicate the year to studying, many hours of studying above and beyond program hours is necessary

Recognize and accept the frustration level in learning new skills

Accept constructive criticism and feedback without anger or hostility

Maintain the physical and emotional challenges of the program

Ability to complete the required volunteer hours above and beyond the program hours.

The following prerequisites must be completed with a

grade of “B” (3.0) higher prior to entry in the program: CMST& 220, PSYC& 100 OR SOC& 101, MAT 108 or MATH& 146 (see your adviser), CAH 105, COLL 102, ENGL& 101, CHEM& 110, and BIOL& 175

BIOL&/CHEM& must be completed within the last five years.

**Degree Requirements**

HISTO 105	Orientation to the Histology Laboratory	2
HISTO 110	Histotechnology I	10
HISTO 115	Histotechnology Lab I	5
HISTO 120	Histotechnology II	10
HISTO 125	Histotechnology Lab II	5
HISTO 130	Math Applications for Histology	3
HISTO 135	Histotechnology III	10
HISTO 140	Histotechnology Lab III	5
HISTO 145	Immunohistochemistry	5
HISTO 150CAP	Histology Internship	10
HISTO 160	Histology Seminar	5
		<b>Subtotal: 100</b>

**AAT Requirements**

	Technical Course Requirements	100
	Math for Health Care Professionals Or Any 100-Level Math Class	5
	General Psychology	5
COLL 102	College Success for All	3
		<b>Subtotal: 113</b>

*Note: General Psychology or other social science or humanities class*

**AAS-T Requirements**

	Technical Course Requirements	100
	Quantitative Reasoning	5
	Social Science, Humanities, or Science	5
COLL 102	College Success for All	3
		<b>Subtotal: 113</b>

**General Degree Requirements**

AAT Degree General Education Requirements (23 credits)

ENGL& 101	English Composition I	5
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CMST& 220	Public Speaking	5
MAT 108	Math for Health Occupations Or Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

Note:

CMST& 220 or higher

PSYC& 100DIV or other social science or humanities class

MAT 108: Preferred

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

10 credits in communication:

ENGL& 101	English Composition I	5
CMST& 220	Public Speaking	5

5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in social science, humanities, or science:

BIOL& 175	Human Biology w/Lab	5
CHEM& 110	Chemical Concepts w/Lab	5
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the

capstone project.

Granting of degree is not contingent upon the students passing any type of external certification or licensure examination.

### Program Accreditation

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences:

5600 N. River Road  
Suite 720  
Rosemont, IL 60018  
773-714-8880

### Employability Requirements

Graduates are required to pass a national certification exam prior to employment. Students must pass a background check prior to being allowed to perform clinical rotations. Students are required to maintain immunizations and acquire an American Health Association CPR Health Care Provider card.

Be aware that many histology laboratories function 24 hours a day, 7 days a week. This is not a 9 am to 5 pm career.

### Physical Activity Requirement

Move freely and safely about the laboratory. Reach laboratory bench tops and shelves. Be able to sit and/or stand for long periods of time, up to 6-7 hours. Use electronic keyboard, computer and calculator with ease. Use clinical grade binocular microscope to evaluate tissue section and ultra-structure of the cell. Characterize color and odor. Histology requires vast memorization skills. Lift and move up to 50 lbs. Have full use of hands and fingers with the ability to manipulate small tools. Be able to perform repetitive movements especially hands, fingers, elbows and shoulders. Those who experience prior injury in shoulder and/or back issues should consult their physician. Twisting, leaning and lifting are required. Read and comprehend technical and professional materials, texts, numbers and graphs displayed in print or monitor. Comprehend three dimensional space, specifically peripheral vision. Have adequate breathing ability.

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily

complete all graduation requirements.

### **Admission Dates**

Fall quarter.

## **Medical Laboratory Technician**

### **Medical Laboratory Technician - Associate of Applied Technology Degree**

Prepares students to work in clinical laboratories performing routine analyses on blood and body fluids.

During the academic phase (spring and summer quarters and three weeks of fall quarter), students are on campus in a simulated clinical laboratory; study focuses on the theory of laboratory testing of body fluids. Basic skills, normal values, the significance of abnormal values, and quality control are emphasized. Normal human anatomy and physiology and the changes that occur in disease states are also studied. Students may have the opportunity to meet with clinical site representatives through field trips and/or the meet and greet. Students will provide instructions to students from Osaka Jikei during a “hands-on” lab experience during the cultural event.

During the clinical phase (fall and winter quarters), students are assigned to affiliated clinical laboratories in the Puget Sound area. Each student rotates through all the departments of the clinical laboratory, spending appropriate lengths of time in each.

The affiliated laboratory assigns eight- or nine-hour day shifts during the clinical phase. Some clinical sites may also assign 1-2 weeks of either swing or night shifts as part of the clinical phase. Upon successful completion, graduates are eligible to take the ASCP Medical Laboratory Technician certification examination, qualifying them for employment as a medical laboratory technician with professional recognition of having achieved MLT (ASCP) status.

Included in this program are academic courses in communication, English, math, and social sciences (psychology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. Please refer to the Program Course list for details.

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and

Counseling Office.

No student will be allowed at a clinical site without proof of insurance.

### **Program Learning Outcomes**

Upon successful completion of the Medical Laboratory Technician degree, students will be able to:

- Evaluate pre-analytical, analytical, and post-analytical phases of clinical laboratory testing to ensure accurate laboratory results.
- Analyze appropriate samples in accordance with standard clinical laboratory operating procedures.
- Evaluate the results of clinical laboratory tests to determine clinical significance.
- Apply systematized problem-solving techniques to identify the appropriate course of action to correct procedural errors.
- Identify situations which require assistance when a problem exceeds capabilities.
- Integrate new techniques and procedures into modern laboratory practices.
- Apply laboratory infection control protocols to prevent the spread of infectious agents.
- Model effective communication with colleagues, health care professionals, and patients.

### **Program Accreditation**

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences:

5600 N. River Road  
Suite 720  
Rosemont IL 60018  
847-939-3547

### **Employability Requirements**

Graduates are required to pass a national certification exam (ASCP) prior to employment. Prior to being allowed to perform clinical rotations, students must pass a background check. Current immunizations and American Health Association CPR Health Care Provider card are also required.



## Physical Requirements

Students must be able to safely lift and carry objects up to 40 lbs. and stand for long periods of time. Frequent standing, walking, grasping, and carrying. The ability to read charts, instrument displays, and printed words on paper or a computer monitor. Must also be able to distinguish gradients of colors and interpret microscopic and macroscopic details.

## Program Length

This program is a combination of on-line, classroom, laboratory and clinical experiences. This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements. The program courses are offered in two phases: approximately 23 weeks of academics and approximately 19 weeks of clinical experience. The MLT program currently runs in a hybrid schedule during the academic portion of the MLT program.

## Admission Dates

Spring Quarter.

## Completion Requirements

### Prerequisite(s)

High school diploma or high school equivalency diploma. College-level courses in both biology with a lab and chemistry with a lab passed with a grade of “B” (3.0) or better. Students will be required to pass a colorblind test. The colorblind test should be done by a medical professional such as a licensed optometrist or ophthalmologist, and the results submitted on or before the first day of school. Speaking, understanding, and writing the English language are required. To enter the program, a student must meet the prerequisites for college-level reading, writing, and math. In order to participate in the clinical aspect of the program, students must receive a “No Record On File” report related to crimes against persons from the Washington State Patrol and pass a comprehensive national background check. A non-refundable fee is charged to each student for the background check. Additionally, students must have current immunizations or laboratory verification of immune status by the end of spring quarter. This includes, but is not limited to, Hepatitis B series, which includes a follow-up positive titer, Tetanus/Diphtheria/Pertussis (TDap), Tuberculosis Test, Measles/Mumps/Rubella MMR, and Varicella as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations is required by the last day of class in spring

quarter, without exception. CPR certification from the American Heart Association with the designation “Health Care Provider” is required prior to commencing clinical rotation. Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

## Program Course List

MLT 110	Introduction to the Laboratory	2
MLT 205	Hematology	11
MLT 207	Hemostasis	4
MLT 209	Phlebotomy/Processing	4
MLT 211	Immunology	5
MLT 215	Immunochemistry	5
MLT 220	Clinical Blood Banking	6
MLT 217	Microbiology	10
MLT 218	Urinalysis	3
MLT 222	Body Fluids	2
MLT 228	Clinical Chemistry	7
MLT 233	Clinical Experience I	10
MLT 237	Clinical Experience II	8
MLT	Clinical Experience III	8
239CAP		
ENGL& 101	English Composition I	5
MATH& 146	Introduction to Statistics	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3
	Computer Literacy Requirement	3

**Subtotal: 106**

*Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam*

## Network Operations and System Security

### Bachelor of Applied Science in Cybersecurity Degree

CPTC’s Bachelor of Applied Science in Cybersecurity (BAS-C) degree has been designed to meet the needs of students who want to become cybersecurity practitioners. Graduates would be candidates for positions as an Information System Security Officer, Penetration Tester, or Security Analyst.

In the BAS-C program, the approach to learning

cybersecurity uses hands on tools in a realistic, practical context. Students will graduate with a practical understanding of cybersecurity concepts as well as experience with a current set of tools.

This degree is offered in a hybrid format with evening and weekend meetings to accommodate working adults.

**Program Learning Outcomes**

Upon successful completion of the Network Operations & Systems Security degree, students will be able to:

- Assess the cyber risk of an information system and recommend mitigation.

Analyze identified malicious activity in order to mitigate effects and recommend security improvements.

- Create a cybersecurity vulnerability assessment of a small to medium business.
- Evaluate the security practices of an application/ IT project development team at any point in the system lifecycle.
- Implement security software or hardware.
- Research offensive and defensive cybersecurity trends and tools.
- Evaluate cloud security in public, private, and hybrid environments.

**Program Length**

A typical full-time student will complete the program in an estimate of 18 months. Half-time students should anticipate completion in an estimated 36 months. Full time students should plan to dedicate 45 hours per week to the program.

**Admission Dates**

Fall, Winter, Spring, Summer Quarters.

**Completion Requirements**

**Prerequisite(s)**

**Admission to the Program**

Admission to the program may occur when the following can be documented:

- Successful completion of an earned Applied

Associate degree, AAS-T, Direct Transfer Associate degree or equivalent from a regionally accredited institution with a minimum GPA of 2.3.

- A minimum grade of 2.0 is required in all general education coursework.
- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 college-level credits in a transferable social science course.
- 5 college-level credits in a transferrable quantitative reasoning course.
- 5 college-level credits in a transferrable humanities course.

**Admission to the Junior Year**

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 5 credits of computer networking coursework.
- 5 credits of Windows Server coursework.
- 5 credits of Linux operating system coursework.
- 5 credits of cybersecurity coursework.
- 5 credits of computer programming.

**Graduation Requirements**

To successfully complete the degree, students must maintain a minimum grade of 2.0 in all coursework.

**Program Course List**

NOS 310	Cyber Threat and Research	5
NOS 315	Risk Assessment and Vulnerability Management	5
NOS 320	Securing Database Management Systems	5
NOS 325	Cloud Security	5
NOS 330	Vulnerability Assessment	5
NOS 335	Network Intrusion Detection	5
NOS 340	Penetration Testing	5
NOS 345	Incident Response	5
	Plus 5 credits from the list of Applied Project courses below	5
NOS 411	Incident Response Project	5

	Or		
NOS 412	Penetration Testing Project	5	
	Or		
NOS 413	Network Intrusion Analysis Project	5	
NOS 420	Capstone Project	5	
ENG 310	Business Communications	5	
PHIL 310DIV	Professional Ethics	5	
MATH& 146	Introduction to Statistics	5	
BUS 310	Project Management	5	
PSYC 311DIV	Industrial & Organizational Psychology	5	
ENGL& 235	Technical Writing	5	
	Any Lab-Based Science	5	
	Any Natural Science (5)	5	
		<b>Subtotal: 90</b>	

**NOTE:**

If MATH & 146 has already been completed upon admission into the program, another college-level, transferable math course is required.

**Lab-based Science Course Options**

BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
GEOL& 110	Environmental Geology with Lab	5
PHYS& 114	General Physics I with Lab	5

**Non-lab Natural Science Course Options**

NUTR& 101	Nutrition	5
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## Network Operations and Systems Security Associate of Applied Technology Degree / Associate in Applied Science – T Degree

The NOSS program prepares students to pursue careers in a variety of entry- to mid-level positions including, but not limited to, help desk, network system administration, and cybersecurity. Our instructors prepare students for careers involving the protection of information on computers and networks against unauthorized access or modification of

information and the denial of service to authorized users. Includes those security measures, both physical and virtual, necessary to detect, document, and counter such threats. Curriculum content includes basic and advanced computer and networking skills, physical and virtual security processes, and procedures, and introduction to security management, planning, and recovery.

The NOSS AAT/AAS-T program focuses primarily on the technical and problem-solving skills associated with PC and network management and cyber-security implementation but adds hands-on experience building computer and network systems. Additional skills include administration, configuration, and security for Cisco, Linux, and Microsoft products. Our focus also includes ethical hacking and prevention, assessing the security needs of computer networking systems, and developing safeguard solutions for computer and information-system infrastructures and countermeasures.

The AAT or AAS-T degree is earned by completing the technical program requirements and general education requirements. The program includes preparing students for the CompTIA A+, Security+, Linux+, Cisco CCNA, and Microsoft MCSA & MTA certification examinations and internship work experience.

Employers include business and industrial firms, financial institutions, government agencies, consulting firms, software developers, health providers, and Internet service providers. Innovations in computer technology continue to rapidly change and expand the computer security field. Therefore, the following courses of study may be subject to change to offer students training based on current industry standards.

**Program Learning Outcomes**

Upon successful completion of the Network Operations & Systems Security degree, students will be able to:

- Troubleshoot computers, software, and networks in order to provide quality service to end users.
- Design a local area network and wide area network that incorporates the fundamentals of network addressing.
- Implement systems security for organizational information systems.
- Apply principles of cybersecurity in order to defend against cybersecurity threats.

- Administer server operating systems in a variety of stand-alone and enterprise network environments.
- Use virtualization and cloud management tools to centralize the management of multiple virtual servers.

**Subtotal: 106**

*AAT General Education Requirements: See list above*

**Completion Requirements**

**Prerequisite(s)**

Before completion of the first quarter, a student must provide documentation of a background check with the Washington State Patrol.

**Program Course List**

NOS 100	IT Fundamentals I	4
NOS 105CL	IT Fundamentals II	4
NOS 110	Cyber Security Fundamentals	4
NOS 115	Introduction to Networking	4
NOS 120	Desktop Support I	4
NOS 125	Desktop Support II	4
NOS 130	Server OS Installation and Configuration	4
NOS 135	Scripting for Network Admins	4
NOS 140	Linux I	4
NOS 145	Administering Windows Server OS	4
NOS 150	Virtualization and Cloud Technologies	4
NOS 155	Linux II	4
NOS 160	Server Security	4
NOS 200	Window Server Identity Services	4
NOS 205	Implementing Systems Security	4
NOS 210	Digital Forensics and Investigations	4
NOS 215	Switch and Route Essentials	5
NOS 220	Enterprise Networking and Security	4
NOS 225	Internship I	3
NOS 230	Penetration Testing I	5
NOS 235	Penetration Testing II	4
NOS 240	Internship II	3

**Subtotal: 88**

*NOSS Program Option: See list below*

**AAT Requirements**

Technical Course Requirements	88
AAT General Education Requirements	18

**AAS-T Requirements**

Technical Course Requirements	88
AAS-T General Education Requirements	23

**Subtotal: 111**

*AAS-T General Education Requirements: See list above*

*For an AAT or AAS-T degree, students must complete one of the specialty options listed below. These options may also be taken as a stand-alone certificate for those not pursuing a degree.*

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two-degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science-T (AAS-T). The different requirements for each degree are listed below:

<b>Network Operations &amp; Security AAT Degree General Education Requirements (18 credits):</b>		
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

**Network Operations AAS-T Degree General Education Requirements (23 credits):**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:  
ENGL& 101 English Composition I 5

5 credits in quantitative reasoning:  
MATH& 107 Math in Society 5  
MATH& 141 Precalculus I 5  
MATH& 142 Precalculus II, Functional Trigonometry 5  
MATH& 146 Introduction to Statistics 5  
MATH& 151 Calculus I 5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV General Psychology 5  
SOC& 101DIV Introduction to Sociology 5

5 credits in social science, humanities, or science;

Choose one from the following:

ART& 100 Art Appreciation 5  
ASL& 121 American Sign Language I 5  
ASL& 122 American Sign Language II 5  
BIOL& 160 General Biology w/Lab 5  
BIOL& 175 Human Biology w/Lab 5  
BIOL& 241 Human A & P I 5  
BIOL& 242 Human A & P II 5  
BIOL& 260 Microbiology 5  
CHEM& 110 Chemical Concepts w/Lab 5  
CHEM& 121 Intro to Chemistry 5  
CHEM& 131 Introduction to Organic/Biochemistry 5  
CMST& 220 Public Speaking 5  
GEOL& 110 Environmental Geology with Lab 5  
HIST& 146 US History I 5  
HIST& 147 US History II 5  
HIST& 148 US History III 5  
HUM& 101 Introduction to Humanities 5  
MUSC& 105 Music Appreciation 5  
PHYS& 114 General Physics I with Lab 5  
POLS& 202 American Government 5  
PSYC& 100 5  
PSYC& 200 Lifespan Psychology 5  
PSYC& 220 Abnormal Psychology 5  
SOC& 101 5

3 credits in College Success:  
COLL 102 College Success for All 3

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to

graduation. This includes courses that meet the requirements for diversity, computer literacy and the capstone project.

### Program Length

This program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

## Linux Administrator Certificate

This certificate is designed to upgrade an entry-level computer support professional's skill to begin a career as a Linux administrator in an enterprise environment. A Linux Administrator performs a wide range of planning, configuration, and support tasks required to administer Linux client and server operating systems. Students will complete NOS 140 and NOS 155 (Linux I and Linux II) in a hybrid learning environment. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives support the CompTIA Linux+ exam, though this is not a certification preparation program

Courses in this certificate transfer towards the Network Operations & Security AAT or AAS-T degree program.

### Program Length

This program is approximately two-quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall, winter, spring, and summer quarters.

### Completion Requirements

### Prerequisite(s)

Students should have some basic computer knowledge.

### Program Course List

NOS 140	Linux I	4
NOS 155	Linux II	4

**Subtotal: 8**

## Network Operations & Systems Security Professional Certificate

This certificate is designed to prepare students for entry-level careers involving the protection of computers, networks, and information systems against unauthorized access or modification of information, and the denial of service to authorized users. Includes those security measures, both physical and virtual, necessary to detect, document, and counter such threats.

Curriculum content includes basic computer and networking skills, physical and virtual security processes and procedures, and introduction to security management, planning, and recovery.

The program includes preparing students for the CompTIA A+, Security+, Linux+, and Microsoft MCSA & MTA certification examinations. Employers include business and industrial firms, financial institutions, government agencies, consulting firms, software developers, health providers, and Internet service providers.

Courses in this certificate transfer towards the Network Operations & Security (NOSS ) AAT or AAS-T

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

Before completion of the first quarter, a student must provide documentation of a background check with Washington State Patrol.

### Program Course List

NOS 100	IT Fundamentals I	4
NOS 105CL	IT Fundamentals II	4
NOS 110	Cyber Security Fundamentals	4
NOS 115	Introduction to Networking	4
NOS 120	Desktop Support I	4
NOS 125	Desktop Support II	4
NOS 130	Server OS Installation and	4

NOS 135	Configuration Scripting for Network Admins	4
NOS 140	Linux I	4
NOS 145	Administering Windows Server OS	4
NOS 150	Virtualization and Cloud Technologies	4
NOS 155	Linux II	4
NOS 160	Server Security	4
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 70</b>

## Computer Help Desk Technician Certificate

This certificate is designed to prepare students for entry-level careers supporting computer users as a Computer Help Desk Technician. A Computer Help Desk Technician performs a wide range of support tasks for the computer user, including computer configuration, image deployment, troubleshooting, and training. Students will complete NOS 120 and NOS 125 (Desktop Support I and II) in a hybrid learning environment. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives support the Microsoft Certified Solution Associate exam standards for the current desktop operating system, though this is not a certification preparation program.

Courses in this certificate transfer towards the Network Operations & Systems Security AAT or AAS-T degree program.

**Program Length**

This program is approximately one-quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall, winter, spring, and summer quarters.

**Completion Requirements****Prerequisite(s)**

Students should be familiar with navigating current Windows desktop operating systems.

**Program Course List**

NOS 120	Desktop Support I	4
NOS 125	Desktop Support II	4
		<b>Subtotal: 8</b>

**Server Administrator Certificate**

This certificate is designed to upgrade an entry-level computer support professional's skill to begin a career as a Server Administrator in an enterprise environment. A Server Administrator performs a wide range of planning, configuration, and support tasks required to administer a server(s). Students will complete NOS 130 (Server OS Installation and Configuration) and NOS 145 (Administering Windows Server OS) in a hybrid learning environment. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives support the Microsoft Certified Solution Associate exam standards for two of the three required exams for the current server operating system, though this is not a certification preparation program.

Courses in this certificate transfer towards the Network Operations & Systems Security (NOSS) AAT or AAS-T degree program.

**Program Length**

This program is approximately two-quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall, winter, spring, and summer quarters.

**Completion Requirements****Prerequisite(s)**

Students should be familiar with navigating current Windows desktop operating systems.

**Program Course List**

NOS 130	Server OS Installation and Configuration	4
NOS 145	Administering Windows Server OS	4
		<b>Subtotal: 8</b>

**Computer Support Technician Certificate**

This certificate is designed to prepare students for entry-level careers supporting computer users as a Computer Support Technician. A Computer Support Technician performs a wide range of hands-on tasks for the computer user, including computer installation, maintenance, troubleshooting, repair, retirement, and training. Students will complete NOS 100 and NOS 105 (IT Fundamentals I and II) in a hybrid learning environment. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives roughly parallel those of the CompTIA A+ certification exam objective, though this is not an exam preparation program. Courses in this certificate transfer towards the Network Operations & Systems Security AAT or AAS-T degree program.

**Program Length**

This program is approximately one-quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall, winter, spring, summer quarters.

**Completion Requirements****Prerequisite(s)**

Students should be able to use a computer to read the courseware online and be able to send an email.

**Program Course List**

NOS 100	IT Fundamentals I	4
NOS 105CL	IT Fundamentals II	4
		<b>Subtotal: 8</b>

## Network Administrator Certificate

Clover Park Technical College is a member of the Cisco Networking Academy community in 165 different countries. Our Cisco program delivers a comprehensive, 21st-century learning experience to help students develop the foundational information and communication technology skills needed to design, build, secure, and manage networks. Our program also helps students develop career skills, such as problem-solving, collaboration, and critical thinking. This certificate uses a blended-learning model that combines face-to-face teaching with engaging online content and hands-on learning activities to help students prepare for entry-level and advanced careers; and higher education in engineering, computer science, information systems, and related fields. The courses' learning objectives support the Cisco Certified Network Administrator and Microsoft Solution Associate exam standards for the desktop and server operating systems, though this is not a certification preparation program.

As networking technologies bring new economic and social opportunities to communities throughout the world, businesses, non-profits, hospitals, schools, and government organizations are experiencing growing demand for networking professionals to design, build, maintain, and secure their networks. Graduates are qualified to work as field-service and help-desk technicians, network support technicians, IT technicians and administrators, network security support technicians, network engineers, and administrators.

### Program Length

This program is approximately two-quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All the courses in this certificate count toward the Network Operations & Systems Security (NOSS) AAT or AAS-T degree program.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

Basic computer and network knowledge.

### Program Course List

NOS 115	Introduction to Networking	4
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NOS 120	Desktop Support I	4
NOS 125	Desktop Support II	4
NOS 200	Window Server Identity Services	4
NOS 215	Switch and Route Essentials	5
NOS 220	Enterprise Networking and Security	4
COLL 102	College Success for All	3
		<b>Subtotal: 28</b>

Note: NOS 115 is articulated courses with high schools for dual enrollment.

## Nondestructive Testing

### Nondestructive Testing - Associate of Applied Technology Degree / Associate in Applied Science – T Degree

The Nondestructive Testing (NDT) program at Clover Park Technical College provides training in a variety of analysis techniques used in industry to evaluate the properties of a material or structure without causing damage. Because NDT does not impair the usefulness of the object being inspected, it is a valuable process used in fields such as construction, manufacturing, civil engineering, and transportation. Nondestructive testing techniques are used to examine structures or vehicles such as aircraft, trains, nuclear reactors, bridges, dams, and pipelines.

This program prepares graduates to become active and successful professionals in nondestructive testing in a wide range of industries. Students will explore and receive hands-on technical training in blueprint reading, codes and specifications, composite fabrication, assembly and repair, materials, and the manufacturing process. Training will also include the major methods of NDT, such as visual and optical, magnetic particle, liquid penetrant, radiographic, ultrasonic and eddy current testing, along with an overview of other methods. Students will be introduced to advanced technologies, such as ultrasonics (phased array), and radiography (digital detector array DDA and computerized radiography CR). Successful graduates are prepared with technical skills for entry-level positions, such as quality control technicians, NDT technicians, engineering technicians, and NDT equipment representatives.

### Program Learning Outcomes

Upon successful completion of the Nondestructive Testing (NDT) degree, students will be able to:

- Correlate the discontinuities specific to each



manufacturing process with the non-destructive testing method or methods used to detect, interpret, and evaluate them.

- Perform the basic setup and calibration of non-destructive testing equipment according to referenced codes, standards, and specifications.
- Create a non-destructive testing technique in which known defects within any assigned part or assembly are inspected, interpreted, and evaluated in accordance with referenced codes, standards, and specifications.
- Analyze inherent and service induced discontinuities and defects for differentiation and disposition with various precision measurement tools.
- Create technical reports documenting the results of their inspection findings.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 091 or equivalent.  
 Successful completion of MAT 099 by the end of the first quarter of the program or instructor’s permission.

**Program Course List**

MS 123	Fundamentals of Welding for the Non-Welding Major	5
MS 126	Fundamentals of Composites for the Non-Composites Technician	4
MS 131	Blueprint Reading Fundamentals	3
NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 120	Visual and Optical Testing	5
NDT 121	Materials and Processes for NDT II	5
NDT 125	Magnetic Particle Testing	5
NDT 130	Liquid Penetrant Testing	5
NDT 140	Eddy Current Testing I	5
NDT 150	Ultrasonic Testing I	5
NDT 160	Radiographic Testing I	5
NDT 170	Eddy Current Testing II	5
NDT 180	Ultrasonic Testing II	5
NDT 185	Physics for NDT Professionals	5
NDT 190	Radiographic Testing II	5
NDT 210	Eddy Current Testing III	5
NDT 220	Ultrasonic Testing III	5

NDT 230	Radiographic Testing III	5
NDT 240CAP	Capstone Project	3
	Or	
NDT 250	NDT Internship	1-11
	<b>Subtotal:</b>	<b>95</b>

Note: Nondestructive Testing Required Electives listed below

**AAT Requirements**

Technical Course Requirements	95
AAT General Education Requirements	18
Computer Literacy	3
<b>Subtotal:</b>	<b>116</b>

*AAT General Education Requirements: See list above*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**AAS-T Requirements**

Technical Course Requirements	95
AAS-T General Education Requirements	23
Computer Literacy	3
<b>Subtotal:</b>	<b>121</b>

*AAS-T Degree General Education Requirements: See list above*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Electives**

**General Degree Requirements**

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (23**

credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:

ENGL& 101 English Composition I 5

5 credits in quantitative reasoning:

MATH& 107 Math in Society 5

MATH& 141 Precalculus I 5

MATH& 142 Precalculus II, Functional Trigonometry 5

MATH& 146 Introduction to Statistics 5

MATH& 151 Calculus I 5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV General Psychology 5

SOC& 101DIV Introduction to Sociology 5

5 credits in social science, humanities, or science

choose one from the following:

ART& 100 Art Appreciation 5

ASL& 121 American Sign Language I 5

ASL& 122 American Sign Language II 5

BIOL& 160 General Biology w/Lab 5

BIOL& 175 Human Biology w/Lab 5

BIOL& 241 Human A & P I 5

BIOL& 242 Human A & P II 5

BIOL& 260 Microbiology 5

CHEM& 110 Chemical Concepts w/Lab 5

CHEM& 121 Intro to Chemistry 5

CHEM& 131 Introduction to Organic/Biochemistry 5

CMST& 220 Public Speaking 5

GEOL& 110 Environmental Geology with Lab 5

HIST& 146 US History I 5

HIST& 147 US History II 5

HIST& 148 US History III 5

HUM& 101 Introduction to Humanities 5

MUSC& 105 Music Appreciation 5

PHYS& 114 General Physics I with Lab 5

POLS& 202 American Government 5

PSYC& 100DIV General Psychology 5

PSYC& 200 Lifespan Psychology 5

PSYC& 220 Abnormal Psychology 5

SOC& 101DIV Introduction to Sociology 5

3 credits in College Success:

COLL 102 College Success for All 3

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

### Program Length

This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

## Eddy Current Testing Certificate

This certificate provides students with foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of eddy current inspection. Eddy current inspection applies electrical currents to an object to create electromagnetic fields. This type of testing can detect manufacturing defects and corrosion damage or cracking for many nonmagnetic metals and alloys.

### Program Learning Outcomes

Upon successful completion of the Eddy Current Testing certificate, students will be able to:

- Calculate the optimum frequency when creating a technique for a given eddy current application.
- Choose the optimum probe when creating a technique for a given eddy current application.
- Determine the optimum filters when creating a technique for a given eddy current application.
- Choose or develop a standard when creating a technique for a given eddy current application in accordance with referenced codes, standards, and specifications.

### Program Length

The certificate program is two-to-three quarters in length,

depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Instructor's permission.

### Completion Requirements

### Prerequisite(s)

Successful completion of NDT 185 prior to enrolling in NDT 140. NDT 185 requires MAT 099 as a prerequisite. Also successful completion of ENG 091 or equivalent.

### Program Course List

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 121	Materials and Processes for NDT II	5
NDT 140	Eddy Current Testing I	5
NDT 170	Eddy Current Testing II	5
NDT 210	Eddy Current Testing III	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal:</b>		<b>36</b>

## Magnetic Particle and Liquid Penetrant Testing Certificate

Provides foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT methods of magnetic particle inspection, liquid penetrant inspection, and visual inspection.

### Program Learning Outcomes

Upon successful completion of the Magnetic Particle & Liquid Penetrant Testing certificate, students will be able to:

- Choose equipment of a given magnetic particle field inspection per ASTM Standard E1444/E1444M.
- Test for the field direction for the magnetic particle inspection per ASTM Standard E1444/E1444M.
- Inspect for the ultraviolet light intensity for the magnetic particle inspection per ASTM Standard E1444/E1444M.
- Perform the magnetic particle field inspection per ASTM Standard E1444/E1444M.

## Program Length

The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Instructor's permission

### Completion Requirements

### Prerequisite(s)

Successful completion of ENG 091 or equivalent and successful completion of MAT 092 or equivalent by the end of the first quarter of the program.

### Program Course List

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 120	Visual and Optical Testing	5
NDT 121	Materials and Processes for NDT II	5
NDT 125	Magnetic Particle Testing	5
NDT 130	Liquid Penetrant Testing	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal:</b>		<b>36</b>

## Radiographic Testing Certificate

Provides foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of radiographic inspection. Radiography uses X-rays or gamma rays to show defects that might otherwise be invisible. A vast array of material can be examined in this efficient and reliable way, ranging from tiny electronic components to 20-foot freestanding concrete slabs.

### Program Learning Outcomes

Upon successful completion of the Radiographic Testing certificate, students will be able to:

- Perform the process control checks for computed radiography per ASTM Standard E2445.
- Perform all radiographic film process control checks in accordance with referenced record logs, codes, standards, and specifications.
- Perform all radiographic safety procedures in accordance with referenced record logs, codes,

standards, and specifications.

- Produce a film image and a computed radiography image that meet all image qualifications in accordance with referenced codes, standards, and specifications.

**Program Length**

The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Instructor’s permission.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of NDT 185 prior to enrolling in NDT 160. NDT 185 requires MAT 099 as a prerequisite. Also, successful completion of ENG 091 or equivalent.

**Program Course List**

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 121	Materials and Processes for NDT II	5
NDT 160	Radiographic Testing I	5
NDT 190	Radiographic Testing II	5
NDT 230	Radiographic Testing III	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal:</b>		<b>36</b>

**Ultrasonic Testing Certificate**

Provides students with foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of ultrasonic testing. With this method, NDT inspectors need access to only one side of a material. A transducer sends the ultrasound through the sample and the inner wall of a defect surface will send the wave bouncing back. Ultrasonic testing is a portable and efficient way to measure thickness, detect corrosion, and examine groove welds in many materials.

**Program Learning Outcomes**

Upon successful completion of the Ultrasonic Testing certificate, students will be able to:

- Create a technique specific to an ultrasonic bond testing application in accordance with referenced codes, standards, and applications.
- Develop a standard when creating a technique for a given ultrasonic application in accordance with referenced codes, standards, and specifications.
- Determine the location and size of any relevant indication found in any ultrasonic application per the accuracy outlined in accordance with referenced codes, standards, and specifications.
- Differentiate one primary ultrasonic test application and at least one secondary ultrasonic test application to detect, interpret, and evaluate any discontinuity found in any test.

**Program Length**

The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Instructor’s permission.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of NDT 185 prior to enrolling in NDT 140. NDT 185 requires MAT 099 as a prerequisite. Also, successful completion of ENG 091 or equivalent.

**Program Course List**

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 121	Materials and Processes for NDT II	5
NDT 150	Ultrasonic Testing I	5
NDT 180	Ultrasonic Testing II	5
NDT 220	Ultrasonic Testing III	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal:</b>		<b>36</b>

**Nursing**

**Nursing Assistant Certificate**

The Nursing Assistant Certificate Program prepares students for employment as a basic care provider under the

supervision of a professional licensed provider, such as a Registered Nurse. This course will meet the Washington state and Omnibus Budget Reconciliation Act (OBRA) requirements for Nursing Assistant Training.

### Program Learning Outcomes

Upon successful completion of the Nursing Assistant certificate, students will be able to:

- Perform approved scope of practice skills in various health care settings.
- Apply patient care skills safely in all care settings.
- Use medical terminology in order to communicate effectively with culturally diverse patients and team members.
- Recall the information in order to pass the state examination for nursing assistant certification.

### Physical Activity Requirements

This occupation requires medium physical activity and lifting/handling objects, contact with body fluid, and standing for long periods of time.

### Employability Requirements

Upon completion of this course, students will be eligible to take the State Certification Examination - the National Nurse Aide Assessment Program Exam (NNAAP). Graduates must pass the NNAAP exam and meet the state eligibility requirements in order to apply for licensure. Persons with history of criminal convictions may not be eligible for licensure.

### Program Length

The total number of hours to complete the course is 160 hours. NAC 108 involves 70 hours of nursing assistant theory, which includes HIV/AIDS and CPR. NAC 111 includes 40 hours of nursing skills. NAC 114 includes 50 hours of unit-based clinical experience in a long-term care facility, using the knowledge and skills acquired from NAC 108 and NAC 111. Mandatory attendance is required for all nursing laboratory and clinical days.

For additional inquiries regarding the program or orientation, email [Admissions@cptc.edu](mailto:Admissions@cptc.edu) or call 253-589-5800.

### Admission Dates

Summer, fall, winter, and spring quarters. Students

entering the evening program will be required to attend an I-BEST information session and complete entry and quarterly assessments while enrolled in the program.

### Completion Requirements

#### Prerequisite(s)

Students must pass a criminal background check performed by the Washington State Patrol and have a “No Record On File” report with the Department of Social and Health Services. A non-refundable fee is charged to each student for the background check.

Students must have current immunizations including Measles/Mumps/ Rubella, Hepatitis B series, T-dap (within the last 10 years), TWO-PPD/ Tuberculosis Tests (the second PPD should occur 10-14 days after the reading of the first PPD), Seasonal Flu and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations should be submitted the first day of class, unless arrangements have been made with the instructor.

#### Program Course List

NAC 108	Nursing Assistant Theory	5
NAC 111	Nursing Skills Fundamentals	2
NAC 114	Unit Based Clinical Experience	2

**Subtotal: 9**

## Practical Nursing Certificate

The Practical Nursing (PN) certificate program at Clover Park Technical College prepares graduates for entry into the nursing profession as practical nurses under the direction of a licensed registered nurse, licensed physician, or dentist. Graduates are eligible to take the NCLEX PN exam.

Clover Park Technical College’s Practical Nursing Certificate program consists of 60 credits of nursing courses and 53 credits of general education courses. Students must receive a “B-” or better in all technical (nursing) courses to satisfy graduation requirements.

This PN program focuses on the art and science of nursing. Students learn in the classroom, in the skills laboratory, and in clinical practice settings. Clinical learning experiences are obtained in various health care settings in the community under the guidance of nursing faculty. Clinical experiences are largely scheduled between 5:00 a.m. and 11:30 p.m. The college reserves the right to schedule clinical experiences during evening and/or on

weekends if necessary, and students may be required to travel up to 50 miles for clinical site.

To apply, download and complete the PN Admission Packet and follow the directions given in the packet for deadlines and how to submit.

### Program Learning Outcomes

Upon successful completion of the Practical Nursing certificate, students will be able to:

- **Human Flourishing:** Promote the dignity, integrity, self-determination, and personal growth of diverse patients, their families and oneself through therapeutic communication.
- **Nursing Judgement/Caregiver:** Provide a rationale for judgments used in the provision of safe, quality care and for decisions that promote the health of patients within the family context.
- **Professional Identity:** Articulate a unique role as a member of the health care team, committed to evidence-based practice, caring, advocacy, and safe quality care, to provide optimal health care for diverse patients and their families.
- **Collaborator:** By collaborating with health care team members, utilize evidence, tradition, and patient preferences in predictable patient care situations to promote optimal health status.
- **Spirit of Inquiry:** Communicates relevant, accurate and complete patient care information in a concise, confidential and clear manner.

### Program Accreditation

The Clover Park Technical College Practical Nurse program is accredited by the National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) located at 2600 Virginia Avenue, NW, Washington DC 20032, 202-909-2526

### Physical Activity Requirements

This occupation requires medium physical activity and handling body fluids. Nurses are often standing for long periods of time. For safety and protection of patients, student nurses must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations.

### Employability Requirements

Graduates must pass the NCLEX-PN exam and meet state eligibility requirements, including a criminal background check, in order to apply for licensure. Persons with history of criminal convictions may not be eligible for licensure.

### Program Length

This program is designed to be completed in four quarters. This is an academically rigorous program that requires a high degree of ability to read, understand, and critically think and apply complex concepts to provide quality patient care. Students can expect 3-4 hours per week per class for homework and study (e.g. 15-20 hours per week for four classes) in addition to actual class time. It is strongly recommended that students not work more than 20 hours per week while in the nursing program to allow for adequate study time.

### Admission Dates

Fall, winter, and spring quarters.

If students are taking or have taken prerequisite courses at another educational institution, they must have credits evaluated prior to submitting the application. Students must request an official college transcript be sent to CPTC Enrollment Services for evaluation and complete a transfer credit request form. Mail your official transcript to Clover Park Technical College ATTN: Credential Evaluator.

It is the student's responsibility to ensure their application is complete. Instructions for submitting applications are included in the application packet.

### Completion Requirements

#### Prerequisite(s)

CPTC courses with an "&" in the course name are transferable to other Washington State educational institutions.

#### Completion of the following academic prerequisites:

General Education Courses: (Only if required for the prerequisites below that require a B or better.)

- CHEM& 100 or higher with a 2.0 or better (5CR)
- BIOL& 160 or 175 with a 2.0 or better (5CR)

General Education Courses: You must achieve a “B” or better

- BIOL& 241 Human A & P 1 w/Lab (5 Cr.)
- BIOL& 242 Human A & P 2 w/Lab (5 Cr.)
- BIOL& 260 Microbiology with lab (5 Cr.)
- ENGL& 101 English Composition or ENGL& 235 Technical Writing (5 Cr.)

MAT 099 Intermediate Algebra or MATH& 141 Precalculus I or MATH& 146 Introduction to Stats (5 Cr.) or MATH& 151 Calculus I

- NUTR& 101 Nutrition (5 Cr.)
- PSYC& 100DIV General Psychology (5 Cr.)
- PSYC& 200 Lifespan Psychology (developmental psychology) (5 Cr.)

Must achieve a passing grade in COLL 102

- COLL 102 College Success for All (3 Cr.)

Speaking, understanding, and writing the English language is required.

American Heart Association CPR for the Health Care Provider. This includes adult, child, and infant, under the guidelines of the American Heart Association. Online CPR courses are not accepted. Students are required to carry personal health/medical insurance throughout their clinical rotations.

NLN PAX Pre-admission Exam with a score of 102 or higher. This exam is offered in the college Testing Center and may be taken elsewhere.

Students must receive a “No Record On File” report related to crimes against persons from the Washington State Patrol. A non-refundable fee is charged to each student for the background check.

Required immunizations must be completed by the first day of the quarter you start. A complete list can be found on the document Requirements for Applying to the Practical Nurse Program on the college Nursing webpage.

NURS 120	Medical/Surgical Nursing I	3
NURS 121	Nursing Clinical Skills & Data Collection I	6
NURS 124	Mental Health Nursing	3
NURS 131	Medical/Surgical Nursing II	3
NURS 133	Medical/Surgical Nursing III	4
NURS 134	Pharmacology in Nursing	5
NURS 137	Nursing Clinical Skills & Data Collection II	5
NURS 140	Maternity and Pediatric Nursing	3
NURS 145	Medical Surgical Nursing IV	4
NURS 149	Clinical Practicum I	5
NURS 151	Clinical Practicum II	4
NURS 154	Issues & Trends in Nursing	2
NURS 161	Clinical Practicum III	4
NURS 163	Clinical Practicum IV	5

**Subtotal: 60**

## Pastry Arts

### Pastry Arts - Associate of Applied Technology Degree / Associate in Applied Science – T Degree

The Pastry Arts program at Clover Park Technical College offers a five-quarter Associate in Applied Science - T degree, as well as a three-quarter certificate program for students seeking entry into, or career advancement in, the pastry arts job market, specifically as a pastry arts chef.

Prepares student for careers as bakers, pastry chefs and other pastry arts positions. Students already working in the culinary arts field can select a study path that will expand their skills and further their employment potential. The Pastry Arts degree is designed to provide hands-on training that will prepare students for careers in pastry arts.

#### Program Learning Outcomes

Upon successful completion of the Pastry Arts degree, students will be able to:

- Apply food safety and sanitation procedures in preparation of food products in the kitchen.
- Plan day-to-day operations to run a bistro effectively.
- Create menus for various events, functions, and price limits.
- Use leadership, customer service, and interpersonal skills in support of management of a bistro.

#### Program Course List

NURS 117	Fundamentals of Nursing	4
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- Create a variety of pastries based on the principles of baking science.
- Summarize the test standards and information in order to pass the ServSafe exam.

Computer Literacy Requirement 3  
**Subtotal: 128**

*AAT General Education Requirements: See list above*  
*Computer Literacy Requirement: CAS 130 (Excel I) recommended to meet computer literacy degree requirement or successful completion of computer literacy exam*

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CUL 104	Sanitation in Food Service Operations	3
BAKE 106	Chocolate I (Confections)	4
BAKE 110	Patisserie I	7
BAKE 113	Cakes I (Fillings and Icings)	4
BAKE 114	Dessert Alternatives (Sugar Free, Gluten Free)	3
BAKE 115	Patisserie II	7
BAKE 117	Frozen Desserts	3
BAKE 119	Yeast Breads	4
BAKE 121	Patisserie III	7
BAKE 131	Pies, Tarts, Custards and Fillings	4
BAKE 134	Quick Breads, Cookies, Brownies	3
BAKE 140	Restaurant (Individual) Desserts and Petit Fours	5
BAKE 153	Sugar Work	3
BAKE 157	Wedding Cakes	3
BAKE 162	Retail and Customer Service	7
BAKE 210	Cakes II	3
REST 103	Food & Beverage Cost Control	4
REST 107CAP	Kitchen & Dining Management	3
REST 109	Marketing/Public Relations	3
REST 115	Catering Production	3
REST 119	Operations Management	4
REST 122	Food Service Nutrition	4
REST 126	Finance & Accounting	4
REST 131	Business Plan Development	4
REST 133	Beverage Service Management	4
REST 137	Hospitality Law	4

**Subtotal: 107**

**AAT Requirements**

Technical Course Requirements	107
AAT General Education Requirements	18

**AAS-T Requirements**

Technical Course Requirements	107
AAS-T Degree General Education Requirements	23
Computer Literacy Requirement	3

**Subtotal: 133**

*AAS-T Degree General Education Requirements: See list above*  
*Computer Literacy Requirement: CAS 130 (Excel I) recommended to meet computer literacy degree requirement or successful completion of computer literacy exam*

**General Degree Requirements**

The two degree options in this program are the Associate of Applied Technology (AAT), and the Associate in Applied Science - T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
Or		
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

ENGL& 101 English Composition or CMST& 220 (or higher)

Any 100 level math class

PSYC& 100DIV General Psychology (PSY 112DIV, SOC& 101DIV, or other social science or humanities course that meets the diversity requirement)

COLL 102 College Success for All

AAS-T Degree General Education Requirements (23



credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
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MATH& 141	Precalculus I	5
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MATH& 142	Precalculus II, Functional Trigonometry	5
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MATH& 146	Introduction to Statistics	5
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MATH& 151	Calculus I	5
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5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
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SOC& 101DIV	Introduction to Sociology	5
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5 credits in social science, humanities, or science

Choose one from the following:

ART& 100	Art Appreciation	5
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ASL& 121	American Sign Language I	5
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ASL& 122	American Sign Language II	5
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BIOL& 160	General Biology w/Lab	5
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BIOL& 175	Human Biology w/Lab	5
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BIOL& 241	Human A & P I	5
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BIOL& 242	Human A & P II	5
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BIOL& 260	Microbiology	5
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CHEM& 110	Chemical Concepts w/Lab	5
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CHEM& 121	Intro to Chemistry	5
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CHEM& 131	Introduction to Organic/Biochemistry	5
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CMST& 220	Public Speaking	5
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GEOL& 110	Environmental Geology with Lab	5
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HIST& 146	US History I	5
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HIST& 147	US History II	5
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HIST& 148	US History III	5
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HUM& 101	Introduction to Humanities	5
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MUSC& 105	Music Appreciation	5
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PHYS& 114	General Physics I with Lab	5
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POLS& 202	American Government	5
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PSYC& 100DIV	General Psychology	5
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PSYC& 200	Lifespan Psychology	5
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PSYC& 220	Abnormal Psychology	5
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SOC& 101DIV	Introduction to Sociology	5
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3 credits in College Success:

COLL 102	College Success for All	3
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### Physical Activity Requirements

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

### Employability Requirements

All food workers (includes those who work with unpackaged food, food equipment, or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

### Program Length

This program is a combination of on-line, classroom, laboratory and practical experience in our on-campus bistro. It is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Pastry Arts Certificate

This program prepares students with the basic skills and knowledge required for entry-level positions in the baking and pastry industry. Students gain hands-on experience and theoretical training as they produce quality bakery products from scratch.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

### Physical Activity Requirements

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

## Employability Requirements

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

## Program Length

The program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates

Summer, fall, winter, and spring quarters.

## Completion Requirements

### Prerequisite(s)

None.

### Program Course List

CUL 104	Sanitation in Food Service Operations	3
BAKE 106	Chocolate I (Confections)	4
BAKE 110	Patisserie I	7
BAKE 113	Cakes I (Fillings and Icings)	4
BAKE 114	Dessert Alternatives (Sugar Free, Gluten Free)	3
BAKE 115	Patisserie II	7
BAKE 117	Frozen Desserts	3
BAKE 119	Yeast Breads	4
BAKE 121	Patisserie III	7
BAKE 131	Pies, Tarts, Custards and Fillings	4
BAKE 134	Quick Breads, Cookies, Brownies	3
BAKE 140	Restaurant (Individual) Desserts and Petit Fours	5
BAKE 153	Sugar Work	3
BAKE 157	Wedding Cakes	3
BAKE 210	Cakes II	3
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
MATH& 107	Math in Society	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3
<b>Subtotal:</b>		<b>81</b>

*NOTE: English Composition or higher*

## Pharmacy Technician Advanced

### Pharmacy Technician - ASHP/ACPE Accredited Associate of Applied Technology Degree

Pharmacy technicians process prescriptions, prepare intravenous drugs, order and stock medications, prepare billing, and operate and troubleshoot automated drug-dispensing systems.

Successful graduates of this program are educated and trained in pharmacy technician duties and responsibilities under the dual guidelines of the American Society of Health-System Pharmacists and the Accreditation Council for Pharmacy Education.

The structured classroom curriculum includes customer service, communication, prescription processing, aseptic technique, human relations, and pharmacy calculations. The clinical component of the program gives students the chance to practice the skills received in the classroom and laboratory environment. This prepares students to assume the role of a pharmacy technician in community, hospital, long term care, compounding and other various types of pharmacies.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

This program is a combination of online, classroom, laboratory, and clinical experience. During the clinical experience quarter, students are required to attend 32 hours per week of clinical experience, Tuesday through Friday. Actual times may vary by pharmacy; most will be day shift hours. Students are required to carry personal health/medical insurance throughout their clinical rotations. No student will be allowed at clinical sites without proof of insurance.

### Program Learning Outcomes

Upon successful completion of the Pharmacy Technician degree, students will be able to:

- Perform mathematical calculations essential to the duties of pharmacy technicians in a variety of settings.
- Select appropriate medication from inventory.

- Apply state and federal laws pertaining to processing, handling, and dispensing of medications including controlled substances.
- Apply patient and medication safety practices in aspects of the pharmacy technician's roles.
- Fill prescriptions/medication orders to ensure completeness, accuracy, authenticity, and safety.
- Summarize the national test standards and information in order to pass the Pharmacy Technician Certification Exam.

### Employability Requirements

Graduation from a Washington State Pharmacy Quality Assurance Commission (PQAC) approved technical training program. The PQAC requires all applicants to provide proof of passing a national pharmacy technician certification examination. Four hours of AIDS education and training as required under WAC 246-901-120. A comprehensive background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure. Drug use, criminal background checks, and immunization status may prevent future employment as a pharmacy technician.

### Physical Requirements

Students of the Pharmacy Technician program are required to be able to discriminate increment readings on syringes and discriminate different colored and shaped objects. Students need to be able to recognize and respond to voices under protective garb and on the phone. Excellent fine motor skills are required. Must be able to type 35 WPM. Standing for long periods of time (8-12 hours) and manipulating needles and syringes while holding their arms out in front of them is required. Ability to stand and work for long periods of time in safety equipment and garb is required. Students are expected to be able to lift 25 lbs. and push and pull carts up to 50 lbs.

### Program Length

This program is approximately five to six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer and winter starts.

### Completion Requirements

#### Prerequisite(s)

Before starting the program, a student must have a high school diploma or high school equivalency diploma.

To enter the program, students must meet the prerequisites for college-level reading, writing, and math. They must have completed CAH 105 Computer Applications or equivalent, and CAH 102 Medical Terminology or equivalent course, and be college level math ready. Students must maintain a "B" or above in all technical and general education courses to enter and continue in the program.

Students will have a comprehensive background check performed by the PQAC as well as Castle Branch prior to their clinical rotation. A non-refundable fee is charged to each student for the background check. Students must be at least 18 years of age by the time clinical experience starts. Students must have current immunizations or laboratory verification of immune status. This could include, but is not limited to, Measles/Mumps/Rubella, Hepatitis B series and titer, Tetanus/ Diphtheria, Tuberculosis Test, Current Flu and Varicella, as required by contracts with clinical facilities and CDC recommendations.

Students must have current American Heart Association CPR for the Healthcare Professional certification. Bring immunizations records the first day of class unless arrangements have been made with instructor.

#### Program Course List

BIOL& 175	Human Biology w/Lab	5
CAH 102	Medical Terminology I	5
CAH 105CL	Computer Applications	5
COLL 102	College Success for All	3
CMST& 220	Public Speaking	5
ENGL& 101	English Composition I	5
MAT 108	Math for Health Occupations	5
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5
PT 121	Introduction to Pharmacy & Pharmacy Law	5
PT 120	Pharmacology Part I	5
PT 122	Generic Drug Names Part I	2
PT 127	Pharmacy Lab #1	2
PT 133	Pharmaceutical Calculations	3
PT 135	Hospital Practice with Sterile Processing	6
PT 155	Clinical Capstone Research	2

PT 157	Pharmacy Lab #2	3
PT 163CAP	Community Pharmacy Clinical Capstone	7
PT 165CAP	Institutional Clinical Capstone	7
PT 126	Community Practice	4
PT 138	Generic Drug Names Part II	2
<b>Subtotal: 91</b>		

*NOTE: PSYC& 100DIV or higher, but not PSY 112*

## Pharmacy Technician ASHP/ACPE Accredited Certificate

Pharmacy Technicians process prescriptions, prepare intravenous drugs, order and stock medications, prepare billing, and operate and troubleshoot automated drug-dispensing systems.

Successful graduates of this program are educated and trained in pharmacy technician duties and responsibilities under the dual guidelines of the American Society of Health-System Pharmacists and the Accreditation Council for Pharmacy Education.

The structured classroom curriculum includes customer service, communication, prescription processing, aseptic technique, human relations, and pharmacy calculations. The clinical component of the program gives students the chance to practice the skills received in the classroom and laboratory environment. This prepares students to assume the role of a pharmacy technician in Community, hospital, long term care, compounding and other various types of pharmacies.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

This program is a combination of online, classroom, laboratory, and clinical experience. During the clinical experience quarter, students are required to attend 32 hours per week of clinical experience, Tuesday through Friday. Actual times may vary by pharmacy; most will be day shift hours. Students are required to carry personal health/medical insurance throughout their clinical rotations. No student will be allowed at clinical sites without proof of insurance.

### Program Learning Outcomes

Upon successful completion of the Pharmacy Technician degree, students will be able to:

- Perform mathematical calculations essential to the duties of pharmacy technicians in a variety of settings.
- Select appropriate medication from inventory.
- Apply state and federal laws pertaining to processing, handling, and dispensing of medications including controlled substances.
- Apply patient and medication safety practices in aspects of the pharmacy technician's roles.
- Fill prescriptions/medication orders to ensure completeness, accuracy, authenticity, and safety.
- Summarize the national test standards and information in order to pass the Pharmacy Technician Certification Exam.

### Employability Requirements

Graduation from a Washington State Pharmacy Quality Assurance Commission (PQAC)-approved technical training program. The PQAC requires all applicants to provide proof of passing a national pharmacy technician certification examination. Four hours of AIDS education and training as required under WAC 246-901-120. A comprehensive background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure. Drug use, criminal background checks, and immunization status may prevent future employment as a pharmacy technician.

### Physical Requirements

Students of the pharmacy technician program are required to be able to discriminate increment readings on syringes and discriminate different colored and shaped objects. Students need to be able to recognize and respond to voices under protective garb and on the phone. Excellent fine motor skills are required. Must be able to type 35 WPM. Standing for long periods of time (8-12 hours) and manipulating needles and syringes while holding their arms out in front of them is required. Ability to stand and work for long periods of time in safety equipment and garb is required. Students are expected to be able to lift 25 lbs. and push and pull carts up to 50 lbs.

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer and winter starts.

**Completion Requirements**

**Prerequisite(s)**

Before starting the program, a student must have a high school diploma or high school equivalency diploma. To enter the program, a student must meet the prerequisite for college-level reading, writing, and math. They must have completed CAH 105 Computer Applications or equivalent, and CAH 102 Medical Terminology or equivalent course and be college level math ready. Students must maintain a “B” or above in all technical and general education courses to enter and continue in the program.

Students will have a comprehensive background check performed prior to their clinical rotation. A non-refundable fee is charged to each student for the background check. Students must be at least 18 years of age by the time clinical experience starts. Students must have current immunizations or laboratory verification of immune status. This could include, but is not limited to, Measles/Mumps/Rubella, Hepatitis B series and titer, Tetanus/Diphtheria, Current Flu, Tuberculosis Test, and Varicella, as required by contracts with clinical facilities and CDC recommendations.

Students must have current American Heart Association CPR for the Healthcare Professional certification. Proof of immunizations records should be submitted the first day of class, unless arrangements have been made with the instructor.

**Program Course List**

CAH 105CL	Computer Applications	5
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
MAT 108	Math for Health Occupations	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
CAH 102	Medical Terminology I	5
COLL 102	College Success for All	3
PT 121	Introduction to Pharmacy &	5

	Pharmacy Law	
PT 120	Pharmacology Part I	5
PT 122	Generic Drug Names Part I	2
PT 127	Pharmacy Lab #1	2
PT 133	Pharmaceutical Calculations	3
PT 135	Hospital Practice with Sterile Processing	6
PT 155	Clinical Capstone Research	2
PT 157	Pharmacy Lab #2	3
PT 163CAP	Community Pharmacy Clinical Capstone	7
PT 165		7

**Subtotal: 75**

*NOTE:*

*ENGL& 101 or higher*

*PSYC& 100DIV or higher, but not PSY 112*

**Professional Pilot**

**Professional Pilot - Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

A professional pilot possesses a commercial pilot certificate issued by the Federal Aviation Administration (FAA).

Students graduating from this course usually begin their careers as flight instructors. After working as a flight instructor for one or two years, most progress into charter flight, corporate flying, and commuter or major commercial airlines.

**Program Learning Outcomes**

Upon successful completion of the Professional Pilot degree, students will be able to:

- Model aeronautical decision-making principles to identify and mitigate risk factors.
- Apply emergency operation procedures in a simulated situation.
- Integrate pilotage, dead reckoning, and radio navigation techniques with aircraft instruments and aeronautical charts during cross country flights.
- Consider crew resource management principles during scenario-based training.
- Apply applicable Federal Aviation Administration regulations to flight operations.

- Apply visual flight rules to flights under visual meteorological conditions.
- Apply instrument flight rules to flights under instrument meteorological conditions.
- Perform the tasks required to pass the Federal Aviation Administration practical tests for private, instrument, and commercial certificate per the FAA Airman Certification standards.

AVP 250	Commercial Pilot XI	4
AVP 255CAP	Commercial Pilot XII	4
		<b>Subtotal: 96</b>

**Completion Requirements**

**Prerequisite(s)**

- A mandatory Information Session is required prior to admission to the program. See the college Web site for information session dates.
- Must be at least 16 1/2 years of age.
- Must obtain a second-class FAA medical examination and comply with FAA licensing standards.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver’s license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.

<b>AAT Requirements</b>		
Technical Course Requirements		96
AAT General Education Requirements		18
Computer Literacy Requirement		3
		<b>Subtotal: 117</b>

*AAT General Education Requirements: See list above*  
*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

<b>AAS-T Requirements</b>		
Technical Course Requirements		96
AAS-T Degree General Education Requirements		23
Computer Literacy Requirement		3
		<b>Subtotal: 122</b>

*AAS-T Degree General Education Requirements: See list above*  
*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Note:** Students complete the Professional Pilot Program requirements at different rates due to their own skills and abilities, availability of planes and weather conditions that can alter scheduled flying times. Thus, the number of quarters needed to satisfactorily complete all graduation requirements may exceed those listed above. Students must meet FAA flight time requirements prior to graduation.

**Program Course List**

AVP 105	Private Pilot I	4
AVP 110	Private Pilot II	4
AVP 115	Private Pilot III	4
AVP 125	Private Pilot IV	4
AVP 130	Private Pilot V	4
AVP 135CAP	Private Pilot VI	4
AVP 140	Instrument Pilot I	4
AVP 145	Instrument Pilot II	4
AVP 150	Instrument Pilot III	4
AVP 155	Instrument Pilot IV	4
AVP 160	Instrument Pilot V	4
AVP 170CAP	Instrument Pilot VI	4
AVP 175	Commercial Pilot I	4
AVP 180	Commercial Pilot II	4
AVP 185	Commercial Pilot III	4
AVP 210	Commercial Pilot IV	4
AVP 215	Commercial Pilot V	4
AVP 220	Commercial Pilot VI	4
AVP 230	Commercial Pilot VII	4
AVP 235	Commercial Pilot VIII	4
AVP 240	Commercial Pilot IX	4
AVP 245	Commercial Pilot X	4

<b>Optional Training</b>		
AVP 190	Airline Multi-Engine CRM (Crew Resource Management) I	3
AVP 195	Airline Multi-Engine CRM (Crew Resource Management) II	3
AVP 218	Multi-Engine Instructor Certification MEI	3
AVP 260	Certified Flight Instructor I	4
AVP 265	Certified Flight Instructor II	4
AVP 268	Certified Instrument Flight Instructor	4
AVP 271	Multi-Engine Certification	3

<b>Optional Elective Courses</b>			
AVP 118	Private Pilot Practical Test Standards I	4	
AVP 138	Private Pilot Practical Test Standards II	4	
AVP 152	Instrument Pilot Practical Standards III	4	
AVP 172	Instrument Pilot Practical Standards IV	4	
AVP 223	Commercial Pilot Practical Standards V	4	
AVP 257	Commercial Pilot Practical Standards VI	4	

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science – T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5	
	Or		
CMST& 220	Public Speaking	5	
	Any 100-Level Math Class	5	
PSYC& 100DIV	General Psychology	5	
COLL 102	College Success for All	3	

*NOTE: CMST& 220 or higher*

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement*

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

<b>5 credits in communication:</b>			
ENGL& 101	English Composition I	5	
<b>5 credits in quantitative reasoning:</b>			
MATH& 107	Math in Society	5	
MATH& 141	Precalculus I	5	
MATH& 142	Precalculus II, Functional Trigonometry	5	

MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**\*Professional Pilot Aircraft Rental Rates**

Rates	Plane	Rate	*Fuel Cost Per Gallon	Fuel Consumption Rate	Hourly Rate with Fuel
Non-Complex Aircraft		\$83.39	\$4.29	9 GPH	\$122.00
Complex Aircraft		\$129.44	\$4.29	14 GPH	\$189.50

\*Aircraft costs vary with the current fuel market price

**Professional Pilot Flight Fees**

**\*Private Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	60 minimum hours	\$122.00	\$7,320.00
Pre and Post Briefings	60 hours	\$12.00	\$720.00
Dual Instruction	47 hours	\$50.00	\$2,350.00
Total Flight Fee Costs		\$10,390.00	

\*Aircraft costs vary with the current fuel market price.

**\*Instrument Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	60 minimum hours	\$122.00	\$7,320.00
Pre and Post Briefings	60 hours	\$12.00	\$720.00
Dual Instruction	60 hours	\$50.00	\$3,000.00
Total Flight Fee Costs		\$11,040.00	

\*Aircraft costs vary with the current fuel market price.

**\*Commercial Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	102 minimum flight hours	\$122.00	\$12,444.00
	18 minimum flight hours	\$189.50	\$3,411.00
Pre and Post Briefings	120 hours	\$12.00	\$1,440.00
Dual Instruction	55 hours	\$50.00	\$2,750.00
Total Flight Fee Costs		\$20,045.00	

\*Aircraft costs vary with the current fuel market price.



**Other Exams**

FAA Knowledge Test – 3 @ \$150.00 each Check for current cost with instructor.	\$450.00
FAA Medical Exam Check with FAA examiner for current cost. FAA medical and examiner fee paid to provider.	\$150.00
FAA Check Ride – 3 @ Examiner Fee (Approximately \$500.00 each)	\$1,500.00
FAA Check Ride – 3 @ Aircraft Rental Fee (Approximately \$200.00 each)	\$600.00

**Employability Requirements**

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

**Program Length**

This certificate program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters

**Private Pilot Certificate**

Private pilots are able to fly with passengers aboard an aircraft and have no limitations on where they can fly.

This is the first FAA certificate students obtain if they eventually want to upgrade to higher certificates and ratings. Content includes basic maneuvering flight, takeoffs, landings, and cross-country flying. Ground training includes in-depth training on meteorology, aerodynamics, national airspace structure and navigation, and aircraft systems.

**Rates**

**\*Professional Pilot Aircraft Rental Rates**

Plane	Rate	Fuel Cost Per Gallon	Fuel Consumption Rate	Hourly Rate with Fuel
<b>Non-Complete Aircraft</b>	\$83.39	\$4.29	9 GPH	\$122.00
<b>Complete Aircraft</b>	\$129.44	\$4.29	14 GPH	\$189.50

\*Aircraft costs vary with the current fuel market price.

**\*Private Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
<b>Aircraft Rental</b>	60 minimum hours	\$122.00	\$7,320.00
<b>Pre and Post Briefings</b>	60 hours	\$12.00	\$720.00
<b>Dual Instruction</b>	47 hours	\$50.00	\$2,350.00
Total Flight Fee Costs		\$10,390.00	

\*Aircraft costs vary with the current fuel market price.

**Other Exams**

FAA Knowledge Test – 1 @ \$150.00 each Check for current cost with instructor.	\$150.00
FAA Medical Exam Check with FAA examiner for current cost. FAA medical and examiner fee paid to provider.	\$150.00
FAA Check Ride – 1 @ Examiner Fee (Approximately \$500.00 each)	\$500.00
FAA Check Ride – 1 @ Aircraft Rental Fee (Approximately \$200.00 each)	\$200.00

**Employability Requirements**

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This

certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

**Program Length**

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

- Must be at least 16 1/2 years of age.
- Must obtain a second-class FAA medical examination and comply with FAA licensing standards.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver’s license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.
- Please note that many students need additional training hours to master the required competencies.
- 60 hours total flight time. 47 hours dual and 13 hours solo. Ground instruction—60 hours. Pre- and post-flight briefings—60 hours.
- Industry average flight time for Private Pilot certification is 60-75 hours.

**Program Course List**

AVP 105	Private Pilot I	4
AVP 110	Private Pilot II	4
AVP 115	Private Pilot III	4
AVP 125	Private Pilot IV	4
AVP 130	Private Pilot V	4
AVP 135CAP	Private Pilot VI	4
COLL 102	College Success for All	3

**Subtotal: 27**

**Optional Elective Courses**

AVP 118	Private Pilot Practical Test Standards I	4
AVP 138	Private Pilot Practical Test Standards II	4

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

**Commercial Pilot Certificate**

The Commercial Pilot Certificate allows the holder to fly for hire in a variety of pilot positions. Content of the course includes advanced aircraft performance maneuvers and cross-country flight. Students receive advanced training in aircraft systems, meteorology, and aircraft performance.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that enhance personal development and provide knowledge and abilities upon which technical skills are built.

**\*Professional Pilot Aircraft Rental Rates**

**Rates**

<b>Plane</b>	<b>Rate</b>	<b>Fuel Cost Per Gallon</b>	<b>Fuel Consumption Rate</b>	<b>Hourly Rate with Fuel</b>
<b>Non-Complete x Aircraft</b>	\$83.39	\$4.29	9 GPH	\$122.00
<b>Complete x Aircraft</b>	\$129.44	\$4.29	14 GPH	\$189.50

\*Aircraft costs vary with the current fuel market price.

### Professional Pilot Flight Fees

#### \*Commercial Pilot Certificate

	Flight Hours	Hourly Rate with Fuel	Total
<b>Aircraft Rental</b>	102 minimum flight hours	\$122.00	\$12,444.00
	18 minimum flight hours	\$189.50	\$3,411.00
<b>Pre and Post Briefings</b>	120 hours	\$12.00	\$1,440.00
<b>Dual Instruction</b>	55 hours	\$50.00	\$2,750.00
Total Flight Fee Costs		\$20,045.00	

\*Aircraft costs vary with the current fuel market price.

#### Other Exams

FAA Knowledge Test – 1 @ \$150.00 each Check for current cost with instructor.	\$150.00
FAA Medical Exam Check with FAA examiner for current cost. FAA medical and examiner fee paid to provider.	\$150.00
FAA Check Ride – 1 @ Examiner Fee (Approximately \$500.00 each)	\$500.00
FAA Check Ride – 1 @ Aircraft Rental Fee (Approximately \$200.00 each)	\$200.00

### Employability Requirements

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

### Program Length

This certificate program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

- Must be at least 17 years of age.
- Must obtain a second-class FAA medical examination and comply with FAA licensing standards.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.
- FAA minimum flight and ground hours required for certification.
- Prerequisite is a Private Pilot Certificate and Instrument Rating. Minimum course requirements consist of an additional 120 hours of flight time consisting of 65 hours solo time and 55 hours of dual instruction. Required ground training is 60 hours and pre- and post-flight briefings—120 hours.
- Please note that many students need additional training hours to master the required competencies.

#### Program Course List

AVP 175	Commercial Pilot I	4
AVP 180	Commercial Pilot II	4
AVP 185	Commercial Pilot III	4
AVP 210	Commercial Pilot IV	4
AVP 215	Commercial Pilot V	4
AVP 220	Commercial Pilot VI	4
AVP 230	Commercial Pilot VII	4
AVP 235	Commercial Pilot VIII	4
AVP 240	Commercial Pilot IX	4
AVP 245	Commercial Pilot X	4
AVP 250	Commercial Pilot XI	4
AVP 255CAP	Commercial Pilot XII	4
	English Composition	5
	Or	
	Public Speaking	5
	Any 100-Level Math Class	5
	General Psychology	5
COLL 102	College Success for All	3

**Subtotal: 66**

*NOTE:*

*English Composition or higher*

General Psychology or other social science or humanities class

Optional Elective Courses

AVP 223	Commercial Pilot Practical Standards V	4
AVP 257	Commercial Pilot Practical Standards VI	4

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

**Instrument Pilot Certificate**

The Instrument Rating is added to either a private or commercial pilot certificate. It allows the holder to fly in clouds and weather, navigating and controlling the aircraft exclusively by reference to the aircraft flight instruments.

Content includes basic attitude instrument flying, advanced radio navigation, instrument approaches, and cross-country flight.

**\*Professional Pilot Aircraft Rental Rates**

**Rates**

Plane	Rate	Fuel Cost Per Gallon	Fuel Consumption Rate	Hourly Rate with Fuel
Non-Complete Aircraft	\$83.39	\$4.29	9 GPH	\$122.00
Complete Aircraft	\$129.44	\$4.29	14 GPH	\$189.50

\*Aircraft costs vary with the current fuel market price.

**Professional Pilot Flight Fees**

**\*Instrument Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
<b>Aircraft Rental</b>	60 minimum hours	\$122.00	\$7,320.00
<b>Pre and Post Briefings</b>	60 hours	\$12.00	\$720.00
<b>Dual Instruction</b>	60 hours	\$50.00	\$3,000.00
Total Flight Fee Costs		\$11,040.00	

\*Aircraft costs vary with the current fuel market price.

**Other Exams**

FAA Knowledge Test – 1 @ \$150.00 each	\$150.00
Check for current cost with instructor.	
FAA Medical Exam	\$150.00
Check with FAA examiner for current cost.	
FAA medical and examiner fee paid for provider.	
FAA Check Ride – 1 @ Examiner Fee	\$500.00
(Approximately \$500.00 each)	
FAA Check Ride – 1 @ Aircraft Rental Fee	\$200.00
(Approximately \$200.00 each)	

**Employability Requirements**

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

**Program Length**

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

## Completion Requirements

### Prerequisite(s)

- Must be at least 17 years of age.
- Must obtain a second-class FAA medical examination and comply with FAA licensing standards.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver’s license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.
- FAA minimum flight and ground hours required for certification.
- Instrument Pilot: 60 hours total flight time, all of which is dual instruction. Ground training required is 60 hours. Pre- and post-flight briefings time—60 hours.
- Please note that many students need additional training hours to master the required competencies.

### Program Course List

AVP 140	Instrument Pilot I	4
AVP 145	Instrument Pilot II	4
AVP 150	Instrument Pilot III	4
AVP 155	Instrument Pilot IV	4
AVP 160	Instrument Pilot V	4
AVP 170CAP	Instrument Pilot VI	4
COLL 102	College Success for All	3
		<b>Subtotal: 27</b>

### Optional Elective Courses

AVP 152	Instrument Pilot Practical Standards III	4
AVP 172	Instrument Pilot Practical Standards IV	4

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

## Flight Instructor Certificate

The flight instructor certificate allows a commercial and instrument- rated pilot to train flight students in acquiring their private and commercial pilot certificates. The

instrument flight instructor rating allows the holder to train students working toward their instrument rating. Flight instructors can also teach aviation ground schools.

### Employability Requirements

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

### Program Length

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver’s license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.

### Program Course List

AVP 260	Certified Flight Instructor I	4
AVP 265	Certified Flight Instructor II	4
AVP 268	Certified Instrument Flight Instructor	4
		<b>Subtotal: 12</b>

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

## Multi-Engine Training Certificate

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

### Program Length

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.

### Program Course List

AVP 271	Multi-Engine Certification	3
		<b>Subtotal: 3</b>

*Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed*

*those listed above in some cases.*

## Airline Multi-Engine Crew Resource Management 1 (CRM 1) Certificate

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

### Program Length

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.

### Program Course List

AVP 190	Airline Multi-Engine CRM (Crew Resource Management) I	3
		<b>Subtotal: 3</b>

*Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

## Airline Multi-Engine Crew Resource Management 2 (CRM 2) Certificate

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

### Program Length

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.

### Program Course List

AVP 195	Airline Multi-Engine CRM (Crew Resource Management) II	3
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**Subtotal: 3**

*Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

## Multi-Engine Instructor Training (MEI) Certificate

The multi-engine instructor training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine instructor training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

### Program Length

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a

current passport or birth certificate and driver’s license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training.

**Program Course List**

AVP 218	Multi-Engine Instructor Certification MEI	3
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**Subtotal: 3**

## Retail Business Management

### Retail Business Management - Associate of Applied Technology Degree

The AAT Retail Business Management degree prepares students for careers in marketing, sales, retailing, customer service, entrepreneurship, and general business applications. Students develop both the technical and human relations skills necessary to succeed in today’s competitive work environment. Current business procedures and computer applications, including online retail services, are covered.

The program combines business theory with practical applications that include the proper use of technology in today’s workplace, ensuring students are making appropriate decisions in business settings. Students are introduced to e-commerce concepts and applications and learn how to use social media to invite potential customers to interact with their company.

This program has a built-in certificate component approved by the Western Association of Food Chains. This certificate prepares individuals to manage a variety of retail sales or lines of merchandise operations. The program serves both entry-level job candidates and incumbent employees. This certificate, endorsed by the Western Association of Food Chains (WAFC), provides grocery employees in Washington access to a consistent curriculum and also meets the needs of other segments of the retail industry.

#### Program Learning Outcomes

Upon successful completion of the Retail Business Management degree, students will be able to:

- Evaluate multiple types of communications as they pertain to business practices.
- Analyze the primary components of the retail mix as they relate to best practices in the retail industry.

- Devise approaches for ethically dealing with dilemmas that arise in a business context.
- Apply human resource management principles in the recruitment, selection, placement and training of employees.
- Evaluate forces within business that influence marketing decisions and trends.
- Demonstrate effective sales techniques and team selling strategies.
- Analyze real-world examples of successful and unsuccessful electronic commerce companies, their accomplishments, their struggles, and their business practices.
- Apply current and relevant customer service strategies to encourage customer satisfaction and trust.
- Create social media strategies that achieve desired marketing goals.
- Apply consumer behavior theory to marketing strategies and tools in a retail environment.

#### Program Length

This program is offered online and is approximately five-to-six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Summer, fall, winter, and spring quarters.

#### Completion Requirements

#### Prerequisite(s)

None.

Program Course		
RBM 105	Fundamentals of Organizational Behavior	3
RBM 107	Marketing	3
RBM 109	Principles of Retailing	3
RBM 111	Essentials of Business Communication	3
RBM 113CL	Business Technology for Retail Applications	3
RBM 115	Human Resource Management	3
RBM 117	Principles of Management	3



RBM 119	Financial Management	3
RBM 123	Customer Service	5
RBM 129	Speaking for Success	5
RBM 133	Effective Selling	5
RBM 159	E-Commerce Principles & Applications	4
RBM 162	Social Media Marketing	5
RBM 164	Marketing Communications	5
RBM 166CAP	Successful Career Development	5
RBM 168	Consumer Behavior	5
RBM 201	Introduction to Business Etiquette	5
CAS 105	Keyboarding	3
BUS& 201	Business Law	5
	Any 100-Level Math Class	5
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	<b>Subtotal: 94</b>	

**NOTE:**

*RBM 105 and RBM 109: Articulated courses with high schools for dual enrollment.*

### Retail Business Management Certificate

This certificate, endorsed by the Western Association of Food Chains (WAFC), provides grocery employees access to a consistent curriculum and also meets the needs of other segments of the retail industry.

The program serves both entry-level job candidates and incumbent employees.

#### Program Length

The program is offered online and is approximately three-to-six quarters long, depending on full- or part-time attendance and the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Summer, fall, winter, and spring quarters.

#### Completion Requirements

#### Prerequisite(s)

None.

**Important Note:** Taking the Accuplacer assessment or equivalent is not required for this certificate.

#### Program Course List

RBM 105	Fundamentals of Organizational Behavior	3
RBM 107	Marketing	3
RBM 109	Principles of Retailing	3
RBM 111	Essentials of Business Communication	3
RBM 113CL	Business Technology for Retail Applications	3
RBM 115	Human Resource Management	3
RBM 117	Principles of Management	3
RBM 119	Financial Management	3

**Subtotal: 24**

*RBM 105 and RBM 109: Articulated courses with high schools for dual enrollment.*

#### Optional Electives

CAS 105	Keyboarding	3
RBM 123	Customer Service	5
RBM 129	Speaking for Success	5
RBM 133	Effective Selling	5
RBM 159	E-Commerce Principles & Applications	4
RBM 162	Social Media Marketing	5
RBM 164	Marketing Communications	5
RBM 166CAP	Successful Career Development	5
RBM 168	Consumer Behavior	5
RBM 201	Introduction to Business Etiquette	5

### Surgical Technology

#### Surgical Technology - Associate of Applied Technology Degree

Prepares students to work as part of a team of surgeons and registered nurses in the operating room. Successful graduates of this program are educated in surgical technology under the guidelines of the Association of

## Surgical Technologists.

The structured curriculum includes basic sciences, patient care, surgical procedures, and human anatomy combined with clinical rotations in area health care facilities. Classroom instruction, labs, and clinical internships prepare students to assume the role of a perioperative team member in a variety of health care delivery settings. Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students are required to carry personal health/medical insurance throughout their clinical rotations.

No student will be allowed at a clinical site without proof of insurance.

### Program Learning Outcomes

Upon successful completion of the Surgical Technology degree, students will be able to:

- Correlate the knowledge of anatomy, physiology, pathophysiology, and microbiology to their role as a surgical technologist.
- Use principles and practices related to personal patient safety devices and procedures.
- Apply the ethical, legal, moral, and medical values related to the patient and the operating room team during the perioperative experience.
- Correlate the elements, action, and use of medications and anesthetic agents used during the perioperative experience.
- Demonstrate safe practice techniques in regards to perioperative routines, patient transportation, positioning, and emergency procedures.
- Demonstrate principles of surgical asepsis as part of the perioperative experience.
- Analyze the biopsychosocial needs of the surgical patient in order to address those needs.
- Perform as a competent entry-level surgical technologist in the cognitive, psychomotor, and effective learning domains according to ARC/STSA standards.
- Model the professional attributes of the surgical technologist.

### Program Accreditation

The Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) has granted accreditation to the Surgical Technology program upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

Commission on Accreditation of Allied Health Education Programs  
25400 U.S. Highway 19 North, Suite 158  
Clearwater, FL 33763  
Phone: 727-210-2350 Fax: 727-210-2354  
[www.caahep.org](http://www.caahep.org)

### Physical Activity Requirements

Students cannot require use of assistive devices. This occupation requires the ability to stand, sit, and walk for extended periods of time and the ability to lift and hold 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements, be assigned to a clinical rotation and get a job in this field.

### Employability Requirements

Most employers prefer national certification. Seven hours of AIDS education and training as required under WAC 246-939. A comprehensive background check will be conducted to screen for prior convictions prior to state registration.

Persons with some types of criminal convictions may not be eligible for employment.

### Program Length

This program is a combination of on-line, classroom, laboratory and clinical experiences. It is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters

### Completion Requirements

#### Prerequisite(s)

Students pursuing the AAT degree must have a high school diploma or high school equivalency diploma, per the governing body for surgical technology, AST. In order to participate in the clinical aspect of the program, students must pass multiple background checks. A non-refundable

fee is charged to each student for the background check. Students must have current American Heart Association CPR for the Healthcare Provider certification and immunizations or laboratory verification of immune status. This includes, but is not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations and CPR should be completed by the first day of class of the third quarter of the SURG courses. No student will be allowed at a clinical site without completion of immunizations. A physical is required for each student prior to clinical rotation. Must be at least 18 years of age by the time clinical experience starts, usually in September and April.

This program requires that the following general education courses be completed prior to beginning the first quarter of SURG courses. These general education courses are BIOL& 241, CAH 102, COLL 102, ENGL& 101. Students must maintain a “B” or better in all general education and Core Allied Health courses.

Students must receive a “C” or better in all technical courses to satisfy graduation requirements. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

#### Program Course List

BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
CAH 102	Medical Terminology I	5
CAH 105CL	Computer Applications	5
ENGL& 101	English Composition I	5
MAT 108	Math for Health Occupations	5
SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3
SURG 110	Introduction to Surgical Lab	3
SURG 115	Introduction to the Surgical Environment	2
SURG 120	Care of the Surgical Patient I	2
SURG 128	Pharmacology & Anesthesia	3
SURG 145	Surgical Lab I	5
SURG 148	Operating Room Theory I	5
SURG 150	Surgical Environment	2
SURG 152	Care of the Surgical Patient II	2
SURG 153	Surgical Lab II	5
SURG 154	Operating Room Theory II	5

SURG 160	Care of the Surgical Patient III	2
SURG 201	Operating Room Theory III	5
SURG 205	Clinical Preparation	2
SURG 208	Microbiology for Surgical Technology	3
SURG 212	Surgical Lab III	5
SURG 215	Clinical Applications I	5
SURG 220	Clinical Applications II	5
SURG 225	Clinical Applications III	5
SURG 230	Clinical Applications IV	5
SURG 235	Seminar I	3
SURG 237	Certification Test Preparation I	2
SURG 240CAP	Seminar II	3
SURG 242	Certification Test Preparation II	2

**Subtotal: 119**

## Upholstery

### Upholstery Fundamentals Certificate

This two-quarter program is designed to provide graduates with a foundation in measuring, cutting, and sewing using industrial sewing machine equipment. Students will also learn how to set up an efficient workstation for upholstery work and the basics of sewing machine maintenance. Students will continue to develop basic upholstery skills, speed, and accuracy in the second quarter while working on projects such as furniture pillows and automotive seat covers. This certificate is a prerequisite to the Automotive Upholstery Certificate and Furniture Upholstery Certificate.

#### Program Learning Outcomes

Upon successful completion of the Upholstery Fundamentals certificate, students will be able to:

- Use hand and power tools safely.
- Troubleshoot commercial sewing machines in order to keep them operational.
- Organize an efficient upholstery work station.
- Operate a commercial sewing machine with safety, speed, and accuracy.
- Construct cushions, pillows, and automotive inserts that meet industry standards.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and Spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

UPH 101	Introduction to Upholstery I	4
UPH 103	Introduction to Upholstery II	4
UPH 105	Basic Sewing I	4
UPH 107	Basic Sewing II	4
UPH 109	Intermediate Sewing I	4
UPH 111	Intermediate Sewing II	4
UPH 113	Advanced Sewing I	4
UPH 115	Advanced Sewing II	4
COLL 102	College Success for All	3
<b>Subtotal:</b>		<b>35</b>

**Automotive Upholstery Certificate**

This three-quarter program builds on the skills learned in the Upholstery Fundamentals Certificate and provides students with lessons and project-based learning specific to the automotive upholstery industry. Students will learn how to remove and re-upholster specific automotive interior elements such as doors and quarter panels, bucket seats, bench seats, headliners, carpets, and convertible tops.

**Program Learning Outcomes**

Upon successful completion of the Automobile Upholstery certificate, students will be able to:

- Remove automotive seat covers in preparation for patterning.
- Calculate all materials needed to complete an interior.
- Construct automotive bucket seat covers and headrests.
- Re-install completed parts.
- Create a new interior for a vehicle.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of Upholstery Fundamentals Certificate or instructor’s permission.

**Program Course List**

UPH 118	Doors and Quarter Panels I	4
UPH 120	Doors and Quarter Panels II	4
UPH 122	Bucket Seats I	4
UPH 124	Bucket Seats II	4
UPH 126	Bench Seats I	4
UPH 128	Bench Seats II	4
UPH 132	Headliners	4
UPH 136	Carpets	4
UPH 140	Convertible Tops	4
UPH 200	Special Projects	4
COLL 102	College Success for All	3

**Subtotal: 43**

**Furniture Upholstery Certificate**

This three-quarter program builds on the skills learned in the Upholstery Fundamentals Certificate and provides students with lessons and project-based learning specific to the furniture upholstery industry. Students will learn how to remove and re-upholster specific furniture pieces such as Louis chairs, wing back chairs, and sofas. Additionally, students will learn specific techniques used in furniture upholstery such as diamond tufting, tying springs, and design and construction of a headboard.

**Program Learning Outcomes**

Upon successful completion of the Furniture Upholstery Certificate, students will be able to:

- Differentiate the various types of chairs to utilize the correct upholstery techniques.
- Remove old upholstery safely, without damaging the furniture.
- Calculate all materials needed to complete an

upholstered piece.

- Evaluate which types of foams and fabric are best for the given project.
- Create a usable, fashionable piece of furniture.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of Upholstery Fundamentals Certificate or instructor’s permission.

**Program Course List**

UPH 145	The Art of Tying Springs	3
UPH 150	Upholstering a Louis-Type Chair I	4
UPH 155	Upholstering a Louis-Type Chair II	4
UPH 160	Upholstering a Wingback Chair I	4
UPH 165	Upholstering a Wingback Chair II	4
UPH 170	Upholstering a Sofa I	4
UPH 175	Upholstering a Sofa II	4
UPH 180	Diamond Tufting	4
UPH 183	Pillow Backs	4
UPH 189	Design and Construction of a Headboard	4
COLL 102	College Success for All	3
<b>Subtotal:</b>		<b>42</b>

**Welding**

**Welding Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This program is designed to develop the technical knowledge and skills required for employment in welding, metal fabrication, and related occupations. Graduates may qualify for many different opportunities within

manufacturing, industrial maintenance, and construction.

Students will develop skills in a variety of welding and metal cutting processes common to industry and are also able to gain practical experience through realistic projects.

MAT 092 and ENG 091 are required classes to enter the welding program. Other academic classes will be embedded in the program scope and sequence that are required for completion of the program.

**Program Learning Outcomes**

Upon successful completion of the Welding degree, students will be able to:

- Demonstrate the safe and proper use of welding related shop equipment.
- Evaluate the quality of: joint design, fit up, and welding to AWS and WABO standards.
- Effectively use shop tools and equipment to layout and fabrication welding projects.
- Fabricate welding projects with thermal cutting equipment.
- Safely perform the eight welding processes covered in the program to AWS and WABO standards.
- Interpret shop drawings in terms of the identification of lines, views, dimensioning, tolerances, and AWS welding symbols that are commonly found on working drawings.
- Use appropriate base metals, welding processes, and filler metals to meet fabrication project requirements.
- Devise an effective welding procedure that incorporates metallurgical principles.
- Demonstrate the welding skills necessary to pass employment and certification testing.

**Completion Requirements**

**Prerequisite(s)**

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

**Program Course List**

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3
WLD 112	Oxyacetylene Welding & Brazing	4

WLD 117	Shielded Metal Arc Welding I	7
WLD 123	Shielded Metal Arc Welding II	7
WLD 143	Materials and Testing	5
WLD 144	Print Reading for Welders	5
WLD 152	Gas Metal Arc Welding	7
WLD 157	Metallurgy	5
WLD 168	Flux Cored Arc Welding I	7
WLD 210	Gas Tungsten Arc Welding	7
WLD 217CAP	Special Projects	1-5
	Welding Electives	28
	<b>Subtotal: 91-95</b>	

*Welding Electives: See list below*

<b>AAT Requirements</b>		
Technical-Course-Requirements		91-95
AAT General Education Requirements		18
Computer Literacy Requirement		3
	<b>Subtotal: 112-116</b>	

*AAT General Education Requirements: See list above*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

<b>AAS-T Requirements</b>		
Technical-Course-Requirements		91-95
AAS-T Degree General Education Requirements		23
Computer Literacy Requirement		3
	<b>Subtotal: 117-121</b>	

*AAS-T Degree General Education Requirements: See list above*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Welding Electives**

Students must take 28 credits. Students must select four elective courses from the list below:

WLD 211	Advanced Gas Tungsten Arc Welding I (GTAW)	7
WLD 214	Advanced Gas Tungsten Arc Welding II	7
WLD 219	Special Projects II	1-5

WLD 223	GTAW Pipe Welding	7
WLD 225	Shielded Metal Arc Welding Pipe	7
WLD 227	Advanced Pipe Welding	7
WLD 229	Metal Forming	7
WLD 233CAP	Layout and Fabrication	7
WLD 235CAP	WABO Test Prep	7
WLD 238	FCAW II (Flux Core Arc Welding)	7

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science – T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*NOTE: CMST& 220 or higher*

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement*

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

**5 credits in communication:**

ENGL& 101	English Composition I	5
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**5 credits in quantitative reasoning:**

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

**5 credits in a social science that meets the diversity**

requirement:		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science

choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Basic Welding Certificate

This program prepares students for entry-level positions in welding as an apprentice or shop helper. The competency based curriculum combines classroom instruction with hands-on training to develop foundational knowledge and skill in select welding and cutting processes.

### Program Learning Outcomes

Upon successful completion of the Welding degree, students will be able to:

- Demonstrate the safe and proper use of welding related shop equipment.
- Safely perform OFW, SMAW and GMAW to AWS and WABO standards.
- Use appropriate base metals, welding processes, and filler metals to meet fabrication project requirements.
- Fabricate welding projects with thermal cutting equipment.
- Use proper personal protective equipment in a welding shop environment.

### Program Length

This certificate program is approximately two quarters long. The program can take five to eight quarters depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

#### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

#### Program Course List

WLD 110	Thermal Cutting & Gouging	3
WLD 112	Oxyacetylene Welding & Brazing	4
WLD 117	Shielded Metal Arc Welding	7

	I		
WLD 123	Shielded Metal Arc Welding		7
	II		
WLD 152	Gas Metal Arc Welding		7
COLL 102	College Success for All		3

**Subtotal: 31**

## Shielded Metal Arc Welding Certificate

Prepares students for employment in positions requiring specialization in Shielded Metal Arc Welding (SMAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

#### Program Course List

WLD 110	Thermal Cutting & Gouging		3
WLD 112	Oxyacetylene Welding & Brazing		4
WLD 117	Shielded Metal Arc Welding I		7
WLD 123	Shielded Metal Arc Welding II		7
WLD 235CAP	WABO Test Prep		7
COLL 102	College Success for All		3

**Subtotal: 31**

## Gas Tungsten Arc Welding Certificate

Prepares students for employment in positions requiring specialization in Gas Tungsten Arc Welding (GTAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the necessary knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

#### Program Course List

WLD 110	Thermal Cutting & Gouging		3
WLD 112	Oxyacetylene Welding & Brazing		4
WLD 210	Gas Tungsten Arc Welding		7
WLD 211	Advanced Gas Tungsten Arc Welding I (GTAW)		7
WLD 214	Advanced Gas Tungsten Arc Welding II		7
COLL 102	College Success for All		3

**Subtotal: 31**

## Gas Tungsten Arc Welding (GTAW) Pipe Certificate

Prepares students for employment in positions requiring specialization in Gas Tungsten Arc Welding pipe (GTAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the necessary knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.



Program Course List

WLD 110	Thermal Cutting & Gouging	3
WLD 112	Oxyacetylene Welding & Brazing	4
WLD 210	Gas Tungsten Arc Welding	7
WLD 211	Advanced Gas Tungsten Arc Welding I (GTAW)	7
WLD 223	GTAW Pipe Welding	7
COLL 102	College Success for All	3
<b>Subtotal: 31</b>		

## Shielded Metal Arc Welding Pipe Certificate

Prepares students for employment in positions requiring specialization in Shielded Metal Arc Welding Pipe (SMAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

Program Course List

WLD 110	Thermal Cutting & Gouging	3
WLD 112	Oxyacetylene Welding & Brazing	4
WLD 117	Shielded Metal Arc Welding I	7
WLD 123	Shielded Metal Arc Welding II	7
WLD 225	Shielded Metal Arc Welding Pipe	7
COLL 102	College Success for All	3
<b>Subtotal: 31</b>		

## Wire Feed Welding Certificate

Prepares students for employment in positions requiring

specialization in Gas Metal Arc Welding (GMAW) and FCAW. The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

Program Course List

WLD 110	Thermal Cutting & Gouging	3
WLD 112	Oxyacetylene Welding & Brazing	4
WLD 117	Shielded Metal Arc Welding I	7
WLD 152	Gas Metal Arc Welding	7
WLD 168	Flux Cored Arc Welding I	7
COLL 102	College Success for All	3
<b>Subtotal: 31</b>		

# Courses

## ACT - Automotive Collision Technician

### ACT 102 - Fundamentals of Collision Repair (3)

Explores career safety, industry certifications, vehicle construction, and an overview of the career field.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement. Corequisite: IAUT 104, IAUT 115, IAUT 130, and IAUT 140. MAT 092 or meet appropriate placement. Instructor's permission required.

### ACT 106 - Body Shop Equipment (3)

Covers operating hand tools, power tools, and shop equipment. Explores air systems and their design and function.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 110 - Welding, Heating, & Cutting (4)

Covers the skills of welding, heating, and cutting as they relate to the collision industry.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 115 - Plastics/SMC Repair (4)

Explores plastic, fiberglass, and SMC repairs as they relate to the collision industry.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 120 - Glass, Trim, & Hardware (5)

Covers the practical skills used to repair and replace door locks and windows and to repair water leaks on car and truck bodies, interior parts, and door skin.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 125 - Introduction to Metal Straightening (3)

Introduces basic body-panel straightening techniques.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 132 - Panel Replacement (6)

Covers the fundamentals of replacing hoods, bumpers, fenders, grilles, lids, and other bolted-on panels.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 133 - Panel Repair (6)

Covers metal-straightening fundamentals including proper tool usage, application of fillers, and sanding for proper size, shape, and texture.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 134CAP - Auto Collision Major Repair (5)

Introduces vehicle damage measuring systems, straightening auto body structure, and replacing structural components.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 141 - Auto Body Aluminum Repair (4)

This course is an introduction to aluminum body repair.

Prerequisite: Successful completion of ACT 102, ACT 106, ACT 110, ACT 115, ACT 120, and ACT 125. Instructor's permission required.

### ACT 145 - Collision Estimating (5)

Covers collision damage estimating, reviewing work orders, and acquiring work skills for job success.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 151 - Refinish Equipment Preparation (6)

Covers paint-shop equipment and painting fundamentals.

Prerequisite: Successful completion of IAUT 104, IAUT

105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

#### **ACT 154 - Topcoat Refinishing (8)**

Covers color matching, final masking, surface cleaning, and topcoat finishing.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

#### **ACT 156 - Pre-Prime Preparation (5)**

Explores corrosion protections and vehicle refinish preparation.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

#### **ACT 157 - Post-Prime Preparation (5)**

Explores final preparations, blocking, and final sanding for application of topcoat.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

#### **ACT 166CAP - Surface Imperfections/Exterior Trim (5)**

Covers paint application problem solving, final detailing, decals, and trimming.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

#### **ACT 171 - Plastic Refinishing (5)**

Covers paint-shop equipment and painting fundamentals as they relate to plastics.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## **ACTG - Accounting**

#### **ACTG 110 - Bookkeeping I (4)**

Introduces fundamental principles of full-cycle, double entry accounting, including maintaining journals, ledgers, and banking records to prepare basic financial statements for service and retail businesses organized as sole proprietorships or partnerships. Explores the concepts and

terminology required to perform specific accounting functions accurately.

Prerequisite: Successful completion MAT 094 or above. Computer literacy course required. Recommended that students take CAS 121 (Preferred) or CAS 115. Or instructor's permission.

#### **ACTG 115 - Bookkeeping II (4)**

Introduces continued principles of full cycle, double-entry accounting. Covers specialty issues, such as uncollectible accounts, depreciation, inventory notes, interest accruals, and end-of-period work for corporations. Also covers basics of payroll accounting and payroll tax reports. Students will maintain journals and ledgers to prepare basic financial statements for a retail business organized as a corporation and identify the concepts and terminology required to perform specific accounting functions accurately.

Prerequisite: Successful completion of ACTG 110.

#### **ACTG 120 - Electronic Business Math (2)**

Covers business math applications, including payroll, percentages, merchandising, consumer credit, simple and compound interest, prorating, stocks and bonds, and the metric system, using keyboard functions and the touch method of electronic calculator operation.

Prerequisite: Successful completion of ENG 091 or equivalent and successful completion of MAT 092 or equivalent, or instructor's permission.

#### **ACTG 135 - Accounting Spreadsheets I (5)**

Introduces electronic spreadsheets (Microsoft Office Excel). Covers creating business forms and spreadsheets to prepare financial statements.

Prerequisite: Successful completion of CAS 115 and CAS 121, or instructor's approval. Concurrent with ACTG 110 or instructor's approval.

#### **ACTG 141 - QuickBooks I (2)**

Covers principal applications, basic operating commands, and functions necessary to use QuickBooks automated accounting software. Basic applications include, but are not limited to, vendor, customer, and banking activities and creating files.

Prerequisite: Successful completion of ACTG 110 and ACTG 135, or instructor's approval.

### **ACTG 143 - QuickBooks II (3)**

Covers continued applications for vendor and customer activities using QuickBooks automated accounting software. Also covers starting up companies, inventory management, sales tax, payroll, and working with balance sheet accounts.

Prerequisite: Successful completion of ACTG 115 and ACTG 141, or instructor's approval.

### **ACTG 160 - Payroll & Business Taxes (5)**

Provides practice in all payroll operations, the recording of accounting entries involving payroll, and the preparation of required payroll and business tax returns. Covers the concepts, laws, and terminology required to perform specific payroll accounting functions.

Prerequisite: Successful completion of ACTG 115 or instructor's approval.

### **ACTG 211 - Principles of Accounting I Lab (2)**

Provides instructional activities that support material covered in ACCT 201 in a supervised lab environment. Concurrent with ACCT 201 or instructor's approval.

Prerequisite: Successful completion of ACTG 135 or instructor's approval.

### **ACTG 212 - Principles of Accounting II Lab (3)**

Provides instructional activities that support material covered in ACCT 202 in a supervised lab environment.

Prerequisite: Successful completion of ACTG 211 and ACTG 135 or instructor's approval. Corequisite: ACCT& 202.

### **ACTG 213 - Principles of Accounting III Lab (3)**

Provides instructional activities that support material covered in ACCT 203 in a supervised lab environment.

Prerequisite: Successful completion of ACTG 211 and ACTG 135, or instructor's approval. Corequisite: ACCT& 203.

### **ACTG 222 - Fundamentals of Individual Income Tax Accounting (4)**

Introduces the fundamentals of individual income tax accounting theory and practice, including a study of the rules and regulations for preparation of the most common forms and schedules, a brief review of the history of income taxation, tax laws in the United States, and the differences between generally accepted accounting

principles and income tax accounting.

Prerequisite: Successful completion of ACTG 115 or instructor's approval.

### **ACTG 224 - Fundamentals of Governmental/Nonprofit Accounting (5)**

Introduces the fundamentals of accounting theory and practice of government/nonprofit accounting, including a study of accounting methods; the reasons for and the use of the various funds; the purpose and use of budgets in this field of accounting; and the differences between generally accepted accounting principles, GASB standards, and fund/ governmental accounting.

Prerequisite: Successful completion of ACTG 115 and ACCT&, 201 or instructor's approval.

### **ACTG 236 - Accounting Spreadsheets II (3)**

Provides advanced instruction in electronic worksheets, various business spreadsheets, 3D worksheets, and various functions, including the conditional function and accounting schedules. CAS 135 may substitute for this course.

Prerequisite: Successful completion of ACTG 135 or instructor's approval.

### **ACTG 241 - QuickBooks III (4)**

Covers advanced accounting activities using QuickBooks automated accounting software. Topics focus on starting up companies in mid-cycle of the fiscal period. Covers setting up prior balances with accounts receivable, accounts payable, checking, inventory, payroll, and fixed assets.

Prerequisite: Successful completion of ACTG 143 and ACCT& 201, or instructor's approval.

### **ACTG 260 - Business Office I (5)**

Provides an opportunity for students to experience and participate in a realistic office environment by providing financial statements, completing financial examinations, preparing payroll, and furnishing other similar financial accounting work products.

Prerequisite: Successful completion of ACTG 143, ACTG 236, CAS 121, CAS 135 and ACCT& 201, or instructor's approval.

### **ACTG 262CAP - Business Office II (5)**

Provides an opportunity for students to experience and participate in a realistic office environment by providing

financial statements, completing financial examinations, preparing payroll, and furnishing other similar financial accounting work products.

Prerequisite: Successful completion of ACTG 260 or instructor's approval.

### **ACTG 271 - Internship I (5)**

Provides students with practical on-the-job field experience. Program offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to students' educational and career objectives. Must be approved by the instructor and includes a weekly seminar component.

Prerequisite: Instructor's approval.

### **ACTG 291 - Individual Income Tax Accounting (5)**

Continues the study of the fundamentals of individual income tax accounting theory and practice, including a detailed study of the rules and regulations for preparation of the most common forms and schedules, preparation of these forms and schedules, tax laws in the United States, and the differences between generally accepted accounting principles and income-tax accounting.

Prerequisite: Successful completion of ACTG 222 and ACCT& 201, or instructor's approval. Concurrent with ACTG 293.

### **ACTG 293 - Individual Income Tax Accounting Lab (5)**

Provides a supervised setting, with instructional support, to apply understanding of federal individual income-tax rules and regulations to specific tax problems.

Prerequisite: Successful completion of ACTG 222 and ACCT& 201, or instructor's approval. Concurrent with ACTG 291.

### **ACTG 295 - Individual Income Tax Internship (5)**

Provides on-the-job practical field experience. Program offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to students' educational and career objectives. Must be approved by the instructor.

Prerequisite: Successful completion of ACTG 291 and ACTG 293, or instructor's approval.

## **ACCT - Accounting**

### **ACCT& 201 - Principles of Accounting I (5)**

Covers fundamentals of accounting theory and practice, including a study of the accounting cycle and the use of special journals. Focus is on double-entry accounting system and financial statement preparation. Covers transactions for a business organized as a sole proprietorship and the effects of transactions on balance sheet accounts.

Prerequisite: ACTG 115 or instructor's approval.

### **ACCT& 202 - Principles of Accounting II (5)**

Covers fundamentals of accounting theory and practice, continued from ACCT 201. Focus is on issues related to businesses organized as a partnership or corporation and their effects on balance sheet accounts. Also covers investment, dissolution, and distribution of income.

Prerequisite: Successful completion of ACCT& 201 or instructor's approval.

### **ACCT& 203 - Principles of Accounting III (5)**

Introduces the theory of cost accounting and an analysis of accounting data as a part of the managerial process of planning, decision-making, and control. Emphasizes job order, process, standard-cost accounting data, and the preparation and use of budgets and internal control reports necessary for making economic decisions for manufacturing businesses.

Prerequisite: Successful completion of ACCT& 201 or instructor's approval.

## **AMT - Aviation Maintenance Technician**

### **AMT 104 - Basic Mathematics, Basic Physics, and Weight & Balance (5)**

Perform all of the mathematical computations required in the Aviation Maintenance Technician curriculum. Understand the scientific principles that apply to the operation of aircraft, engines, and the equipment that aviation maintenance technicians are in daily contact with. Develop a comprehensive understanding of the importance of weight and balance to aircraft safety, and make all of the required calculations for weight and balance checks, equipment changes, extreme loading checks, and the addition of ballast.

#### **AMT 109 - Basic Electricity (4)**

Covers direct-current circuits, series, and parallel-circuit arrangements and their application. Includes the relationship between voltage, current, resistance, and power. Students will calculate and measure these values and understand the operation of the multimeter and its use in troubleshooting.

#### **AMT 116 - Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings (5)**

Sketch aircraft repairs and alterations and understand information presented on typical aircraft blueprints, graphs, and charts. Recognize types of corrosion and know their causes, identify and use the proper materials and processes to remove corrosion byproducts, treat corroded areas, and apply proper protection. Gain a thorough understanding of the importance of safe ground handling procedures, aircraft movement, and storage, and identify aviation fuels. Identify fluid line components, fabricate rigid and flexible fluid lines, and properly install fluid lines on aircraft.

#### **AMT 119 - Materials & Processes (5)**

Learn about identification and selection of non-destructive testing methods, dye- penetrant, eddy current, ultra-sound, and magnetic particle inspections, as well as basic heat-treated processes, aircraft hardware, and materials. Inspect and check welds. Perform precision measurements.

#### **AMT 125 - Advanced Electricity (4)**

Understand the effect of resistance, capacitance, and inductance in AC circuits, and understand transformers. Learn about basic semi-conductor devices (diodes and transistors), and be able to explain their function in simple circuits.

#### **AMT 127 - Maintenance Forms & Records, Publications, and Mechanics Privileges & Limitations (4)**

Use maintenance records and entries, maintenance forms, and inspection reports. Requires reading, comprehension, and application of information from the FAA and manufacturer's maintenance specifications, data sheets, manuals, publications, related FAA regulations, airworthiness directives, and advisory material. Apply mechanic privileges within the limitations prescribed by FAR Part 65.

#### **AMT 132 - Wood Structures, Aircraft Coverings, & Finishes (4)**

Covers wood aircraft construction, repair, and inspection. Students will select, apply, inspect, test, and repair aircraft fabric and fiberglass covering materials. Become familiar with types of aircraft protective coatings, trim applications, markings, finish problems, and the inspection of finishes.

#### **AMT 133 - Aircraft Fuel Systems, Ice & Rain Control Systems, & Fire Protection Systems (4)**

Covers principles of operation and configuration of warning systems, electrical brake controls, anti-skid systems, and landing gear position indicating and warning systems. Learn the effects of ice and rain on aircraft during operations in inclement weather, the equipment and materials used to counter ice and rain, and the maintenance of this equipment. Explore components and operation of fire detection and extinguishing equipment, as well as smoke and toxic gas detection systems.

#### **AMT 135 - Sheet Metal Structures (4)**

Inspection and repair of all types of sheet metal. Information regarding the fabrication, construction, and repair of sheet-metal aircraft structures.

#### **AMT 136 - Welding, Position & Warning Systems (3)**

Principles regarding the fabrication, construction, and repair of welded aircraft structures. Principles of operation of speed and configuration warning systems, electrical brake controls, anti-skid systems, and landing-gear position indicating and warning systems.

#### **AMT 137 - Non-Metallic Structures (4)**

Covers inspection and repair of all types of non-metallic and composite structures, including transparent plastic enclosures and interiors.

#### **AMT 138 - Aircraft Inspections (4)**

Lecture, demonstration, and practical application are used to train students in the methods and techniques of all phases of aircraft inspections, federal aviation regulations, maintenance record entries, and disposition of those records.

#### **AMT 139 - Assembly & Rigging (4)**

Covers basic information regarding the assembly of aircraft, components, rigging of all flight control surfaces, balancing and inspection of flight controls, alignment of aircraft structures, and jacking of aircraft.

**AMT 140 - Aircraft Landing Gear (3)**

Inspect, check, service, and repair landing gear retraction systems, shock struts, brakes, wheels, tires, and steering systems.

**AMT 141 - Hydraulic & Pneumatic Power Systems (3)**

Inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems and components. Identify and select hydraulic fluids.

**AMT 142 - Hangar Operations & Maintenance (3)**

Perform maintenance on items of shop equipment used in the day-to-day operation of the aircraft maintenance hangar, calibrate precision tools as needed, and assist in repair station operations. Note: Offered winter quarter. Not FAA approved.

**AMT 143 - Airframe Electrical Systems (5)**

Learn about operation of AC and DC electrical systems used on large and small aircraft, generating and starting systems, AC and DC electric motors, wiring, controls, switches, indicators, and protective devices, and constant speed and integrated drive generators.

**AMT 144 - Engine Electrical Systems (5)**

Develop an understanding of the operation of generators, alternators, DC motors, and AC motors, and their repair and overhaul. Learn the special requirements of electrical components operating in high-temperature areas and how to install wiring, controls, switches, and indicators, and to protect them from the effects of high temperatures.

**AMT 145 - Cabin Atmosphere Control Systems (3)**

Physiological aspects of flight. Inspection and maintenance of oxygen, pressurization, heating, cooling and air-conditioning systems.

**AMT 146 - Aircraft Instrument, Communication & Navigation Systems (3)**

Learn principles of operation of common aircraft instruments, air- or vacuum-driven gyros, pilot-static systems, and static system leak tests. Gain operating principles of common avionics equipment, antennas, autopilots, servos, approach coupling systems, interphones, static discharge devices, and ground proximity warning systems. Inspect and repair antennas and electronic equipment.

**AMT 208 - Helicopter Operations & Maintenance Practices (4)**

Covers history, operations, regulations, publications, records, special-use equipment, and basic maintenance fundamentals as they relate to rotorcraft.

**AMT 210 - Basic Rotor Systems Maintenance & Repair (4)**

Covers history of rotorcraft and principles of flight, types, and function of rotor systems, overhaul of rotor hub assemblies, installation and static balancing of rotors, types and function of anti-torque control systems, and inspection of rotor blades using manufacturer's data.

**AMT 212 - Advanced Rotor Systems Maintenance & Repair (4)**

Covers vibration analysis, installation and dynamic balancing of rotor systems, tracking of helicopter rotor blades, principles of helicopter autorotation, and adjustment of autorotation RPM for power-off operations.

**AMT 215 - Helicopter Systems (4)**

Covers helicopter power plants and controls; fuel systems, turbine fuels, and fuel system components; oil systems and types of oils; mechanical drives, clutches, drive shafts, freewheeling units, and transmissions; flight controls, hydraulic, and instrument systems; rotor RPM, engine-out, and master caution and warning systems; electrical systems, NiCad batteries, and starter generators; fuselage structures; and landing gear.

**AMT 217 - FAA Testing & Turbine Engines (7)**

Covers preparation for and completion of FAA certification examinations. FAA written examinations are accomplished outside of CPTC at an FAA Designated Written Examination Center. After successful completion of written examinations, students must pass an oral and practical examination administered by an FAA Designated Maintenance Examiner. Students are charged a fee for these examinations. Note: Fees for these examinations are not included in the college tuition or lab fees. The remaining 120 hours of training concentrate on turbine engines, including their history, different types, the theory of operation of turbine engines, the Brayton cycle, Bernoulli's theory, and turbine engine air-flow characteristics. Learn the theory of operation of different types of compressors, combustion chambers, turbines and turbine stator vanes (nozzles). Learn the exhaust sections maintenance of turbine engines, including turbine engine removal, overhaul, inspection, and repair procedures. Learn to install turbine engines; make adjustments;

troubleshoot, test, and check run procedures; and become familiar with regulations, publications, and records for turbine engines.

#### **AMT 219 - Engine Lubrication Systems (4)**

Covers the components and the operation of engine lubrication systems. Introduction to the requirements and characteristics of engine lubricants and lubrication systems.

#### **AMT 221 - Engine Instrument Systems (4)**

Covers the theory and principles of operation of electrical and mechanical fluid rate-of-flow indicating systems. Covers electrical and mechanical temperature, pressure, and RPM-indicating systems.

#### **AMT 224 - Powerplant Reciprocating Engine Theory (6)**

Covers the history of aircraft engines, principles of energy transformation, theory of operation, engine requirements and configuration, and overhaul of horizontally- opposed engines.

#### **AMT 225 - Powerplant Maintenance & Operation (6)**

Powerplant maintenance and operation consists of theory of operation; engine requirements, configuration and installation; and troubleshooting and removal of horizontally-opposed engines.

#### **AMT 226 - Engine Fuel System & Fire Protection (1)**

Fuel systems and fire protection consists of transformation of energy, chemistry of combustion, and thermal efficiency of fuel-air mixtures. Fire protection covers the components and the operation of fire- detection and extinguishing equipment.

#### **AMT 228 - Engine Fuel Metering Systems (5)**

Fuel metering consists of the principles of fuel metering for float carbs, pressure carb, fuel injection, anti-detonation injection, turbine fuel controls, and electronic engine-fuel controls.

#### **AMT 229CAP - Propellers & FAA Final Testing (4)**

Consists of the theory of operation and nomenclature; propeller controls and instrumentation; fixed pitch, controllable pitch, constant speed, and feathering propellers; governors, anti-ice, phasing, and synchronization systems; and inspection, maintenance, and repairs to propellers and related systems, including familiarization with unducted fan engines. At the end of the course, six hours are devoted to preparation for FAA

certification examinations. FAA written examinations are taken at an FAA Designated Written Examination Center. After successful completion of written examinations, students must pass an oral and practical examination administered by an FAA Designated Mechanics Examiner. Students are charged a fee for these examinations administered by FAA designated examiners and centers. Fees for these examinations are not included in the college tuition or lab fees systems.

#### **AMT 231 - Engine Inspection (4)**

Engine inspection consists of detailed work with FAA regulations, types of inspections, conformance to type certificate data sheets and major alterations, airworthiness directives, and maintenance record entries.

#### **AMT 233 - Engine Ignition & Starting Systems (4)**

Covers the operation, maintenance, and overhaul of magnetos and ignition; harnesses; the inspection, servicing, troubleshooting, and repair of reciprocating and turbine engine ignition system; and components and turbine engine electrical and pneumatic starting systems.

#### **AMT 235 - Induction, Airflow, Cooling & Exhaust Systems (3)**

Learn about the maintenance of carburetors and fuel-injected, naturally aspirated, turbo-charged, and super-charged induction systems. Learn about maintenance of ice and rain control systems, as well as principles of air-cooled engines and problems that can occur with an air-cooled engine. Study the history, development, and function of exhaust systems. Students will describe, inspect, maintain, troubleshoot, and repair components of exhaust systems. Learn operation principles of turbine-engine reversing systems and power recovery turbines.

#### **AMT 239 - Advanced Hangar Operations & Maintenance (3)**

Advanced hangar operations and maintenance is designed for students currently enrolled in the helicopter and powerplant classes. It includes servicing and repair of shop equipment, calibration of precision tools, and assisting in the repair station operations.

## **ARC - Architectural Engineering Design**

#### **ARC 120 - Residential Drafting & Design I (4)**

Overview of the design industry, construction procedures, codes, guidelines and standards, elements and principles of design, spatial concepts, and energy efficiency in design.



Prerequisite: Successful completion of ENG 091 and MAT 092, or instructor's approval.

#### **ARC 124 - Residential Drafting & Design II (5)**

Overview of site factors and legal regulations affecting design, site plans, residential floor plans, symbols and systems, electrical plans, plumbing plans, HVAC plans, and roof plans.

Prerequisite: Successful completion of ARC 120, ARC 171, and ARC 183, or instructor's approval. .

#### **ARC 126 - Residential Drafting & Design III (5)**

Overview of specialized Construction Documents: Exterior Elevations; Cabinet and Interior Elevations; foundation systems and plans; and framing methods and plans. Students will create drawings using industry standard CAD software.

Prerequisite: Successful completion of ARC 124 or instructor's approval.

#### **ARC 146 - Detailing and Light Construction (4)**

Students will be introduced to concepts and common terminology used in light wood- framed construction. Students will produce standard details of structural design for residential applications using CAD software.

Prerequisite: Successful completion of ARC 124 or instructor's approval.

#### **ARC 150 - Construction Materials Research (4)**

Students will investigate and research: materials, methods, and trends in construction; the Construction Specification Institute's (CSI) MasterFormat, SectionFormat, and PageFormat systems; and methods of specifying.

Prerequisite: Successful completion of ARC 120, ARC 171, and ARC 183, or instructor's approval. .

#### **ARC 171 - Drafting Technologies I (5)**

Overview of basic manual drafting skills; architectural lines, text and layers; isometric drawings; orthographic and Multiview projections; and roof plan layout and components.

Prerequisite: Successful completion of ENG 091 and MAT 092, or instructor's approval.

#### **ARC 175 - Civil Engineering (4)**

An introduction to civil engineering software. Students will learn to create, edit and modify civil CAD design

objects, add annotation, obtain information, and import other software data into Civil CAD applications.

Prerequisite: Successful completion of ARC 120 and ARC 183, or instructor's approval. .

#### **ARC 183CL - Introduction to CAD Drafting (4)**

An introduction to CAD software. You will learn to utilize the fundamentals of CAD software to produce basic architectural drawings.

Prerequisite: Successful completion of ENG 091 and MAT 092, or instructor's approval. .

#### **ARC 192 - Engineering Mechanics of Materials (4)**

Students will apply basic engineering used in the building design field: forces, force systems, loading, and reactions; material stress and strain; selection of wood columns and wood connection materials; steel structural materials; and reinforced concrete materials.

Prerequisite: Successful completion of ARC 126 and MAT 094 or higher, or instructor's approval.

#### **ARC 219 - Residential Drafting & Design IV (4)**

Overview of design criteria for structural loading; section and detail drawings; stair and fireplace construction; commercial building codes; and materials for commercial construction. Students will create drawings using industry standard CAD software.

Prerequisite: Successful completion of ARC 126, or instructor's approval. .

#### **ARC 223 - Design Project I (5)**

Project management and design of a single-story house compliant with current state building and energy codes, all based on the needs of a hypothetical client.

Prerequisite: Successful completion of ARC 183, ARC 219, and ARC 262, or instructor's approval.

#### **ARC 225CAP - Design Project II (5)**

Students will manage and design an intermediate architectural drafting project. Address regulatory codes, hypothetical client needs, establish schedules, and give effective progress reports. Students will use interactive collaboration within 3D Architectural CAD software and produce a complete set of computer-drafted construction drawings.

Prerequisite: Successful completion of ARC 223 and ARC 286, or instructor's approval.

### **ARC 227 - Special Intern Project (5)**

Completion of a 150-hour job site internship as approved by the instructor and under employer supervision as stated in the PC3 Work-Based Learning Experience Plan and Agreement.

Prerequisite: Instructor's permission required.

### **ARC 229 - Special Design Project (5)**

Complete a design project of student's choosing, as approved by the instructor to aid in realistic training.

Prerequisite: Successful completion of ARC 262 and ARC 286, or instructor's approval.

### **ARC 231 - Cost Estimating (3)**

Use industry software to estimate the cost of a single-story residential project as assigned by your instructor.

Prerequisite: Successful completion of ARC 223 or instructor's approval.

### **ARC 255 - Employment Research (1)**

Basic job-seeking skill activities, including résumé preparation, employer contacts, presentation activities, and employment opportunities.

Prerequisite: ENG 091.

### **ARC 262 - Intro to 3D Modeling (3)**

A hands-on introduction to 3D modeling. This course walks you through the basics of 3D software (i.e. SketchUp). Develop a preliminary design model using massing. Learn about strategies and techniques to develop speed and efficiency in modeling and presentations.

Prerequisite: Successful completion of ARC 183 or instructor's approval.

### **ARC 282 - Intro to Building Information Modeling (5)**

Use current industry standard architectural 3D software application to produce three-dimensional building models and production drawings. Explores integration of building systems in a three-dimensional virtual environment.

Prerequisite: Successful completion of ARC 262 or instructor's approval.

### **ARC 286 - Advanced Building Information Modeling (5)**

Using current industry standard architectural 3D software students will create software families. Manage both two-

dimensional and three-dimensional information within the program family through use of parameters.

Prerequisite: Successful completion of ARC 282 or instructor's approval.

### **ARC 288CL - Applied CADD (5)**

Use current industry standard 3D software applications (i.e. - Revit, SketchUp, Civil3D) to create, or modify a design. Produce production drawings. Save, print or transmit drawings to industry-standard applications.

Prerequisite: Successful completion of ARC 223, ARC 262, and ARC 282, or instructor's approval.

### **ARC 293 - Engineering Statics (5)**

Students will apply basic engineering used in the building design field: equilibrium, loads and reactive forces, shear and bending in structures, and wood spanning elements.

Prerequisite: Successful completion of ARC 192 and MAT 099 or MAT 103 or higher, or instructor's approval.

## **ARCF - Automotive Restoration & Customization - Finishing**

### **ARCF 103 - Fundamentals & Shop Equipment (3)**

Covers shop safety, fundamentals of tool use, and proper use of shop equipment.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 109 - Welding & Metal Skills (4)**

Covers welding, heating, and cutting techniques using MIG and oxyacetylene equipment. Students will learn safe handling and correct metal-forming techniques of sheet metal.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 114 - Basic Repairs & Assembly (8)**

Covers basic repair and assembly procedures for bolt-on body components.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 119 - Custom Fabrication (6)**

Explores basic customizing techniques used on original factory parts, as well as fabrication of custom parts.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 124 - Refinishing Equipment (4)**

Explores refinishing equipment use and maintenance.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 129 - Refinish Preparation (7)**

Explores corrosion protection and vehicle refinish preparation.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 130 - Advanced Paint Application (4-6)**

Covers application of advanced masking, topcoat shading, and graphics on a restoration or custom project.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 133 - Fiberglass/Composites Techniques (4-6)**

Further develop skills in customizing techniques used on original factory parts, as well as fabrication of custom parts.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 134 - Custom Refinishing (6)**

Covers topcoat, clear coat, and custom refinishing.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 141 - Surface Imperfections/Show & Shine (4)**

Covers paint-application problem-solving and show detailing.

Prerequisite: Students must have successfully completed

the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 154 - Automotive Restoration & Customization Finishing Lab (4-9)**

Finish projects and competencies in restoration and/or customizing. Nine credits in summer quarter; variable credit other three quarters.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 159 - Metal Straightening & Shaping (4-6)**

Metal straightening and shaping techniques on a custom or restoration project.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 167 - Custom Paint Application (3)**

Covers application of custom masking, topcoat shading and graphics.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 168 - Applied Metal Skills (3)**

Covers application of previously acquired metal skills as they relate to students' project work.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ARCF 170 - Custom Refinishing Special Projects (4-6)**

Develop skills in advanced custom and/or restoration techniques. Students will have the opportunity to apply knowledge to projects of personal interest, as assigned, and/or job shadowing.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

**ART - Art****ART& 100 - Art Appreciation (5)**

Introduction to the diversity of the art world from ancient civilizations to contemporary society. A discussion of art

terminology and methods will be covered in an overview of art materials and techniques.

Prerequisite: Appropriate Accuplacer (283 in reading) score or equivalent, or successful completion of ENG 094.

## ASL - American Sign Language

### ASL& 121 - American Sign Language I (5)

Informs students about deafness, deaf culture, the deaf community, and American Sign Language. Learn to communicate both expressively and receptively in American Sign Language in basic conversation situations.

Prerequisite: Successful completion of ENG 094 or equivalent.

### ASL& 122 - American Sign Language II (5)

An expansion of ASL& 121, working toward mastery of American Sign Language. Course focuses on deeper insights into vocabulary, grammar, receptive/expressive skills, and history with increased knowledge of deaf communities and culture.

Prerequisite: Successful completion of ASL 121 or appropriate prior ASL experience.

## AUT - Automotive Technician

### AUT 147 - Automotive Brakes (6)

Theory and troubleshooting of hydraulic systems, disc brake systems, drum brake systems, power booster systems and antilock brake systems.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 149 and AUT 157.

### AUT 149 - Automotive Suspension, Steering, & Wheel Alignment (7)

Theory and troubleshooting of front suspension systems, steering systems, rear suspension systems, and computer-controlled systems. This course will also cover basic wheel alignment, including two- and four-wheel alignment.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 147 and AUT 157.

### AUT 157 - Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab (6)

Repair automotive brakes, steering, and suspension systems by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Instructor's permission required.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 147 and AUT 149.

### AUT 174 - Engine Minor Mechanical Repair (6)

Diagnose and repair general engine mechanical, lubrication, and cooling system problems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, and minor engine mechanical service and repair procedures.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 175 and AUT 178.

### AUT 175 - Engine Major Mechanical Repair (7)

Diagnose and repair engine blocks, heads, and valve trains. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, and removal and installation procedures to successfully diagnose and repair automobiles and light truck engines.

Prerequisite: Must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 174 and AUT 178.

### AUT 178 - Engine Mechanical Lab (3)

Repair engine components by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance and repair of automobile and light truck engines.

Prerequisite: Must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 174 and AUT 175.

### AUT 209 - Electronic Systems (7)

Diagnose and repair automotive electronic systems and study basic application of computerized electronic control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, removal, and installation procedures used on automobiles

and light trucks.

Prerequisite: Must have required tools and textbooks.  
Instructor's permission required. Corequisite: AUT 212.

### **AUT 212 - Electrical Systems (9)**

Diagnose and repair automotive electrical systems and study basic application of computerized electronic control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, removal, and installation procedures used on automobiles and light trucks.

Prerequisite: Must have required tools and textbooks.  
Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 209.

### **AUT 217 - Automotive Ignition Systems (7)**

Diagnose and repair electronic and computer-controlled automotive ignition systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite: Must have required tools and textbooks.  
Successful completion of AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212. Instructor's permission required. Corequisite: AUT 223 and AUT 236.

### **AUT 223 - Automotive Fuel Systems (7)**

Diagnose and repair fuel management systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite: Must successfully complete courses AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212, and must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 217 and AUT 236.

### **AUT 236 - Automotive Emissions Systems (7)**

Diagnose and repair emissions control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite: Must successfully complete courses AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212, and must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 217 and AUT 223.

### **AUT 239 - Automotive Clutches & Manual Transmissions (9)**

Provides students with the knowledge and skills to competently repair automotive clutches and manual transmissions/ transaxles. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck clutches and manual transmissions/transaxles.

Prerequisite: Must have required tools and textbooks.  
Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### **AUT 243 - Automotive Axles, Drivelines, Differentials & Transfer Cases (6)**

Provides students with the knowledge and skills to competently repair automotive axles, drivelines, differentials, and transfer cases. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck axles, drivelines, differentials, and transfer cases.

Prerequisite: Must successfully complete AUT 239 and have required tools and textbooks. Instructor's permission required.

### **AUT 246 - Manual Drive Trains & Axles Lab (4)**

This course is designed to teach students to competently repair drive-train components by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance, and repair of automobile/light truck manual drive trains.

Prerequisite: Must successfully complete courses AUT 239 and AUT 243, and must have required tools and textbooks. Instructor's permission required.

### **AUT 247 - Automatic Transmissions (7)**

This course provides students with the knowledge and skills to competently repair automatic transmissions. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck automatic transmissions.

Prerequisite: Must have required tools and textbooks.  
Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### **AUT 250 - Automatic Transaxles (7)**

This course provides students with the knowledge and skills to competently repair automatic transaxles. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile transaxles.

Prerequisite: Must successfully complete AUT 247 and have required tools and textbooks. Instructor's permission required.

### **AUT 251CAP - Automatic Transmission/Transaxle Lab (4)**

This course is designed to teach students to competently repair automatic transmission/ transaxle assemblies by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance, and repair of automobile/light truck drive trains by applying academic knowledge to hands-on projects.

Prerequisite: Must successfully complete courses AUT 247 and 250, and must have required tools and textbooks prior to entering this course. Instructor's permission required.

### **AUT 255 - Automotive Air Conditioning, Heating & Ventilation (6)**

Theory, troubleshooting, and repair of automotive air-conditioning systems, heating systems, and ventilation systems. Also covers recovery and recycling of both R-12 and R134A refrigerants.

Prerequisite: Must successfully complete AUT 209 and AUT 212 and have required tools and textbooks. Instructor's permission required.

### **AUT 270 - Introduction to Hybrid Safety (4)**

This course is an introduction to the safety precautions required when working on hybrid and electric vehicles. Students will learn about the basics of hybrid electrical systems, personal protective equipment (PPE), and how to power down the most common hybrid vehicles. Offered only during winter quarter.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### **AUT 295 - On-the-Job Training/Work-Based Learning (1-2)**

Provides advanced students with realistic training at a

work site. Dates and times will be determined.

Prerequisite: Instructor's permission required.

## **AUTH - Automotive Technician**

### **AUTH 105 - Hybrid/Alternate Fuel Introduction & Safety (2)**

Covers the history, evolution, and general safety precautions for servicing.

Prerequisite: Students must have completed an ASE/NATEF certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 110 - Alternate Fuel Vehicle Systems (2)**

Covers diesel, E85, CNG, and hydrogen systems in use today.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 115 - Toyota Hybrid System Overview (2)**

Covers the Toyota systems in use today, with a focus on the Prius model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 120 - Toyota Prius Hybrid System (2)**

Covers the Toyota systems in use today, with a focus on the Prius model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 125 - Honda Hybrid System Overview (2)**

Covers the Honda hybrid systems in use today, with a focus on the Civic model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

**AUTH 130 - Honda Civic IMA Hybrid System (2)**

Covers the Honda Civic Integrated Motor Assist systems in use today.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

**AUTH 135 - Ford Escape/Mercury Mariner Hybrid System Overview (2)**

Covers the Ford Escape/Mercury Mariner Hybrid systems in use today, with a focus on the Escape model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

**AUTH 140 - General Motors & Other Hybrid Systems Overview (2)**

Covers General Motors and other systems in use today, with a focus on the GM Dual Mode model system.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

**AUTH 145 - Advanced Lab & Final Exam Preparation (2)**

Gives students a hands-on opportunity for preparation for the final exam.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

**AVIO-Avionics Technician****AVIO 105 - Basic Electricity (6)**

This course will introduce basic electronics theory along with understanding of both direct and alternating current. The fundamentals of Ohms and Kirchhoff's laws will be used to understand circuit measurements and calculations along with using measurement instruments for circuit component values. Prerequisite: Instructor permission or FAA Airframe or Powerplant Certificate.

**AVIO 107 - Circuit Theory (6)**

This course introduces basic circuit theory and describes how direct and alternating current operate within series, parallel and series-parallel circuits. Formulas, measurement techniques, and calculations will be used to create a greater understanding of given circuit dynamics.

**AVIO 110 - Electrical components (6)**

This course will introduce important discreet circuit components and diagnostic techniques. The items in this course are fundamental to many circuits. Examples of the components covered in this course are: resistors, Inductors, capacitors, transformers and switches.

**AVIO 115 - Hazards and Safety (3)**

Fundamentals of on-equipment safety practices, hazardous material handling and identification. General first aid, CPR, and treatment for electrical shock injuries are introduced and discussed during this course.

Prerequisite: Instructor permission or FAA Airframe or Powerplant Certificate.

**AVIO 120 - RF Circuits (8)**

This course will give the student the knowledge necessary to recognize and identify frequency dependent circuits such as: filter supply circuits, frequency sensitive filtering circuits, and wave generating circuits. This course will also give the student the ability to accurately describe and compare power supply circuits/components.

**AVIO 125 - Digital Logic (5)**

This course will explore digital logic gates, functions, and symbols. Students will analyze, define, and interpret digital logic circuits and compare hexadecimal, octal, and binary digital numbering systems.

**AVIO 130 - Aircraft Maintenance Practices (5)**

This course introduces common maintenance practices and fundamentals of on-equipment maintenance. Students will practice interpretation of schematic, pictorial, wiring, and block diagrams. Students will also use common tooling including screwdrivers, soldering irons, wire strippers, crimping tools, etc.

**AVIO 135 - Aircraft Handling and Testing (2)**

Fundamental knowledge and practices involved in aircraft structures, terminology, aerodynamic forces, flight control surfaces, and ground handling procedures and safety. Use

of circuit measuring equipment including multi-meters, oscilloscopes and milli-ohmmeters.

## AVP - Professional Pilot

### AVP 105 - Private Pilot I (4)

Training in basic aircraft control, aircraft systems, airport procedures, and traffic pattern operations.

AVP 105 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,220.00	\$500
Solo	0	\$0	
Pre/Post	10	\$120	
<b>Total</b>		<b>\$1,340</b>	<b>\$500</b>

**Combined Total: \$1,840**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: FAA Class II Medical with Student Pilot Certificate prior to the first day of class. Instructor's permission only.

### AVP 110 - Private Pilot II (4)

Covers aircraft control, establishing and maintaining specific flight attitudes, and ground reference maneuvers.

AVP 110 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,220.00	\$500
Solo	.5	\$61	
Pre/Post	10.5	\$126	
<b>Total</b>		<b>\$1,407</b>	<b>\$500</b>

**Combined Total: \$1,907**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 105 or equivalent. Instructor's permission only.

### AVP 115 - Private Pilot III (4)

Basic performance maneuvers, traffic pattern procedures,

and takeoffs and landings. Upon successful completion, students will solo the aircraft.

AVP 115 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	7.5	\$915	\$375
Solo	2	\$244	
Pre/Post	9.5	\$114	
<b>Total</b>		<b>\$1,273</b>	<b>\$375</b>

**Combined Total: \$1,648**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 110 or equivalent. Instructor's permission only.

### AVP 118 - Private Pilot Practical Test Standards I (4)

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Solo endorsement and completion of a solo flight. Instructor's permission only.

### AVP 125 - Private Pilot IV (4)

Introduces knowledge, skills and aeronautical experience necessary to successfully complete the navigation and cross-country flight portion of flight training.

AVP 125 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	5.5	\$671	\$275
Solo	4.5	\$549	
Pre/Post	10	\$120	
<b>Total</b>		<b>\$1,340</b>	<b>\$275</b>

**Combined Total: \$1,615**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Grade of C" or better in AVP 115 or equivalent. Pre-solo written exam must be completed with a passing grade. Instructor's permission only."

### AVP 130 - Private Pilot V (4)

Provides the knowledge, skill, and aeronautical experience necessary to read and understand disseminated weather



reports and forecasts. Meets the requirements for crosscountry navigation and basic instrument flight. AVP 130 Flight Training Flight Hours Aircraft\* Dual Non-Complex

**Training Flight Hours**

Non-Complex Aircraft	4	\$488.00	Dual	\$200.00
Solo	6	\$732.00		
Pre/Post	10	\$120.00		
<b>Total</b>		<b>\$1,340.00</b>		<b>\$200.00</b>

**Combined Total \$1,540.00**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 125 or equivalent. Pre-solo written exam must be completed with a passing grade. Instructor's permission only.

**AVP 135CAP - Private Pilot VI (4)**

Gain the proficiency to meet the requirements necessary for FAA Private Pilot Certification with an Airplane Category and Single-Engine Class Rating.

AVP 135Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,220	\$500
Solo	0	\$0	
Pre/Post	10	\$120	
<b>Total</b>		<b>\$1,340</b>	<b>\$500</b>

**Combined Total: \$1,840**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 130 or equivalent. Pre-solo written exam must be completed with a passing grade. Instructor's permission only.

**AVP 138 - Private Pilot Practical Test Standards II (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Solo endorsement and completion of a solo flight. Instructor's permission only.

**AVP 140 - Instrument Pilot I (4)**

Introduces skills that will establish a strong foundation in

basic attitude instrument flying and basic instrument navigation.

AVP 140Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,220	\$500
Pre/Post	10	\$120	
<b>Total</b>		<b>\$1,340</b>	<b>\$500</b>

**Combined Total: \$1,840**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: FAA Private Pilot Certificate. Instructor's permission only.

**AVP 145 - Instrument Pilot II (4)**

Perform precision attitude instrument flight, including advanced navigation techniques and procedures.

AVP 145Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	9	\$1,098	\$450
Pre/Post	9	\$108	
<b>Total</b>		<b>\$1,206</b>	<b>\$450</b>

**Combined Total: \$1,706**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 140 or equivalent. Instructor's permission only.

**AVP 150 - Instrument Pilot III (4)**

Apply advanced navigation techniques and perform holding pattern entry procedures.

AVP 150Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	11	\$1,342	\$550
Pre/Post	11	\$132	
<b>Total</b>		<b>\$1,474</b>	<b>\$550</b>

**Combined Total: \$2,024**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 145 or equivalent. Instructor's permission only.

**AVP 152 - Instrument Pilot Practical Standards III (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only.

**AVP 155 - Instrument Pilot IV (4)**

Perform holding patterns and instrument approach procedures.

AVP 155Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,220	\$500
Pre/Post	10	\$120	
<b>Total</b>		<b>\$1,340</b>	<b>\$500</b>

**Combined Total: \$1,840**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Grade of C" or better in AVP 150 or equivalent. Instructor's permission only."

**AVP 160 - Instrument Pilot V (4)**

Perform cross-country flight using advanced navigation procedures. Use ATC communication procedures and conduct instrument departures, arrivals, and approaches.

AVP 160Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	8	\$976	\$400
Pre/Post	8	\$96	
<b>Total</b>		<b>\$1,072</b>	<b>\$400</b>

**Combined Total: \$1,472**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 155 or equivalent. Instructor's permission only.

**AVP 170CAP - Instrument Pilot VI (4)**

Acquire the flight and aeronautical knowledge proficiency

required for the issuance of the FAA Instrument-Airplane Rating.

AVP 170CAPFlight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	12	\$1,460	\$600
Pre/Post	12	\$144	
<b>Total</b>		<b>\$1,604</b>	<b>\$600</b>

**Combined Total: \$2,204**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 160 or equivalent. Instructor's permission only.

**AVP 172 - Instrument Pilot Practical Standards IV (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only.

**AVP 175 - Commercial Pilot I (4)**

Acquire initial VFR cross-country flight training. Pilotage, dead-reckoning, and radio navigation will be covered.

AVP 175Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	8	\$976	\$400
Solo	3	\$366	
Pre/Post	11	\$132	
<b>Total</b>		<b>\$1,474</b>	<b>\$400</b>

**Combined Total: \$1,874**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: FAA Private Pilot Certificate, Instrument-Airplane Rating. Instructor's permission only.

**AVP 180 - Commercial Pilot II (4)**

Receive additional VFR cross-country flight training. Additional flight training will encompass mountain flying techniques and local night flight operations.

AVP 180Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	10.5	\$1,281	
Pre/Post	10.5	\$126	
Total		\$1,407	\$0

**Combined Total: \$1,407**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 175 or equivalent. Instructor's permission only.

**AVP 185 - Commercial Pilot III (4)**

Receive final training in VFR cross-country flight and night operations. The cross-country flight hours required for Commercial Pilot Certification will be completed.

AVP 185Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	8.5	\$1,037	
Pre/Post	8.5	\$102	
Total		\$1,139	\$0

**Combined Total: \$1,139**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 180 or equivalent. Instructor's permission only.

**AVP 190 - Airline Multi-Engine CRM (Crew Resource Management) I (3)**

Update your knowledge and skills in multi-engine and advanced avionics operations, systems, performance, instrument, and airline crew operations. Operate a multi-engine aircraft as a crew and log no less than 10 hours of multi-engine Pilot in Command time.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA Commercial multi-engine Certificate. Second-class FAA medical certificate required prior to the first day of

class. Please contact instructor for details. Must have instructor's permission.

**AVP 195 - Airline Multi-Engine CRM (Crew Resource Management) II (3)**

Update your knowledge and skills in multi-engine and advanced avionics operations, systems, performance, instrument, and airline crew operations. Operate a multi-engine aircraft as a crew and log no less than 20 hours of multi-engine Pilot in Command time.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA Commercial multi-engine Certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. Must have instructor's permission.

**AVP 210 - Commercial Pilot IV (4)**

Receive initial flight and ground training in high-performance Commercial Pilot Certification maneuvers. Flight maneuver training includes chandelles, lazy eights, steep power turns, and accuracy landings.

AVP 210Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	11	\$1,342	
Pre/Post	11	\$132	
Total		\$1,474	\$0

**Combined Total: \$1,474**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Grade of C" or better in AVP 185 or equivalent. Instructor's permission only."

**AVP 215 - Commercial Pilot V (4)**

Gain additional aeronautical knowledge and flying skills necessary for advanced precision flight maneuvers.

AVP 215Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	3	\$366	\$150
Solo	7	\$854	
Pre/Post	10	\$120	
Total		\$1,340	\$150

**Combined Total: \$1,490**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 210 or equivalent. Instructor's permission only.

**AVP 218 - Multi-Engine Instructor Certification MEI (3)**

Obtain and/or update knowledge and skills to meet Federal Aviation Administration multi-engine instructor requirements. Multi-engine operations, systems, performance, instrument, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision making, and instrument flight, will be studied.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA private pilot certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Must have instructor's permission.

**AVP 220 - Commercial Pilot VI (4)**

Receive advanced training in all the required Commercial Pilot Certification maneuvers. Flying proficiency in these maneuvers will meet the requirements set forth in the FAA Practical Test Standards.

AVP 220Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	5	\$610	\$250
Solo	4	\$488	
Pre/Post	9	\$108	
Total		\$1,206	\$250

**Combined Total: \$1,456**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 215 or equivalent.

**AVP 223 - Commercial Pilot Practical Standards V (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only.

**AVP 230 - Commercial Pilot VII (4)**

Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Basic flight maneuvers and aircraft systems will be covered.

AVP 230Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	4.5	\$549	\$225
Solo	5	\$610	
Pre/Post	9.5	\$114	
Total		\$1,273	\$225

**Combined Total: \$1,498**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Grade of C" or better in AVP 220 or equivalent. Instructor's permission only."

**AVP 235 - Commercial Pilot VIII (4)**

Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Advanced flight maneuvers, as well as emergency procedures, will be mastered.

AVP 235Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	6.5	\$793	\$325
Solo	4	\$488	
Pre/Post	10.5	\$126	
Total		\$1,407	\$325

**Combined Total: \$1,732**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 230 or equivalent. Instructor's permission only.

**AVP 240 - Commercial Pilot IX (4)**

Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Increase proficiency in advance flight maneuvers and emergency procedures. Obtain logbook endorsement for the operation of High Performance Airplanes.

AVP 240Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	6	\$488	\$200
Solo	4	\$732	
Pre/Post	10	\$120	
Total		\$1,340	\$200

**Combined Total: \$1,540**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 235 or equivalent. Instructor's permission only.

**AVP 245 - Commercial Pilot X (4)**

Receive initial preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.

Basic performance maneuvers, traffic pattern procedures, and takeoffs and landings. Upon successful completion, students will solo the aircraft.

AVP 245Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	4	\$488	\$200
Solo	6	\$732	
Pre/Post	10	\$120	
Total		\$1,340	\$200

**Combined Total: \$1,540**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Grade of C" or better in AVP 240 or equivalent. Instructor's permission only."

**AVP 250 - Commercial Pilot XI (4)**

Receive additional preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.

AVP 250Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	2	\$244	\$100
Solo	0	\$0	
Dual Complex Aircraft	8	\$1,516	\$400
Pre/Post	10	\$120	
Total		\$1,880	\$500

**Combined Total: \$2,380**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: Successful completion of AVP 245 or equivalent. Instructor's permission only.

**AVP 255CAP - Commercial Pilot XII (4)**

Receive final advanced preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.

AVP 255CAPFlight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	0	\$0	
Dual Complex Aircraft	10	\$1,895	\$500
Pre/Post	10	\$120	
Total		\$2,015	\$500

**Combined Total: \$2,515**

\*Aircraft costs vary with the current fuel market price.

Prerequisite: AVP 250 or equivalent. Instructor's permission only.

**AVP 257 - Commercial Pilot Practical Standards VI (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only.

**AVP 260 - Certified Flight Instructor I (4)**

Receive initial training in teaching and learning theory, as well as overall review of commercial pilot aeronautical knowledge subject areas. Student will be trained to fly the aircraft from the right seat to Commercial Pilot Practical Test Standards.

Prerequisite: FAA Commercial Pilot, Airplane Certificate and Instrument Airplane Rating. Instructor's permission only.

**AVP 265 - Certified Flight Instructor II (4)**

Master proper teaching techniques from the right seat of the training aircraft. Develop proficiency in conducting aeronautical knowledge briefings. Successful completion will result when knowledge and proficiency meet and/or exceed FAA Practical Test Standards.

Prerequisite: Successful completion of AVP 260 or equivalent. Instructor's permission only.

**AVP 268 - Certified Instrument Flight Instructor (4)**

Acquire the aeronautical knowledge, skills, and experience necessary to obtain an FAA Instrument Flight Instructor Rating added to student's Certified Flight Instructor Certificate.

Prerequisite: FAA Commercial Pilot Airplane Certificate with Instrument Airplane Rating Certified Flight

Instructor-Airplane Certificate. Instructor's permission only.

**AVP 271 - Multi-Engine Certification (3)**

Obtain and/or update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements. Multi-engine operations, systems, performance, instrument, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision making, and instrument flight, will be studied.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA private pilot certificate and Instrument rating. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Must have instructor's permission.

**BAKE - Pastry Arts****BAKE 106 - Chocolate I (Confections) (4)**

Explores the different types of chocolate used in making assorted treats, candies, and garnishes. Various methods of tempering, chocolate decorating, fudges, truffles, and other candies will be identified.

**BAKE 110 - Patisserie I (7)**

Provides students with the opportunity to attain fundamental cooking, time management, and production competencies in the program-run bistro. These include: making scones, muffins, and cookies; demonstrating how to read, write, and follow a standard recipe; and understanding the basic principles of various cooking methods. Students will uphold a high level of professionalism.

**BAKE 113 - Cakes I (Fillings and Icings) (4)**

Introduces students to mixing methods, their ingredients, and their function in cake baking. Correct scaling, portioning, baking, and determining doneness of assorted cakes. Fillings and icings will be introduced in the presentation of basic cakes.

**BAKE 114 - Dessert Alternatives (Sugar Free, Gluten Free) (3)**

Covers how to make sugar-free, vegan, and gluten-free desserts. Students will explore how to develop and use special ingredients, techniques, and methods when making desserts not using standard ingredients, such as eggs, butter, white flour, and milk.

**BAKE 115 - Patisserie II (7)**

Emphasis in this course will be on baking methods and how to properly execute properly baked breads, cakes and specialty desserts. Instruction will focus on understanding proper inventory and quality standards for daily operations. Students will start to develop their leadership skills and help train incoming students. Students will demonstrate the ability to decorate various types of baked goods. Students will be able to demonstrate a working knowledge of the ratio method as it pertains to baking.

**BAKE 117 - Frozen Desserts (3)**

Explores the world of frozen desserts. Students will develop recipes for various frozen desserts, such as gelato, sorbets, parfaits, and ice creams, along with savory desserts with the use of herbs, spices, and vegetables.

**BAKE 119 - Yeast Breads (4)**

Introduces students to the techniques used with starters and yeasts. Students will demonstrate how to cultivate yeast with proper proofing and baking techniques, along with completing a variety of yeast breads.

**BAKE 121 - Patisserie III (7)**

Introduces students to the experience of managing, training, and mentoring fellow classmates. Students help manage given assignments and will rotate through restaurant stations throughout the quarter. Students will be expected to practice a high level of previously learned competencies in knife skills, sanitation, proper handling and storage of product, managing, training, and working under stringent time guidelines. Students are expected to uphold high levels of professionalism.

**BAKE 131 - Pies, Tarts, Custards and Fillings (4)**

Introduces students to a variety of pie crusts and the preparation of assorted fruit fillings. Tarts, custards, and pastry cream will also be explored.

**BAKE 134 - Quick Breads, Cookies, Brownies (3)**

Introduces students to the ingredients and function in preparation of quick breads and cookies. Students will

explore the assorted doughs, shapes, and baking and finishing methods.

**BAKE 140 - Restaurant (Individual) Desserts and Petit Fours (5)**

Introduces students to the challenges of creating individual desserts for restaurants. Students will make individual desserts for the college restaurant and learn the detailed art of the Petit Fours.

**BAKE 153 - Sugar Work (3)**

Introduces students to the stages of sugar work. Students will demonstrate how to make various sugar-based candies and pulled sugar items. The coloring and handling of sugar flowers and ribbons will also be demonstrated.

**BAKE 157 - Wedding Cakes (3)**

Covers elaborate techniques used in the composition, design, and execution of wedding cakes. Explores the use of gum paste, fondant, and modeling chocolate. Students will develop a cake rendering on the spot with a customer.

**BAKE 162 - Retail and Customer Service (7)**

Familiarizes students with all aspects of retail service, cashiering, and retail displays. Included are opening/closing procedures, retail layout and presentation, customer service, leadership, sanitation and safety, proper cash handling, and sales techniques. Instructor's permission required.

**BAKE 210 - Cakes II (3)**

Introduces students to advanced cakes, such as high ratio, chiffon cakes, and torts, along with buttercream icings and fondant. Temperature and environmental factors in cake making will also be covered.

**BIOL - Biology****BIOL& 160 - General Biology w/Lab (5)**

Provides an introduction to cellular biology for students preparing for the health professions. Major concepts include the structure, reproduction, and metabolism of cells; genetics; ecological perspectives; and evolutionary biology.

Prerequisite: Successful completion of ENG 094 or equivalent.

**BIOL& 175 - Human Biology w/Lab (5)**

This course is an in-depth approach to body systems, emphasizing the relationship between structure and

functions. This is a laboratory course appropriate for non-science majors or for students beginning study in life sciences.

Prerequisite: Successful completion of ENG 094 or equivalent.

### **BIOL& 241 - Human A & P I (5)**

Provides students with the first course of the two-quarter study of body structure and related physiology on cellular-through-system levels. Includes an in-depth study of cells, tissues, and integumentary, skeletal, muscular, nervous, and sensory systems. Laboratory component included.

Prerequisite: Successful completion of CHEM 110 or higher and BIOL 160 or BIOL 175. All prerequisite courses must be completed with a grade of 2.0 or better.

### **BIOL& 242 - Human A & P II (5)**

Provides students with the second course of the two-quarter study of body structure and related physiology on cellular-through-system levels. Includes an in-depth study of body organization and cardiovascular and lymphatic physiological processes. Includes immunology, respiratory, digestive, metabolic, excretory, reproductive, and endocrine systems. Laboratory component included.

Prerequisite: Successful completion of BIOL 241 with a grade of 2.0 or better.

### **BIOL& 260 - Microbiology (5)**

Provides students with the content of diversity, structure, and physiology of beneficial and harmful microbes. Laboratory practice in identification of microbial species through culturing, staining, and biochemical testing. Includes laboratory.

Prerequisite: Successful completion of BIOL 160 with a grade of 2.0 or better and CHEM 110 with a grade of 2.0 or better.

## **BUS - Accounting**

### **BUS& 201 - Business Law (5)**

Introduces students to business law as it applies to the business world through the Uniform Commercial Code. Examines legal institutions and processes, legal reasoning, and the interaction of law and business. Laws pertaining to business contracts, sales, bailments, commercial paper, employment, agency, business organization, insurance, and property are reviewed.

Prerequisite: Successful completion of ACTG 115 or

instructor's approval.

### **BUS 310 - Project Management (5)**

Teaches students some of the techniques necessary to develop realistic and comprehensive project plans, identify risk areas, monitor the plans, and deal with problems. The course will also cover management of the procurement process and communication with project stakeholders.

Prerequisite: Successful completion of ENGL& 101.

## **CAH - Core Allied Health**

### **CAH 102 - Medical Terminology I (5)**

Provides students with the basic techniques of medical word building using basic word elements. The class will be organized according to specific body systems and will include key terms and the introduction of anatomical, physiological, and pathological terms.

### **CAH 105CL - Computer Applications (5)**

Introduction course to the use of Microsoft Office and related online programs. Students will become familiar with online tools and learn team-based projects while developing a proficiency in the use of technology.

## **CAS - Computer Applications**

### **CAS 105 - Keyboarding (3)**

Use computers to develop touch control and proper keyboarding techniques; introduction to basic word-processing functions.

### **CAS 115CL - Introduction to Computing (3)**

Explore personal computer concepts from a user's perspective. In this introductory course, learn computer terminology; run programs; save, retrieve, and search for files; use help; and perform computer maintenance. Develop basic skills in word processing, Internet, email, and PowerPoint.

### **CAS 121CL - Word I (3)**

Use beginning word-processing techniques while creating and editing business documents. Create tables, columns, envelopes, and mailing labels. Work with special features to track and review changes and compare documents.

### **CAS 125CL - Word II (3)**

Explore advanced word processing with Microsoft Word. Perform mail merges, create styles, use advanced graphics tools, create basic forms with formulas, and use advanced



report functions, including indexes. Create macros and modify the Word environment.

Prerequisite: Successful completion of CAS 121.

### **CAS 130CL - Excel I (3)**

Create and analyze professionally formatted spreadsheets. Enter data, formulas, and functions. Create charts and insert graphics. Sort and filter lists.

Prerequisite: MAT 092 skills preferred.

### **CAS 135CL - Excel II (3)**

Use advanced spreadsheet features and functions to analyze and project data. Learn how to use what-if analysis tools, such as scenarios and solver. Create macros; validate data; link worksheets/books; use pivot tables; find errors; and share, merge, and protect workbooks.

Prerequisite: Successful completion of CAS 130.

### **CAS 141CL - PowerPoint (3)**

Create professionally formatted presentations that include animation and transitions. Insert and format charts, graphics, diagrams and pictures. Save presentations for various delivery options.

Prerequisite: Successful completion of CAS 115 or CAS 121, or instructor permission.

### **CAS 145CL - Publisher (5)**

Explore desktop publishing in this project-based class. Create and edit flyers, newsletters, brochures, logos, calendars, and various business publications. Use mail merge to create letters and labels. Use tools to edit text, colors, graphic-design objects, and logos. Prepare files for commercial printing.

Prerequisite: Successful completion of CAS 115 or CAS 121, or instructor permission.

### **CAS 151CL - Access I (3)**

Develop basic relational databases as you create, edit, format, and print tables, queries, forms, and reports. Copy records and import tables from another Access database. Define field properties and create relationships. Run, sort, and filter queries. Use comparison and logical operators and perform calculations. Explore the basics of creating a cohesive database.

Prerequisite: Successful completion of CAH 105, CAS 115, or CAS 121, or instructor permission.

## **CHEM - Chemistry**

### **CHEM& 110 - Chemical Concepts w/Lab (5)**

An introduction to chemistry intended for non-science majors. This course looks at how models of atoms, bonding, and the structures of materials provide an understanding of common chemical properties and reactions.

Corequisite: Students who have not completed MAT 099 or achieved an Accuplacer advanced algebra score of 233 or equivalent or higher must take MAT 099 concurrently with this course.

### **CHEM& 121 - Intro to Chemistry (5)**

Understanding the metric system, atomic theory, bonding, quantitative relationships, solutions, gases, acids and bases, salts, and nuclear chemistry. Lab included.

Prerequisite: Successful completion of CHEM& 110 or high school chemistry. Corequisite: MAT 099 or higher or appropriate Accuplacer placement or equivalent concurrently with this course.

### **CHEM& 131 - Introduction to Organic/Biochemistry (5)**

This course is a survey of organic and biochemistry. The following topics are covered: Nomenclature of organic matter, alcohols, alkenes, organic acids and bases, amines and amides, carbohydrates, proteins, enzymes, nucleic acids, and metabolic pathways.

Prerequisite: Successful completion of CHEM& 121.

### **CHEM& 161 - General Chemistry with Lab I (5)**

Course covers methods and measurements, including significant figures and scientific notation, states of matter, atomic structure, the periodic table, ionic and covalent bonding, and calculations and chemical equations, including the mole.

Prerequisite: Successful completion of MATH& 141 and one year of high school chemistry or CHEM& 121 or other college-level chemistry class.

### **CHEM& 162 - General Chemistry with Lab II (5)**

A continuation of general chemistry with instruction in properties of solutions, calculation of solution concentrations, thermodynamics, acids and bases, oxidation and reduction, and radioactivity. Also covers the structure, properties, and nomenclature of organic molecules.

Prerequisite: Successful completion of CHEM& 161 or acceptable equivalent.

## CMST - Communication

### CMST& 220 - Public Speaking (5)

An Open Course Library class with inexpensive course materials. Assists students in developing real-world oral communication skills. Capture the dynamics of today's business realities and see the benefits of effective communication. Selection of topics, library research, analysis, oral style, use of visual aids, and preparation and delivery of various types of speeches and oral presentations are included. The Internet, email, community interaction, and other practical tools support student learning and increase public speaking skills. Emphasis is placed on principles of cultural diversity.

Prerequisite: Appropriate Accuplacer (283 in reading) placement score or equivalent or successful completion of ENG 094.

## COLL - College Success

### COLL 102 - College Success for All (3)

College Success for All prepares students for success at Clover Park Technical College and beyond. This class is offered pass/fail and utilizes CANVAS, CPTC's online learning management system, to familiarize students with this learning environment. Designed to provide students with the basic skills to be successful in college by developing connections with campus resources, faculty, staff, and peers. The course includes 20 hours of classroom instruction and 20 hours of online and computer work. It includes, but is not limited to: study skills, learning styles, communication skills, time management, campus resources, test taking strategies, diversity, and campus policies and procedures. This class also includes mandatory safety and FERPA training, along with SALT component for financial planning.

Prerequisite: None, but required for all students.

## CONST - Construction Technologies

### CONST 102 - Safety & Operating Certificates (3)

Presents the basic elements of safe practices related to construction job sites, emphasizing accident prevention and correct response in the event of injury and other medical emergencies on the job, as well as personal

protective equipment that is standard in the industry. Participants receive instruction in administering First Aid, CPR and AED (defibrillator use), as well as how to protect themselves against Bloodborne Pathogens (BBP). Provides Forklift Operator Certification with classroom and hands-on training in safe forklift operation; Lead Renovation, Repair and Painting certification (Lead RRP- required by EPA to engage in remodeling certain types of older structures), OSHA 10 Construction Safety card, and American Heart Association First Aid and CPR certification card.

Prerequisite: Physical capability to do the work required.

### CONST 104 - Trades Math & Print Reading for Const. (5)

Provides a basic foundation of math skills directly related to performing functions required in the construction trades, along with essential knowledge required to accurately read and interpret blueprints, plans, and schematics. Math skills and the ability to correctly interpret plans/prints are critically important to the construction process to ensure jobs are completed professionally and on time. This foundational training includes, but is not limited to, ability to measure and cut various materials correctly, understand and use the metric system of measurement, solve questions related to weight, volume, pressure, angles of fall, etc., and understand scale" and its relationship to the finished product."

### CONST 106 - Basic Carpentry Skills (6)

Introduces basic tools of the trades with a focus on carpentry and provides hands-on experience in the proper techniques for safe use of various hand and power tools as well as their correct care, maintenance and storage. Participants will learn how to set up an efficient work station, how various parts of a structure are framed up, and the basic principles of electric power and how that relates to employing proper electrical connections when using power tools. Students will be drilled on essential hands-on skills needed to pass entry assessments for the United Brotherhood of Carpenters carpentry apprenticeship program.

### CONST 109 - Employment Preparation (4)

Explains the history of apprenticeship, its subsequent evolution into the present-day form, and how this translates into an effective method of on-the-job training resulting in journeyman credentials that are recognized industrywide throughout this country and in many other parts of the world. Provides an overview of government agencies, regulatory bodies and actual regulations that affect the

construction industry. Participants are also given information related to job success, including but not limited to, ethical standards, attitude and behavioral expectations, teamwork and communication strategies, personal financial management, ergonomics, physical fitness and nutrition, and use of basic MS Office computer programs to conduct job search activities.

### **CONST 112 - Footings & Foundations (3)**

Introduction to the methods of construction footing and foundation forms, terminology, and inspections for the typical residential home.

### **CONST 116 - Floor Framing (3)**

Introduction to the construction procedures and terminology used in framing a residential wood floor.

### **CONST 120 - Wall Framing, Sheeting & Ceilings (5)**

Introduction to wall-framing construction procedures and terminology, the application of ceiling and/or two-story framing, inspections, sheeting, and aligning.

### **CONST 122 - Roof Framing (5)**

Introduction to roof framing and the use of a framing square, including both truss roofs and stick-built residential roofs.

### **CONST 126 - Roofing Materials & Installation (3)**

Introduction to various roofing materials, including proper installation techniques.

Prerequisite: Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

### **CONST 134 - Exterior Finish (3)**

Introduction to the installation of exterior trim, siding, window, and door installation, or the equivalent on typical residential homes.

Prerequisite: Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

### **CONST 139 - Interior Finish I (5)**

Introduction to interior wall and ceiling finish, interior doors and hardware, cabinet and countertop installation, and interior trim and finish flooring.

Prerequisite: Instructor's permission.

### **CONST 142 - Interior Finish II (3)**

Continuation of interior wall and ceiling finish, interior

doors and hardware, cabinet and countertop installation, and interior trim and finish flooring.

Prerequisite: Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

### **CONST 144 - Electrical and Plumbing Basics (4)**

Introduction to basic home electrical, switches, outlets, wiring, and plumbing pipes, drains, faucets and leaks.

Prerequisite: Instructor's permission.

### **CONST 152 - LEED (2)**

Introduction to LEED for new construction and renovations.

Prerequisite: Instructor's permission.

### **CONST 155 - Decking (2)**

Introduction to outside deck construction, including types, code requirements, and safety.

Prerequisite: Instructor's permission.

### **CONST 158 - Energy Auditor (5)**

Introduction to trade regulations, other building trades workers, industry and standards organization, and entering the carpentry trade.

Prerequisite: Instructor's permission.

### **CONST 160 - Home Inspector (4)**

Overview of equipment, technology, systems, and software used to measure a building's structural and physical integrity.

Prerequisite: Instructor's permission.

## **COSMO - Cosmetology**

### **COSMO 112 - Infection Control Principles & Practices (2)**

Acquire knowledge for successful and responsible infection control, first aid and safety. It is the foundational practices and procedures commonly used in all aspects of your education and future salon pursuits. Topics include proper cleaning and disinfecting tools and work areas for compliance with state regulations and laws. Understanding infection control principles and practices will help protect hair designers and their clients from the unnecessary spread of infectious diseases and maintain a safe, efficient working environment.

### **COSMO 117 - Trichology (4)**

Learn why professional hair services must be based on an understanding of the growth, structure, and composition of hair. Gain skills in evaluating various hair and scalp conditions. Understand the purpose for draping and scalp massage as a foundation for attentive client care services.

### **COSMO 137 - Application of Haircutting, Hairstyling, and Thermal Styling (13)**

Introducing haircutting tools and cutting fundamentals. The use of a systematic plan for each haircut develops the foundational skills desired. It is important the Hair Designer recognize and identify the primary considerations, fundamentals, essentials and infection control and safety. Learn the consultation guidelines for haircutting to create the client's desired results. Build a repertoire of skills necessary to meet the needs in industry.

Thermal Styling covers the proper usage and methods of styling, waving or curling the hair with heated tools.

Haircutting and Thermal Styling are stand-alone services.

The practice of infection control and safety practices required by salon standards and state board regulations are reinforced.

Prerequisite: None.

### **COSMO 146 - Chemical Texture Services (5)**

Presentation of the three main concepts of chemical texturizing commonly known as permanent waving, relaxing with chemicals, and curl reforming and straightening. Brazilian blowout certification is achievable through this course. This course covers the theory of chemical texturizing and the tools used to achieve desired effects, infection control principles and practices, and client consultation.

Prerequisite: Successful completion of COSMO 112, COSMO 117, and COSMO 137.

### **COSMO 147 - Wet Styling and Long Hair Design (5)**

A presentation of techniques, procedures and fundamentals in wet styling. The student will be introduced to finger waving, pin curling and roller placements along with long hair design techniques. Infection control principles and practices are reinforced.

Prerequisite: Successful completion of COSMO 112, COSMO 117, and COSMO 137 with a "C" grade or better or instructor's approval.

### **COSMO 159 - Lab Clinic I (7)**

Enhancing skills and knowledge by providing services to client, models and on the use of mannequins in a realistic salon environment. This course reinforces skills learned in COSMO 112, COSMO 117 and COSMO 137, including hair and scalp analysis, consultation, scalp and hair care, haircutting and hairstyling.

Prerequisite: Successful completion of COSMO 112, COSMO 117, and COSMO 137 with a "C" grade or better – or instructor's approval.

### **COSMO 163 - Lab Clinic II (9)**

Enhancing skills and knowledge by providing services to clients, models and on the use of mannequins in a realistic salon environment. This course reinforces skills learned within cosmetology 112,117, and 137 including hair and scalp analysis, consultation, scalp and hair care, haircutting, hairstyling and hair coloring.

Prerequisite: Successful completion of COSMO 147, COSMO 159, and COSMO 167, or instructor's approval.

### **COSMO 167 - General Science of Hair Coloring (6)**

This course offers exploration of relationships in color. Developing the art of the consultation will guide students through the proper formulation and decision making to meet client needs. Students will learn color applications to achieve desired results in addition to the safety and sanitation practices unique to hair coloring.

Prerequisite: Successful completion of COSMO 112, COSMO 117, and COSMO 137.

### **COSMO 172 - Lab Clinic III (10)**

Continue to gain hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation, haircutting, hairstyling, conditioning, hair coloring, and chemical texturizing services on clients/ models.

Prerequisite: Successful completion of COSMO 163, COSMO 181, COSMO 226, or instructor's approval.

### **COSMO 175 - Cosmetology Salon Business Practices (3)**

Introduces the topics of salon business, going into business for yourself, operating a successful salon, and building

your business. Topics include identifying options for going into business for yourself, basic factors to consider when opening a salon, business plans, and the importance of record keeping, elements of successful salon operations, and why selling services and products is a vital aspect of a salon's success.

Prerequisite: Successful completion of COSMO 163, COSMO 181, and COSMO 226 or instructor's approval. .

### **COSMO 181 - Artificial Hair (2)**

Provides an informational overview of the fundamentals of artificial hair products and services. Hair extensions, additions, and hairpieces can be lucrative services in the salon.

Prerequisite: Successful completion of COSMO 147, COSMO 159, and COSMO 167 or instructor approval. .

### **COSMO 183 - General Science of Nails (7)**

Learn to work with the tools required for nail services and practice fundamental techniques for providing clients with a professional manicure or pedicure on natural nails. Develop skills in safety and sanitation associated with nail care. Topics include basic nail theory, nail diseases, disorders and the anatomy of the hands.

### **COSMO 189 - General Science of Skin (7)**

Provides an introduction to esthetic sciences. Presents applications in temporary hair removal, skin care and cosmetic applications. Emphasizes histology and the recognition of diseases and disorders of the skin. Students will apply infection control principles and practices.

### **COSMO 226 - Advanced Hair Coloring (8)**

Reinforces skills in application techniques and procedures which continue to develop proficiency and confidence in color design. The student will create aesthetically pleasing designs to enhance client features and haircut designs. Current trends applications such as Balayage, Ombre, and other color services will be performed to meet the demand of services clients seek. Corrective coloring techniques continues to advance the student's skill in formulation of hair color.

Prerequisite: Successful completion of COSMO 147, COSMO 159, and COSMO 167 or instructor's approval. .

### **COSMO 232 - State Board Practical Preparation (6)**

Prepares students to sit for the Washington State Cosmetology or Hair Designer Practical Board examination.

Prerequisite: Successful completion of COSMO 146, COSMO 172, and COSMO 175 or instructor approval.

### **COSMO 233 - Lab Clinic V (6)**

Gain 130 hours of hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation and natural nail care, including manicuring, pedicuring, and safety issues as they relates to nails. Basic skin care, including histology, hair removal, facial massage, and product application and removal, will also be performed.

Prerequisite: Successful completion of COSMO 234 or instructor's approval.

### **COSMO 234 - Lab Clinic IV (9)**

Hands on learning experience in Cosmetology Clinic. Reinforced skills and knowledge will be demonstrated through client and student interactions.

Prerequisite: Successful completion of COSMO 146, COSMO 172, and COSMO 175 or instructor approval.

### **COSMO 237 - State Board Written Test Review (2)**

Prepares students for Washington State Cosmetology or Hair Designer Written Board Examination.

Prerequisite: Successful completion of COSMO 146, COSMO 172, and COSMO 175 or instructor approval.

### **COSMO 245CAP - Cosmetology Capstone (2)**

Will pursue work experience opportunities. May be supervised internship setting, on site events, and/or practice in CPTC's student run clinic.

Prerequisite: Successful completion of COSMO 146, COSMO 172 and COSMO 175 or instructor approval.

### **COSMO 248 - Internship I (1)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 33 hours of experience.

Prerequisite: Instructor's approval.

### **COSMO 250 - Internship II (2)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hoursof training to complete the program courses. This course offers 66 hours of experience.

Prerequisite: Instructor's approval.

### **COSMO 252 - Internship III (3)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 99 hours of experience.

Prerequisite: Instructor's approval.

### **COSMO 254 - Internship IV (4)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 132 hours of experience.

Prerequisite: Instructor's approval.

### **COSMO 256 - Internship V (5)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offer 160 hours of experience. Internship cannot exceed 10 percent of the total program hours.

Prerequisite: Instructor's approval.

## **CPW - Computer Programming**

### **CPW 101CL - Programming Fundamentals (5)**

This course is an introduction to programming concepts that enforces good programming style and logical thinking. Designed for students with little or no programming language experience, it begins with basic general programming concepts and key concepts of structure. The course then progresses to the intricacies of decision-making, looping, array manipulation, and methods.

### **CPW 116 - .NET Programming (5)**

Create programs using the .NET Framework, with focus on desktop and console applications. Use decision structures, loops, and arrays to solve problems. Apply exception handling and data validation to programs. Use the predefined libraries in .NET Framework to solve problems. Create methods and learn to pass and return arguments. Create classes, and use the classes as objects in programming. Use databases to store and retrieve the data from the applications.

Prerequisite: Successful completion of CPW 142 and CPW 210.

### **CPW 118 - Web Design Principles (5)**

Explore how the web works and methods and limitations of delivering content on the web. Examine usability issues, such as interface design and structure and how to accommodate a wide variety of viewports, from smartphones to cinema screen computer monitors. Students will build a four-page portfolio-style website and post it to the Internet.

### **CPW 142 - Java Object-Oriented Programming I (5)**

Construct a foundation of procedural programming concepts and skills requisite for professional object oriented software development. Use Java, a modern structured, object oriented language, to develop your problem-solving and algorithm formulation skills.

Prerequisite: Successful completion of CPW 101 and MAT 094.

### **CPW 143 - Java Object-Oriented Programming II (5)**

Build your problem-solving skills with the fundamental concepts and techniques of object oriented Java programming in analyzing, designing, and implementing computer programs. Practice problem-solving methods and algorithm development to analyze, design, implement, modify, verify, and document computer programs that solve real-world problems. Develop a good conceptual understanding of data and functional abstraction.

Prerequisite: Successful completion of CPW 142.

### **CPW 150 - Principles of Relational Databases (5)**

Delve into the fundamental concepts, terminologies, methodologies, and system organizations of database management systems. Develop the theoretical foundation of understanding necessary to design, implement, optimize, query, and maintain a database system. Propose, design, and develop a database, using a relational database management system to reinforce the theoretical concepts.

### **CPW 203 - Advanced JavaScript (5)**

Reinforce fundamentals and create larger applications using JavaScript. Dive deeper into event-driven programming. Update web pages dynamically by manipulating the HTML Document Object Model (DOM). Learn how to integrate existing JavaScript libraries and frameworks into your applications.

Prerequisite: Successful completion of CPW 223.

**CPW 205CAP - Object-Oriented Analysis & Design (5)**

Explore methodologies and technologies used in analyzing, designing, and developing object-oriented software systems intended to solve real-world problems. Build on the Systems Development Life Cycle model initially presented in the CPW 101 course to model and design systems using tools such as CRC cards and the Unified Modeling Language, which includes class, use case, and sequence diagrams. Discuss the theoretical and practical aspects of object orientation.

Prerequisite: Successful completion of CPW 245.

**CPW 210 - Advanced Database Programming (5)**

Advanced database programming using a commercial relational database management system. Perform object creation, manipulation, and control using SQL. Write simple and complex queries to solve problems. Create advanced objects like stored procedures and triggers. Explore non-relational systems and business intelligence.

Prerequisite: Successful completion of CPW 101, CPW 150.

**CPW 212 - Advanced .NET Programming (5)**

Learn advanced .NET programming - writing classes, working with indexers, overloading operators, and other advanced object-oriented concepts. Work with databases using ADO.NET, databinding, and object-relational mappers. Learn techniques for working non-relational data storage.

Prerequisite: Successful completion of CPW 116.

**CPW 213 - .NET Web Programming (5)**

Earn professional experience in analyzing, designing, and developing dynamic, data-driven, commercial web applications using Microsoft ASP.NET. Gain a solid foundation in web development covering topics from state management, security, using various data stores, working with forms, and more.

Prerequisite: Successful completion of CPW 116 and CPW 203. Prerequisite or Co-requisite: CPW 212.

**CPW 215 - Advanced .NET Web Programming (5)**

Build upon existing fundamental ASP.NET skills. Learn how to build scalable, secure, and maintainable web applications. Apply advanced object-oriented techniques while diving deeper into design patterns. Learn how to create and consume web services. Explore server architecture and data storage options with the public cloud.

Prerequisite: Successful completion of CPW 212 and CPW 213.

**CPW 217CAP - Portfolio (5)**

Build a portfolio website showcasing skills developed in the Computer Programming program. Create a fully functional website from start to finish. Analyze and derive requirements by creating a project proposal or by working with an actual client. Larger projects will utilize source control and emphasize team work.

Prerequisite: Successful completion of CPW 215.

**CPW 218 - C++ (5)**

Deals with learning programming using C++ as the primary language, with a focus on problem-solving and introduction to object-oriented concepts and terms.

Prerequisite: Successful completion of CPW 245.

**CPW 223 - Introduction to JavaScript (5)**

Introduces the fundamentals of working with JavaScript. Applies variables, objects, arrays, strings, conditional statements, and external data to create dynamic, interactive web pages.

Prerequisite: Successful completion of CPW 101 and CPW 118.

**CPW 240 - Programming Practicum (5)**

Programming on a medium scale in object-oriented development, consolidating prior programming principles and expanding knowledge of application design. This course introduces students to some concepts of advanced programming. Topics may include Graphical User Interface (GUI), Java Database Connectivity (JDBC), multithreading, inner classes, collections, exceptions, file I/O (NIO), networking, reflection, Swing, Remote Method Invocation (RMI), Naming Service (JNDI), Serialization, Servlets, and JavaServer Pages (JSP).

Prerequisite: Successful completion of CPW 245.

**CPW 245 - Data & Logic Structures (5)**

Expand your understanding of object-oriented programming techniques by implementing abstract data types as data structures in solving complex computing problems. Study the fundamental algorithms of computer science while using mathematical principles to analyze the efficiency of their implementation.

Prerequisite: Successful completion of CPW 143.

### **CPW 252 - Phone Programming (5)**

Covers the concepts involved with programming on the phone - source control, phone emulators, phone APIs, and deployment.

Prerequisite: Successful completion of CPW 245.

### **CPW 299CAP - Internship (5)**

Earn college credit by applying learned technical skills in professional work experiences directly related to your studies in Computer Programming and Web Development. Perform 165 hours of part-time or full-time labor as an intern with a public or private enterprise, as a paid employee, or as a volunteer. Study and practice in resume building, interviewing, and job-search skills by actually identifying and then applying for an intern position. Work site supervisor and CPW faculty will jointly evaluate your performance.

Prerequisite: Instructor's permission.

## **CUL - Culinary Arts**

### **CUL 104 - Sanitation in Food Service Operations (3)**

Presents the principles of food microbiology, food-borne illness and the standards enforced by regulatory agencies. Incorporates applied measures for the prevention of food-borne illness and other microbiological factors. Includes National Restaurant Association ServSafe Certification.

### **CUL 107 - Professional Cooking I (7)**

Provides students with a general understanding of the professional kitchen. Topics include kitchen safety; dishwasher procedures; how to handle food in a safe environment; selection of and caring for knives; understanding how a professional kitchen is organized; and the rationale, cleaning, and function of kitchen equipment. Students will learn to cut foods in a variety of shapes and to recognize and use a variety of herbs and spices.

### **CUL 109 - Cooking Methods I (7)**

Introduces students to the experience of preparing and cooking meals for restaurant service. Students will be given assignments and will rotate through restaurant stations throughout the quarter. Students will learn dishwashing and basic food preparation, how to read and follow standardized recipes, deli operations, and station organization.

### **CUL 111 - Food Preparation I (3)**

Practice and apply the skills of a restaurant cook. Students

will learn the importance of organizing and planning their work stations, as well as preparing items needed prior to actual cooking. Topics include fruit and vegetable varieties, uses, and preparation.

### **CUL 113 - Introduction to Baking (3)**

Introduces culinary students to the fundamentals of baking and to scientific principles. Students will learn different mixing and production methods in producing quick breads, pastries, cakes, pies, soufflés, mousses, and custards.

### **CUL 117 - Professional Cooking II (7)**

Covers the procedures and techniques of sauces and stocks. Students will learn how to prepare a variety of classic hot and cold sauces, use thickening agents properly, recognize and classify sauces, and prepare a variety of stocks.

### **CUL 119 - Food Preparation II (3)**

Provides practice in the fundamental techniques related to hot food cooking. Students will perform specific competencies to develop their proficiency in the techniques and science of cooking. Topics that will be covered are pasta, potatoes and grain cookery.

### **CUL 123 - Cooking Methods II (7)**

Introduces the experience of preparing and cooking meals for restaurant service. Students will be given assignments and will rotate through restaurant stations throughout the quarter. They will be expected to practice a high level of previously learned competencies in knife skills, sanitation, proper handling and storage of product, and working under stringent time guidelines.

Prerequisite: Successful completion of CUL 109.

### **CUL 127 - Professional Cooking III (7)**

Introduces students to basic meat cooking procedures, breakfast cookery, and dairy products. Students will learn the composition of meats, eggs, and dairy products and apply various cooking methods.

### **CUL 132 - American Regional Cuisine (3)**

Explores the history and styles of food from the Pacific Northwest, California, the Southwest, New England, and Florida. Students will create regionally-inspired dishes with continued emphasis on solid cooking methodologies.

### **CUL 135 - Food Preparation III (3)**

Focuses on beef, chicken, and fish cookery and fabrication. Instruction will center on understanding the structure and composition of meats, being able to identify a variety of



fish and shellfish, use of proper storage, and application of various cooking methods.

### **CUL 139 - Cooking Methods III (7)**

Introduces students to the experience of preparing and cooking meals for restaurant service. Students will be given assignments and will rotate through restaurant stations throughout the quarter. Students will be expected to practice a high level of previously learned competencies in knife skills, sanitation, proper handling and storage of product, and working under stringent time guidelines.

Prerequisite: Successful completion of CUL 123.

## **DAS - Dental Assistant**

### **DAS 104 - General Studies (3)**

This course will introduce the students to the dental profession, ethics and jurisprudence, dental terminology, diversity, and preparing for patient care.

Prerequisite: DBOA 103 .

### **DAS 107 - Biomedical Sciences (4)**

This course will introduce the students to microbiology, infection control, sterilization, management of hazardous materials, and ergonomics.

Prerequisite: DBOA 103.

### **DAS 112 - Dental Sciences I (4)**

This course will introduce the student to tooth morphology, oral embryology and histology, landmarks of the face and oral cavity, and oral health and nutrition to include dental caries, preventative dentistry and nutrition.

Prerequisite: DBOA 103 .

### **DAS 114 - Dental Assisting Skills I (4)**

This course is an introduction to basic dental assisting skills to include moisture control techniques, lab safety, alginate impressions, diagnostic casts, and proper technique for accurately obtaining blood pressure and pulse, and dental charting.

Prerequisite: DBOA 103.

### **DAS 117 - Foundations of Clinical Dentistry (2)**

This course will introduce the students to assisting in a medical emergency, the dental office, and delivery of dental care.

Prerequisite: DBOA 103 .

### **DAS 121 - Dental Sciences II (2)**

This course will introduce the students to oral pathology, restorative and esthetic dental materials, dental liners, bases and bonding systems, dental cements, general anatomy and physiology and head and neck anatomy.

Prerequisite: Successful completion of DBOA103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117 .

### **DAS 123 - Dental Assisting Skills II (5)**

This course will introduce students to intermediate study models, rubber dam principles, intermediate dental charting, coronal polish and fluoride treatment, and dental instruments and handpieces.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117 .

### **DAS 126 - Dental Specialties I (3)**

This course will introduce students to the dental specialties of orthodontics, endodontics, and periodontics.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117. .

### **DAS 131 - Principles of Radiography (6)**

This course will introduce students to dental radiographic techniques and patient and operator safety, intraoral and extraoral radiographic imaging, legal issues associated with radiography, quality assurance, and manual and automatic radiographic processing techniques.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117. .

### **DAS 133 - Certification Review I (2)**

This course will prepare students to take the Dental Assistant National Board Infection Control exam.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117. .

### **DAS 207 - Dental Sciences III (4)**

This course will introduce the students to pharmacology, anesthesia and pain control, lab and impression materials and procedures, and the medically and physically compromised patient and advanced radiographic techniques.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114,

DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam.

### **DAS 209 - Dental Assisting Skills III (5)**

This course will introduce students to general dentistry and matrix systems, employment, advanced study models, advanced chairside assisting, advanced charting, and advanced rubber dam. This course will culminate in a capstone chairside assessment.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. .

### **DAS 213 - Dental Specialties II (5)**

This course will introduce students to the dental specialties of fixed prosthodontics, removable prosthodontics, dental implants, oral and maxillofacial surgery, and pediatric dentistry, including expanded functions in pit and fissure sealant application, assisting in a crown prep appointment. Including construction of custom provisionals, assisting in the delivery of a partial denture and assisting in a routine extraction.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114m DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. .

### **DAS 215 - Certification Review II (2)**

This course will prepare students to take the Dental Assistant National Board Radiation Health and Safety exam.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. .

### **DAS 220CAP - DAS 220CAP (6)**

This course will provide the Dental Assistant student with the opportunity to utilize the skills and knowledge acquired in DBOA 103-237. Students will spend the majority of their final quarter, 300 hours, rotating through a minimum of two dental offices and/or dental clinics, functioning in an Expanded Functions Dental Assistant capacity. This course will consist of the first 135 hours of the total

clinical experience.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DBOA 119, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133, DAS 207, DAS 209, DAS 213, DAS 215, DAS 237, Infection Control certification, and completion of the Radiation Health & Safety component of the Dental Assistant National Board certification exam. .

### **DAS 225 - Clinical Experience III (6)**

This course will provide the Dental Assistant student with the opportunity to utilize the skills and knowledge acquired in DAS 104-220. Students will spend the majority of their final quarter, 300 hours, rotating through a minimum of two dental offices and/or dental clinics, functioning in an Expanded Functions Dental Assistant capacity. This course will consist of the second 135 hours of the total clinical experience.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DBOA 119, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133, DAS 207, DAS 209, DAS 213, DAS 215, DAS 237, Infection Control certification, and completion of the radiation Health and Safety component of the Dental Assistant National Board certification exam. .

### **DAS 230 - Certification Review III (2)**

This course will prepare students to take the Dental Assistant National Board General Chairside exam.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DBOA 119, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133, DAS 207, DAS 209, DAS 213, DAS 215, DAS 237, Infection Control certification, and completion of the Radiation Health & Safety component of the Dental Assistant National Board certification exam. .

### **DAS 237CAP - Clinical Experience I (1)**

Provides Dental Assistant students with the opportunity to use the skills and information acquired in DAS 103-228. Students will spend three hours per week - for a total of 30 hours - volunteering in an infection-control assistant capacity in a private office or dental clinic.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. .

## DBOA - Dental Assistant

### **DBOA 103 - Dental Terminology & Procedures (4)**

Introduces information to correctly recognize and identify various occupations within the dental environment. Students will also learn terminology necessary to complete the other courses in the program. Students will learn to accurately identify the names and numbers of teeth in the primary and permanent dentition. Students will complete the Washington State Dental Association (WSDA) HIV/AIDS course.

### **DBOA 111 - Dental Charting, Scheduling and Recall Management (5)**

Explores dental charting symbols and treatment descriptions. Students will develop, decipher, and present a comprehensive treatment plan. Covers the necessary information to accurately develop a patient recall system and maintain productive and effective patient scheduling. Students will have training and 24-hour access to the Dentrix Dental Software to learn and practice dental charting, scheduling, and recall procedures.

Prerequisite: DBOA 103 (or co-requisite).

### **DBOA 119 - Dental Documents and Inventory Systems (4)**

Explores a wide variety of dental office forms and the development of manual and computerized inventory filing systems. Organizational skills are the primary emphasis of this course.

Prerequisite: DBOA 103 (or co-requisite).

### **DBOA 135 - Dentrix Advanced Training (2)**

Provides expanded Dentrix software skills to students with basic Dentrix Dental Software training or experience. Students will have training and 24-hour access to the software. Students will demonstrate setting up practice defaults in the Office Manager module, manage electronic charting in the Dentrix Dental Software, pursue dental insurance claims processing and payment posting processes, and explore and generate management reports.

Prerequisite: DBOA 111 or industry experience with the Dentrix Dental Software (or co-requisite).

## DED - Digital Entertainment Design

## and Production

### **DED 102 - Genre Studies (3)**

Covers history of film and how economy and politics affect films through hidden symbolism.

### **DED 104 - General Art (4)**

Covers the fundamentals of traditional art and basic skills of visual expression.

### **DED 106CL - Digital Art I (4)**

This course is an overview of industry software tools that are used in the creation of 2D computer graphics. Students will learn the commands and the interfaces of industry-standard vector graphics.

### **DED 108 - Screenwriting (3)**

Introduces the fundamentals of writing and working with scripts for many different media projects. This will include, but is not limited to, the creation and breakdown of scenes using voice, action, and dialogue.

Corequisite: Successful completion of ENG 094.

### **DED 110 - Digital Photography I (4)**

This introductory-level course familiarizes students with the basics of cameras, the new features of today's DSLRs, and the basic elements of taking a good photograph. Students will explore the work of great artists of the medium, learn the elements of composition, and begin working with light and shadow to create visually interesting images.

### **DED 112 - Digital Art II (4)**

Digital Art II will be focusing on advancing the students' knowledge and skills in industry standard digital graphics programs. Students will be learning to use the tools of these programs provided for advance techniques. In each assignment is a real world situation, which they will be following color theory, compositions, and elements of art and design. This class will also help increase your productivity and incorporate best practice into your workflow.

Prerequisite: Successful completion of DED 106.

### **DED 120 - Digital Photography II (4)**

Builds on the previous course concentrating on using light effectively. Students will begin to use photographic lights to take studio-style photographs of still life, working up to portrait photography.

Prerequisite: Successful completion of DED 110.

### **DED 125 - Digital Video I (4)**

Digital Video I will introduce the students to the digital video equipment and proper handling. Hands on work will involve camera shots, angles, lighting, and compositions of a shot. Students will complete a variety of technical exercises that will familiarize them with terms and basic equipment while working in teams.

### **DED 127 - Advanced Media Creation (4)**

Covers advanced creation and critique of digital entertainment through an iterative design and development process.

Prerequisite: Successful completion of DED 140 or DED 154.

### **DED 130 - Storyboarding (3)**

Teaches students how to break down a script into shots and create a visual storyboard that shows actor and camera movements while showing the type of camera angle and shot.

Prerequisite: Successful completion of DED 104.

### **DED 135 - Motion Graphics I (4)**

Uses 2D and 3D compositing, animation, and visual effects tools to allow students to create innovative graphics and visual effects for film, video, broadcast, DVD, and the web. Using Adobe After Effects, students will learn the concepts of video, time-based animation, and special effects. They will explore program features that include key framing, editing, masking, type, 3D environment, and tools. Importing media from a wide variety of applications, including Adobe Photoshop and QuickTime files will also be covered.

### **DED 138 - Advanced Development Tools (4)**

A course covering the use of advanced tools of media production. Students will develop projects using the industry tools of their medium. Students will choose between using the advanced software of their medium to create professional-grade projects to use in a personal portfolio showcasing their talents and skills.

Prerequisite: Successful completion of DED 125 and DED 152.

### **DED 140 - Digital Video II (4)**

In Digital Video II, students will be furthering their education from Digital Video I by extending their

knowledge to more hands-on lessons of film production. This would include but not limited to; Audio recording techniques, introduction to master shots, and other common practices towards common projects like tutorial videos, interviews, and documentaries.

Sometimes a big project is offered to the class that fits in the course outcomes. This project; under the discretion of the instructor and the students, would replace the normal assignments.

Prerequisite: Successful completion of DED 125 and DED145.

### **DED 145 - Digital Editing (4)**

Covers digital editing using Adobe Premiere Pro. Students will work with nested, single- frame, and multiple-sequencing editing tools to export to a variety of formats and for websites like YouTube, adding multi-track audio, transitions, and simple effects.

### **DED 147 - Advanced Design Theory (4)**

Explores the high-level decisions made in the creation of various forms of digital entertainment. Introduces the concepts and practices associated with how written word is translated into visual language. Students will explore how their chosen media are a reflection of the world we live in and vice versa. During this course, students will have the opportunity to learn the art and theory behind films and games including how various design decisions are used to affect the audience.

Prerequisite: Successful completion of DED 127 or DED 102, DED 140, DED 145, and DED 152.

### **DED 150 - 3D Modeling I (4)**

Uses 3D Studio Max, specialized software that is commonly used to create 3-Dimensional graphics. The majority of the class is spent becoming familiar with the software through class tutorials and weekly assignments and learning basic techniques, such as box modeling. By completing this class, students will be able to create models that can be used in film or games.

### **DED 152 - Motion Graphics II (4)**

Builds on Motion Graphics I by working on more advanced features in Adobe After Effects. Students will go more in-depth with the features, such as particles, photo replacements, and integrating 3D models into scenes to create digital effects.

Prerequisite: Successful completion of DED 135.

**DED 154 - Game Design I (3)**

Introduces the fundamentals of game design and development with a focus on rapid prototyping through pen and paper design. Students will also build a foundational knowledge of genre and basic elements of games and their interaction with each other.

**DED 158 - 3D Modeling II (4)**

Expands into the 3D world by teaching students to create textures for their 3D Models. Discusses the importance of file size and formats for a variety of purposes that go into creating detailed textures for an abstract style or gritty look. Students will create a variety of texture maps such as UV Mapping, diffused, opacity, bump, normal, specular, and reflection maps to really bring models to life.

Prerequisite: Successful completion of DED 150.

**DED 159CAP - Capstone/Internship (4)**

This course consists of either a major project representing the culmination of the student's learning in the program OR a full- or part-time position as an intern in either the public or private sector. The project must be approved by the instructor, show the breadth of skill acquired in the program, and require the students to use the entire production cycle, including their preproduction paperwork. The students will also be required to keep an online journal of their project and report in at least once per week with updates on their progress. The internship a temporary position, where the student gains confidence and experience in a chosen area of employment. Students experience on-the-job opportunities as well as making a skilled contribution to the internship provider.

Prerequisite: Successful completion of DED 125 and DED 152.

**DED 170 - 3D Modeling III (4)**

Teaches students advanced techniques in modeling using 3D Studio Max, such as NURBS, lighting and reflection effects, and particle systems. Students will apply these methods to create organic and hard-surface models

Prerequisite: Successful completion of DED 106 and DED 158.

**DED 172 - Scene Design (4)**

Scene Design will cover the use of lighting and design to create environments that enhance the story while providing optimum shooting potential.

Prerequisite: Successful completion of DED 120 and DED

125.

**DED 174 - 3D Animation (4)**

Introduces the methods and techniques of animating virtual objects and environments using 3D Studio Max. Students will bring life to 3D Models with basic animation techniques using and combining modifiers to control the animation. They will explore the features, such as key frames, track view, function curves, animation constraints, and controllers.

Prerequisite: Successful completion of DED 158.

**DED 175 - Development Project (4)**

An instructor-led major project involving the full class. Each student will be given a role to fulfill in the project just as in a professional film or game production studio.

Prerequisite: Successful completion of DED 112 and DED 150.

**DED 183 - Interactivity Guidance (4)**

A class exploring the interaction between the technical skills of digital entertainment creators and their deliverable product. Students will work in their respective media to take control of communications between their medium and their audience to create new digital entertainment projects.

**DSN - Interior Design****DSN 105 - Drafting I (6)**

This course introduces students to the fundamental skills and concepts necessary for interior design planning and drawing, including use of drafting tools, exercises in line weight and line type quality, architectural scale, dimensioning, and architectural lettering.

**DSN 119 - Interior Design & the Creative Design Process (4)**

This course will introduce students to concepts to successfully steer an idea on its journey from imagination to object and to focus on where the idea is going. This introduction describes the nature of a designer's journey, maps the path a designer will take, and explores the path of what happens along the way. This course is an introduction to inspiration, conceptualization, communication, and elements and principles of design and trend spotting.

**DSN 121 - Drafting II (5)**

This course introduces students to the fundamental principles needed to create an as-built plan set to include

floor plan, power/mechanical plan, and elevation. Introduces field surveys, symbols and graphics, and formatting of drawings.

Prerequisite: Successful completion of DSN 105.

#### **DSN 123 - Materials, Methods and Techniques of Interior Design (4)**

This course is an introduction to the fundamental design materials and applications for interior environments, including hard and resilient flooring, soft flooring, paint, wall coverings, cladding, acoustics, metal, plaster, glass, and millwork. Students will also learn to visually present material selections in a professional manner.

#### **DSN 124 - Color Theory (4)**

This course is an introduction to the world of color, encompassing the following: the three dimensions of color, color systems, color theory, coloring agents, dimensions of color in compositions, principles and elements of design in color, color interactions, symbolisms, influence of color, and exercises of putting color to use.

#### **DSN 132 - Lighting (5)**

This course introduces students to the fundamental skills and concepts of lighting design. It is an approach to quality lighting, with a primary focus on the design process. Covers basic lighting, human factors, sustainability, products, and design fundamentals.

#### **DSN 136 - Introduction to Drawing & Rendering (4)**

Introduction to Drawing and Rendering is a beginning look at some of the drawing methods and materials used by interior designers. This course begins with the fundamental concepts of freehand sketching and gaining the ability to think three-dimensionally. It is also an introduction for methods to communicate your design vision through hand-drawn renderings. This is shown by the use of shade, shadow, texture, pattern, color, and material qualities.

#### **DSN 140 - Textiles (4)**

This course is a comprehensive study of the textile products available for use in residential interior design, with an emphasis on window treatments, upholstery, the proper selection of materials, and working with drapery and upholstery showrooms and workrooms.

#### **DSN 145 - Residential Planning, Design & Exterior Spaces (5)**

Completion of this course will provide students with the understanding of interior space planning basics and

concepts using diagrams, residential codes, planning guidelines, and presentation techniques. Students will also learn exterior elements and finishes that help to enclose the space.

Prerequisite: Successful completion of DSN 121.

#### **DSN 152 - Furniture & Cabinet Design (2)**

This course covers the fundamentals of custom furniture and cabinet design. Students will design a unique custom piece of furniture based on the study of furniture design theory, function, social use, materials, and fabrication.

#### **DSN 153 - Drafting III (4)**

Completion of this course provides students with an understanding of typical planning dimensions and guidelines for residential interiors, as well as proper techniques to combine cabinetry, appliances, and applied measurements for graphic presentation standards.

Prerequisite: Successful completion of DSN 121.

#### **DSN 158 - History of Interiors (4)**

This course is a comprehensive overview of the history of interior design and furniture from antiquity to the present day, with special emphasis on design elements.

#### **DSN 159 - Intro to Technology for Interior Designers (3)**

Learn basic computer skills for interior designers. Contents include computer use for file management and Internet research, as well as introductions to computer-generated 3D modeling and design software for editing and presentation.

#### **DSN 202 - Elements of Kitchen & Bath Design (5)**

This course is an introduction to the principles and elements of design for kitchens and bathrooms, including basic components, mechanical and lighting systems, color theory and construction applications.

#### **DSN 204 - Introduction to Commercial Interior Design (4)**

This course provides an introduction to commercial interiors. Contents include areas of practice, ADA and code compliance, and commercial design case studies.

#### **DSN 206 - 20/20 Drafting (5)**

Learn to design kitchen and bath spaces using 20-20 Design software. Skills learned include the execution of floor plans, elevation drawings, rendered perspectives,

reports, and design layouts.

#### **DSN 208 - Materials & Estimating (4)**

This course is an introduction to recommending and calculating quantities for cabinetry, appliances, plumbing fixtures, lighting, hardware, and surfacing materials for kitchens and bathrooms.

#### **DSN 211 - Business Procedures & Sales (4)**

This course provides students with the understanding of business practices generally conducted by interior designers. The study will acquaint students with the basic procedures, documents, ethical conduct, associations, and certification requirements within various business formats. This course is designed to address current topics on interior design and help prepare students for a professional job search.

#### **DSN 215 - Sustainable Design: An Overview (5)**

Explores the history and principles associated with green and sustainable design. This course uncovers how the built environment affects people and the natural environment, environmental movements throughout history, green building assessment methods and certification programs, and the environmental responsibilities associated with the interior design profession.

Prerequisite: Basic competency with computers and navigating the web.

#### **DSN 216 - CAD I (5)**

Learn to use the basic functions of AutoCAD software to produce 2D drawings for interior design.

Prerequisite: Basic competency with computers.

#### **DSN 224 - Sustainability for Residential & Commercial Applications (4)**

Examines sustainable approaches to the built environment, including preservation, rehabilitation, restoration, and reconstruction. This course also looks at applying sustainable design elements to residential and a variety of commercial project types.

Prerequisite: It is recommended to have completed or be concurrently enrolled in DSN 215. Basic competency with computers and navigating the web.

#### **DSN 225 - Design I (5)**

This course introduces space planning for commercial interiors, including programming, design schematics and development, as well as relevant ADA Standards for

Accessible Design and building codes.

Prerequisite: Successful completion of DSN 204 and DSN 216.

#### **DSN 226 - Sustainable Strategies in Design (5)**

Introduces sustainable strategies for the integrated interior environment, including identifying materials, products, lighting systems, and building components that embody the principles of sustainability.

Prerequisite: It is recommended to have completely or be concurrently enrolled in DSN 215. Basic competency with computers and navigating the web.

#### **DSN 227 - Commercial Specifications (4)**

This course covers general notes used within construction documents, the specification of products, fabrication, and applications for commercial interior design. It also covers the liabilities of the designer in regard to specification writing for codes, standards, and federal regulations that are an essential part of designing building interiors.

Prerequisite: Successful completion of DSN 225.

#### **DSN 229 - Sustainable Interiors & the Integrated Design Process (5)**

Covers the steps to design and present a green interior space. Students will learn more about the integrated design process, develop their own sustainable interior design, and present it in a professional manner in preparation for real-life sustainable design proposals.

Prerequisite: Completed or concurrently enrolled in DSN 215, DSN 224, and DSN 226. Basic competency with computers and navigating the web.

#### **DSN 231 - Historic Preservation 20th Century Design & Philosophy (3)**

Includes the study of historically significant 20th- and 21st-century designers and architects, their philosophies, and the role of their significant historic works.

#### **DSN 236 - Design II (7)**

Through site visits, research and building plans, students will develop and present a space plan and design concept incorporating sustainable practices for a project of commercial nature, using an existing space as a model. Students will also be introduced to building code topics, such as occupant load and means of egress. Upon completion of the project, students will give a verbal and visual presentation of their design concept.

Prerequisite: Successful completion of DSN 225.

### **DSN 239CL - CAD II (5)**

This course includes the intermediate-level use of 2-dimensional CAD (computer-aided drafting). To develop increased knowledge, speed, and accuracy, students will use AutoCAD software to develop an interior drawing set using AutoCAD layouts.

Prerequisite: Successful completion of DSN 216.

### **DSN 241 - Business Practices (4)**

This course is an introduction to business practices as generally conducted by interior designers. The intent of this study is to acquaint students with some of the daily basic procedures, documents, ethical conduct, associations, certification requirements, and fees associated with the profession of interior design within various business formats. This course is designed to address current topics within the profession and help prepare students for internships and the job search.

### **DSN 245 - Internship (4)**

Interact with established businesses or related businesses of interior design by going to a place of business and working in the field. Students will arrange to work with a sponsor and will observe and assist the sponsor with meaningful design activities for a total of 80 hours.

Prerequisite: Successful completion of DSN 119, DSN 123, DSN 124, DSN 132, DSN 136, DSN 140, DSN 145, DSN 153, DSN 158, DSN 159, DSN 204, DSN 227, DSN 231, DSN 236, and DSN 239, or instructor's permission.

### **DSN 251 - Contract Furniture (3)**

This course provides an introduction to the various types of furniture used in commercial design. Concentrates on the selection, specification, and use of furnishings, as well as contracts, documents, and the procurement of contract furniture.

### **DSN 265 - (Optional) Independent Study (3)**

Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.

Prerequisite: Instructor's approval.

### **DSN 266CAP - Portfolio/Professional Presentation (7)**

Create and present a professional portfolio of work illustrating your level of design and technical skills. Students will learn to present themselves and their work professionally to prepare for the job search, interviews, and employment in the interior design industry.

Prerequisite: Successful completion of DSN 119, DSN 124, DSN 136, DSN 145, DSN 153, DSN 159, DSN 227, DSN 236, and DSN 239, or instructor's permission.

### **DSN 270 - (Optional) Independent Study (4)**

Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.

Prerequisite: Instructor's approval.

### **DSN 275 - (Optional) Independent Study (5)**

Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.

Prerequisite: Instructor's approval.

### **DSN 310 - Interior Construction & Building Systems (5)**

Examine the basic components and practices of interior construction and building systems to better understand the built environment and factors that may affect design.

### **DSN 312 - Building Information Modeling I (5)**

Create design drawings using building information modeling software. Students will learn to navigate the software and develop a basic drawing/model for interior design.

### **DSN 314 - Building Information Modeling II (5)**

Produce drawings with increased detail and information using building information modeling software, further exploring the program's drafting, formatting and rendering capabilities.

Prerequisite: Successful completion of DSN 312 or



equivalent.

### **DSN 316 - Environmental & Sustainable Interiors (5)**

Examine environmentally friendly and sustainable practices in interior design. Topics include environmental movements throughout history, building assessment methods and rating systems, local, national and international laws, energy and water conservation, indoor air quality, and the many materials and products that are available on the market today.

### **DSN 350 - Intermediate SketchUp for Interior Design (5)**

Develop intermediate skills using SketchUp modeling software by further exploring its modeling capabilities, and learning to import files, produce drawing layouts, and work with SketchUp plug-ins to produce more photorealistic renderings.

Prerequisite: Successful completion of DSN 159 (or equivalent basic knowledge of SketchUp software).

### **DSN 355 - Intermediate Photoshop for Interior Design (5)**

Create and edit interior images, drawings and renderings using Photoshop software. Students will build upon skills learned in earlier course work with the goal of increasing knowledge of Photoshop capabilities and quality of work.

Prerequisite: Successful completion of DSN 159 (or equivalent basic knowledge of Photoshop software).

### **DSN 360 - Independent Study (5)**

Further develop an area of study or technical skill to help you reach your personal career goals in interior design. Upon approval of a topic, students will work with faculty to develop a course plan, objectives, and identify deliverables for evaluation.

Prerequisite: Basic competency with computers.

### **DSN 410 - Design Studio I (5)**

Combine knowledge and skills learned throughout your design education and experience to develop a functional design solution for a given project. Students will be presented with an introduction to human-centered design which will then be applied to their work. Projects will be presented in a written report and a visual and oral presentation.

### **DSN 412 - Design Studio II (5)**

Combine knowledge and skills learned throughout your

design education and experience to develop a functional design solution for a given project. Students will be presented with an introduction to evidence-based design which will be applied to their work. Projects will be presented in a written report and a visual and oral presentation.

Prerequisite: Successful completion of DSN 410.

### **DSN 414 - Design Studio III (5)**

Combine knowledge and skills learned throughout your design education and experience to develop a functional design solution for a given project. Students will be presented with an introduction to global context considerations in design which will then be applied to their work. Projects will be presented in a written report and a visual and oral presentation.

Prerequisite: Successful completion of DSN 410 and DSN 412.

### **DSN 416 - Design Research (5)**

Research a chosen design topic for increased scholarly knowledge and application to the final studio course (Design Studio IV) and the Capstone Project. Students will learn about research methods such as conducting literature reviews, observations, interviews, surveys, and document reviews, then analyze and develop a summary of findings.

Prerequisite: Successful completion of DSN 414.

### **DSN 418 - Design Studio IV (5)**

Combine knowledge and skills learned throughout your design education and experience to an interior design project with a focus relevant to design research conducted in DSN 416. Students will consider the project site, and apply research and other collected programming information to schematics in order to develop a design concept for their Capstone Project.

Prerequisite: Successful completion of DSN 416 or equivalent.

### **DSN 420 - Internship (5)**

Experience the interior design industry by procuring and participating in an internship. Students will work with their internship sponsor to develop a schedule in order to complete a minimum of 120 hours of internship work within the quarter.

Prerequisite: Successful completion of PHIL 310.

### **DSN 422 - Capstone Project (5)**

Fully develop a design project based on research work from DSN 416 Design Research, and programming, schematic and conceptual work completed in DSN 418 Design Studio IV. This self-directed special capstone project will illustrate the culmination of your education and experience, and include creating contract documents and presentation materials, for a final written, visual and oral presentation to students, faculty and industry members.

Prerequisite: Successful completion of DSN 416 and DSN 418.

## **ECE - Early Care & Education**

### **ECE 120 - Interpersonal Skills for the ECE Professional (2)**

Covers human relations roles and workplace skills. Discusses balancing individual technical skills with human relations and competencies.

### **ECE 126 - Nature & Outdoor Classroom (2)**

Gain skills and knowledge on the components of an outdoor classroom. Includes ways to incorporate creativity while supporting children as they explore nature in the environment, as well as sustainable practices for young children.

### **ECE 132 - Raising an Emotionally Intelligent Child (1)**

This course will focus on teaching parents, teachers, and providers how to use emotion-coaching techniques that foster emotional intelligence in children.

### **ECE 134 - Issues & Trends Green (2)**

Research topics that cover some of the current sustainable practices and trends in the ECE field.

### **ECE 135 - School Age Math, Science & Technology (3)**

Explore the different aspects of the school-age curriculum in science, math, and technology.

### **ECE 156 - From Seed to Table: Gardening with Children (2)**

Discover how important connecting with nature and caring for living plants can be for children. Students will learn techniques to create plantings and cooking items grown to serve at the snack table.

### **ECE 158 - Just Recycle It! (2)**

Students will explore the use of developing sustainable green curriculum ideas that use recyclable materials to make creative projects and activities to use in your work with young children."

### **ECE 190 - Practicum IV: Green (3)**

Provides students with the opportunity for practical field experience with a sustainable practice or green specialization. Includes a seminar component."

### **ECE 194 - Practicum IV: The Emotionally Intelligent Child (3)**

Provides students with the opportunity for practical field experience with an emotional intelligence specialization. Includes a seminar component.

### **ECE 198 - Practicum IV: Working with Families (3)**

Provides students with the opportunity for practical field experience with a specialization in working with families. Includes a seminar component.

### **ECE 219 - Practicum IV: Responsive Caregiving for Infants and Toddlers (3)**

Explores responsive caregiving for infants and toddlers, including best practices, building trust, environments, creating lesson plans, theories of development, and collaborating with families.

### **ECE 230 - Inclusion In Ece (3)**

Introduction to including children with special needs in the ECE field.

### **ECE 245DIV - Diversity Awareness & Curriculum Development (3)**

Exploring our own cultural awareness supports our work with diverse populations and is paramount to planning for and interacting with young children and their families. In this course, you will explore the various aspects of bias to develop strategies and an anti-bias approach within the early childhood curriculum.

### **ECE 290CAP - Portfolio Adventure (2)**

Provides students with the opportunity to compile their Early Care and Education degree portfolio. The portfolio adventure is an opportunity for students to establish self-marketing goals in the field and to produce an end-product that reflects their best practice, passion, and experience to date in the program and field. Students will receive instructor guidance and feedback and will participate in the

ECE portfolio review process prior to graduation.

## ECED - Early Care & Education

### **ECED& 100 - Child Care Basics (Stars) (3)**

Designed to meet licensing requirements for early learning teachers and family home child care providers, the STARS 30-hour basics course is recognized in the MERIT system. Topics include child growth/development, cultural competency, community resources, guidance, health/safety/nutrition, and professional practice.

### **ECED& 105 - Introduction to Early Childhood Education (5)**

Explore the foundations of early childhood education. Examine theories defining the field, issues and trends, best practices, and program models. Observe children, professionals, and programs in action.

### **ECED& 107 - Health, Safety & Nutrition (5)**

Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, responsibilities for mandated reporting, and available community resources.

### **ECED& 120 - Practicum: Nurturing Relationships (2)**

Students will apply theories of best practice in an early learning setting. Focus will be on developing supportive relationships while keeping children healthy and safe.

### **ECED& 132 - Infants & Toddlers - Nurturing Care (3)**

Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally-appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care.

### **ECED& 139 - Administration of Early Learning Programs (3)**

Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available for Washington State licensing and National Association for the Education of Young Children (NAEYC) standard compliance.

### **ECED& 160 - Curriculum Development (5)**

Investigate learning theory, program planning, and tools for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative

skills, and growth in young children.

### **ECED& 170 - Environments for Young Children (3)**

Design, evaluate and improve indoor and outdoor environments that ensure quality learning and nurturing experiences and optimize the development of young children.

### **ECED& 180 - Language and Literacy Development (3)**

Develop teaching strategies for language acquisition and literacy skill development at each developmental stage (birth through age 8) through the four interrelated areas of speaking, listening, writing, and reading.

### **ECED& 190 - Observation and Assessment (3)**

Collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions and communicating findings.

## ECON-Economics

### **ECON 101 - Principles of Economics (5)**

An overview of both micro and macroeconomics. Topics include: organization and operation of the U.S. economy, including unemployment, inflation, and GDP issues; fiscal and monetary policies; supply and demand; market structures; determination of prices in a market economy; and income distribution.

Prerequisite: Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

### **ECON& 201 - Microeconomics (5)**

Study of scarcity; the allocation of resources; supply and demand; production; market structures; determination of output and prices, with emphasis on a market economy; labor and capital markets; role of government in a market economy; comparative advantage; international trade; and distribution of income.

Prerequisite: Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

### **ECON& 202 - Macroeconomics (5)**

Study of the organization and operation of the U.S. economy, including: unemployment, inflation and GDP issues; the business cycle and long-run growth; national income accounting; aggregate supply and aggregate demand; government spending, taxation, and budget deficit/surplus; fiscal policy; the monetary system and the

Federal Reserve Banking System; monetary policy; interest rates; and international trade.

Prerequisite: Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

### **ECON 310 - Managerial Economics (5)**

Focuses on forecasting and estimating techniques and on tools used to analyze projects, compare alternatives, and make sound business decisions based on economic principles, such as time value of money, internal rate of return, and cost-benefit ratios.

Prerequisite: Prerequisite(s): Successful completion of ENGL& 101 and MATH& 146.

## **ECS - Early Care & Education**

### **ECS 110CL - Computer Essentials for the ECE Professional (4)**

Covers the essential computer tools and techniques necessary for the ECE professional. Covers designing forms, parent newsletters, fliers, brochures, and other materials needed to smoothly run a child care center.

### **ECS 121 - Introduction to the Early Childhood Profession (2)**

Examines professional characteristics, responsibilities and rewards for individuals working with young children. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered. ECS 121 is the foundation course for series ECS 121-127.

### **ECS 122 - Ways to Study How Children Grow/Learn (2)**

Examines theory and field practices to facilitate physical and intellectual development of young children. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered.

### **ECS 123 - Self, Social and Positive Guidance (2)**

Examines theory and field practices to support social and emotional development of young children and provide positive guidance. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered.

### **ECS 124 - Productive Relationships with Families (2)**

Examines theory and field practices to establish positive and productive relationships with families. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered.

### **ECS 125 - Program Management (2)**

Examines theory and field practices to ensure a well-run purposeful program that is responsive to participant needs. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered.

### **ECS 126 - Professionalism (2)**

Examines theory and field practices necessary to maintain knowledge of and commitment to professionalism in the early learning field. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered.

### **ECS 127CAP - CDA Capstone (2)**

Reviews the six CDA competency areas and prepares students for the CDA application and testing process.

### **ECS 151 - ECE Curriculum: Math, Science & Technology (3)**

Explores the different aspects of early childhood curriculum in math, science, and technology.

### **ECS 160 - ECE Curriculum: Music/Movement & Creativity (5)**

Explores the different aspects of the early childhood curriculum in creative art, music, movement, and creativity.

### **ECS 181 - ECE Practicum I (5)**

Provides students with practical field experience. Students will work at community child care centers or the Hayes Child Development Center on the Lakewood Campus, allowing them to apply classroom study to on-the-job situations. Includes a scheduled seminar.

### **ECS 182 - ECE Practicum II (5)**

Provides students with practical field experience. Students will work at community child care centers or the Hayes Child Development Center on the Lakewood campus, allowing them to apply classroom study to on-the-job situations. Includes a scheduled seminar.

**ECS 183 - ECE Practicum III (5)**

Provides students with practical field experience. Students will work at community child care centers or the Hayes Child Development Center on the Lakewood campus, allowing them to apply classroom study to on-the-job situations. Includes a scheduled seminar.

**ECS 202 - Preschool Activities (2)**

Covers developmentally appropriate activities for preschoolers. This is a hands-on class that will provide a chance for making and sharing samples.

**ECS 206 - Signing with Infants & Toddlers (2)**

Signing for basic communication with infants and toddlers with an emphasis on working with children who exhibit language delays.

**ECS 217 - ECE Practicum IV Infants/Toddlers (3)**

Provides students with the opportunity for practical field experience with specialization in infants and toddlers.

**ECS 220 - Curriculum for School Age (2)**

Focuses on curriculum suitable for the development of school-age children.

**ECS 225 - School Age Environment (2)**

Focuses on suitable environments for the development of school-age children.

**ECS 230 - ECE Practicum IV School Age (3)**

Provides students with opportunities for practical field experience with school-age specialization.

**ECS 235 - Issues & Trends (2)**

Research that covers some of the current issues and trends in the ECE field.

**ECS 260 - Curriculum for Family Child Care (2)**

A focus on developmentally appropriate curriculum for children in family child care settings with multiple ages.

**ECS 266 - Leadership in Early Childhood Education (4)**

Designed for leaders in the early childhood field. Essential skills for effective leadership will be covered: creating a shared vision, team building, managing change, personal development, communication, conflict management, staff development, and empowerment strategies.

**ECS 277 - Professionalism & Ethics (2)**

Examines NAEYC's Code of Ethical Conduct. Includes determining an Early Childhood professional's responsibilities to children, families, colleagues, and the community, using frameworks for ethical decision-making and exploration of personal and professional growth.

**ECS 286 - Practicum IV Leadership (3)**

Provides students with the opportunity for practical field experience with a leadership specialization. Includes a seminar component and observations. Focuses on emotional intelligence and conducting meetings.

**ECS 287 - Practicum IV Child Development (3)**

Provides students with opportunities for a practical field experience with a preschool specialization. Includes a seminar component and observations.

**ECS 288 - Practicum IV Family Childcare Professional (3)**

Provides students with the opportunity for a practical field experience with a family child care specialization. Includes a seminar component and observations.

**ECS 290 - Mentoring In ECE (1)**

Learn fundamental skills needed for early childhood mentors who practice as trainers and coaches. Covers concepts of adult learning, communication, observation, feedback, and conflict resolution.

**ECS 292 - Theories of Child Development (3)**

Exploration of child development theories and their application to the education of young children.

**ECS 297 - Practicum IV Special Needs (3)**

Provides students with the opportunity for a practical field experience with specialization in special needs. Includes a seminar component.

**EDUC - Early Care & Education****EDUC& 115 - Child Development (5)**

Build a functional understanding of the foundation of child development, from prenatal to early adolescence. Observe and document physical, social, emotional, and cognitive development of children, reflective of cross-cultural and global perspectives.

**EDUC& 130 - Guiding Behavior (3)**

Examine the principles and theories promoting social

competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences.

### **EDUC& 134 - Family Child Care Management (3)**

Learn the basics of family home childcare program management. Topics include: licensing requirements; business management; relationship building; health, safety, and nutrition; guiding behavior; and promoting growth and development.

### **EDUC& 136 - School Age Care Management (3)**

Students will develop skills to provide developmentally appropriate and culturally relevant activities and care, specifically: preparing the environment, implementing curriculum, building relationships, guiding academic/social skill development, and community outreach.

### **EDUC& 150 - Child, Family and Community (3)**

Students working with children (ages birth through school age) and their families will learn how to integrate the family and community contexts in which a child develops. Students will learn how to explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication.

## **EFS - Electrician Low Voltage Fire Security**

### **EFS 105 - AC/DC Electricity: Basic Theory, Fractions & Ohm's Law (7)**

Introduces basic theory of electricity, electrical measurements of circuits, fractions, Ohm's law, decimals, and decimal fractions. Covers formulas in electrical work, positive and negative numbers, exponents, powers of 10, and solving Ohm's law.

### **EFS 106 - AC/DC Electricity: Series Parallel & Combination Circuits (7)**

Introduces students to voltage, current, resistance, total values, and control of current in a series circuit. Introduction to parallel circuits, current and resistance, and voltage in a parallel circuit.

Prerequisite: Successful completion of EFS 105 or instructor's permission.

### **EFS 107 - AC/DC Electricity: Electrical Power & Power Applications (7)**

Introduces electric power in electric circuits, solving the power formula for current and voltage. Algebra for complex electric circuits. Resistance of wire of different sizes and length, sizing wire for a given load. Instantaneous values, maximum values, and phase angles of an AC sine wave.

Prerequisite: Successful completion of EFS 106 or instructor's permission.

### **EFS 108 - National Electrical Code Print Reading (7)**

Introduces students to practical print reading as it applies to the National Electrical Code.

Prerequisite: Successful completion of EFS 105, EFS 106, and EFS 107, or instructor's permission.

### **EFS 109 - National Alarm Installer Training Program (7)**

Introduces students to basic alarm systems through comprehensive lessons, videos, and lesson tests. With final test, students will have a thorough exposure to alarm systems.

Prerequisite: Successful completion of EFS 105, EFS 106, and EFS 107, or instructor's permission.

### **EFS 110 - CCTV Application & Design (7)**

Introduces students to basics of closed-circuit television systems design and applications.

Prerequisite: Successful completion of EFS 105, EFS 106, and EFS 107, or instructor's permission.

### **EFS 118 - National Electrical Codes (6)**

Introduces National Electrical Codes. Through individual tests, students will be able to research applicable electrical codes.

Prerequisite: Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

### **EFS 119 - National Fire Codes (6)**

Introduces the National Fire Codes. Through individual tests, students will be able to research applicable fire codes.

Prerequisite: Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

**EFS 121 - CCTV Field Service & Installation (7)**

Introduces basic systems service and installation of closed-circuit television systems. Through individual lessons, students will be exposed to the basics of CCTV field service and installation.

Prerequisite: Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

**EFS 124 - Washington Administrative Codes (2)**

Introduces students to the Washington Administrative Codes pertaining to industrial safety and to electrical installations in the state of Washington.

Prerequisite: Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

**EFS 207 - Addressable Fire SLC Systems/Design (7)**

Introduces Addressable and Intelligent Fire Alarm Systems using Signaling Line Circuits (SLC). Includes comprehensive lessons, lecture, and hands-on practical application and design.

Prerequisite: Successful completion of the Electrician Low Voltage Fire/Security Certificate, or instructor's permission.

**EFS 211 - Biometrics Access (7)**

Introduces Biometrics Access Control. Various Biometrics Systems are explored, as well as Computer Programmed Access-Control Systems. Includes comprehensive lessons and lecture, as well as hands-on practical application, installation, and design.

Prerequisite: Successful completion of EFS 207 or instructor's permission.

**EFS 216 - Advanced Voice Evacuation Fire Alarm Systems (7)**

Introduces Advanced Voice Evacuation Fire Alarm Systems as used in high-rise applications. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Prerequisite: Successful completion of EFS 211 or instructor's permission.

**EFS 221 - Fire Codes, NICET, NFPA (7)**

Introduces Fire Codes, AHJ (Authority Having Jurisdiction), NICET (National Institute for Certification of Engineering Technologies), and NFPA (National Fire Protection Association). Includes comprehensive lessons,

lecture, and hands-on practical application, installation, and design.

Prerequisite: Successful completion of EFS 216 or instructor's permission.

**EFS 226 - High Security Structured Cabling (7)**

Introduces High Security Structured Cabling in residential and commercial applications. Explores cabling as a total package. Includes most applications of security and low voltage needs. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Prerequisite: Successful completion of EFS 221 or instructor's permission.

**EFS 231CAP - CCTV Digital Network Solutions (7)**

Introduces Closed-Circuit Television (CCTV) Digital Network Solutions. Explores applications that require the camera to be recorded and viewed digitally or remotely via various networks. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Prerequisite: Successful completion of EFS 226 or instructor's permission.

**ENGL - English****ENGL& 101 - English Composition I (5)**

Utilize the writing process to write clearly with consideration of audience, purpose, and tone, using standard grammar and punctuation conventions along with common discourse modes and patterns of organization. Read and process sources using independent and critical thinking skills, following established conventions for incorporating and documenting sources in writing.

Prerequisite: Successful completion of ENG 094 or equivalent, or concurrent enrollment in ENGL 101 of linked sections. .

**ENGL& 102 - Composition II (5)**

Continues to develop writing skills practiced in English 101 with an emphasis on writing the research paper and writing analytical essays about literature. Through lecture, discussion, research, reading and writing, become familiar with the literary genres of prose, poetry and drama.

Prerequisite: Successful completion of ENGL& 101.

**ENGL& 235 - Technical Writing (5)**

Focuses on technical writing skills and projects for

industry and professions. Strong emphasis will be placed on principles of good writing and research techniques. Students will use appropriate technology and research to prepare letters, resumes, reports, proposals, newsletters, specifications, and other writing tasks typically required in a technical work setting. Discovery and knowledge of workplace ethics and guidelines as they pertain to writing will be researched, discussed, and used to enhance research. Requires use of technology including, but not limited to, computers, printers, and scanners.

Prerequisite: Successful completion of ENGL& 101.

### **ENGL& 244 - American Literature I (5)**

This course covers selected works in American literature from its beginnings to 1865. The emphasis is on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Authors and works vary but typically include Bradstreet, Franklin, Melville, Whitman, and Douglass.

Prerequisite: Successful completion of ENGL& 101.

### **ENGL& 245 - American Literature II (5)**

This course covers selected works in American literature from 1865 to 1945. The emphasis is on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Authors and works vary but typically include Twain, Crane, Wharton, Hughes, and Hurston.

Prerequisite: Successful completion of ENGL& 101.

### **ENGL& 246 - American Literature III (5)**

Surveys post-WWII American literature to the present. The emphasis is on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Authors and works vary but typically include Steinbeck, Williams, Morrison, Wallace, and Cisneros.

Prerequisite: Successful completion of ENGL& 101.

## **ENG - English**

### **ENG 91 - Basic Reading & Writing (5)**

Introduces and develops basic reading and writing skills.

Focus is on writing proper sentences and sound paragraphs that express a main idea clearly and fully with a minimum of errors in sentence structure, punctuation, and spelling. Coursework emphasizes writing from observation, as well as writing in response to reading. Helps refine reading comprehension and increase vocabulary for college-level reading requirements.

Prerequisite: Appropriate placement score or equivalent.

### **ENG 92 - Speaking and Listening for ESL Students in Prof-Tech Programs (5)**

This course works with non-native speakers to improve their speaking. Idioms, pronunciation, and clarity of spoken English will be demonstrated and practiced. Vocabulary for different situations will be discussed and used. Students will practice many levels of both personal and professional conversation.

Prerequisite: Successful completion of ENG 094 or equivalent.

### **ENG 94 - Advanced Reading & Writing (5)**

Enhances writing ability with emphasis on organization, unity, coherence, and adequate development of short essays. Introduction to various types of paragraphs and essays and review of the rules and conventions of standard written English. Both paper and electronic communication tools will be used.

Prerequisite: Successful completion of ENG 091 or equivalent.

### **ENG 96 - Business English I for AMT Support Course (3)**

Designed to support the development of reading, writing, speaking, and listening skills for AMT students in Business English. Emphasis will be on reviewing English structure, content, and usage explored in ENGL 105, providing additional guidance for students in sentence structure, vocabulary, and reading comprehension as well as an additional component for practicing speaking and listening skills as it relates to business communications.

### **ENG 97 - Business English II for AMT Support (3)**

Designed to support the continued development of reading, writing, speaking, and listening skills for AMT students in Business English. Emphasis will be on reviewing English structure, content, and usage explored in ENGL 106, providing additional guidance for students in sentence structure, vocabulary, and reading comprehension as well as an additional component for practicing speaking and



listening skills as it relates to business communications.

### **ENG 104 - Business Writing (5)**

Review structure, content, and usage as applied to business correspondence. Emphasis will be placed on writing clear, effective written communication, including memoranda, email, letters, resumes, and feasibility reports. Students will compile a portfolio. Course requires researching and documenting data using electronic databases and the Internet.

Prerequisite: Successful completion of ENG 094 or equivalent.

### **ENG 105 - Business English I for AMT (3)**

Introduction to Basic English structure, content, and usage as it applies to business documents, manuals, and forms. Emphasis will be placed on vocabulary and reading comprehension of business documents as well as listening and responding to verbal communication with clear and effective communication methods. Course requires researching and documenting data using electronic publications and related business manuals.

Prerequisite: Students will take TOEFL or IELTS test in their county and pass with the required scores for admission to be allowed into ENG 105. Accuplacer score between 250-259 or placement into ENG 094 is required for all other International students.

### **ENG 106 - Business English II for AMT (3)**

Review and expand upon knowledge of English structure, content, and usage as it applies to spoken and written communication scenarios in aerospace and manufacturing and related business fields. Emphasis on technical reading comprehension using business documents and verbal communication with coworkers and supervisors. Written communication skills will also include writing resumes, cover letters, and required reports as it applies to aerospace and manufacturing. Course requires researching and documenting data using electronic publications and related business manuals.

Prerequisite: Students will take TOEFL or IELTS test in their county and pass with the required scores for admission to be allowed into ENG 105. Accuplacer score between 250-259 or placement into ENG 094 is required for all other International students.

### **ENG 310 - Business Communications (5)**

Focuses on audience-oriented communication in the business environment. Course content includes writing

reports, proposals, memoranda, and emails; graphical presentation of data using Excel; and developing and delivering presentations using PowerPoint and other visual aids.

Prerequisite: Successful completion of ENGL& 101.

## **ENGL& 101**

### **ENGL& 101 - English 101 Supplemental Instruction (3)**

This course is a co-requisite and intended for students whose writing placement indicates the need for additional instructional support to be successful in college-level writing. ENGL& 101 requires concurrent enrollment in a linked section of ENGL& 101 and provides intensive instruction, workshopping, and programming that supports students' development as writers and learners.

Prerequisite: Successful completion of ENG 091 or equivalent placement. . Corequisite: Designated, linked section of ENGL& 101.

## **ENV - Environmental Sciences & Technology**

### **ENV 108 - Introduction to Ecology (5)**

Covers the basic topics of ecology, including population biology, plant and animal species characterization, habitat restoration, nutrient cycling, and energy flow.

### **ENV 131 - Hazardous Waste Site Operations - 40 Hours (4)**

Provides 40 hours of instruction and mandated training in hazardous materials, personal protection, and safety, in compliance with Occupational Safety and Health Administration (29 CFR 1910.120 HAZWOPER) for hazardous waste site operations. Training shall include theory and application of incident management/command structures, response operation, toxicology, and planning, in addition to the statutory requirements. Mandatory attendance required to receive certificate.

### **ENV 135 - Hazardous Waste Site Operations (8)**

Training provided in accordance with 29 CFR 1910.120 HAZWOPER Standard and WAC 296-843-20010. Training includes theory and application of incident management/command structures, response operation, toxicology, and planning, in addition to statutory requirements. Mandatory attendance required to receive certificate.

#### **ENV 141 - Orientation to Environmental Science (4)**

Course will survey the wide range of duties and career choices available to the environmental technician. Major environmental issues around the world are covered.

Prerequisite: Completion of, or co-enrollment, in English 94 or equivalent placement. .

#### **ENV 154 - Site Characterization (4)**

Focuses on providing students with a wide variety of mapping skills necessary for many phases of environment-related investigations. Also will provide hands-on application of established methods for evaluation of water, soil, and air. Biological, chemical, and physical investigations in accordance with generally accepted methodologies will be studied and conducted. This will be accomplished using hands-on training, with a wide variety of map resources and texts.

#### **ENV 157 - Environmental Site Assessment (4)**

Includes studying potential liability associated with property transfers. Students learn and implement historical research, site investigation, liability assessment, and regulatory assessment.

#### **ENV 161 - Environmental Law I (5)**

Provides an overview of the American legal system and how the branches of government work together to create and enforce laws. Focuses on environmental legislation and case law.

#### **ENV 164 - General Chemistry with Lab (5)**

Provides the basic concepts, principles, and applications of inorganic chemistry germane to the environmental field. Related instruction includes mathematics used in designing, conducting, and interpreting analytical procedures. Laboratory methods, chemical calculations, properties of solutions, and properties of acids and bases are also covered.

Prerequisite: Completion of MAT 094 or higher, or equivalent placement. .

#### **ENV 165 - Environmental Chemistry with Lab (5)**

Continuation of ENV 164 General Chemistry with progressive instruction in laboratory methods; chemical calculations; properties of solutions, acids and bases; and an introduction to organic chemistry.

Prerequisite: Completion of ENV 164 or CHEM& 161 General Chemistry with Lab.

#### **ENV 230 - Rural Technologies (4)**

Explores potential job areas in which students might seek employment. The "rural" aspect examines agriculture, forestry, fish, and wildlife.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

#### **ENV 231 - Issues in the Urban Environment (5)**

Course explores a variety of urban environmental issues. Storm-water management, sewage treatment, drinking-water treatment, and waste disposal.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

#### **ENV 240CAP - Internship (10)**

All students finishing the program are required to complete an internship. This is temporary full time field experience in the public or private sector where the student gains skills and experience in a chosen area of employment. Students learn "on the job" as well as making a skilled contribution to the internship provider. Opportunities to find internships are provided but the student is in charge of finding his/her own internship.

Prerequisite: Successful completion of at least 25 credits of ENV 200-level courses or instructor's permission. Enrollment in ENV 246 required.

#### **ENV 245CL - Environmental Law II (5)**

Places an emphasis on correct, accurate interpretation of environmental regulations and their applications. Students will be able to research, interpret, and use a variety of regulations upon completion. Regulations include RCRA; CERCLA; CWA; Washington Drinking Water Rules; Washington State Water Quality regulations; SDWA; and other applicable state, federal and local regulations. Course also covers Federal Energy Policy, including development of fossil fuels and alternative energy sources.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

#### **ENV 246CAP - Environmental Science Capstone (2)**

Accompanies ENV 240 Internship. The Capstone Project integrates the CPTC core abilities with the internship and identification of how core abilities apply in the workforce.

Prerequisite: Successful completion of at least 25 credits of ENV 200-level courses or instructor's permission. Enrollment in ENV 240 required.

**ENV 248 - Hydrology (6)**

Course covers the basic principles of applied surface water hydrology, ground water hydrology, and water quality. Emphasis is placed on a watershed-based approach that uses water quality standards to regulate surface water quality. Concepts and principles of biologically-based water quality standards are also introduced. The occurrence, movement, and quality of water beneath the earth's surface, aquifers, well-testing methods, and sampling techniques are also covered.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

**ENV 250 - Introduction to Air Pollution (3)**

Provides a basic knowledge of the sources, mechanisms, and health effects of noise and atmospheric air pollution and their interaction with the weather and other climatological conditions. Methods of regulatory-required air monitoring, sampling, and data interpretation will also be introduced.

**ENV 251 - Environmental Critical Areas (7)**

Covers environmental critical areas, including wetlands, wildlife conservation areas, aquifer recharge areas, flood hazard, and landslide areas. Focus is on wetland delineation and reporting. Appropriate sections of federal, state, and local regulations are addressed. Includes field trips to local sites and delineation projects on the campus wetland. Field trips are to local sites. Delineation project on the campus wetland will be completed.

**ENV 260 - Introduction to Soils (5)**

Course focuses on basic physical, biological, and chemical concepts of soil science. Written assignments and practical exercises will be utilized to demonstrate how soils data is commonly used in regulatory, legal, and scientific land use interpretations and decisions.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

**ENV 261 - Watershed Analysis (4)**

Focuses on issues associated with Timber, Fish, and Wildlife watershed analysis. Study various modules and make an in-depth presentation to the class using visual aids. Monitoring and analysis skills will be covered and demonstrated through the collection of field data in remote areas. Willingness to be outdoors in rough terrain is a consideration. EPA Watershed Academy training is included.

Prerequisite: Successful completion of GEOL&110 and all ENV 100-level courses, except ENV 135 and ENV 165.

**ENV 270 - Hazardous Materials Transportation (3)**

Covers the requirements associated with transportation of hazardous materials as defined in Title 49 Code of Federal Regulations (49CFR) and 171.8 (not including radioactive). Meets the hazmat employee training requirements found in 49 CFR 172 Subpart H.

**ES - Esthetic Sciences****ES 105 - Anatomy and Physiology for Estheticians (2)**

A comprehensive survey of the body systems and how they work as they relate to the practice of esthetics. Class projects include eukaryotic cell, cranial puzzle, muscles of the head and neck, and muscle flash cards.

**ES 110 - Histology and Physiology of the Skin (3)**

A comprehensive examination of the epidermis, dermis, and hypodermis, including specialty cells and dermal adnexa. Examination of the physiology of the epidermal basement membrane, accessory organs of skin, and epidermal differentiation as they relate to the practice of esthetics.

**ES 113 - Introduction to Cosmetic Chemistry (3)**

Fundamentals of chemistry, including differences between organic and inorganic matter, simple chemical reactions, pH for estheticians, and composition of, as well as indications for, commonly used products for esthetic salon services.

**ES 114 - Facial Procedures (5)**

Introduction to facial procedures, including client intake and assessment, skin analysis, clinical indications and contraindications. European facial instruction, product selections, and recommendations.

Prerequisite: Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123. Corequisite: ES 118, ES 130, ES 132, ES 134, and ES 137.

**ES 116 - Medical Chart Notation and Medical Terminology for Estheticians (4)**

Survey of common medical charting notations and terminology employed in medical practice, particularly as they relate to spa, salon, and medical office environments.

**ES 118 - Temporary Hair Removal (4)**

Survey of temporary hair removal to include: indication;

contraindications; and methods of epilation using multiple modalities including, but not limited to, hard wax, soft wax, and sugaring, lash and brow tinting as well as all safety and sanitation employed in the esthetics profession.

Prerequisite: Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123. Corequisite: ES 114, ES 130, ES 132, 134, and ES 137.

#### **ES 120 - Skin Diseases and Disorders (5)**

Identify normal skin and anomalies of skin, including primary, secondary, and vascular lesions, as well as irregularities of skin pigmentation. Identification of skin diseases and differentiating from common noncontagious lesions is included.

#### **ES 123 - Bacteriology, Salon Safety and Sanitation (4)**

Overview of pathological and non-pathological microorganisms including bacteria, viruses, endoparasites and ectoparasites, disease vectors, and transmission. Covers levels of decontaminations pertaining to salons, spas, and medical offices.

#### **ES 130 - Makeup Applications (2)**

Exploration of color theory, basic makeup allocation techniques, and general product knowledge

Prerequisite: Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123. Corequisite: ES 114, ES 118, ES 132, ES 134, and ES 137.

#### **ES 132 - Skin Care and Body Treatments (4)**

Body treatments to include: foot soaks, mud wraps, body scrubs, wet and dry room techniques, and back treatments.

Prerequisite: Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123. Corequisite: ES 114, ES 118, ES 130, ES 134, and ES 137.

#### **ES 134 - Machine Facials (4)**

Includes indications, contraindications, and safety for electrical modalities including galvanic, high frequency, and other electrical equipment such as magnifying lamps, steamers, and hot towel warmers.

Prerequisite: Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123. Corequisite: ES 114, ES 118, ES 130, ES 132, and ES 137.

#### **ES 136 - Microdermabrasion and Superficial Peels (4)**

Covers clinical exfoliation and desquamation techniques employing chemical and mechanical methods.

Prerequisite: Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137. Corequisite: ES 140, ES 145, ES 154, and ES 159.

#### **ES 137 - Spa/Clinical Operations (1)**

Introduction to realistic training in our student-run clinic, incorporating point of sale, dispensary, laundry, spa and clinical operations, and management positions.

Prerequisite: Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123. Corequisite: ES 114, ES 118, ES 130, ES 132, and ES 134.

#### **ES 140 - Clinical Applications I (7)**

Realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice.

Prerequisite: Successful completion of ES 125, ES 128, ES 130, ES 132, ES 134, and ES 137. Corequisite: ES 136, ES 145, ES 154, and ES 159.

#### **ES 141CL - Clinical Applications II (5)**

Realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice and advanced modalities.

Prerequisite: Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159. Corequisite: ES 149, ES 150, ES 153, ES 157, and ES 158.

#### **ES 145 - Corrective Concealing Makeup (3)**

Theory and application of corrective and concealing techniques for makeup applications.

Prerequisite: Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137. Corequisite: ES 136, ES 140, ES 154 and ES 159.

#### **ES 149 - Laser Theory and Applications (5)**

Didactic and hands-on applications of multiple laser modalities. Course will include all related safety and first aid components.

Prerequisite: Successful completion of ES 136, ES 140, ES 141, ES 145, ES 154, and ES 159. Corequisite: ES 141, ES 150, ES 153, ES 157, and ES 158.

#### **ES 150 - Medium Depth Peels (2)**

Didactic and hands-on applications of clinical-based medium-depth peels. Course includes all related safety and first aid measures.

Prerequisite: Successful completion of ES 136, ES 140, ES

145, ES 154, and ES 159. Corequisite: ES 141, ES 149, ES 153, ES 157, and ES 158.

### **ES 153 - Advanced Cosmetic Chemistry (3)**

In-depth study of cosmetic chemicals and product knowledge. Students will write research papers on chemical products, ingredients, and contraindications that may occur during an esthetic treatment.

Prerequisite: Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159. Corequisite: ES 141, ES 149, ES 150, ES 157, and ES 158.

### **ES 154 - Advanced Skin Care and Massage Techniques (5)**

This course includes advanced modalities of skin care, including MLD and other industry- related techniques.

Prerequisite: Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137. Corequisite: ES 136, ES 140, ES 145, and ES 159.

### **ES 157CAP - Business Planning (2)**

Independent research and preparation of a business plan and portfolio as capstone project.

Prerequisite: Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159. Corequisite: ES 141, ES 149, ES 150, ES 153, and ES 158.

### **ES 158 - State Board Prep (2)**

This course includes kit preparation and simulation of state board examinations.

Prerequisite: Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159. Corequisite: ES 141, ES 149, ES 150, ES 153, and ES 157.

### **ES 159 - Introduction to Business Planning and Professional Development (1)**

This course introduces students to outlining business plans by obtaining demographics, researching profit and loss statements, and outlining startup costs.

Prerequisite: Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137. Corequisite: ES 136, ES 140, ES 145, and ES 154.

### **ES 202 - Advanced Esthetic Theory (2)**

Covers advanced anti-aging modalities of skin care. Students will learn and practice advanced and holistic practices of face and body to benefit both themselves and

their clients.

Prerequisite: Valid Washington State Esthetics License. Corequisite: ES 204, ES 206, ES 208, and ES 210.

### **ES 204 - Wound Healing/ Inflammation in Esthetics (2)**

Covers the theory and application process of how wound healing occurs with advanced modalities and the use of proper ingredients in skin care products to reduce effects of aggressive treatments.

Prerequisite: Valid Washington State Esthetics License. Corequisite: ES 202, ES 206, ES 208, and ES 210.

### **ES 206 - Advanced Cosmetic Chemistry (2)**

In-depth study of cosmetic chemicals and product knowledge. Research papers produced consisting of chemical products, ingredients, and contraindications that may occur during an esthetic treatment.

Prerequisite: Valid Washington State Esthetics License. Corequisite: ES 202, ES 204, ES 208, and ES 210.

### **ES 208 - Advanced Exfoliation Procedures (4)**

Covers the theory and application of multiple advanced exfoliation techniques as they pertain to esthetic skin care practices.

Prerequisite: Valid Washington State Esthetics License. Corequisite: ES 202, ES 204, ES 206, and ES 210.

### **ES 210 - Evening Clinical Applications I (3)**

Covers realistic training in our student-run clinic, incorporating the point of sale, dispensary, laundry, spa and clinical operations, retail sales, and clinic management. Services will include every aspect of an exemplar esthetics practice and advanced modalities performed in a safe and sanitary manner.

Prerequisite: Valid Washington State Esthetics License. Corequisite: ES 202, ES 204, ES 206, and ES 208.

### **ES 218 - Medium Depth Peels (2)**

Introduces and covers didactic and hands-on applications of clinical-based medium-depth chemical peels. Students learn and practice all related safety and first aid measures.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210. Corequisite: ES 220, ES 222, and ES 224.

### **ES 220 - Intro to Assessment and Business Practice (2)**

Covers clinical client charting practices and advanced skin

analysis techniques in theory and practical applications. Students prepare research for a business plan and client portfolio of clinical treatments as the foundation of their second quarter capstone project.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210. Corequisite: ES 218, ES 222, and ES 224.

#### **ES 222 - Laser and Light Therapy (4)**

Covers didactic and hands-on applications of LED and other light therapy modalities, including all related safety and first aid components.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210. Corequisite: ES 218, ES 220, and ES 224.

#### **ES 224 - Evening Clinical Applications II (5)**

Participate in realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice and advanced modalities performed in a safe and sanitary manner.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210. Corequisite: ES 218, ES 220, and ES 222.

#### **ES 228 - Evening State Board Preparation (4)**

Prepares students for state board examinations. Course covers state board kit preparation and simulation of state board examinations.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224. Corequisite: ES 230, ES 232, ES 234, and ES 236.

#### **ES 230 - Corrective Concealing Makeup (2)**

Prepares students for state board examinations. Course covers state board kit preparation and simulation of state board examinations.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224. Corequisite: ES 228, ES 232, ES 234, and ES 236.

#### **ES 232 - Advanced Assessment and Business Practice (3)**

Covers advanced diseases and disorders with in-depth study of cosmetic chemicals and product knowledge. Students prepare research papers consisting of chemical products, ingredients, and contraindications that may occur during an esthetic treatment. Students complete a business

plan and portfolio as capstone project.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224. Corequisite: ES 228, ES 230, ES 234, and ES 236.

#### **ES 234 - Pre/Post Procedures (2)**

Determining what procedures will be appropriate for patients preparing for more invasive services - for example, laser or plastic surgery - and how the esthetician plays a vital role in the successful outcome of these advanced services.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224. Corequisite: ES 228, ES 230, ES 232, and ES 236.

#### **ES 236 - Evening Clinical Applications III (2)**

Participate in realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice and advanced modalities performed in a safe and sanitary manner.

Prerequisite: Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224. Corequisite: ES 228, ES 230, ES 232, and ES 234.

## **FAUT - Automotive Technician**

#### **FAUT 120 - Ford Introduction to Automotive (2)**

Students will be preparing for working in a shop environment by covering HAZMAT issues, equipment safety and operation, hand tool selection and use, and service information selection and use. Students will also become familiar with employment opportunities and expectations and certification requirements.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 149, FAUT 172, and FAUT 179.

#### **FAUT 144 - Ford Basic Electrical Systems Diagnosis and Testing (6)**

Diagnose and repair automotive electrical systems using the Symptom-to-System-to-Component-to-Cause process. Use special tools and service equipment associated with electrical diagnosis and repair. Use all service publications in their available formats to obtain needed information for diagnosis. Perform diagnosis test procedures. Perform repair procedures. Students will become familiar with the

tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 209 and FAUT 212.

#### **FAUT 147 - Ford Automotive Brakes (6)**

Covers brake system theory and operation, diagnostic strategies, and component removal/reinstallation. Students will become familiar with the tools, terminology, and procedures used during routine brake service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list. (See syllabus).

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 157, FAUT 185, and FAUT 255.

#### **FAUT 149 - Ford Automotive Suspension, Steering, & Wheel Alignment (7)**

Students will learn suspension and steering principles, diagnostic strategies, and component removal/reinstallation. Alignment geometry and service procedures are also covered. Students will become familiar with the tools, terminology, and procedures used during routine brake service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list (see syllabus).

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 120, FAUT 172, and FAUT 179.

#### **FAUT 157 - Ford Automotive Brakes, Suspension, Steering, & Alignment Lab (5)**

Provides students with the opportunity to practice the skills covered in FAUT 147 and FAUT 149. Students will become familiar with the tools, terminology, and procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 147, FAUT 185, and FAUT 255.

#### **FAUT 172 - Ford Base Steering, Suspension, & Alignment (6)**

Students will learn suspension and steering principles, alignment geometry, and service procedures to diagnose and correct excessive tire wear and pull concerns. Students will perform suspension adjustments using an alignment machine; perform power steering service and tests; correctly inspect steering and suspension system components; and flush, fill and inspect power steering systems. Students will become familiar with the tools, terminology, and procedures used during common steering and suspension service operations and will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 120, FAUT 149, and FAUT 179.

#### **FAUT 179 - Ford General Maintenance & Tires (7)**

Topics covered include shop safety practices, general automotive maintenance, vehicle checkups, and multi-point inspections. Students will perform scheduled maintenance on items such as fluid and filter changes and learn wheel and tire service procedures. Students will use all available service publications to identify automotive systems and components and become familiar with the tools, terminology, and procedures used during routine maintenance, inspections, and wheel and tire service. Students will have the opportunity to practice the procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 120, FAUT 149, and FAUT 172.

#### **FAUT 185 - Ford Brake Systems Diagnosis (2)**

Topics covered include brake system diagnosis and testing and brake system service. Students will diagnose brake concerns using all available service publications. Identify brake system components and perform brake system

inspections, machine rotors using an on-car lathe, and become familiar with the tools, terminology, and procedures used during routine brake service operations. Students will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: Concurrent enrollment in FAUT 147, FAUT 157, and FAUT 255 is required.

#### **FAUT 209 - Ford Electronic Systems (7)**

Diagnose and repair automotive electronic systems and basic application of computerized electronic systems. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 144 and FAUT 212.

#### **FAUT 212 - Ford Electrical Systems (9)**

Diagnosis, repair, and basic application of automotive electrical systems. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 144 and FAUT 209.

#### **FAUT 255 - Ford Air-Conditioning, Heating & Ventilation (6)**

Provides students with theory, troubleshooting, and repair of automotive air-conditioning systems, heating systems, and ventilation systems. Also covers recovery and recycling of both R-12 and R-134A refrigerants and procedures used during common service operations and gives students the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet

appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 147, FAUT 157 and FAUT 185.

## **FSME - Fundamental Skills for Manufacturing and Engineering**

### **FSME 101 - Workshop Safety (3)**

Covers occupational safety and health for workers in manufacturing and engineering workshop environments.

Prerequisite: Instructor's permission.

### **FSME 110 - Quality Principles, Inspection and Test (4)**

Provides students with a foundational set of measurement, data analysis, and documentation skills. Teaches students how to interpret manufacturing drawings and schematics, how to take measurements and analyze data, and introduces quality principles and terminology used in industry.

Prerequisite: Instructor's permission.

### **FSME 114 - Fabrication Fundamentals I (4)**

Teaches students the basic workshop skills needed to fabricate parts and structures. Also introduces students to the properties of common materials used in manufacturing and engineering.

Prerequisite: Instructor's permission. .

### **FSME 116 - Fabrication Fundamentals II (4)**

Introduces students to more advanced manufacturing and engineering fabrication techniques, including welding, the use of machine tools, composites, and electrical wiring.

Prerequisite: Instructor's permission.

## **GEO - Environmental Sciences & Technology**

### **GEO 215 - GPS Technologies (2)**

Covers the use of global positioning system equipment to create maps and files for use in ArcGIS (geographic information system). Focuses on Trimble GPS technologies. Covers analysis tools and layout features for map creation in ArcGIS.



## GEOL - Geology

### **GEOL& 110 - Environmental Geology with Lab (5)**

Focuses on the geological impacts associated with human activities. Emphasis includes internal and surface processes and the basic formation of the earth. Also covers conflicts associated with resource development and human responses to natural hazards.

## GTC - Graphic Technologies

### **GTC 110 - Art, Design & Visual Thinking (5)**

Introduction to visual arts and design principles. Stresses the components of visual thinking and visual language underlying design for digital media. A series of real-life case studies and exercises applies the design process and use of basic elements of design, typography, images, color, and layout.

### **GTC 123CL - Macintosh Operations & Image Acquisition (5)**

Introduction to Macintosh computer operations and file management. Covers image acquisition and archiving from Internet and analog sources.

### **GTC 130 - Digital Imaging I: Photoshop (5)**

Introduces the fundamentals of Photoshop to include basic tools, image editing, painting, color correction, and the creation, use, and management of layers and channels.

### **GTC 143 - Electronic Publishing & Layout (5)**

Apply typographic terms, vocabulary, and concepts; examine type identification and explore the relationships or essence of typographic design. Apply and solve mathematical problems common to typography. Apply basic page layout and create files. Explore proofreading and correcting copy changes.

### **GTC 149 - Digital Imaging II: Photoshop (5)**

Builds on the fundamentals of Photoshop and introduces advanced imagery to include blending, advanced layers, advanced selections, vector tools, filters, and color correction.

Prerequisite: Successful completion of GTC 130 or instructor's approval.

### **GTC 164 - Prepress I (5)**

Students will create, edit, and manipulate PDF files, combine files into PDF presentations, and secure PDF

documents. They will also work with many of the advanced features of Adobe Acrobat to include OCR text recognition, preflight, print production tasks, touch and commenting, proofing, live review, and collaboration.

### **GTC 169 - Intro to Vector-Based Illustration Software (5)**

Vector-based software, tools and features will be used to create text and logos, apply image effects, and design web graphics. The course incorporates branding and identifiers when designing products and enables students to design for both print and web.

### **GTC 174 - InDesign I (5)**

Perform techniques of the application of InDesign on the Macintosh or PC-based computer. Create files for electronic output; create documents, using style sheets, color/ swatches, and tabs, along with understanding color separations for creating a variety of projects such as menus, booklets, brochures, forms, and other documents. Explore PDF and postscript files, service bureaus, and production speed

Prerequisite: Successful completion of GTC 143 or instructor's approval.

### **GTC 203 - Preflight (5)**

Explore the prepress environment using page layout, vector object-oriented, and imaging software applications. Create projects in color to collect for output and packaging of files. Use Acrobat Professional to create and Distill PDF files, edit files, transfer files, and create an electronic portfolio. Perform electronic and laser separations for digital output, creating Postscript and EPS files for graphic manipulation.

Prerequisite: Successful completion of GTC 164, GTC 209, and GTC 276, or instructor's approval.

### **GTC 209 - Advanced Vector Digital Illustration (5)**

Perform advanced techniques using Adobe Illustrator, create documents using color swatches and color separations for a variety of projects. Explore the abilities of different tools/ panels, effects, and filters. Integrate Adobe Acrobat Pro as soft proofing software from within Illustrator and prepare files for electronic output ready for a service provider.

### **GTC 210 - Digital Imaging III: Photoshop (5)**

From combining multiple images into a single design to manipulating existing photos and creating entirely new digital artwork from scratch. Adobe Photoshop is one of

the most universal and powerful tools in the professional graphic design arsenal. The projects in this course were designed to reflect a variety of assignments that you might encounter in your graphic design career.

Prerequisite: Successful completion of GTC 149 or instructor's approval.

### **GTC 223 - Prepress II (5)**

Advanced prepress production topics are covered through lecture, research and practice. Topics include: fonts, postscript, Acrobat, file management, and raster image processing. Students will produce printing plates with halftones through the use of the Adobe suite and raster image processing.

Prerequisite: Successful completion of GTC 164 or instructor's approval.

### **GTC 225 - Advanced Page Layout Principles (5)**

Apply advanced layout techniques using industry-standard software to produce files for output. Preflight and package press-ready files. Output composite and separations to postscript. Impose jobs for output service provider.

Prerequisite: Successful completion of GTC 164, GTC 209, and GTC 276, or instructor's approval.

### **GTC 254CAP - Capstone Class (5)**

Preparation of personal job-hunting package of student's chosen specialty within the graphic technologies program, including industry research, business cards, cover letters, resumes, personal sales pitches, and portfolios.

Prerequisite: Successful completion of GTC 223 or instructor's approval.

### **GTC 260 - Web Animation Design (5)**

Offers experience using industry-standard tools for basic web animation. Students will develop familiarity with a timeline, layers, symbols, vector tools, and introductory animation techniques.

Prerequisite: Successful completion of GTC 276 or instructor's approval.

### **GTC 264 - Paper, Pricing & Estimating (5)**

Explore paper choices and costs within the printing industry. Estimate both materials and time for various printing processes. Produce a comprehensive business package from research to print-ready package. Present the business package with estimates to a group.

### **GTC 265 - Web Programming Basics (5)**

Apply basic programming and graphical user-interface techniques for developing effective and useful websites. Become familiar with current HTML code syntax and CSS code for styling. Through progressive enhancement of skills, students will build multi-page websites, culminating in a personal portfolio website.

Prerequisite: Successful completion of GTC 276 or instructor's approval.

### **GTC 273 - Web Graphic Design and User Experience (5)**

Learn techniques and best practices for designing graphics to be used on the web. Build website layout mock-ups, style guides, and user interface elements using Adobe Photoshop and Illustrator. Using modern design principles, create layouts that are both appealing and easy to use.

Prerequisite: Successful completion of GTC 276 or instructor's approval.

### **GTC 276 - InDesign II (5)**

Students will perform advanced techniques with InDesign, create documents, use color and color separations for a variety of projects, and prepare files for electronic output.

Prerequisite: Successful completion of GTC 174 or instructor's approval.

### **GTC 278 - Independent Study (4)**

This course explores student competency in the student's specialty skills area of the Graphic Technologies program. Students will produce a capstone project showing work accomplished and skills summarized.

Prerequisite: Successful completion of GTC 254 or instructor's approval.

### **GTC 280 - Internship (4)**

Provides on-the-job field experience relevant to visual communications. Apply classroom skills to work-related supervised learning experience. Internships may be paid or non-paid assignments and occur at on- or off-campus locations.

Prerequisite: Successful completion of GTC 254 or instructor's approval.

## **HAC - Heating & Air Conditioning**

## Service Technician

### HAC 102 - Basic Electricity (5)

This course discusses the structure of matter, movement, electrons, conductors, insulators, direct and alternating currents, and electrical units of measurement. Students will also study electrical circuits and measurements, Ohm's law, series and parallel circuits, and electrical power. Also includes magnetic fields, inductance, transformers, capacitance, impedance, sine waves, and use of electrical measuring instruments.

Corequisite: HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169, or instructor's permission.

### HAC 105 - Electrical Circuits (4)

This course discusses types of automatic control devices that respond to thermal change, the bimetal device, control by fluid expansion, the thermocouple, and electronic sensing devices. Covers space temperature controls (both high and low voltage), sensing temperatures of solids, pressure-sensing devices, oil-pressure safety controls, air-pressure controls, devices that control fluid flow, and maintenance of mechanical and electromechanical controls.

Corequisite: HAC 102, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169, or instructor's permission.

### HAC 120 - Advanced Controls & Troubleshooting (4)

This course covers control terminology, applications and electronic control circuits. Pneumatic controls and direct digital controls are also explored, along with programmable thermostats. Also covers procedures for troubleshooting basic and complex circuits, thermostats, and high-voltage circuits controlled by thermostats. Describes procedures for measuring amperage and voltage in low-voltage circuits and discusses pictorial and line diagrams.

Corequisite: HAC 102, HAC 105, HAC 162, HAC 163, HAC 164, and HAC 169, or instructor's permission.

### HAC 162 - Electric Motors & Their Applications (4)

This course discusses types of electric motors, along with starting and running components and characteristics, motor speeds, and power supplies. Specific topics also included are single and split-phase motors, the centrifugal switch, electronic relay, capacitor start motors, capacitor run motors, permanent split capacitor motors, shaded pole motors, single-phase hermetic motors, positive temperature coefficient motors, and variable-speed motors. Includes

discussions of various characteristics and insulations, bearings, mountings, and motor drives.

Corequisite: HAC 102, HAC 105, HAC 120, HAC 163, HAC 164, and HAC 169, or instructor's permission.

### HAC 163 - Refrigeration Controls (3)

This course covers fundamentals of refrigeration controls and defrost systems.

Prerequisite: Must have required hand tools of the trade. Corequisite: HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169.

### HAC 164 - Electric Motors & Troubleshooting (3)

This course discusses mechanical and electrical motor troubleshooting. This includes drive assemblies, belt tension, pulley alignment, open and shorted windings, shorts to ground, capacitor problems, wiring and connectors, and troubleshooting hermetic motors.

Corequisite: HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 169 or instructor's permission.

### HAC 169 - Advanced Motor Theory (2)

In this course, students will develop an understanding of variable-speed and capacity control motors (ECMs, Offloaders, Compressors, Inverter Drives).

Prerequisite: Must have required hand tools of the trade. Corequisite: HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, and HAC 164.

### HAC 170 - Heating I (7)

This course covers controls, thermal physics, electric heating, and equipment for residential and light commercial heating system installation and servicing, with emphasis on electric heating and gas heating.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade. Corequisite: HAC 175, HAC 181, and HAC 184.

### HAC 175 - Heating I Lab (5)

This course teaches students to troubleshoot and repair gas-burning appliances. Thermal physics and equipment for heating systems analysis and efficiency are studied. This is a hands-on class utilizing live projects.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.

Corequisite: HAC 170, HAC 181, and HAC 184.

### **HAC 181 - Heating II (6)**

This course covers controls, thermal physics, and equipment for residential and light commercial heating system installation and servicing with emphasis on electric and gas fuel heating.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.

Corequisite: HAC 170, HAC 175, and HAC 184.

### **HAC 184 - Heating II Lab (4)**

Will teach students to competently troubleshoot and repair electric, gas, and fuel heating equipment; thermal physics, gas safety, and equipment for heating systems analysis and efficiency are studied. This is a hands-on class using live projects.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.

Corequisite: HAC 170, HAC 175, and HAC 181.

### **HAC 202 - Advanced Refrigeration (10)**

This course covers competently troubleshooting and repair of refrigeration equipment, thermal physics and equipment for refrigeration systems analysis and efficiency. This is a hands-on class utilizing live projects.

Prerequisite: Must have required hand tools of the trade.

Corequisite: HAC 249 and HAC 257.

### **HAC 230 - EPA Refrigerant Certification (1)**

In this course, students will learn to properly recover and charge refrigerants dispose of them as defined by EPA in order to pass a national examination.

### **HAC 237 - Basic Refrigeration I (7)**

Introduction to controls, thermal physics, and equipment for residential and light commercial air conditioning and refrigeration system installation and servicing, with emphasis on refrigeration.

Prerequisite: Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 242, HAC 246, and HAC 255.

### **HAC 242 - Basic Refrigeration I Lab (5)**

This course covers troubleshooting and repair of refrigeration equipment, thermal physics, and equipment for refrigeration systems analysis and efficiency. This is a hands-on class utilizing live projects. Students will build a basic capillary tube refrigeration unit using basic temperature controls.

Prerequisite: Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 237, HAC 246, and HAC 255.

### **HAC 246 - Basic Refrigeration II (6)**

Introduction to controls, thermal physics, and equipment for residential and light commercial air conditioning and refrigeration system installation and servicing, with emphasis on commercial refrigeration and heat pumps.

Prerequisite: Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 237, HAC 242, and HAC 255.

### **HAC 249 - Job Readiness (5)**

This course covers resume writing, cover letter preparation, Internet job search, Work Source job readiness workshop, and tips on filling out job applications.

Prerequisite: Must have required hand tools of the trade.

Corequisite: HAC 202 and HAC 257.

### **HAC 255CAP - Basic Refrigeration II Lab (3)**

This course provides students hands-on experience with introduction to controls, thermal physics, and equipment for air-conditioning system installation and servicing.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 237, HAC 242, and HAC 246.

### **HAC 257CAP - Commercial Refrigeration/Advanced Refrigeration (7)**

This course teaches students to troubleshoot and repair commercial refrigeration through study material and DVD format. Refrigeration fundamentals, refrigeration electrical controls, and refrigeration charging are explored. This is a hands-on class utilizing live projects.

Prerequisite: Must have required hand tools of the trade.  
Corequisite: HAC 202 and HAC 249.

## HDT - Hemodialysis

### HDT 106 - Patient Calculations (2)

Emphasis on fractions, combined percentages, the metric system, apothecary measurements and conversions, Roman numerals and dosage calculation formulas. Self-paced lab. (For hemodialysis students only).

Prerequisite: Successful completion of ENG 091 or equivalent.

### HDT 108 - Health Information Technology in Patient Services (2)

Covers the issues, trends, and impacts of electronic and networked information technology on health care services in general. Explores specific issues related to the hemodialysis technician profession.

### HDT 116 - Computer Applications/Keyboarding (2)

Students will use computers to develop touch control and proper keyboarding and keypad techniques, with emphasis on alpha/numeric data entry. Course includes skill building; keyboarding alphabetic, figure, and symbol keys; and continued keyboarding drills and practice to develop a minimum speed and accuracy of 45 WPM/150 KSPM at 98 percent accuracy. Includes an introduction to MS Office Suite for basic business correspondence. Students will use Internet navigation for research projects.

### HDT 123 - Hemodialysis Terms/Anatomy & Physiology (2)

Provides the basic techniques of medical word building to be applied in acquiring an extensive medical vocabulary. Introduces anatomical, physiological, and pathological terms relating to body systems and medical abbreviations.

### HDT 130 - Hemodialysis Principles & Procedures I (5)

Defines the basic principles of diffusion, filtration, fluid dynamics, and osmosis relating to the dialysis process. Includes overviews of the dialysis environment and kidney functions. Covers patient vitals and monitoring treatment, including identification of normal and abnormal values. Students will perform laboratory tests and use patient documentation procedures. Students will learn to identify causes, signs, symptoms, preventions, and interventions for medical and technical complications that may occur during dialysis. Includes patient dietary and nutrition requirements.

### HDT 142 - Water Treatment for Hemodialysis (2)

Basic concepts of water treatment and dialyzer reuse are covered, including instruction on the varied devices used in hemodialysis. Also studied are advantages and disadvantages of filters, carbon tanks, deionizers, ultraviolet light, and reverse osmosis in the treatment of water for dialysis. Students will work in small groups to build a model of a water treatment room as their final project.

Prerequisite: Students must complete HDT 106, HDT 108, HDT 116, HDT 123, and HDT 130 with a score of 80 percent or higher.

### HDT 150 - Vascular Access (2)

This course covers the history and importance of vascular access, including the major types of permanent and temporary vascular access. Covers use of appropriate needle insertion for arteriovenous fistulae and grafts; catheter care and connections; the four types of anastomosis used for internal arteriovenous fistulae; and management of thrombosis, infection, hematoma, bleeding, steal syndrome, aneurysm, and catheter dislodgement.

Prerequisite: Students must complete HDT 106, HDT 108, HDT 116, HDT 123, and HDT 130 with a score of 80 percent or higher.

### HDT 151 - Professional Interaction (3)

Explores the relationship and psychological boundaries between the technician, the patient and the renal facility. Includes concepts of patient education. Covers basic interpersonal verbal and non-verbal communication, with a focus on adapting to an individual's special needs or cultural orientation. Students will be given the tools to develop listening skills by practicing assertive communication and developing appropriate interpersonal relationships using the concepts of patient confidentiality.

Prerequisite: Students must complete HDT 106, HDT 108, HDT 116, HDT 123, and HDT 130 with a score of 80 percent or higher.

### HDT 153 - Hemodialysis Principles & Procedures II (5)

Defines the basic principles of diffusion, filtration, fluid dynamics, and osmosis relating to the dialysis process. Includes overviews of the dialysis environment and kidney functions. Covers patient vitals and monitoring treatment, including identification of normal and abnormal values. Students will perform laboratory tests and use patient documentation procedures. Students will learn to identify causes, signs, symptoms, preventions, and interventions for

medical and technical complications that may occur during dialysis. Includes patient dietary and nutrition requirements.

Prerequisite: Students must complete HDT 106, HDT 108, HDT 116, HDT 123, and HDT 130 with a score of 80 percent or higher.

### **HDT 160 - Clinical Practicum I (6)**

During the clinical experience, students will participate in a dialysis facility as a member of the health care team in applying principles of hemodialysis, standard precautions, fluid management, initiating and concluding a dialysis treatment, patient and equipment monitoring, and treatment of routine hemodialysis problems in accordance with the standard dialysis procedures and policies of the facilities. Student will need to complete a total of 300 hours in the clinic.

Prerequisite: Students must successfully complete HDT 142, HDT 150, HDT 151, and 153 with a score of 80 percent or higher. Completion of all required immunizations with lab results as outlined. Students must be able to pass background check and drug screening requirements per clinical site. Current American Heart Association" (Healthcare Provider CPR/FirstAid BLS) - no substitutions."

### **HDT 165 - Clinical Practicum II (6)**

During the clinical experience, students will participate in a dialysis facility as a member of the health care team in applying principles of hemodialysis, standard precautions, fluid management, initiating and concluding a dialysis treatment, patient and equipment monitoring, and treatment of routine hemodialysis problems in accordance with the standard dialysis procedures and policies of the facilities. Student will need to complete a total of 300 hours in the clinic.

Prerequisite: Students must successfully complete HDT 142, HDT 150, HDT 151, and 153 with a score of 80 percent or higher. Completion of all required immunizations with lab results as outlined. Students must be able to pass background check and drug screening requirements per clinical site. Current American Heart Association" (Healthcare Provider CPR/FirstAid BLS) - no substitutions."

## **HIST - History**

### **HIST& 146 - US History I (5)**

Surveys the history of North America in the colonial era to

the Civil War. Emphasis is placed on the establishment of European colonies, relations between colonists and Native Americans, the development of slavery, economic and social developments, the relationship with the British Empire, the Revolutionary War, and emergence of the U.S. as a nation.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

### **HIST& 147 - US History II (5)**

Surveys the history of the U.S. from the Civil War era through World War I. Emphasis is placed on Native American-white relations, slavery, territorial expansion, the Civil War, and economic, social, and political developments leading to World War I.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

### **HIST& 148 - US History III (5)**

Survey of U.S. History from World War II to present. Emphasis is placed on the Cold War Era, Vietnam, Civil Rights, the liberal consensus, the rise of modern conservatism, minority relations, the 1990s, and post-9/11 American society.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

## **HISTO - Medical Histology**

### **HISTO 105 - Orientation to the Histology Laboratory (2)**

Introduces laboratory and chemical safety, as well as universal precautions. Covers basic overview of standard histology instrumentation, quality-control procedures, specimen accessioning, record keeping, and documentation. Explores laboratory and personnel certification requirements.

Prerequisite: Successful completion of BIOL& 175, CHEM& 110, and ENGL& 101.

### **HISTO 110 - Histotechnology I (10)**

Explores the theory and principles of fixation, processing, embedding, sectioning, and cover slipping of tissue sections.

Prerequisite: Successful completion of BIOL& 175, CHEM& 110, and ENGL& 101. Corequisite: HISTO 115.

**HISTO 115 - Histotechnology Lab I (5)**

Explores work in a simulated histology laboratory on campus. Students will participate in hands-on training in basic grossing techniques, as well as in-depth training in processing, embedding, and cutting tissue sections. Students will also learn to identify basic tissue structures using a light microscope.

Corequisite: HISTO 110.

**HISTO 120 - Histotechnology II (10)**

Covers and expands upon the knowledge and skills learned in Histotechnology I. Students will begin to learn the theory and principles of hematoxylin and eosin staining, as well as the basic principles and procedures of carbohydrate stains and cytology.

Prerequisite: Successful completion of HISTO 105, HISTO 110, and HISTO 115. Corequisite: HISTO 125 and HISTO 130.

**HISTO 125 - Histotechnology Lab II (5)**

Expands upon the knowledge and skills learned in Histotechnology Lab I. Students will continue to increase their skills in embedding and tissue sectioning, including the cutting and staining of frozen tissue specimens. Students will learn to do carbohydrate and Amyloid stains.

Corequisite: HISTO 120 and HISTO 130.

**HISTO 130 - Math Applications for Histology (3)**

Introduces laboratory mathematics, with an emphasis on solution preparation.

Corequisite: HISTO 120 and HISTO 125.

**HISTO 135 - Histotechnology III (10)**

Covers theory and techniques learned in Histotechnology I and II. Students will study more complicated special stains, focusing on methods used for microorganisms, pigments, minerals, the nervous system, connective tissue, and muscle stains.

Prerequisite: Successful completion of HISTO 120, HISTO 125, and HISTO 130. Corequisite: HISTO 140 and HISTO 145.

**HISTO 140 - Histotechnology Lab III (5)**

Expands upon the knowledge and techniques learned in Histotechnology Lab I and II. Students will perform more complicated special stains focusing on methods used to demonstrate microorganisms, pigments, and minerals.

Students also perform special stains commonly run on brain, muscle, and connective tissue.

Corequisite: HISTO 135 and HISTO 145.

**HISTO 145 - Immunohistochemistry (5)**

Covers basic immunohistochemistry and Enzyme histo-chemistry theory and techniques.

Corequisite: HISTO 135 and HISTO 140.

**HISTO 150CAP - Histology Internship (10)**

Covers the clinical phase of working in an affiliated histology laboratory. The staff of the affiliated laboratory directly supervise students. A report of "No Record On File" related to crimes against persons from the Washington State Patrol is required for participation in this class."

Prerequisite: Successful completion of HISTO 135, HISTO 140, and HISTO 145. Corequisite: HISTO 160.

**HISTO 160 - Histology Seminar (5)**

Covers what students have learned while working in an affiliated histology laboratory. Students will also review for their certification exam.

Corequisite: HISTO 150.

**HS - Human Services****HS 115 - Therapeutic Communication Skills (5)**

Acquaints students with the basic methods of therapeutic communication. Emphasis is placed on building basic active listening skills. Students will demonstrate mastery of theory through classroom activities, including mock interviews and videotaping.

Prerequisite: Successful completion of ENGL& 101, PSYC& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of C" or higher."

**HS 120 - Soft Skills for the Human Services Professional (3)**

Designed to prepare students for the internship portion of the program, as well as employment. Students will develop professional résumés, cover letters, and employment preparation materials in line with human services industry standards. Topics include workplace communication skills, including written and oral communication, team building, time and self-management, stress management, and

conflict resolution for the workplace. Students will explore the supervisor-supervisee relationship, including the functions of evaluation, self-evaluation, and professional development.

Prerequisite: Successful completion of HS 115, HS 127, and HS 237.

### **HS 125 - HIV/AIDS/Blood-Borne Pathogens & Brief Risk Intervention for the Chemically Dependent (1)**

Increase student's knowledge of HIV/AIDS blood-borne pathogens. Students will gain knowledge of the history of HIV/AIDS and related issues. Provides 10 hours of HIV/AIDS training in the areas of transmission, occupational safety, and standard precautions.

Prerequisite: Successful completion of ENG 094 and MAT 092 or equivalent.

### **HS 127 - Introduction to Human Services (5)**

Introduces students to human services as a profession and includes a historical and philosophical framework of human service delivery. Contemporary roles and the human service worker will be covered, including: typical duties and tasks of human service workers, income, maintenance, children's services, family services, aging, substance abuse, mental health, services for persons with disabilities, and the sociocultural aspects of providing services in a multiculturally diverse society. Students will also examine the competencies and qualifications required to become an effective human services worker, as well as the occupational and educational alternatives for graduates.

Prerequisite: Successful completion of ENGL& 101, PSYC& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of C" or higher."

### **HS 152 - Internship I (3)**

Students will participate in on-the-job training in the human services field of their choice. Duties and tasks are supervised. Students will perform relevant job duties and tasks within an agency of their choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice.

Prerequisite: Successful completion of HS 120, HS 125, HS 225, and HS 227.

### **HS 215 - Human Development for the Human Services Professional (5)**

Human development for the human services professional is

a lifespan development course looking at the physical, social, cognitive, and emotional development from conception to death. Cultural dynamics, diversity, and social contexts are examined in their relationship to the developmental process. Implications for parenting, education, case management, and social policy making will be discussed in terms of the application for human services professionals.

Prerequisite: Successful completion of HS 222, HS 230, HS 241, and HS 245.

### **HS 222 - Applied Counseling for the Human Services Professional (5)**

Increases student knowledge of a variety of counseling theories, theorists, and techniques, from both a historical and contemporary viewpoint. Students will explore the practical application and appropriate uses of these theories in the human services system.

Prerequisite: Successful completion of HS 152, HS 226, and HS 234.

### **HS 225 - Survey of Community Resources (3)**

Introduces students to a variety of community-based human service agencies through examination of their services, functions, and service populations. The class will participate in field visits, guest lectures, and exercises designed to assist them in understanding the relevance of each service component to the whole community, regional, and state system.

Prerequisite: Successful completion of HS 115, HS 127, and HS 237.

### **HS 226 - Mental Health Assessment & Evaluation (5)**

Explores current perspectives of mental health in the helping professions by focusing on the identification, definition, diagnostic criteria, and assessment and evaluation of psychological disorders. Emphasizes the continuum between normal and abnormal behavior by examining biological, psychological, and sociocultural causal factors as they relate to adults and children.

Prerequisite: Successful completion of HS 120, HS 125, HS 225, and HS 227.

### **HS 227 - Behavioral Health & Wellness (5)**

Introduces students to the dimensions of wellness, including physical, emotional, social, and spiritual components. Students explore strategies for personal behavioral health and wellness, including coping strategies, personal boundaries, self-awareness, and how to



avoid burnout on the job.

Prerequisite: Successful completion of HS 115, HS 127, and HS 237.

### **HS 230 - Case Management (5)**

This course introduces students to the fundamentals of case management practice. Students will review different models of case management and learn about common case management functions, such as outreach, engagement, assessment, planning, accessing resources, coordination, and advocacy.

Prerequisite: Successful completion of HS 152, HS 226, and HS 234.

### **HS 237 - Law & Ethics for Human Services (3)**

Presents an overview of the ethical and professional issues that human services workers face in the field. Includes ethical decision making, professional responsibilities, liability, confidentiality, records and rights of clients, professional codes of ethics, core values and personal issues, supervision, leadership, and the legal system.

Prerequisite: Successful completion of ENGL& 101, PSYC& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of C" or higher."

### **HS 238 - Special Projects (3-5)**

Increases students' knowledge and skill by formulating and implementing a special project related to the human services field. Students must obtain authorization from the instructor for the project prior to enrolling in course.

### **HS 239 - Selected Topics (3-5)**

Students will be responsible for performing a literature review and/or a research paper on a human services-related topic. Students must obtain authorization from the instructor for the project prior to enrolling in the course.

### **HS 240 - Survey of Addiction (5)**

Focuses on addiction in modern society by surveying prevalent addictions and common co-occurring disorders. Students will gain an overview of causal factors and the consequences of addiction as they relate to the individual, family, and community. A strengths-based perspective will focus on the biological, psychological, and sociocultural factors influencing addiction and recovery.

Prerequisite: Successful completion of HS 222, HS 230, HS 241, and HS 245.

### **HS 241 - Dynamics of Violence (5)**

Presents an overview of the dynamics of violence in relationship to both the perpetrator and the victim. Areas of emphasis include child neglect, child sexual and physical abuse, missing and exploited children and adolescents, domestic violence, the cycle of violence, elder abuse, and violence's impact on the family system. Strategies for treatment and community intervention are explored.

Prerequisite: Successful completion of HS 152, HS 226, and HS 234.

### **HS 234DIV - Culturally Competent Practice (5)**

Provides students with an awareness of the historical, cultural, socioeconomic, biological, and psychosocial influences that define diversity. Examines culturally competent standards that influence best practice standards for human service workers. Students will explore culture, guidelines for culturally sensitive practices, the impact of inequality on a variety of service populations, racism, prejudice, and inclusion strategies.

Prerequisite: Successful completion of HS 120, HS 125, HS 225, and HS 227.

### **HS 245 - Internship II (3)**

Students will participate in on-the-job training in the human services field of their choice. Duties and tasks are supervised. Students perform relevant job duties and tasks within their agency of choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice. Successful completion of Internship I is required.

Prerequisite: Successful completion of HS 152.

### **HS 246 - Group Process (3)**

An introduction to the dynamics of group interaction, with emphasis on the student's firsthand experience as a group leader and member. Highlights the factors involved in problems of communication, effective emotional responses, and personal growth. Emphasizes group process as a means of changing behavior. This course is designed to assist human services students, who will function as group leaders and co-leaders.

Prerequisite: Successful completion of HS 222, HS 230, HS 241, and HS 245.

### **HS 255 - Internship III (3)**

Students will participate in on-the-job training in the

human services field of their choice. Duties and tasks are supervised. Students perform relevant job duties and tasks within their agency of choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice. Successful completion of Internship II is required.

Prerequisite: Successful completion of HS 245.

## HSCD - Human Services

### HSCD 134 - Introduction to Addictions (5)

Focuses on substance and behavioral addictions in modern society by surveying prevalent addiction trends and common co-occurring disorders. Students will gain an overview of causal factors and the consequences of addiction as they relate to the individual, family, and community. A strengths-based perspective will focus on the biological, psychological, and sociocultural factors influencing addiction and recovery.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### HSCD 150 - The Neuro-Pharmacology of Addiction (5)

This course provides an overview of the effects of drug use and chemical dependency on the body, including physiological, emotional, and behavioral implications. Topics include drug interactions, brain-body chemistry, and the management of chronic and acute conditions of drug misuse.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 134.

### HSCD 155 - Chemical Dependency Counseling I: Individuals & Groups (5)

This course explores learning in a collaborative process that facilitates the client's progress toward mutually determined treatment goals and objectives. Students will learn counseling competencies that will include sensitivity to the client's individual characteristics and culture, the role of the counselor, approaches to counseling and addiction disorders, use of warmth, respect, genuineness, concreteness and empathy, and the therapeutic use of power and authority. Group dynamics and CD group counseling requirements as per the WAC and RCW will be covered.

Prerequisite: Completion of a terminal degree associate or

higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### HSCD 180 - Addictions Treatment: Ethics & the Law (5)

This course examines the federal and state laws that pertain to chemical dependency for individuals, families, and service agencies, including the relevant WAC and RCW. Students will be introduced to the local criminal, civil, and juvenile court systems. Core topics include the examination and adherence of the ethical standards for chemical dependency professionals in the helping relationship, including implications for clinical supervision and continuing education. Includes ethical decision-making, professional responsibilities, liability, confidentiality, records and rights of clients, professional codes of ethics, core values and personal issues, supervision, leadership, and the legal system.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### HSCD 215 - Case Management & Recordkeeping for the Chemical Dependency Professional (5)

This course provides basic chemical dependency case management skills of service coordination, referral practices, community services, ongoing evaluation of treatment progress, client needs, HIV Brief risk intervention for the chemically dependent, and learning documentation standards and applicable laws.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### HSCD 227 - Chemical Dependency Assessment & Evaluation (3)

Students will be introduced to a variety of industry-standard screening, evaluation and assessment tools for both adolescents and adults. Students will be able to determine a client's readiness for treatment and change and have an understanding of the appropriate levels of care. ASAM placement and the stages of change will be focal topics.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 229 - Suicide Prevention for the Chemical Dependency Professional (1)**

This course provides an overview of contributing factors to suicidality, including mental health, substance use, and lifespan development. Evidence-based prevention strategies for adolescents, adults, and older adults are discussed, including differentiations between Death with Dignity statutes for the terminally ill.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 235 - Chemical Dependency Practicum (3)**

Students will work in a supervised chemical dependency agency, as approved by the internship supervisor. Students adhere to ethical and professional responsibilities as per their agency, WAC, RCW, and NAADAC guidelines. The course will provide both individual and group supervision provided by agency and instructional professionals to share experiences and further develop work-related skills. Students will complete 115 hours of supervised clinical experience.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 134.

### **HSCD 249 - Chemical Dependency Counseling II: Adolescents & Families (5)**

Acquaints students with culturally competent models of diagnosis and intervention for families and adolescents, as well as building an understanding for the dynamics among family members impacted by chemical dependency. Provides an overview of adolescent psychology and development and family systems theory. Discusses client, family, and community education for substance misuse.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 155.

### **HSCD 251 - Relapse Prevention (3)**

Familiarizes students with the basic philosophy and techniques of relapse prevention for substance abuse and the ongoing process that involves all aspects of the person's wellness and culture. Learn to recognize the warnings signs for relapse, the 12-step approach to recovery, and general wellness concepts.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS

241, and HS 255.

## **HUC - Health Unit Coordinator**

### **HUC 106 - Anatomy & Physiology for Health Unit Coordinator (3)**

Introduces basic word elements used in building medical terminology and identifies the different types of word elements present in each medical term by name. Introduces medical terms, body structure, and pathology in relation to each body system: integumentary, musculoskeletal, sensory, circulatory, nervous, endocrine, and digestive systems.

Prerequisite: Must provide evidence of a current CPR card on the first day of enrollment, or by instructor's permission. Corequisite: Enrollment in HUC 108, HUC 114, and HUC 120.

### **HUC 108 - Introduction to Health Unit Coordinating (6)**

This course will focus on orientation and introduction to campus policies and rules of conduct. This course will also introduce students to program policies, dress code, attendance, classroom, and workplace rules of conduct, program goals, and grading system. This course also focuses on the use of various communication devices and introduces the EMR/HER and related Windows programs used in the hospital.

Prerequisite: Must provide evidence of a current CPR card on the first day of enrollment, or by instructor's permission. Corequisite: Enrollment in HUC 106, HUC 114, and HUC 120.

### **HUC 112 - Unit Coordinator Tasks & Procedures II (4)**

Focuses on cognitive knowledge and performance skills in the computer laboratory. Students will demonstrate performance skills for maintaining medical records, accurately transcribing physicians' orders to the appropriate chart forms and Kardex, as well as completion of pseudo patient charts.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Corequisite: Enrollment in HUC 113, HUC 118, HUC 122, HUC 126, and HUC 132.

### **HUC 113 - Introduction to Communication in the Health Unit Coordinator Role (1)**

Students will learn to describe and use good listening skills as a means of preventing and/ or solving conflicts with a variety of people in different situations. This course also

focuses on developing skills for the role of the communicator for the nursing unit. Students will also be given the tools for developing and practicing assertive communication, interpersonal relationships, and confidentiality skills.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Corequisite: Enrollment in HUC 112, HUC 118, HUC 122, HUC 126, and HUC 132.

#### **HUC 114 - Unit Coordinator Tasks & Procedures I (7)**

Enables identification of the forms commonly used in the patient's chart. Students will learn to explain the purpose of a patient's chart and recognize the charting responsibilities for each health care team member. Presents instruction and procedures for scheduling appointments by telephone, computer, and writing. Also focuses on students' performance in the computer-skill laboratory, demonstrating their cognitive knowledge for maintaining medical records; ordering laboratory and diagnostic exams; accurately transcribing physicians' orders; recognizing treatment orders; ordering nursing supplies; identifying abbreviations, symbols, and terms used in a medication order; and charting information accurately to the appropriate forms and the Kardex for their pseudo patients.

Corequisite: Enrollment in HUC 106, HUC 108, and HUC 120.

#### **HUC 118 - Advanced Communications in the Health Unit Coordinator Role (2)**

Improves communication among diverse cultures and incorporates the relevant needs of culturally diverse groups in the medical field. Provide students with an overview and understanding of the fundamentals of communication.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Corequisite: Enrollment in HUC 112, HUC 113, HUC 122, HUC 126, and HUC 132.

#### **HUC 120 - Unit Management I (3)**

Covers management responsibilities for the nursing unit, including time management and identification of possible fire and safety hazards on the nursing unit.

Corequisite: Enrollment in HUC 106, HUC 108, and HUC 114.

#### **HUC 122 - Unit Management II (3)**

Focuses on cognitive knowledge for managing the nursing unit and developing verbal and written communication skills. Students will develop leadership and performance skills by practicing classroom management.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Corequisite: Enrollment in HUC 112, HUC 113, HUC 118, HUC 126, and HUC 132.

#### **HUC 126 - Legal/Ethical Aspects of Unit Coordinating (2)**

Enables students to identify legal elements that are necessary in regard to preparing legal documents, discussing hospital and patient confidentiality, or witnessing signatures on consents for treatment. The ethics of this profession will be explored, and students will learn how to apply these ethics in professional behaviors. Covers AIDS education, blood-borne pathogens, HIPAA and hepatitis information.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Corequisite: Enrollment in HUC 112, HUC 113, HUC 118, HUC 122, and HUC 132.

#### **HUC 132 - Clinical Experience (7)**

Enables students to use the cognitive and performance objectives from courses HUC 106 through 126 in the clinical setting. The course focuses on resume preparation, employment application, and an employment interview. In order to participate in the clinical aspect of the program, students must receive a "No Record On File" report from the Washington State Patrol regarding crimes against persons. Clinical hours vary from six to eight hours per day four days per week. Students unable to complete course HUC 132 will have the option of completing a clinical rotation with the next available program on approval from the instructors within six months."

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Corequisite: Enrollment in HUC 112, HUC 113, HUC 118, HUC 122, and HUC 126.

#### **HUC 204 - Electrocardiogram Monitor Technician (3)**

Examines basic cardiac function, normal and abnormal cardiac rhythms, etiology of arrhythmias, and interpretation of EKG tracing. Class time will consist of lectures, identifying rhythms, and group challenges. This course provides students with an excellent baseline understanding of both simple and more complex rhythms.

## **HUM - Humanities**

#### **HUM& 101 - Introduction to Humanities (5)**

An introduction to the humanities through investigation of current cultural events offered by local communities. Study of the arts - painting, sculpture, architecture, drama, film, music, and dance - will be enhanced by attending

performances and on-location field trips to sites in the community. Students will become familiar with terminology of the arts and with community performance/demonstrations of these same arts (Multicultural content) (Writing intensive).

Prerequisite: Completion of ENG 094 with a minimum grade of C" or equivalent."

## IAUT - Automotive Core

### IAUT 104 - Introduction to Automotive Electrical (4)

This course introduces students to automotive electrical theory, electrical components, basic electrical testing equipment and procedures, and wire splicing techniques.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Must be completed with a grade of 2.3 or better. Valid driver's license required.

### IAUT 105 - Introduction to Automotive Trades (4)

This course introduces students to the automotive careers and development of an employment plan, shop safety, automotive systems and components, basic hand tool identification and use, how to use a variety of measuring tools, basic shop tool identification and use, scientific theory applicable to automobiles, fastener identification and repair, and how to perform automotive preventive maintenance inspections. Students will also have the opportunity to earn professional certification in safety and pollution prevention, lift safety, and automotive information systems.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement. Instructor's permission required. Valid driver's license required. Corequisite: IAUT 104, IAUT 115, IAUT 130, and IAUT 140. MAT 092 or meet appropriate placement.

### IAUT 115 - Introduction to Automotive Steering, Suspension & Brakes (5)

This course introduces students to automotive steering, suspension, and braking system theory, component identification, and inspections. Students learn how to read and interpret tire markings, alignment theory, restraint system operation and inspection, and introduces students to disc and drum brake systems.

Prerequisite: Successful completion of ENG 094 or meet

appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Valid driver's license required. . Corequisite: IAUT 104, IAUT 105, IAUT 130, and IAUT 140. Must be completed with a grade of 2.3 or better.

### IAUT 130 - Automotive HVAC (2)

This course introduces students to automotive HVAC system theory and component identification.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Valid driver's license required. . Corequisite: IAUT 104, IAUT 105, IAUT 115, and IAUT 140. Must be completed with a grade of 2.3 or better.

### IAUT 140 - Basic Automotive Welding (4)

This course teaches students how to perform set-up, operation and maintenance of oxygen-acetylene welding, cutting and heating equipment and how to operate, maintain and utilize gas-metal arc welding (GMAW) to produce basic welds used in the automotive industry.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Valid driver's license required. . Corequisite: IAUT 104, IAUT 105, IAUT 115, and IAUT 130. Must be completed with a grade of 2.3 or better.

## LEADR - Leadership

### LEADR 100 - Leadership I (1-6)

Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

### LEADR 101 - Leadership II (1-6)

Students taking this course will gain a basic understanding

of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

### **LEADR 102 - Leadership III (1-6)**

Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

### **LEADR 103 - Leadership IV (1-6)**

Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

## **MAP - Medical Assistant**

### **MAP 108 - Introduction to Medical Assisting (4)**

Learn and demonstrate asepsis and infection control. Perform anthropometric measurements, vital signs and physical examination. Instruction and discussion also includes the overall function of the medical assistant within the health care team, including legal responsibilities and limitations. College and program policies and procedures are extensively discussed. This course must be successfully completed in order to proceed in the program.

Prerequisite: Students must attend a mandatory information session/advising meeting with an instructor before or once the student has registered for MAP 108. Corequisite: CAH 102, CAH 105, and COLL 102.

### **MAP 121 - Body Systems Theory 101 (4)**

Caring for patients with disorders associated with hematology, endocrinology, obstetrics and gynecology, urology and male reproduction, and gastroenterology. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: MAP 124.

### **MAP 124 - Body Systems Applications 101 (3)**

Practice fundamental skills relating to Body Systems Theory 101. Skills include microhematocrit, blood glucose monitoring, care and use of the microscope, pregnancy testing, physical and chemical urinalysis, and UA slide preparation.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: MAP 121.

### **MAP 146 - Body Systems Applications 102 (4)**

Practice fundamental skills relating to Body Systems Theory 102. Skills include practicing care and usage of the otoscope, vision exams, audiometry testing, peak flow meters and small volume nebulizers, and performing ECGs, as well as phlebotomy skills.

Prerequisite: Completion of MAP 121 and MAP 124. Corequisite: MAP 147.

### **MAP 147 - Body Systems Theory 102 (4)**

Caring for patients with disorders associated with ophthalmology and otolaryngology, pulmonary medicine, neurology and mental health, cardiology, phlebotomy, and microbiology. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.

Prerequisite: Completion of MAP 121 and MAP 124. Corequisite: MAP 146.

### **MAP 164 - Body Systems Applications 103 (4)**

Practice fundamental skills relating to Body Systems Theory 103. Skills include wound and burn care; assisting with application and removal of sutures, surgical staples and casting; asepsis and infection control; identifying surgical instruments and proper care of instruments;

assisting with minor office surgery; and operating the autoclave. Also includes activities related to safety and emergency practices and uploading immunizations into the college designated database.

Prerequisite: Completion of MAP 146 and MAP 147.

Corequisite: MAP 166, MAP 176, and MAP 209.

#### **MAP 166 - Body Systems Theory 103 (4)**

Caring for patients with disorders associated with dermatology, orthopedic medicine, and surgical asepsis, as well as learning procedures and safety and emergency practices. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.

Prerequisite: Successful completion of MAP 146 and MAP 147. Corequisite: MAP 164, MAP 176, and MAP 209.

#### **MAP 176 - Computers for the Healthcare Setting (5)**

Perform tasks within the electronic health record. Included tasks include: computerized patient appointment and procedure scheduling, accounts receivable & payable, and documentation of clinical interactions. Practice of knowledge and skill acquired from previous quarters

Prerequisite: Completion of MAP 178, MAP 181, and MAT 092 or higher.

#### **MAP 178 - Health Insurance & Coding (6)**

Acquire information regarding private and public insurance programs. Practice fundamental skills relating to ICD-10 and CPT. Coding utilizing the coding books, computer and/or specific software. Practice of knowledge and skill acquired from previous quarters.

Prerequisite: Successful completion of MAP 182 and MAP 184. Corequisite: MAP 181.

#### **MAP 181 - Financial Practices (4)**

Covers basic bookkeeping, accounts receivable, and accounts. Instruction also includes information relating to bank accounts & cash funds. Practice of knowledge and skill acquired from previous quarters.

Prerequisite: Completion of MAP 182 and MAP 184.

Corequisite: MAP 178.

#### **MAP 182 - Patient Reception & Legal Components (4)**

Emphasis on customer service within the health care field, focusing on effective communication with the patient while projecting and promoting a positive image of the profession and the office. This course also includes telephone techniques, patient scheduling, introduction to

chart management, and business correspondence for the medical office, including cover letter and resume preparation. Define law and ethics relating to the health care field focusing on components specific to medical assistants.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: MAP 184.

#### **MAP 184 - Medical Records Management (3)**

Instruct and apply knowledge relating to medical records, including the creation, management, and legality of both the paper and electronic record, as well as filing systems utilized within the health care office. Focus will also include assisting patients in obtaining health and community services, as well as supplies and inventory control.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: MAP 182.

#### **MAP 209 - Externship Preparation 1 (3)**

Introduction of pharmacology math (with estimation components), administering oral and parental (intramuscular, subcutaneous, and intradermal) medications, performance of phlebotomy and microbiology while adhering to medical/surgical asepsis and universal/ standard precautions. Also included are student demonstrations of patient flow.

Prerequisite: Successful completion of MAP 121, MAP 124, MAP 146, MAP 147, MAP 178, MAP 181, MAP 182, and MAP 184. This course must be taken the quarter immediately prior to Quarter 5 courses. If more than one quarter passes before beginning Quarter 5, students will have to repeat this course. Corequisite: MAP 164, MAP 166, and MAP 176.

#### **MAP 212 - Externship Preparation 2 (3)**

Demonstrate competencies of skills acquired throughout the Medical Assistant Program. Each student will perform and must pass the following skills at a mastery level while adhering to standard precautions: medical/ surgical asepsis, blood pressures, patient workups, growth charting, phlebotomy skills, urinalysis, hematocrit, blood glucose check, audio and visual exam, electrocardiogram, telephone techniques and appointment scheduling used within the medical office, computerized accounts payable/receivable, the electronic record, and chart management. Instruction will include caring for pediatric patients and geriatric patients.

Prerequisite: Successful completion of MAP 164, MAP

166, MAP 176, and MAP 209. Successful completion of general education courses and compliance with the MAP immunization policy and personal health insurance policy. Corequisite: MAP 215 and MAP 222.

### **MAP 215 - Externship (8)**

Capstone course gives students practical experiences in physician offices and/or clinics. Student must successfully pass MAP 212 in order to be eligible for this course.

Corequisite: MAP 212 and MAP 222.

### **MAP 222 - Community Employment Opportunities & Locations (1)**

Locates the major medical employers (including hospitals) in the student's community, along with their human resources departments. This course also includes interviewing techniques, updating your resume, and methods of applying for employment through a variety of sources.

Corequisite: MAP 212 and MAP 215.

## **MASST - Massage**

### **MASST 110 - Anatomy, Physiology & Pathology I (5)**

Introduces students to anatomy and physiology, cytology, integumentary, osteology, myology, and the nervous system.

### **MASST 111 - Anatomy, Physiology & Pathology II (5)**

Explores endocrinology, cardiovascular, digestive, and respiratory systems.

Prerequisite: Successful completion of MASST 110.

### **MASST 112 - Swedish Massage Theory (4)**

Introduces students to the history, application, and principles of Swedish massage. This includes not only the massage strokes, but also client safety, communication, and charting of results.

Prerequisite: Potential students entering the program must test at college level (283 or higher) in reading on the Accuplacer or equivalent or have completed ENG 094. Students must also have documentation of training in standard first aid and CPR and a four-hour HIV/AIDS/blood-borne pathogens class prior to progressing to second quarter. A Washington State Patrol check will be required during the first quarter of study to progress to the second quarter. Some results from the background check may prevent individuals from

participating in certain classes. Corequisite: MASST 120.

### **MASST 115 - Clinical Massage Techniques (4)**

Covers a variety of massage techniques used in clinical massage. Students will learn and practice when and how to employ these techniques in order to safely and effectively treat their clients.

Prerequisite: Successful completion of the Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

### **MASST 116 - Complementary Massage Modalities I (3)**

Introduces students to a variety of massage modalities that can be safely integrated into a massage practice. Modalities covered include fascial techniques, acupressure, seated massage, and side-lying. Indications, contra-indications, and treatment modifications will be identified.

Prerequisite: Successful completion of MASST 112 and MASST 120.

### **MASST 120 - Swedish Massage Practice (4)**

Students will apply knowledge and techniques taught in Swedish Massage Theory. This class prepares students to practice safe, relaxing, therapeutic, and effective Swedish massage. In addition to proper use and application of Swedish massage strokes, students will also practice proper self-care techniques and learn how to care for their equipment.

Corequisite: MASST 112.

### **MASST 123 - Clinical Application of Massage Therapy (4)**

Introduces and prepares students to recognize, assess, and effectively treat common musculoskeletal pathologies. Other information covered is scope of practice, tissue healing, defining causes of injury, stages of rehabilitation, and common mistakes that massage therapists make.

Prerequisite: Successful completion of Swedish Practitioner course or equivalent, or current Washington state massage practitioner license.

### **MASST 126 - Kinesiology: Upper Extremity (2)**

Introduces students to the study of movement. Presents the beginning principles and skills for locating and identifying bony landmarks and muscles of the upper extremity using palpation techniques, movement, and anatomical terminology.



**MASST 130 - Kinesiology: Trunk (1)**

This course continues the study of movement. Builds upon the principles and skills for locating and identifying bony landmarks and muscles of the trunk using palpation techniques, movement, and anatomical terminology.

Prerequisite: Successful completion of MASST 126.

**MASST 131 - Assessment & Treatment of the Back (2)**

Detailed and extensive review of the structure and function of the back. Students will explore common musculoskeletal and neurological pathologies that can affect the back and will formulate a treatment plan to safely and effectively assess and treat those conditions.

Prerequisite: Successful completion of MASST 115 and MASST 123.

**MASST 132 - Deep Tissue Massage Theory (3)**

Introduces students to a variety of massage treatment techniques, providing groundwork for clinical massage applications. Indications, contraindications, and treatment modifications will be identified and discussed.

Prerequisite: Successful completion of MASST 112 and MASST 120. Corequisite: MASST 135.

**MASST 135 - Deep Tissue Massage Practice (4)**

Building on the massage techniques learned in Swedish massage theory and practice, students become proficient in a variety of deep-tissue techniques.

Prerequisite: Successful completion of MASST 112 and MASST 120. Corequisite: MASST 132.

**MASST 136 - Complementary Massage Modalities II (2)**

Introduces students to a variety of massage modalities that can be safely integrated into a massage practice. Modalities covered include pregnancy massage, sports massage, and hydrotherapy, including hot stone massage. Indications, contraindications, and treatment modifications will be identified.

Prerequisite: Successful completion of MASST 112 and MASST 120.

**MASST 137 - Kinesiology: Head and Neck (1)**

Continues the study of movement. This course builds on the principles and skills for locating and identifying bony landmarks and muscles of the head and neck, using palpation techniques, movement, and anatomical

terminology.

Prerequisite: Successful completion of MASST 126.

**MASST 139 - Clinical Massage Business & Ethics (1)**

Prepares students to communicate with other health care practitioners through proper and thorough documentation.

Prerequisite: Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or currently a Washington state licensed massage practitioner.

**MASST 143 - Massage Business & Ethics I (2)**

Introduces the learner to important business knowledge, skills, and professional ethics vital to the successful practice of massage therapy after licensure. Students will know and follow professional ethics as related to massage, learn and practice universal safety precautions, use and understand common medical terms, research the different avenues of employment available, and begin the process of building a successful massage business.

**MASST 145 - Orthopedic Assessment (4)**

Detailed analysis of joints, ligaments, and how surrounding structures affect movements. Integrating basic assessment and treatment of common musculoskeletal injuries and conditions.

Prerequisite: Successful completion of MASST 126, MASST 130, MASST 137 and MASST 146, or current Washington state massage practitioner license.

**MASST 146 - Kinesiology: Lower Extremity (2)**

Continue the study of movement. This course builds on the principles and skills for locating and identifying bony landmarks and muscles of the lower extremity using palpation techniques, movement, and anatomical terminology.

Prerequisite: Successful completion of MASST 126.

**MASST 147 - Clinical Massage Anatomy & Physiology I (3)**

Explores body systems, with an emphasis on the common pathologies of those systems. In addition to covering the cause and effect of those pathologies, students will also be presented with common allopathic treatments their clients may be receiving for those conditions. Pharmacology will include effects and side-effects of medications, and how those relate to the indications and contraindications of massage.

Prerequisite: Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

#### **MASST 148 - Massage Business & Ethics II (1)**

Learn and demonstrate a variety of successful business strategies, from marketing to record keeping, in addition to becoming knowledgeable regarding state and local laws that govern massage therapy in Washington state.

Prerequisite: Successful completion of MASST 143.

#### **MASST 150 - Clinical Massage Theory: Special Populations (4)**

Explores how massage can be modified to safely and effectively treat individuals who have unique situations that could include physical, emotional, and health-related challenges. Indications and contraindications will be discussed as they apply to each population.

Prerequisite: Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license. Corequisite: MASST 151.

#### **MASST 152 - Clinical Massage Practice: Special Populations (3)**

Students will practice techniques and positioning to adapt massage to safely and effectively treat individuals who have unique situations that could include physical, emotional, and health-related challenges. Indications and contraindications will be discussed as they apply to each population.

Prerequisite: Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license. Corequisite: MASST 150.

#### **MASST 153 - Assessment & Treatment: Upper Extremity (2)**

Detailed and extensive review of the structure and function of the upper extremity. Students will explore common musculoskeletal and neurological pathologies that can affect the arm and shoulder and will learn how to safely and effectively assess and treat those conditions.

Prerequisite: Successful completion of MASST 115 and MASST 123, or current Washington state massage practitioner license.

#### **MASST 155 - Assessment & Treatment: Lower Extremity (2)**

Detailed and extensive review of the structure and function of the lower extremity. Students will explore common musculoskeletal and neurological pathologies that can affect the lower extremity and will learn how to safely and effectively assess and treat those conditions.

Prerequisite: Successful completion of MASST 115 and MASST 123, or current Washington state massage practitioner license.

#### **MASST 157 - Assessment & Treatment: Head & Neck (2)**

Detailed and extensive review of the structure and function of the head and neck. Students will explore common musculoskeletal and neurological pathologies that can affect the head and neck and formulate a treatment plan to safely and effectively assess and treat those conditions.

Prerequisite: Successful completion of MASST 115 and MASST 123, or current Washington state massage practitioner license.

#### **MASST 158 - Practicum I (3)**

Allows students to choose and pursue individual workplace experience opportunities. This opportunity may be in a supervised internship setting, at on-site events, or at Clover Park Technical College's student-run massage clinic.

Prerequisite: Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

#### **MASST 159 - Clinical Massage Business & Ethics II (1)**

Prepares students to communicate with insurance companies and leads students through the process of billing insurance companies for services, from codes to filling out forms and follow-up.

Prerequisite: Successful completion of MASST 139, or current Washington state massage practitioner license.

#### **MASST 160CAP - Practicum II (3)**

Allows students to choose and pursue individual workplace experience opportunities. This opportunity may be in a supervised internship setting, at on-site events, and/or at Clover Park Technical College's student-run massage clinic.

Prerequisite: Successful completion of Swedish Massage

Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

### **MASST 162 - Student Clinic (2)**

Students will gain first-hand knowledge and experience by running a massage clinic. In addition to providing relaxation and deep-tissue massage, each student will also have an opportunity to experience the administrative positions in a clinic by rotating through the receptionist, cashier, and scheduling manager positions.

Prerequisite: Successful completion of MASST 112 and MASST 120. Student must have current First Aid/CPR certification and must have completed a minimum of four hours of HIV-AIDS training. Students must have a report from the Washington State Patrol. Some results from the background check may prevent individuals from participating in the student clinic.

### **MASST 163 - Clinical Massage Anatomy & Physiology II (3)**

Continues the exploration of body systems, with an emphasis on the common pathologies of those systems started in MASST 147. In addition to covering the cause and effect of those pathologies, this course will also present students with the common allopathic treatments their clients may be receiving for those conditions. Pharmacology will include effects and side-effects of the medications and how those relate to the indications and contraindications of massage.

Prerequisite: Successful completion of MASST 147.

## **MATH - Mathematics**

### **MATH& 107 - Math in Society (5)**

Exploration of mathematical concepts, with emphasis on observing closely, developing critical thinking, analyzing and synthesizing techniques, improving problem-solving skills, and applying concepts to new situations. Core topics are probability and statistics. Additional topics may be chosen from a variety of math areas useful in our society.

Prerequisite: Appropriate Accuplacer advanced algebra score of 233 or equivalent or successful completion of MAT 099.

### **MATH& 141 - Precalculus I (5)**

Covers linear, quadratic, polynomial, rational, absolute value, exponential, logarithmic, and inverse functions and equations; composite functions, linear and quadratic

inequalities, graphs of functions, relations, and inequalities; and graphic transformations. Introduces limits, linear and quadratic curve fitting, and mathematical modeling, including exponential growth and decay. Graphing calculator required.

Prerequisite: Appropriate Accuplacer advanced algebra score of 233 or equivalent or successful completion of MAT 099.

### **MATH& 142 - Precalculus II, Functional Trigonometry (5)**

Covers circular, trigonometric, and inverse trigonometric functions and graphs; trigonometric and inverse trigonometric identities; trigonometric equations; vectors and elementary vector operations; De Moivre's theorem and equations with complex solutions; and polar and parametric equations and their graphs. Graphing calculator required.

Prerequisite: Appropriate Accuplacer advanced algebra score of 263 or equivalent or successful completion of MATH& 141 or equivalent.

### **MATH& 146 - Introduction to Statistics (5)**

Descriptive and inferential statistics, including measures of central tendency, dispersion or variation, and skewness. Students are introduced to basic concepts in probability, as well as discrete and continuous probability distribution functions. Statistical inference includes sampling, elementary experimental design, and hypothesis testing using normal, student's T, and F-distributions; linear regression and correlation; and the chi-square distribution. Graphing calculator is required.

Prerequisite: Appropriate Accuplacer advanced algebra score of 263 or equivalent or successful completion of MAT 099 is required.

### **MATH& 151 - Calculus I (5)**

Covers algebraic and transcendental functions, continuity, limits (including indeterminate forms), derivatives and differentials of algebraic and transcendental functions (e.g., exponential, logarithmic, and trigonometric forms), applications of differential calculus, and an introduction to antiderivatives or indefinite integrals. Graphing calculator is required.

Prerequisite: Successful completion of MATH& 142 or equivalent.

### **MATH& 152 - Calculus II (5)**

Topics of calculus are presented geometrically,

numerically, and symbolically. MATH 152 topics include applications of integration, differentiation, and methods of integration, including improper integrals. Graphing calculator required.

Prerequisite: Successful completion of MATH& 151 or equivalent.

## MAT-Mathematics

### **MAT 92 - Pre- Algebra (Formerly MAT 082) (5)**

Covers basic operations with whole numbers, fractions, decimals, percentages, ratios and proportions, signed numbers, algebraic expressions, linear equations, order of operations, basic geometry, units of measurement, and introduction to statistics.

Prerequisite: Accuplacer arithmetic score of 230 or equivalent or higher.

### **MAT 94 - Introduction to Algebra (Formerly MAT 091) (5)**

Develops algebraic topics, including algebraic expressions, solving linear equations and inequalities, coordinate graphing, systems of equations, polynomials, factoring, and introduction to rational expressions.

Prerequisite: Accuplacer quantitative score of 230 or equivalent or successful completion of MAT 092.

### **MAT 99 - Intermediate Algebra (5)**

Expands on algebraic topics, including solving equations and inequalities, graphing of linear and nonlinear equations, and rational expressions. Develops topics, including roots and radicals; solving absolute value equations and inequalities; solving quadratic, exponential and logarithmic equations; and introduction to functions.

Prerequisite: Accuplacer quantitative score of 252 or equivalent or successful completion of MAT 094.

### **MAT 103 - Business Mathematics (5)**

Develops elements of algebra applied to percentages, markup and markdown, discounts, payroll, and simple and compound interest. Scientific calculator required.

Prerequisite: Successful completion of MAT 092, or equivalent, or concurrent enrollment in MAT 092 of linked sections. .

### **MAT 105 - Mathematics for Industrial Professionals (5)**

Develops elements of algebra, geometry, metric measure,

and trigonometry to calculate areas, volumes, and angles for polygonal objects, objects with smooth curves, and composite objects. Includes applications to material strength, tapers, pulleys, gears, screw threads, and elementary engines. Scientific calculator required.

Prerequisite: Successful completion of MAT 092, or equivalent, or concurrent enrollment in MAT 092 of linked sections. .

### **MAT 108 - Math for Health Occupations (5)**

Develops elements of algebra, including quadratic equations with real roots and unit conversion processes applied to U. S. and metric measure, calculation of dosages, and intravenous infusions. Covers solutions and dilutions, elementary chemical calculations, and elementary non-linear functions. Scientific calculator required.

Prerequisite: Accuplacer advanced algebra score of 233 or equivalent, or successful completion of MAT 094.

### **MAT 111 - Math for Cosmo/Esth Professionals (5)**

This course is designed to prepare students interested in the cosmetology career to gain confidence in the mathematics and problem solving they may encounter. Topics covered include: methods of mathematical operations; order of operations; fractions; percentages; decimals; mathematical expressions and equation; solving variable equations and formulas; markdowns and markups; simple business math calculations; unit analysis, including US and metric measuring systems; time management; handling payroll.

Prerequisite: Successful completion of MAT 092.

### **MAT 311 - Mathematical Techniques for Operations Management (5)**

Provides students with the foundational mathematical tools required for operations management, including acceptance sampling, decision theory, probability theory, and linear programming.

Prerequisite: Successful completion of MATH& 146.

### **MAT 413 - Measurement and Statistical Process Control (5)**

Introduces key tools used in statistical process control, including control charts, continuous improvement, acceptance sampling, and the design of experiments. Also covers fundamental metrology principles, including error measurement and analysis, the impact of temperature and pressure on precision measurement, equipment calibration, and advanced test and measurement techniques.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

## MCH - Manufacturing

### MCH 115 - Standard Operating Procedures - Lathes & Mills (8)

This course provides progressively difficult operations on lathe and milling machine with emphasis on safety, parts of a mill and lathe, and cutting tools. *Actual machining jobs from industry may be utilized in this course.*

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 123 - Lathes & Mills II (5)

This course provides intermediate calculations and machining operation with emphasis on accessories for lathes and milling machines. *Actual machining jobs from industry may be utilized in this course.*

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 129 - Surface Grinding (4)

This course provides difficult grinding operations with emphasis on surface grinding, mounting, dressing, and truing machine wheels. *Actual machining jobs from industry may be utilized in this course.*

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 135 - Tool & Cutter Grinding (4)

This course provides progressively difficult operations grinding and sharpening lathe tools. Sharpening a variety of end mills and drills.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 197 - Introduction to CAD/CAM (4)

This course provides understanding in Computer Aided Design (CAD) and Computer Aided Machining (CAM)

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 199 - Industrial Survey (6)

This course provides opportunities to research and prepare for industry related employment.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 204 - Introduction to CNC (8)

This course provides understanding and operation of Computer Numerical Control (CNC) machinery, with emphasis on writing programs and manual data input.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 207 - Inspection Techniques (4)

This course covers proper use of inspection tools and equipment. Emphasis is placed on use of geometric dimensioning and tolerancing, with use of granite layout surfaces.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 209 - Metallurgy & Heat Treatment (4)

This course provides insight to the study of the properties and compositions of metals. Emphasis is placed on heat treatment of metals.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 212 - Advanced CAD/CAM (4)

This course provides progressively advanced CNC machining techniques with emphasis placed on complex setups, program trouble shooting, and increased production. *Actual machining jobs from industry may be utilized in this course.*

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### MCH 214 - Intermediate CNC (6)

This course provides intermediate experience preparing safe G & M code used in production of parts by choosing proper fixturing, tooling and programming strategies.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### **MCH 220 - Advanced CNC (10)**

This course provides progressively advanced CNC machining techniques with emphasis placed on complex setups, program trouble shooting, and increased production. *Actual machining jobs from industry may be utilized in this course.*

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### **MCH 235CAP - Capstone Portfolio (5)**

This course provides an opportunity to compile a professional portfolio.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, and FSME 116.

### **MCH 240 - Training & Practice (2--10)**

This course provides an opportunity to practice skills related to job entry in the manufacturing technologies field.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, FSME 116, and instructor's permission.

### **MCH 241 - Internship (5)**

This course provides an opportunity to prepare for related work in the manufacturing technologies industry.

Prerequisite: Fundamental Skills for Manufacturing and Engineering FSME 101, FSME 110, FSME 114, FSME 116, and instructor's permission.

## **MEC - Mechatronics**

### **MEC 115 - DC Circuits (5)**

Covers DC electrical terms, equations and theory. Presents techniques used for solving problems involving resistance, voltage, and current in circuits. Presents fundamental laws and relationships applied to the analysis of circuits, including capacitors and/or inductors. Basic circuit fabrication techniques and standard instrumentation used in test and measurement of DC circuits will also be covered.

Prerequisite: Successful completion of FSME 113

Prerequisite or co-requisite: MAT 099 or higher or appropriate placement. Corequisite: MEC 140.

### **MEC 116 - AC Circuits (5)**

Covers AC circuit analysis. Network theorems are applied to the solution of AC circuits. Resonance, filters, AC power and three-phase circuits are covered in detail. Introduces standard instrumentation used in testing AC circuits and measurement of AC circuits and systems. Discusses wiring techniques for AC power systems.

Prerequisite: Successful completion of MEC 115.  
Corequisite: MEC 130.

### **MEC 120 - Computer Aided Design I (5)**

Introduces the use of parametric Computer-Aided Design (CAD) software to design parts working from engineering sketches and/or prototypes.

### **MEC 121 - Computer Aided Design II (5)**

Covers the use of 3D parametric Computer-Aided Design (CAD) software to create individual parts and mated assemblies working from engineering sketches and/or prototypes.

Prerequisite: Successful completion of MEC 120.

### **MEC 125 - Hydraulics and Pneumatics (5)**

Provides students with an understanding of design, installation, maintenance, and repair techniques for the hydraulic and pneumatic systems used in automated systems.

Prerequisite: Successful completion of FSME 113.  
Corequisite: MEC 150.

### **MEC 128 - Applied Statics and Strengths of Materials (5)**

Study of forces acting on structures at rest: free-body diagrams, trusses, friction and related material, which may include hydrostatic pressures and loads, cables, and arches. Includes analysis of tension, compression, shear, deformation, and stress acting on members. Also includes analysis of material properties and their classification and characterization.

Prerequisite: Successful completion of MATH& 141.

### **MEC 130 - Electric Motors and Drives (5)**

Gives a broad perspective of DC motors, AC motors (both single- and three-phase), and variable speed drives. Industrial applications of variable speed drives for constant

torque, constant horsepower, and variable torque/ variable horsepower are covered. Stepper Motors and Servo Motors are discussed, along with their advantages and applications.

Prerequisite: Successful completion of MEC 150.  
Corequisite: MEC 116.

### **MEC 132 - Lean Manufacturing (5)**

This course offers students opportunities to deploy and apply lean principles, concepts, and methods locally - within a work cell, work, group or value stream. The course focuses on workshop and project implementation of specific lean concepts and techniques and the qualities and habits that characterize a culture of continuous quality improvement.

### **MEC 135 - Digital Electronics and Networks (5)**

Introduces logic fundamentals, numbering systems, codes, gates, truth tables, basic Boolean theorems, and combination logic circuits. Also introduces the elements used to create TCP/IP-based industrial networks, including switches, routers, and firewalls. The course will include network troubleshooting and the use of network diagnostic tools.

Prerequisite: Successful completion of MEC 115.  
Corequisite: MEC 160.

### **MEC 140CL - Computer Programming and Logic (5)**

Introduces computer programming and problem solving. Topics include language syntax, data types, program organization, algorithm design, and logic control structures. Also covers program design techniques, such as flowcharts and the use of pseudocode.

Corequisite: MEC 115.

### **MEC 150 - Mechanical Systems (5)**

Develops an understanding of mechanical components used in typical mechatronic systems, such as positioning mechanisms, cranks and sliders, and belts and pulleys. Includes fabrication, test, and troubleshooting of prototype devices.

Prerequisite: Successful completion of FSME 113.  
Corequisite: MEC 125.

### **MEC 160CL - Programmable Controls I (5)**

Covers programmable logic controller (PLC) architecture, configuration, and programming. Teaches students what PLCs do and where they are used. Introduces the Relay

Ladder Diagram (RLD) programming language. Students will write and test PLC RLD programs and create a PLC system using digital and analog I/O simulators.

Prerequisite: Successful completion of MEC 140.  
Corequisite: MEC 135.

### **MEC 163 - Industrial Survey (5)**

This course is an exploration of current mechatronics applications in regional industry. Students will examine and analyze the implementation of various mechatronics improvements and process solutions through field tours, interviews with experts, and presentations by local industry professionals.

Prerequisite: Successful completion of MEC 115, MEC 116, MEC 125, MEC 150, and MEC 160.

### **MEC 165 - Robotics (5)**

Covers basic robot terminology and operational skills, including safety, moving a robot in joint and world modes, and creating Teach Pendant programs. Students will also learn about preventative maintenance and program a robot to carry out simple tasks representative of industrial practice.

Prerequisite: Successful completion of MEC 140.

### **MEC 170 - Sensors and Actuators (5)**

Students will develop an understanding of how actuators and sensors are chosen for and used in automated systems. Students will demonstrate understanding by integrating actuators and sensors into prototype equipment.

Prerequisite: Successful completion of MEC 115 and MEC 125.

### **MEC 173 - Applied Mechatronics (5)**

In this course, students develop applied systems by integrating elements of the constituent fields of mechatronics: electrical, mechanical, communication, control, and computing processes and devices. Students revisit fundamental skills and apply them to multidisciplinary challenges in the lab. Projects may include construction and modification of equipment to increase the capacity of the mechatronics lab.

Prerequisite: Successful completion of MEC 115, MEC 116, MEC 125, MEC 150, and MEC 160.

### **MEC 200 - Programmable Controls II (5)**

Exercises students' PLC programming and integration skills through the completion of a project representative of

modern industrial control practice. Students will also learn about installation, maintenance, and troubleshooting of PLC systems.

Prerequisite: Successful completion of MEC 160.

### **MEC 201 - Systems Approach (5)**

The analysis and manipulation of complex systems from a top-down modular approach. Students learn how to divide a complex system into smaller modules and mapping them down to their single components, identifying sources of power, control signals, and conversions of energy along the way.

### **MEC 202 - Total Mechatronics (5)**

A course that provides an expedited analysis of the core disciplines utilized in mechatronics. The course serves as a refresher or introduction to the most important principles utilized within the realm of mechatronics including AC/DC circuits, motors and drives, PLC programming, digital electronics and networks, hydraulics and pneumatics, and mechanical systems.

### **MEC 210 - Metrology and Calibration (5)**

Introduces students to basic concepts of metrology, including common technical terms, basic measurement concepts, electronics related to measurement instruments, and math used in calibration. Also teaches various techniques used to make good measurements using calibration equipment and the standards and requirements for implementation and maintenance of calibration and measurement equipment.

Prerequisite: Instructor's permission.

### **MEC 220 - Maintenance Management (5)**

Introduces students to some of the tools used to plan and manage the maintenance function in manufacturing organizations, including consideration of Total Productive Maintenance (TPM) and corrective, preventative, risk-based, and condition-based maintenance strategies. Students will also be introduced to Computerized Maintenance Management Software (CMMS) and will demonstrate their understanding of the subject by developing a maintenance plan for a typical manufacturing organization.

Prerequisite: Successful completion of MEC 125, MEC 130, and MEC 150.

### **MEC 281 - Independent Study I (2-5)**

A theoretical and/or lab-based investigation into a topic

directly related to mechatronics. Students meet in person with an instructor and agree to an appropriate course of study. Students registering for independent study must submit, at or before registration, a description and timetable for completion, signed by both the instructor supervising the independent study and the student.

Prerequisite: Successful completion of ENGL& 101, MATH& 141, and PHYS& 114, and instructor's permission.

### **MEC 282 - Independent Study II (2-5)**

A theoretical and/or lab-based investigation into a topic directly related to mechatronics. Students meet in person with an instructor and agree to an appropriate course of study. Students registering for independent study must submit, at or before registration, a description and timetable for completion, signed by both the instructor supervising the independent study and the student.

Prerequisite: Successful completion of ENGL& 101, MATH& 141, and PHYS& 114, and instructor's permission.

### **MEC 289 - Internship/Work Experience (5)**

Provides students with practical on-the-job experience and offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to the student's educational and career objectives in the field of mechatronics. Includes a weekly seminar component. Students must submit, at or before registration, a description of the proposed internship, signed by the employer, the instructor, and the student.

Prerequisite: Instructor's permission.

### **MEC 290CAP - Mechatronics Capstone Project (5)**

A required capstone project to be completed prior to graduation as a final check of competency. Students meet in person with an instructor and agree to a project that will apply the skills and competencies that students have acquired in the program, and that will result in a portfolio piece showcasing their abilities. Students must submit, at or before registration, a description and timetable for completion, signed by both the instructor supervising the capstone project and the student. This course is to be taken the final quarter of the program.

Prerequisite: Instructor's permission.

## **MEC - Mechatronics Engineering**



## Technology and Automation

### **MEC 300 - The Industrial Internet of Things (5)**

Students will gain a broad perspective on IIoT technologies and industry 4.0 applications. An in-depth exploration will be made of the theory and application of large-scale networking of sensors in industry and the data collection and analysis work that results. Topics include remote field devices, smart sensors, RFID tracking, edge devices and cloud computing platforms. Focus will be spent on how to identify suitable applications, how to merge OT with IT, how to capture the data generated, and exploring a lean approach to data management.

### **MEC 310 - Environmentally Sustainable Manufacturing (5)**

An examination of the lean management practices that lead to the reduction of waste, and the economic benefits of sustainable management perspectives focusing on the supply chain. Students will learn how to quantify the environmental impacts from raw material to product end of life, learn how to develop and implement responsible strategies and tools to achieve sustainable and efficient manufacturing processes. Includes examination of Life Cycle Assessment of products, manufacturing, and supply chains.

### **MEC 320 - Fixtures and Workflow (5)**

The course takes a product focus approach to manufacturing, by examining the organization structures and Lean principles applied to the design and construction of complex manufacturing production systems. Students will learn how to analyze a product for its manufacturability. The course includes how to talk to designers and customers to bridge DFM and DFA inconsistencies, how to select manufacturing methods and create flow, how to develop metrics and determine economic and sustainable production.

### **MEC 330 - Programming for Industry 4.0 (5)**

The course focuses on programming for industrial hardware control. Students will work on seamless information and instruction flows between various industrial devices from the perspective of programming. Experience will be gained in programming in the most up-to-date environments used in Industry. Students will program in C++, C#, Python, and other languages in the application of a complex industrial system. The class will analyze the current state of the ever-changing ecosystem of programming environments

and relate them to practical applications.

### **MEC 361 - Process Control (5)**

Experience handling analog signals, PID controls and multiple process variables typically found in process control. Focus on controlling temperature, pressure, mixing and other common process variables through PLC's and SCADA. The course focuses on statistical methods as applied to keeping various industrial processes under statistical control. Students learn how to keep a process steady, do alterations to the process with predictable outcomes and how to bring the process back under control if it goes unstable.

### **MEC 362 - Advanced Sensors and Actuators (5)**

Experience designing and building complex sensing and actuation devices, including communications, signal conditioning and programming. The purpose of this course is to provide experience in problem solving complex industrial challenges by choosing and applying different sensor and actuators. The course will introduce students to technical challenges that they will have to solve by robustly applying knowledge of materials, sensors, and actuators.

### **MEC 363 - AI and Data Analytics (5)**

This course covers the theory and application of algorithms for machine learning and inference, from an AI perspective. Python and C based languages will be employed to process large data sets through both conventional and AI based systems. Students will practice drawing conclusions from given data and setup models for capturing data. This covers data mining, where the algorithms are used to automatically detect interesting information and relations in large industrial or scientific databases. Students will use large data sets for AI control of process variables, predictive maintenance, and production flow.

Prerequisite: Successful completion of MEC 330.

### **MEC 381 - Automation Evaluation and Implementation (5)**

Examination of the business, safety, and social considerations involved in the decision to automate and the effective implementation thereof. Students will examine the choices involved from a managerial perspective.

Prerequisite: Successful completion of MEC 310.

### **MEC 382 - Machine Vision (5)**

Practical experience on implementing vision systems in

manufacturing processes. The course gives a general overview of machine vision and introduces the student to machine vision software and hardware. The course covers common topics like finding known models in images, depth perception, camera calibration and alignment, image stabilization, tracking of objects, photometry, boundary detections, environmental factors and point clouds, along with various sensing technologies.

### **MEC 383 - Dynamics of Machinery and Kinematics (5)**

A mathematical exploration of the functions used to describe the motions and momentums of machine elements with an emphasis on the application of motion control. This course introduces students to the application of the principles of dynamics to mechanisms and machine elements. Students learn how to visualize and analyze motions in machines, how to create new machines based upon desired kinematics.

Prerequisite: Successful completion of PHYS& 221.

### **MEC 402 - Robotic Integration (5)**

Experience designing and integrating complex robotic manufacturing cells. Applying design for manufacturing techniques to system, cell, and tooling and fixture design. The course focuses on programming for industrial hardware control. Students will work on seamless information and instruction flows between various industrial devices from the perspective of programming.

Prerequisite: Successful completion of MEC 165 or instructor permission.

### **MEC 403 - Simulation, Emulation and Digital Twins (5)**

Design working simulations and Digital Twins of machinery for use in virtual commissioning, predictive maintenance and process optimization. The course introduces the students to the area of virtual process planning and to get hands on experience in some of the most relevant and needed areas of industry utilizing virtual process planning while preparing upcoming production. The students will learn how prepare products for production with virtual tools and how to conduct virtual process planning of a production cell consisting of various components such as machines, fixtures, robots, products.

Prerequisite: Successful completion of MEC 330, MEC 160, and MEC 120.

### **MEC 450 - Mechatronics Project Management Preparation and Planning (2)**

Precursor to the Mechatronics Project Management course. Students will begin the planning and preparation for the management of a complex mechatronics project.

Prerequisite: Successful completion of 25 credits of upper division MEC courses.

### **MEC 490CAP - Mechatronics Project Management (5)**

Project Management of a team of Mechatronics students in the design and build of a complex mechatronics project.

Prerequisite: Successful completion of MEC 450.

## **MLT - Medical Laboratory Technician**

### **MLT 110 - Introduction to the Laboratory (2)**

Orients students to the campus, the program, and the laboratory field. Covers school and program policies, the metric system, basic techniques, microscopy, physiological processes, human anatomy, medical terminology, and laboratory organization. A large block of time is dedicated to discussing laboratory safety and standard precautions, HIPAA, and professionalism. These topics are then integrated into the applied academic courses for the remainder of the program. This course is presented spring quarter.

Prerequisite: High school diploma or equivalent.

Completion of a college course in biology with lab and a college course in chemistry with lab with a grade of B" (3.0) or better. Students must pass a colorblind test. Documentation regarding the test from a medical professional must be submitted on or before the first day of class."

### **MLT 205 - Hematology (11)**

Review microscopy, standard precautions, and the basic concepts of quality assurance plans in the Hematology laboratory before studying the red blood cell production, function, and relevant red blood cell morphology. Study of erythrocytes and leukocytes will include principles of production, function, normal reference ranges, and associated diseases. Assigned online learning modules will be administered to gain a better understanding and correlation of analyzer results with performed manual differentials. Laboratory practice includes manual and automated counting of all cell types, and routine basic procedures in a Hematology laboratory.

Prerequisite: Successful completion of MLT 110.

#### **MLT 207 - Hemostasis (4)**

This course begins with the study of production and function of thrombocytes, including counts, function tests, and associated diseases; it continues with the processes involved in coagulation (hemostasis), both primary and secondary, and culminates with a discussion of fibrinolysis. Normal coagulation activities, as well as coagulation deficiencies, are presented, and routine coagulation procedures are performed in the student laboratory. This course is offered in spring quarter.

Prerequisite: Successful completion of MLT 205.

#### **MLT 209 - Phlebotomy/Processing (4)**

Learn to collect both venous and capillary blood specimens, as well as to separate plasma or serum from cells, when necessary for testing. The color-coding of evacuated tubes, the specimen requirements for major procedures, and, particularly, the practice of standard precautions are all stressed throughout the course. Recognize pre-analytical and analytical variables regarding specimen labeling and specimen integrity.

Prerequisite: Successful completion of MLT 110.

#### **MLT 211 - Immunology (5)**

Covers the immune process in terms of active-versus-passive, innate-versus-acquired, and humoral-versus-cell-mediated immunities. Laboratory procedures employing a variety of in vitro demonstrations of antigen-antibody reactions are performed. This course is offered spring quarter.

Prerequisite: Successful completion of MLT 207.

#### **MLT 215 - Immunohematology (5)**

Applies the principles of antigens and antibodies covered in MLT 211 to red blood cell antigens and antibodies, with emphasis on blood banking procedures, and culminating in performance of pre-transfusion cross matching. This course is offered summer quarter.

Prerequisite: Successful completion of MLT 211 and MLT 217.

#### **MLT 217 - Microbiology (10)**

This course begins with an introduction to bacterial growth, culture requirements, sterilization procedures, and biochemical activity. This introductory material is followed by detailed study of the gram positive cocci, the

gram negative cocci, the enterobacteriaceae, and the non-fermentative gram negative bacilli. Particular attention is paid to human pathogenic versus normal flora organisms depending on body site. Identification by classical and packaged systems is followed by susceptibility studies. Brief presentations on anaerobes, parasitology, and mycology conclude the course. This course is offered summer quarter.

Prerequisite: Successful completion of MLT 228.

#### **MLT 218 - Urinalysis (3)**

Perform routine urine analysis, both macroscopic and microscopic, with attention to abnormal results and their possible cause. An overview of the anatomy and physiology of the excretory system and the normal and abnormal constituents of urine accompany laboratory practice. This course is presented fall quarter.

Prerequisite: Successful completion of MLT 217.

#### **MLT 220 - Clinical Blood Banking (6)**

Experience a mock clinical training rotation in blood banking under the direction of a blood banking specialist. Building on the procedures mastered in MLT 215, students will solve real-world blood banking problems, including identification of antibodies. Students will deal with daily inventory and temperature record-keeping, perform quality assurance procedures, and receive and complete stat orders.

Prerequisite: Successful completion of MLT 215.

#### **MLT 222 - Body Fluids (2)**

Introduces the production, collection, and analyses of various body fluids, including cerebrospinal and synovial fluids.

Prerequisite: Successful completion of MLT 205 and MLT 218.

#### **MLT 228 - Clinical Chemistry (7)**

Beginning with an overview of the digestive system, students will study the relationship between blood levels of many substances and normal-versus-abnormal physiology. In the student laboratory, students will perform manual and semi-automated procedures for the assay of commonly measured blood components. Preventative maintenance of instruments, troubleshooting, and quality assurance are stressed throughout the course.

Prerequisite: Successful completion of MLT 211.

**MLT 233 - Clinical Experience I (10)**

This course begins the clinical phase of training in an affiliated laboratory. During this course, students will complete nine weeks of the experience (either five eight-hour days each week or four nine-hour days each week). In the next courses (MLT 237 and 239), they will continue training for eleven more weeks. Over the course of approximately 19-20 weeks of clinical training, students will rotate through all departments and perform current routine procedures by state-of-the-art methodologies. Appropriate amounts of time are spent working in each particular discipline; to accomplish this, some students rotate through two or three different laboratories.

Prerequisite: Successful completion of MLT 220. Proof of current immunizations or laboratory verification of immune status, a No Record On File" report related to crimes against persons from a national background check current CPR for Health Care Providers from the American Heart Association and personal medical/health insurance. Some clinical sites may have additional requirements."

**MLT 237 - Clinical Experience II (8)**

Continues the clinical training begun in MLT 233. Students continue for six weeks of training (either five eight-hour days each week or four nine-hour days each week), rotating through those departments not yet experienced and continuing to meet objectives listed in the MLT 233 syllabus. Some clinical sites may assign 1-2 weeks of either swing or night shift as part of the clinical phase.

Prerequisite: Successful completion of MLT 222 and MLT 233. Proof of current immunizations or laboratory verification of immune status, a No Record On File" report related to crimes against persons from a national background check current CPR for Health Care Providers from the American Heart Association and personal medical/ health insurance. Some clinical sites may have additional requirements."

**MLT 239CAP - Clinical Experience III (8)**

Complete the clinical training begun in MLT 233 and continued in 237. Students complete five more weeks of training (either five eight-hour days or four nine-hour days each week), completing the remainder of the objectives in the MLT 233 syllabus. Some clinical sites may also assign 1-2 weeks of either swing or night shift as part of the clinical phase.

Prerequisite: Successful completion of MLT 237. Proof of current immunizations or laboratory verification of

immune status, a No Record On File" report related to crimes against persons from a national background check current CPR for Health Care Providers from the American Heart Association and personal medical/health insurance. Some clinical sites may have additional requirements."

**MMN - Central Service Sterile Processing****MMN 103 - Introduction to the Program & the Health Care Industry (3)**

Covers overall program content, including policies, procedures, philosophy, and terminal objectives. Explores the history and evolution of the central service profession, human relations, legal issues, and regulatory agencies affecting the field. Web enhanced.

**MMN 106 - Anatomy & Physiology/Medical Terminology (4)**

Explores the overall makeup of the human body, its systems and functions, and related medical and surgical terminology. Surgical instrumentation is introduced. Web enhanced.

Prerequisite: Successful completion of MMN 103.

**MMN 111 - Microbiology/Infection Control (3)**

Covers the examination of human pathogens in microbiology. Students will learn about infection control as it relates to the sterilization process. Safety issues in the health care environment are covered, including bloodborne pathogens. This unit satisfies the Washington state law for mandatory HIV training for all medical personnel. Web enhanced.

Prerequisite: Successful completion of MMN 103 and MMN 106.

**MMN 124 - Surgical Instrumentation (4)**

In this course, students learn to identify basic and complex surgical instruments. They will demonstrate thorough knowledge of the manufacture, care, and processing of surgical, endoscopic, and power instruments. In addition, students will have an understanding of special protocols required with loaner instruments. Web enhanced.

Prerequisite: Successful completion of MMN 103, MMN 106, and MMN 111.

**MMN 126 - Principles and Methods of Cleaning & Disinfecting (6)**

Includes classroom and laboratory experience in the fundamentals of cleaning and disinfection. Topics include cleaning and disinfecting chemicals, handling and transporting of patient care equipment, and general decontamination protocols for instruments and equipment. Students will gain knowledge and experience with high-level disinfection and flexible endoscopes. The proper and safe handling of infectious waste is included. Web enhanced.

Prerequisite: Successful completion of MMN 103, MMN 106, MMN 111, and MMN 124.

**MMN 129 - Principles and Practices of Sterilization (6)**

Students learn techniques and practice in the packaging, assembly, and sterilization of procedural trays, instrument sets, and sterile supplies. Major topics include methods of high- and low-temperature sterilization, sterilization chemicals, and packaging materials. Guidelines for point-of-use processing and transport are discussed. Operations, parameters, and maintenance of various sterilizers are learned, as well as monitoring of the sterilization process and quality control. Proper storage and storage concerns for sterile supplies are included.

Prerequisite: Successful completion of MMN 103, MMN 106, MMN 111, MMN 124, and MMN 126.

**MMN 132 - Materiel Management/Central Service Applications (3)**

This course is an overview of the handling and distribution of materials in a medical facility. Topics covered include inventory management, replenishment methods, and tracking systems. Students become familiar with quality assurance measures and techniques.

Prerequisite: Successful completion of MMN 103, MMN 106, MMN 111, MMN 124, MMN 126, and MMN 129.

**MMN 213 - Clinical Internship I (6)**

Provides students with the opportunity to apply the theories and principles of central service and sterilization learned in the classroom to the actual work experience in a central service, sterile processing, or distribution department. The role of the central service technician in a hospital central service/sterile processing department will be the focus. In order to participate in the clinical aspect of the program, students must receive a clear background check as required by the health care facilities, have proof of current immunizations, complete CPR for health care

professionals, be able to lift 50 pounds, and be able to work on their feet for up to eight hours.

Prerequisite: Successful completion of MMN 103, MMN 106, MMN 111, MMN 124, MMN 126, MMN 129, and MMN 132.

**MMN 215 - Clinical Internship II (6)**

Continued participation in the clinical setting at local facilities allows students to gain a variety of experiences in central service/ sterile processing and materiel management. Requirements are the same as MMN 213.

Prerequisite: Successful completion of MMN 213.

**MS - Material Science****MS 123 - Fundamentals of Welding for the Non-Welding Major (5)**

Students will identify, perform, or witness various basic welding processes for prospective visual and non-destructive inspectors.

**MS 126 - Fundamentals of Composites for the Non-Composites Technician (4)**

Introduces the various kinds of composite parts. This course explores the different types of resin, matrices, fibers, cores, and laminates. Students will explore their mechanical properties and the advantages of each type of composite structure. Covers the layup, winding, molding, curing, and repair of composite parts. Explores the role of NDT in testing composite parts after fabrication and after repair and the kinds of defects found.

**MS 128 - OSHA, Occupational, Health And Safety (3)**

Introduces OSHA policies, procedures, and standards, as well as construction safety and health principles. Topics include scope and application of the OSHA construction standards. Special emphasis is placed on those areas that are the most hazardous, and includes hazard identification, avoidance, control, and prevention, using OSHA standards as a guide.

**MS 131 - Blueprint Reading Fundamentals (3)**

Covers basic lines and views of drawings, identifying and interpreting weld and fabrication symbols, and locating NDT requirements.

## MUSC - Music

### **MUSC& 105 - Music Appreciation (5)**

Learn about elements of music, that is, the building blocks: pitch, melody, harmony, rhythm, texture, timbre, and dynamics. Study the evolution of music through the ages. This will not be a music history class, but rather an investigation of how music changed through time.

Prerequisite: Successful completion of ENG 094 or equivalent.

## NAC - Nursing

### **NAC 108 - Nursing Assistant Theory (5)**

The Nursing Assistant Certified program prepares students to take the state examination for nursing assistant certification licensure. All three courses in the program must be successfully completed for students to be eligible to take the state examination. This course provides an introduction to the role and responsibilities of being a nursing assistant and meets the theory requirements for Washington State Nursing Assistant training.

### **NAC 111 - Nursing Skills Fundamentals (2)**

This course covers instruction and practice of nursing assistant skills. Students will not be allowed to participate in the final skills exam unless attendance for all clinical hours has been fulfilled.

Prerequisite: Documentation of required immunizations and "No Record On File" from the Washington State Patrol and DSHS. Successful completion of NAC 108."

### **NAC 114 - Unit Based Clinical Experience (2)**

This course includes clinical experience in a long-term facility under the supervision of an instructor.

Prerequisite: Documentations of required immunizations. Students must have "No Record On File" related to crimes against children or vulnerable adults from the Washington State Patrol and DSHS. Successful completion of NAC 111."

## NDT - Nondestructive Testing

### **NDT 108 - Introduction to NDT (5)**

This course is an introduction to terms and definitions and a method overview of nondestructive testing. Methods include eddy current, visual liquid penetrant, magnetic particle, radiography, and ultrasonic testing.

### **NDT 113 - Material and Processes for NDT I (5)**

Explores the properties of materials, both metals and non-metals, and their applications in design and manufacturing. Introduction to Lean Concepts and applications.

### **NDT 120 - Visual and Optical Testing (5)**

Visual inspection is the most widely used method of nondestructive testing. Learn to detect various discontinuities related to the powerplant industry, structural steel fabrication and construction industries, aerospace industry, petrochemical industry, and manufacturing processes. Exercises are performed using many visual inspection tools.

Prerequisite: Successful completion of NDT 185.

### **NDT 121 - Materials and Processes for NDT II (5)**

Learn the major manufacturing processes used to fabricate parts, their possible discontinuities, and how to choose the appropriate NDT methods to inspect them.

### **NDT 125 - Magnetic Particle Testing (5)**

Covers the principles of magnetization, the selection of equipment, and the type of indications found. Students will operate, test, and maintain quality control of the equipment and report results.

### **NDT 130 - Liquid Penetrant Testing (5)**

Covers principles and practices of liquid penetrant inspection. Students will learn why and when to use various types of penetrant materials and the proper techniques necessary for reliable inspection. Addresses the evaluation of liquid penetrant indications, interpreting standards and specifications, and checking penetrant system quality. Students will review fundamental liquid penetrant principles and techniques; develop and write procedures; and inspect welds, castings, forgings, and machined components. Parts are evaluated according to relevant codes and/or standards.

### **NDT 140 - Eddy Current Testing I (5)**

Covers electromagnetic theory, types of Eddy Current sensing elements, selection of inspection parameters, readout mechanism and applications. Successful students will pass a simulated Level I general exam.

Prerequisite: Successful completion of NDT 125, NDT 185, and CAS 121.

### **NDT 150 - Ultrasonic Testing I (5)**

Covers the principles of acoustics. Introduces the basic

pulse echo instruments, transducers and couplants. Covers the basic testing methods, calibration, and examinations to specific procedures. Successful students will pass a simulated Level 1 general examination.

Prerequisite: Successful completion of MS 123, MS 126, NDT 185, and CAS 121.

### **NDT 160 - Radiographic Testing I (5)**

Introduces students to basic principles and theory of radiography, methods and applications, safety, image quality and formation, exposure parameters and techniques, dark room and film processing techniques, and film characteristics.

Prerequisite: Successful completion of MS 123, MS 126, and NDT 185.

### **NDT 170 - Eddy Current Testing II (5)**

Covers a continuation of Eddy Current theory: factors that affect coil impedance, signal-to-noise ratio, selection test frequency, coupling and field strength. Includes an explanation of standards and specifications used in eddy current testing. Students will learn about the selection of the appropriate instruments, probes and standards necessary to perform the required tests. Successful students will pass a simulated Level II general and specific exam.

### **NDT 180 - Ultrasonic Testing II (5)**

Introduces the operation of various ultrasonic equipment and transducers in a variety of testing methods. Students will calibrate, test, and evaluate various product forms per procedures, standards, and codes. Successful students will pass a simulated Level II general and specific exam.

Prerequisite: Successful completion of NDT 185.

### **NDT 185 - Physics for NDT Professionals (5)**

Covers physics concepts used in nondestructive testing, including right-triangle trigonometry, waves, sound, electric fields, electric current, resistance, circuits, magnetism, and the electromagnetic spectrum.

Prerequisite: Successful completion of MAT 099.

### **NDT 190 - Radiographic Testing II (5)**

Students will explore more advanced radiographic theory. Students will develop radiographic techniques commonly used in industrial testing. Includes a review of types and characteristics of defects and manufacturing processes. Students will explore safety principles and practices in working with radiographic equipment and isotopes. Covers

the practical applications of radiographic evaluation and interpretation per applicable standards, codes, and procedures. Successful students will pass a simulated Level II general and specific exam.

Prerequisite: Successful completion of NDT 160.

### **NDT 210 - Eddy Current Testing III (5)**

Covers an extension of advanced Eddy Current theory. Students will simulate a Level II practice exam through development of a technique and evaluation per applicable standards, codes, and procedures.

Prerequisite: Successful completion of NDT 170.

### **NDT 220 - Ultrasonic Testing III (5)**

Covers an overview of the basic principles and theories of Phased Array. Students will simulate a Level II practical exam through development of a technique and evaluation per applicable standards, codes, and procedures.

Prerequisite: Successful completion of MAT 099 and NDT 180.

### **NDT 230 - Radiographic Testing III (5)**

Covers an overview of non-film radiography: computed radiography (CR), digital detector arrays (DDA), and computed tomography (CT), with emphasis on CR. Students will perform practical exercises to reinforce their understanding of the principles of CR. Students will take a simulated Level II practical exam with film radiography through development of a technique and evaluation per applicable standards, codes, and procedures.

Prerequisite: Successful completion of NDT 190.

### **NDT 240CAP - Capstone Project (3)**

Designed to synthesize and integrate the knowledge gained in all previous courses and demonstrate the application of theory and practice through a project.

### **NDT 250 - NDT Internship (1-11)**

Provides on-the-job practical experience under the supervision of an employer. Instructor's permission is required for site choice.

Prerequisite: Advanced standing and instructor's permission.

## **NOS - Network Operations and**

## Systems Security

### **NOS 100 - IT Fundamentals I (4)**

This course covers aspects of troubleshooting, preventative maintenance, hardware installation, configuration, diagnostics, and repair. Hardware installation, configuration, and upgrading diagnosing and troubleshooting, preventative maintenance. Operating system topics include common components and features, installing, configuring, upgrading, troubleshooting, and basic networking. Includes hands-on training in a realistic lab environment which will help prepare the students for the CompTIA IT Fundamentals Certification Test.

Corequisite: NOS 100 and NOS 105 are half-quarter stacked courses offered during the same quarter. Students must register for both during the same quarter.

### **NOS 105CL - IT Fundamentals II (4)**

Introduces students to the knowledge and skills necessary to competently use, install, configure, upgrade, and troubleshoot current operating systems technologies.

Prerequisite: Successful completion of NOS 100 or instructor's permission. Corequisite: NOS 100 and NOS 105 are half-quarter stacked courses offered during the same quarter. Students must register for both during the same quarter.

### **NOS 110 - Cyber Security Fundamentals (4)**

Cyber Security Fundamentals is an introduction to the world of information security as it relates to technology. This course provides an overview of security challenges, defense strategies, and countermeasures in the information systems environment. Information on relevant topics, real-life user experiences, and hands-on projects will be used to explore foundational cybersecurity principals and to build a comprehensive security strategy.

### **NOS 115 - Introduction to Networking (4)**

Introduces fundamental networking concepts and technologies. This course should assist you in developing the skills necessary to plan and implement small networks across a range of applications. The focus of the course is to understand and apply the basic protocols used in computer networking. The student will apply basic troubleshooting to simple networks within the context of the ISO and TC/IP models. The course materials are online and reinforced with in-class lectures, labs, and exams.

### **NOS 120 - Desktop Support I (4)**

Introduces knowledge, skills, and tasks necessary to deploy, support, and secure windows client and server network operating systems in a variety of stand-alone and enterprise network environments. Provides extensive hands-on training for Information Systems Security professionals responsible for managing accounts and resources, maintaining client backup resources, monitoring client performance, safeguarding data, and securing client network operating systems.

Corequisite: NOS 120 and NOS 125 are half-quarter stacked courses offered during the same quarter. Students must register for both during the same quarter.

### **NOS 125 - Desktop Support II (4)**

Introduces knowledge, skills, and tasks necessary to deploy, support, and secure windows client and server network operating systems in a variety of stand-alone and enterprise network environments. Provides extensive hands-on training for Information Systems Security professionals responsible for managing accounts and resources, maintaining client backup resources, monitoring client performance, safeguarding data, and securing client network operating systems.

Prerequisite: Successful completion of NOS 120 or instructor's permission. Corequisite: NOS 120 and NOS 125 are half-quarter stacked courses offered during the same quarter. Students must register for both during the same quarter.

### **NOS 130 - Server OS Installation and Configuration (4)**

Introduces knowledge, skills, and tasks necessary to deploy, support, and secure windows server network operating systems in a variety of stand-alone and enterprise network environments. Provides extensive hands-on training for Information Systems Security professionals responsible for managing accounts and resources, maintaining server resources, monitoring server performance, safeguarding data, and securing server network operating systems.

### **NOS 135 - Scripting for Network Admins (4)**

This introductory scripting course is designed to provide students with the fundamental knowledge and skills to use scripting to automate administrative tasks commonly used by system administrators.



**NOS 140 - Linux I (4)**

This course introduces students to the Linux Operating system with particular emphasis on command-line tools, utilities, and the BASH shell. The course will cover the various commands and utilities related to file system management, user and group creation, and text editing. Students will also be introduced to different Linux distributions and graphical user interfaces.

**NOS 145 - Administering Windows Server OS (4)**

Introduces knowledge, skills, and tasks necessary for systems administrators to successfully implement core services in windows server operating systems. Provides extensive hands-on training for Information Systems Security professionals responsible for installing and maintaining a variety of network services. Including DHCP, DNS, IP addressing, and Virtual Private Network.

Prerequisite: Successful completion of NOS 130 or equivalent experience.

**NOS 150 - Virtualization and Cloud Technologies (4)**

This course provides an overview of virtualization and cloud technologies focusing on using virtualization software in networked environments while building virtual networks, implementing clusters, enhancing performance and security, and using virtualization and cloud management tools to centralize management of multiple virtual servers. This class includes opportunities for hands-on learning experiences

Prerequisite: Successful completion of NOS 100 or NOS 105, or equivalent experience.

**NOS 155 - Linux II (4)**

By using a hands-on team approach this course explores the various tools and techniques commonly used by Linux system administrators and end-users to achieve their day-to-day work in a Linux environment. Students will install various enterprise services and features used in the industry today.

Prerequisite: Successful completion of NOS 140 or a basic understanding of the Linux Operating System.

**NOS 160 - Server Security (4)**

Introduces the use of security best practices to harden server operating systems. Successful students will manage the protection of Active Directory by implementing Group Policy changes and integrating threat management detection systems to defend server operating systems.

Prerequisite: Successful completion of NOS 130.

**NOS 200 - Window Server Identity Services (4)**

Introduces knowledge, skills, and tasks necessary to deploy, support, and secure windows server network operating systems in a variety of stand-alone and enterprise network environments. Provides extensive hands-on training for Information Systems Security professionals responsible for installing and maintaining a variety of network roles. Including Active Directory Domain Services, Groups Policies, and Certification Authority services.

Prerequisite: General Windows Server knowledge.

**NOS 205 - Implementing Systems Security (4)**

A fundamental course of information technology security, infrastructure security, cryptography, and organizational security concepts. This includes access, attacks, audits, vulnerabilities, devices, physical security, algorithms, protocols, digital forensics, disaster recovery, penetration testing, social engineering, Reconnaissance, scanning, enumeration, vulnerability analysis, system hacking, malware, sniffers, session hijacking, denial of service, IDS, firewalls, honeypots, web servers, web applications, and SQL Injections, Wi-Fi, Bluetooth, and mobile devices, cloud computing and internet of things, and documentation.

Prerequisite: Successful completion of NOS 100 or NOS 105, or equivalent experience.

**NOS 210 - Digital Forensics and Investigations (4)**

Introduces the use of software to acquire and analyze digital data. Techniques will be used to demonstrate the use of statistical analysis practices to predict or show trends involving security issues crime and loss prevention

Prerequisite: Basic knowledge of operating systems.

**NOS 215 - Switch and Route Essentials (5)**

We will learn the basics of routing, switching, and wireless networking. In a physical lab, we will configure and troubleshoot devices typical of a small to medium business.

Prerequisite: Successful completion of NSS109 or NOS115.

**NOS 220 - Enterprise Networking and Security (4)**

We will configure and troubleshoot enterprise networks. Students are introduced to network virtualization,

automation, and Quality of Service (QoS). Network security is emphasized.

Prerequisite: Successful completion of NOS 215.

### **NOS 225 - Internship I (3)**

Provides the student with practical field experience in a security-related area. The student will apply classroom study to an on-the-job situation in the community. Includes seminars.

Prerequisite: Instructor Permission.

### **NOS 230 - Penetration Testing I (5)**

Introduces some of the latest attacks, tools, and techniques deployed by hackers, using the offensive approach, report, and develop mitigation techniques/countermeasures, utilize security's best practices to identify vulnerabilities, and develop computer/network defense plans.

Prerequisite: Successful completion of NOS 160 or Instructor Permission/interview.

### **NOS 235 - Penetration Testing II (4)**

Introduces developing appropriate levels of computer and network security, dependent on the needs of the business or enterprise environment. Topics include how to protect a web site setup from intrusion, sabotage, defacement, or tampering. Utilizing Penetration testing utilities/tools to test secure network development and deployment. Developing a network plan, using secure configurations, and firewalls; securing the extended and distributed business/enterprise network and private network.

Prerequisite: Successful completion of NOS 230 or Instructor Permission.

### **NOS 240 - Internship II (3)**

Provides the student with practical field experience in a security-related area. The student will apply classroom study to an on-the-job situation in the community. Includes seminars.

Prerequisite: Successful completion of NOS 225 .

## **NOS - Cybersecurity**

### **NOS 310 - Cyber Threat and Research (5)**

We will examine the common types of cyber-crimes and their motivation. We will survey laws, treaties, regulations, and frameworks designed to fight cybercrime and protect privacy as well as the security policy

implications of each. We will assume the role of a local business and research the most important cyber threats to our business.

### **NOS 315 - Risk Assessment and Vulnerability Management (5)**

We will examine risk assessment models, methodologies and processes. We will complete risk assessments and formulate mitigation recommendations to protect the confidentiality, integrity, and availability of critical data. We will examine methods used to prioritize and manage vulnerabilities.

### **NOS 320 - Securing Database Management Systems (5)**

We will explore current database management systems used in medium and large businesses. We will identify common security vulnerabilities in protocols as well as mitigation strategies for those vulnerabilities. This course includes an introduction to Structured Query Language (SQL) and relational database systems.

### **NOS 325 - Cloud Security (5)**

We will explore the technologies and services that enable cloud computing, different types of cloud computing models and the security and legal issues associated with cloud computing.

### **NOS 330 - Vulnerability Assessment (5)**

We will apply standard techniques to find possible cybersecurity vulnerabilities in systems, document them, determine their root cause, and propose possible mitigations. Students need an understanding of Linux at the command line and basic networking to be successful.

### **NOS 335 - Network Intrusion Detection (5)**

We will gain experience configuring, tuning, and administering the core components of modern IPS/IDS systems. We will also analyze results in the form of alarms, packet captures, and log files. We will conduct attacks and analyze the resulting artifacts.

### **NOS 340 - Penetration Testing (5)**

We will plan, organize and perform authorized penetration testing on a simple network. We will develop skills in interpreting responses as well as researching vulnerabilities and exploits. Improvisation, keeping detailed notes, and clear report writing will become fine arts.

### **NOS 345 - Incident Response (5)**

We will practice procedures used to determine if a system is compromised, mitigate the threat, and determine the root

cause. We will use common digital forensic tools.

#### **NOS 411 - Incident Response Project (5)**

Working in teams we will complete a series of increasingly complex incident scenarios. We will use common digital forensic tools. This course emphasizes speed, accuracy, and clear report writing.

#### **NOS 412 - Penetration Testing Project (5)**

Working in teams, we will plan and conduct a series of cybersecurity audits of a simulated medium-sized business. The audits will use both technical and non-technical means. The team will prepare clear reports from both the internal customer and external customer perspectives.

#### **NOS 413 - Network Intrusion Analysis Project (5)**

Working in teams, we will implement intrusion detection systems (IDS) on a testbed network, tune the systems to ignore normal traffic, analyze alerts, and write new rules to detect new threats. Over the course of the project, the testbed will change requiring us to re-assess our approach.

#### **NOS 420 - Capstone Project (5)**

We will propose and complete an individual project to clearly demonstrate mastery of at least two of the program outcomes. The project proposal will include a timeline and concrete deliverables. The proposal must demonstrate new work and not rely mostly on previously completed work.

## **NURS - Nursing**

#### **NURS 117 - Fundamentals of Nursing (4)**

Explores the health care system and the profession of nursing, with emphasis on care with a diverse population of clients and the basics of multicultural health. Introduces the beginning practical nurse student to essential nursing concepts, such as therapeutic communication, infection control, promotion of comfort, patient safety, patient education, evidence-based practice, Washington State Scope of Practice Decision Tree, coordination of care legal and ethical issues, standards of practice, and the nursing process.

Prerequisite: Admission to Practical Nursing program.

#### **NURS 120 - Medical/Surgical Nursing I (3)**

Utilizing a physiological systems approach focus is on implementation of the nursing process in the care of a diverse population of clients, throughout the life span, with health disturbances. Emphasis will include promotion of

physiological integrity through providing care and comfort, reducing client risk potential and managing health alterations. Topics will include musculoskeletal system, gastrointestinal, hepatic and pancreatic systems, cardiovascular systems, respiratory systems, immune system and infections, fluids, electrolyte and acid base imbalances, pain, and older adult care.

Prerequisite: Admission to Practical Nursing program.

#### **NURS 121 - Nursing Clinical Skills & Data Collection I (6)**

Students will learn, practice and demonstrate competence in collecting patient assessment data and utilizing the Washington State Scope of Practice Decision Tree. Safe medication administration will also be introduced in this course. A clinical experience will be included to allow for practice of basic daily patient care in a long term care setting.

Prerequisite: Admission to Practical Nursing program.

#### **NURS 124 - Mental Health Nursing (3)**

Focuses of this course is on the continuum of mental health and illness and the therapeutic communication and the professional nurse-client relationship. Selected psychosocial disorders, including substance abuse, will be addressed, with emphasis on nursing interventions that promote well being of clients experiencing stressful events. Common interdisciplinary treatments, and services available for clients in inpatient and outpatient settings will be discussed. Suicide assessment and interventions will be a primary topic of this course.

Prerequisite: Admission to Practical Nursing program.

#### **NURS 131 - Medical/Surgical Nursing II (3)**

Utilizing a physiological systems approach focus is on implementation of the nursing process in the care of a diverse population of clients with health disturbances. Emphasis will include promotion of physiological integrity through providing care and comfort, reducing client risk potential and managing health alternations. Topics will include patients having surgery, hypertension, heart failure, respiratory system disorders, hepatic, pancreatic and gallbladder disorders, upper gastrointestinal disorders, lower gastrointestinal orders, urinary system disorders.

Prerequisite: Successful completion of NURS 117, NURS 120, NURS 121, and NURS 124.

#### **NURS 133 - Medical/Surgical Nursing III (4)**

Utilizing a physiological system approach focus is on

implementation of the nursing process in the care of a diverse population of clients with health disturbances. Emphasis will include promotion of physiological integrity through providing care and comfort, reducing client risk potential and managing health alterations. Topics will include patients in shock, integumentary system and disorders, cardiovascular disorders, respiratory system disorders, hematologic and lymphatic system and disorders.

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

#### **NURS 134 - Pharmacology in Nursing (5)**

Prepares the student for calculation of drug dosages in order to accurately prepare and administer medication to a diverse client population. Presents pharmacological concepts and principles for preparation and administration of medications along with related client assessment and teaching. The role and responsibility of the practical nurse in drug therapy is emphasized. The course prepares the student to safely and effectively participate in medication therapy.

Prerequisite: Successful completion of NURS 117, NURS 120, NURS 121, and NURS 124.

#### **NURS 137 - Nursing Clinical Skills & Data Collection II (5)**

Students will learn, practice, and demonstrate competence in selected practical nurse skills using simulation and classmates as clients. Focus will be on safe nursing practice, utilization of the nursing process, therapeutic communication, documentation, and client teaching and utilizing the Washington State Scope of Practice Decision Tree. A clinical experience will be included to allow for practice of nursing skills and data collection in a safe, effective care environment.

Prerequisite: Successful completion of NURS 117, NURS 120, and NURS 121, NURS 124. .

#### **NURS 140 - Maternity and Pediatric Nursing (3)**

This course will cover concepts of antepartum, intrapartum, postpartum, and newborn nursing with only an assisting role in the care of clients during labor and delivery and those with complications. It will also address the principles necessary for the student to care for clients throughout the age continuum. Special emphasis will be on the developmental stages of the pediatric client and how this impacts care. Common diseases and disorders related to each developmental stage are explored.

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

#### **NURS 145 - Medical Surgical Nursing IV (4)**

Utilizing a physiological systems approach, focus is on implementation of the nursing process in care of a diverse population of clients with health disturbances. Emphasis will include promotion of physiological integrity through providing care and comfort, reducing client risk potential and managing health alterations. Topics will include immune systems disorders, cancers, cardiovascular disorders, genitourinary and reproductive system and disorders, endocrine system and disorders.

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151.

#### **NURS 149 - Clinical Practicum I (5)**

Provides opportunity for the students to provide care for clients, with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medications to diverse population of clients. Focus is on safe nursing practice, standards and scope of practice, therapeutic communication, documentation, and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to the final clinical week of quarter 4 (NURS 161/163).

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

#### **NURS 151 - Clinical Practicum II (4)**

Provides opportunity for the students to provide care for clients with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medications to diverse population of clients. Focus is on safe nursing practice, standards and scope of practice, therapeutic communication, documentation, and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to final clinical week of quarter 4 (NURS 161/163).

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

**NURS 154 - Issues & Trends in Nursing (2)**

Prepares the students for entry into nursing practice. Topics will include nursing leadership role of the practical nurse, nursing ethics the Washington State Scope of Practice Decision Tree, nursing history and trends, nursing licensure and legal aspects of nursing including the disciplinary proves substance abuse and professional values. Career opportunities, and opportunities for further education in nursing are explored.

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151.

**NURS 161 - Clinical Practicum III (4)**

Provides opportunity for the students to provide care for clients with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medication to diverse populations of clients. Focus is on safe nursing practices, standards and scope of practice, therapeutic communication, documentation and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to the final clinical week of quarter 4 (NURS 161/163).

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151.

**NURS 163 - Clinical Practicum IV (5)**

Provides opportunity for the students to provide care to clients with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medication to diverse population of clients. Focus is on safe nursing practices, standards and scope of practice. therapeutic communication, documentation and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to final clinical week of quarter 4 (NURS 161/163)

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151. .

**NUTR - Nutrition****NUTR& 101 - Nutrition (5)**

An exploration of macronutrients (carbohydrates, proteins, and fats) and micronutrients (vitamins and minerals) and

their role in growth, development, and optimal health throughout the lifespan. A study in the anatomy and physiology of the gastrointestinal tract and its relation to digestion, absorption, and metabolism of nutrients will be completed. Students will explore the role of nutrition in preventing nutrition-related diseases. A healthy dietary plan will be developed to assist students in making healthy changes in their nutritional status for themselves and other members of their community.

Prerequisite: Successful completion of ENGL& 101.

**OPM - Operations Management****OPM 312 - Forecasting and System Design (5)**

Introduces students to forecasting and capacity planning tools for manufacturing and service organizations. Covers the selection of appropriate processes and facility layouts, the design of work systems, and maintenance planning.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

**OPM 313 - Quality Management (5)**

Equips students with the tools used to plan, implement, and manage quality management programs, with special emphasis on process documentation, staff training, and communication of results to management and auditors.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

**OPM 314 - Logistical Planning & Supply Chain Management (5)**

Introduces students to the complexities of domestic and global supply chains, including consideration of make/buy and outsourcing decisions. Explores the importance of the inventory control and procurement functions and discusses the use of materials resource planning (MRP), manufacturing resource planning (MRPII), and enterprise resource planning (ERP) systems.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

**OPM 315 - Lean Concepts and Applications (5)**

Introduces students to the theory behind Lean, including concepts such as value stream mapping, workplace organization and standardization, 5-S and cellular flow. Covers Lean terminology, including kanban and total production maintenance, and tools, such as gap analysis, 5 Whys

Prerequisite: Successful completion of MAT 311 or instructor's permission. Corequisite: root cause analysis, Pareto charts, and cause-effect diagrams.

#### **OPM 411 - Facility Layout and Materials Handling (5)**

Covers the design and optimal layout of industrial facilities, materials handling systems, and warehousing for the most efficient flow of raw materials, work-in- process, and completed product.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

#### **OPM 412 - Workplace Health and Safety Management (5)**

Provides a foundation for students to take on responsibility for the management of health and safety in the workplace. Covers OSHA and the inspection process, identification of safety hazards and implementation of preventative measures, and developing a formal health and safety training program.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

#### **OPM 491 - Focused Study I (5)**

Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.

Prerequisite: Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

#### **OPM 492 - Focused Study II (5)**

Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.

Prerequisite: Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

#### **OPM 493 - Focused Study III (5)**

Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.

Prerequisite: Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

#### **OPM 495 - Internship (5)**

This course may be substituted for OPM 498-Individual Capstone (with instructor permission). Provides students with practical on-the-job experience, and offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to the student's educational and career objectives in the field of Manufacturing Operations. Includes a weekly seminar component. Students must submit, at or before registration, a description of the proposed internship, signed by the employer, the instructor and the student.

Prerequisite: Successful completion of OPM 492 or instructor permission.

#### **OPM 498CAP - Individual Capstone Project (5)**

Involves the self-directed execution of a project in the field of operations management, employing elements from many of the courses the student has already taken linked together in a methodical, systematic way. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director. The course requires both a written report and an oral presentation of the project results.

Prerequisite: Successful completion of OPM 491 and OPM 492.

#### **OPM 499CAP - Group Capstone Project (5)**

Involves working as a team on a project in the field of operations management. The topic to be studied will be chosen by the group, agreed on in conjunction with program faculty, and approved by the program director. The project may be carried out with an industry partner/ employer. The course requires a written project report, an oral presentation of the project results by the group, and individual summary reports by each student.

Prerequisite: Successful completion of OPM 491 and OPM 492.

## PHIL - Philosophy

### PHIL 310DIV - Professional Ethics (5)

This course increases students' awareness of ethical dilemmas that might occur at work to show how such ethical issues are subject to management analysis and decision-making action and to provide students with the conceptual tools necessary to identify and develop an acceptable resolution to these dilemmas.

Prerequisite: Successful completion of ENGL& 101.

## PHLEB - Hemodialysis

### PHLEB 114 - Phlebotomy Program (4)

Develop the skills necessary to draw blood specimens for analysis in a laboratory. Includes an introduction to the structure and function of a clinical laboratory. Safety procedures and universal precautions are included. Provides hands-on practice in phlebotomy.

Prerequisite: Students must complete HDT 106, HDT 108, HDT 116, HDT 123, and HDT 130 with a score of 80 percent or higher.

## PHYS - Physics

### PHYS& 114 - General Physics I with Lab (5)

Covers problem-solving concepts in physics, including one- and two-dimensional kinematics, force, Newton's laws of motion, uniform circular motion, universal gravitation, work, energy, linear momentum, rotational motion, and angular momentum in an algebra-based approach.

Prerequisite: Successful completion of MAT 099.

### PHYS& 221 - Engineering Physics I (6)

The first quarter of a three-quarter sequence in calculus-based physics for science and engineering students. The course covers topics in mechanics, including kinematics of motion, force, work, energy, momentum, and kinematics & dynamics of rotation. Lab included.

Prerequisite: Successful completion or concurrent enrollment of MATH& 152.

### PHYS& 222 - Engineering Physics II (6)

The second quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of equilibrium of rigid bodies, properties of solids, gravity, fluid mechanics, heat, thermodynamics, waves, sound and light. Lab included.

Prerequisite: Successful completion of PHYS& 221.

## POLS - Political Science

### POLS 180 - Critical Issues in World Politics (5)

Examination of enduring political issues as well as political processes and institutions. Special emphasis is placed on studying some of the most pressing international issues facing the world today including war, global power shifts, democracy promotion, intervention, development, non-state actors such as multinational corporations and terrorist groups, security, and global issues.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

### POLS& 202 - American Government (5)

A survey of the structure and process of American politics and government, including the structure and function of the executive, legislative, and judicial branches and the American political party system. Special emphasis is placed on the relationship between political culture, thought, institutions, and the debate over public policy.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

## PSY - Psychology

### PSY 112DIV - Psychology of the Workplace (5)

Introduces general psychological principles and their application to the workplace, emphasizing critical thinking with regard to self-awareness, interpersonal relations, motivation, and teamwork.

Prerequisite: Successful completion of ENG 094 or equivalent.

## PSYC-Psychology

### PSYC& 100DIV - General Psychology (5)

Surveys the knowledge and methods of the discipline of psychology. Presents a broad view of this subject and establishes the foundation for further study of the

discipline. Emphasis will be placed on applying psychological knowledge to daily situations and on accessing and assessing information about behavior from a variety of sources. Skills in scientific reasoning and critical thinking will be developed.

Prerequisite: Successful completion of ENG 094 or equivalent.

### **PSYC& 200 - Lifespan Psychology (5)**

Introduces the milestones of human development from conception to death. It describes the physical, cognitive, and social growth of people, with special attention to various cultural contexts of development and the rich diversity of individuals. The content is drawn from research and theories in developmental psychology. Students are expected to integrate their personal experiences, knowledge of psychology, and their observations of human development with the content of this course. Implications for parenting, education, and social policy making will be discussed, so that students may apply course information to meaningful problems.

Prerequisite: Successful completion of PSYC& 100.

### **PSYC& 220 - Abnormal Psychology (5)**

A study of the development and symptoms of mental health disorders. Topics covered include schizophrenia, mood disorders, anxiety disorders, personality disorders, psychosomatic disorders, sexual deviation, organic disorders, and the process of adjustment to stress. Attention is given to biosocial, cognitive, and cultural factors and their role in mental health.

Prerequisite: Successful completion of PSYC& 100 or equivalent.

### **PSYC 311DIV - Industrial & Organizational Psychology (5)**

Examines how people behave and interact with each other at work, with an emphasis on the way that this affects job performance. Topics covered in this course include the development of leadership skills, recruitment and retention, motivation and team building, managing change, and conflict resolution.

Prerequisite: Successful completion of ENGL& 101.

## **PT - Pharmacy Technician**

### **PT 120 - Pharmacology Part I (5)**

This course explores drug action mechanisms, the routes of

administration, and the effects on body systems. Emphasis is placed on the uses, effects and side effects of the major drug classes.

Prerequisite: High school diploma or high school equivalency diploma. Ability to speak, read, and write the English language. CAH 105 Computer Applications or equivalent, 5-credit Medical Terminology course, and Coll 102 College Success for All. All courses required for certificate or degree must be completed with a grade of "B" or better.

### **PT 121 - Introduction to Pharmacy & Pharmacy Law (5)**

Orients students to the work of pharmacy technicians and the context in which technicians' work is performed. Covers the study of pharmacy law as it pertains to the practice of pharmacy in the state of Washington compared to the United States as a whole.

Prerequisite: High school diploma or high school equivalency diploma. Ability to speak, read, and write the English language. CAH 105 Computer Applications or equivalent, 5-credit Medical Terminology course, and COLL 102 College Success for All. All courses required for certificate or degree must be completed with a grade of "B" or better.

### **PT 122 - Generic Drug Names Part I (2)**

This course will begin the introduction of the top 200 drugs prescribed in the United States each year.

Prerequisite: Completion of Introduction to PT 121 Pharmacy and Pharmacy Law, PT 120 Pharmacology Part 1, and PT 126 Community Practice courses with a B or above in all courses.

### **PT 126 - Community Practice (4)**

Introduces the community pharmacy experience. Customer Service will be explored.

Prerequisite: High school diploma or high school equivalency diploma. Ability to speak, read, and write the English language. CAH 105 Computer Applications or equivalent, 5-credit Medical Terminology course, and Coll 102 College Success for All. All courses required for certificate or degree must be completed with a grade of "B" or better.

### **PT 127 - Pharmacy Lab #1 (2)**

Prescription filling with counting, keyboarding, packaging, stocking, and labeling will be covered. Emphasis will be on nonsterile compounding following USP 795 guidelines.



Prerequisite: Completion of PT 121 Introduction to Pharmacy and Pharmacy Law, PT 120 Pharmacology Part 1, and PT 126 Community Practice courses with a B or above in all courses.

### **PT 133 - Pharmaceutical Calculations (3)**

Math specific to the practice of pharmacy will be explored.

Prerequisite: Completion of a college level math course within the last 5 years (unless the student has a bachelor's degree), PT 121 Introduction to Pharmacy and Pharmacy Law, PT 120 Pharmacology Part 1, and PT 126 Community Practice courses with a B or above in all courses.

### **PT 136 - Pharmacology Part II (6)**

Continues the exploration of drug action mechanisms, the routes of administration, and the effects on body systems. Emphasis is placed on the uses, effects and side effects of the major drug classes.

Prerequisite: Completion of PT 121 Introduction to Pharmacy and Pharmacy Law, PT 120 Pharmacology Part 1, and PT 126 Community Practice courses with a B or above in all courses.

### **PT 135 - Hospital Practice with Sterile Processing (6)**

This course will introduce the differences between hospital practice and community pharmacy practice. Students will learn of inpatient drug distribution systems, unit dose systems, formularies, and specialized services, including sterile compounding. This course also includes infection control, inventory management, and medication orders.

Prerequisite: Completion of PT 136 Pharmacology Part 2, PT 122 Generic Drug Names Part 1, PT 133 Pharmaceutical Calculations, and PT 127 Lab #1 courses with a B or above in all courses.

### **PT 138 - Generic Drug Names Part II (2)**

This course will continue the exploration of the top 200 drugs prescribed in the United States each year.

Prerequisite: Completion of PT 136 Pharmacology Part 2, PT 122 Generic Drug Names Part 1, PT 133 Pharmaceutical Calculations, and PT 127 Lab #1 courses with a B or above in all courses.

### **PT 155 - Clinical Capstone Research (2)**

This course explores professionalism and clinical readiness.

Prerequisite: Completion of PT 136 Pharmacology Part 2,

PT 122 Generic Drug Names Part 1, PT 133 Pharmaceutical Calculations, and PT 127 Lab #1 courses with a B or above in all courses.

### **PT 157 - Pharmacy Lab #2 (3)**

Students will apply techniques learned to prepare sterile compounding products. Emphasis will be on aseptic technique and USP 797 and USP 800 guidelines. Students will learn how to use inpatient drug distribution systems, unit dose systems, and bubble packing.

Prerequisite: Completion of PT 136 Pharmacology Part 2, PT 122 Generic Drug Names Part 1, PT 133 Pharmaceutical Calculations, and PT 127 Lab #1 courses with a B or above in all courses.

### **PT 163CAP - Community Pharmacy Clinical Capstone (7)**

Provides 5 1/2 weeks of clinical training in a community pharmacy. Students will put into practice skills learned in the classroom by arranging an internship with a community pharmacy. Students and faculty collaborate in arranging community practice sites. Students are directly supervised by a pharmacist preceptor and their staff, with ongoing contact with the instructor in the form of site visits and seminars.

Prerequisite: Successful completion of all required in-class PT courses of the pharmacy technician program from all previous quarters with a B or above.

### **PT 165CAP - Institutional Clinical Capstone (7)**

Students will spend 5 1/2 weeks in an institutional pharmacy setting. While in this capstone experience, students will perform the duties of an institutional pharmacy technician under the direct supervision of a pharmacist preceptor. There will be ongoing contact with the instructor in the form of site visits and seminars.

Prerequisite: Successful completion of all required in-class PT courses of the pharmacy technician program from all previous quarters with a B or above.

## **RBM - Retail Business Management**

### **RBM 105 - Fundamentals of Organizational Behavior (3)**

Emphasizes the human factor in business, the job of the supervisor, human relations, the art of leadership and converting policy into action, job analysis and performance, how and when to discipline, and effective supervising techniques for a diverse workplace.

**RBM 107 - Marketing (3)**

Discover the methods and techniques of marketing research and the principles on which they are based. Includes the elements of the research process, evaluation, and effective presentation of findings.

**RBM 109 - Principles of Retailing (3)**

Provides an introduction to retail management operations and merchandising. Covers retail target markets, trading area analysis and site selection, retail organization, buying, handling financial management of merchandise, development of retail image, customer service, and control of retail operations.

**RBM 111 - Essentials of Business Communication (3)**

Prepares students to communicate effectively in business settings by helping them develop superior written and oral communication skills. This course focuses on traditional and web-based forms of communication, as seen in business today, including email, letters, memos, reports, proposals, and presentations. Upon completion of Business Communications, students will know how to plan, write, and revise communications for a variety of audiences, both in print and online.

**RBM 113CL - Business Technology for Retail Applications (3)**

Gain hands-on experience with the fundamentals of Microsoft Office, such as entering data, formatting, copying and pasting, basic formula construction, auto summing and more. This course will not only teach you the basics of Office but will also teach you the thinking and mechanics of how to apply it to your everyday retail problems.

**RBM 115 - Human Resource Management (3)**

Identify the role of human resource management, including its scope and responsibilities. Students will examine the principles and methods used in the recruitment, selection, placement, and training of employees. Major laws, trends, and issues related to human resource administration will be discussed.

**RBM 117 - Principles of Management (3)**

Learn essential skills for operating an effective business. Topics include employee productivity, project management, human resources and job design, forecasting, statistical process control, and supply chain management.

**RBM 119 - Financial Management (3)**

Introduces students to key financial management topics that give insight into the issues and challenges facing retail managers on a daily basis. Topics include ordering inventory management, scheduling, and analyzing profit and loss statements. This course delivers the solid understanding of financial management that a business student needs for future success.

**RBM 123 - Customer Service (5)**

Introduces concepts of effective customer service, step-by-step suggestions for improving communication, and valuable references for delivering exceptional internal and external customer service skills.

**RBM 129 - Speaking for Success (5)**

Theory and practice in composing and presenting oral business communications, both impromptu and prepared. Effective writing of business documents, methods of research, and presentation of oral class reports.

**RBM 133 - Effective Selling (5)**

Nature and scope of selling and understanding buying motives, with strong emphasis on the selling process, prospecting, pre-approach, demonstration of products and services, and closing. While we use the traditional selling tenets as a foundation, this course adapts the concepts to the rapidly changing world of business in today's environment, including the use of Twitter, LinkedIn, Facebook, blogs, wikis, and other interactive ways of connecting with customers.

**RBM 159 - E-Commerce Principles & Applications (4)**

This introduction to the world of electronic commerce provides the tools necessary to understand and capitalize on the explosion of Internet-based business in today's economy. Study the technologies used to create new opportunities for business-to-business and business-to-customer services.

**RBM 162 - Social Media Marketing (5)**

Social Media Marketing will give you a practical approach to developing successful social media marketing plans. Students will learn how to analyze effective and ineffective ways to market various products to achieve desired marketing outcomes.

**RBM 164 - Marketing Communications (5)**

Developed with real world examples to illustrate the concepts of promotion and give students a glimpse into

industry and the challenges it faces. This course will introduce concepts on developing a target market, how to find your target market, and how to effectively build relationships through research and branding to the company's core customer.

#### **RBM 166CAP - Successful Career Development (5)**

Participate in self-analysis, goal setting, career exploration, personal appearance and grooming; resume writing, application letter writing, and the employment interview; and communication of ideas, interviewing practice, and other techniques of successful career development.

#### **RBM 168 - Consumer Behavior (5)**

Introduction to the core concepts and applications of contemporary consumer behavior as it is practiced today with the latest consumer behavior statistics, examples, and trends. This course emphasizes how the recent recession, green marketing, and natural disasters all impact contemporary consumer behavior.

#### **RBM 201 - Introduction to Business Etiquette (5)**

A professional class designed to give an understanding of business etiquette. Put your best professional foot forward with Introduction to Business Etiquette. This course covers all the important issues and concepts without confusing students with excess material. This class covers basic digital etiquette and provides information on how to create and maintain business relationships.

## **REST - Culinary Arts - Restaurant Management**

#### **REST 103 - Food & Beverage Cost Control (4)**

Outlines the fundamentals of food costing in relation to writing menus. Students will be responsible for pricing out each item on the menu, as well as preparing yield tests and standardizing recipes.

#### **REST 107CAP - Kitchen & Dining Management (3)**

Learn how to communicate with, lead, and manage different types of people. This entails how to hire and fire, inventory control, writing job descriptions, and creating performance reviews for both front and back of the house.

Prerequisite: Successful completion of REST 112.

#### **REST 109 - Marketing/Public Relations (3)**

Learn how to create a marketing concept for your restaurant. Learn to define your target market and understand the importance of effective marketing in the

industry. We will also look at current market trends, consumer behavior, market segmentation, and positioning your business in the market to get the desired results.

#### **REST 112 - Restaurant Dining (7)**

Familiarizes students with all aspects of running a casual-style dining room open to the public. Included are opening/closing procedures, table setup, customer-service techniques, leadership, sanitation, and safety procedures.

#### **REST 115 - Catering Production (3)**

Emphasis will focus on buffet preparation and presentation. Students will receive hands-on experience creating and executing catering requisitions. Students will explore designing menus for various events, functions, and price limits.

#### **REST 119 - Operations Management (4)**

Explore all aspects of running a successful operation in the hospitality industry. Students will learn leadership skills, team building, and how to create a positive work environment. Students will also learn hiring procedures, how to recruit new team members, how to organize and implement systems and controls, and how to handle issues that arise daily. Students will also explore how to use Excel and the benefits of using Excel for restaurants.

#### **REST 122 - Food Service Nutrition (4)**

Learn the basics of food service nutrition for culinary professionals. This class will teach students about the biological process that occurs as you eat and what constitutes a healthy diet. Students will gain an understanding of the structure and functions of food.

#### **REST 126 - Finance & Accounting (4)**

Prepares students to understand, interpret, and analyze financial statements, budgeting, cash flow, and cash management. This gives students a chance to become familiar with financial statements prior to entering the workforce.

#### **REST 131 - Business Plan Development (4)**

Develop a restaurant concept from start to finish, including a hands-on look at how to develop a business plan to present to possible investors. Students will practice decision-making and problem-solving skills by creating and planning their own concept.

#### **REST 133 - Beverage Service Management (4)**

Learn to successfully set up and manage a beverage service operation. Includes the history of bar service, beverage-

making ingredients and processes, safety, and sanitation in the bar.

### **REST 137 - Hospitality Law (4)**

Learn about laws affecting the hospitality industry on both a national and state level. This class will look at operating an establishment according to government regulations regarding sales, civil rights, liability, administration issues, and organization.

## **SBS - Construction Technologies**

### **SBS 107 - Sustainability Building Basics (4)**

Overview of sustainable green" building models with a focus on energy indoor health natural resources and other environmental impact."

### **SBS 121 - Survey of Energy Ratings (3)**

Introduction to the current and emerging efficiency standards for measuring energy usage and consumption, including but not limited to Energy Star, BPI, LEED, Built Green, etc.

Prerequisite: Instructor's permission.

### **SBS 130 - Alternative Energy Systems (5)**

An overview of existing and emerging approaches to energy production for use in residential and commercial structures, including but not limited to, solar/ photovoltaics, wind, geothermal, biofuels, etc.

### **SBS 142 - Building Envelope (4)**

Introduction to the principles of heat, light, sound, moisture, and air movement within a residential structure, including an overview of external factors that impact a building's energy integrity.

### **SBS 150 - Moisture Mitigation (3)**

Introduction to practices in construction that prevent moisture intrusion, as well as techniques for maintaining healthy living environments free from the destructive impacts of moisture.

### **SBS 174 - Basic Diagnostics and Testing (4)**

Overview of the equipment, technology, systems, and software used to measure a building's energy usage and loss.

### **SBS 185CAP - Service Learning Project (3)**

A capstone project that gives students an opportunity to apply their sustainable building science knowledge in a

real-life setting, focusing on helping nonprofit organizations achieve sustainability in the buildings where they live, work, and serve the public.

## **SOC - Sociology**

### **SOC& 101DIV - Introduction to Sociology (5)**

Focuses on understanding and applying the sociological perspective, which stresses the importance of the impact of social forces external to the individual in shaping people's lives and experiences. Topics studied will include socialization, social interaction, culture, groups, social structure, deviance, social inequality, social class, race, gender, institutions (political, economic, educational, and family), collective behavior, and social change. Students will be asked to learn the basic concepts, theories, and perspectives of sociology; to see how these operate in terms of social processes, structures, and events; and to apply this knowledge to better understand the social world.

Prerequisite: Successful completion of ENG 094 or equivalent.

## **SURG - Surgical Technology**

### **SURG 110 - Introduction to Surgical Lab (3)**

Covers proper attire, hand hygiene, patient vitals, urinary catheterization, room set up, handling of sterile supplies, gowning and gloving, and introduction to surgical instrumentation.

Prerequisite: Successful completion of ENGL& 101, CAH 102, BIOL& 241, COLL 102.

### **SURG 115 - Introduction to the Surgical Environment (2)**

Explores the basics of surgical instrumentation, use of energy sources and guidelines to safe practices surrounding them, introduction to specimen handling, principals of aseptic technique, processes related to maintaining asepsis and hazards of the surgical environment.

Prerequisite: Successful completion of ENGL& 101, CAH 102, BIOL& 241, COLL 102.

### **SURG 120 - Care of the Surgical Patient I (2)**

Covers patient vitals and diagnostics; methods of patient identification, transfer, transport and positioning of surgical patients; theories of skin prep and draping; case planning and intraoperative routines.

Prerequisite: Successful completion of ENGL& 101, CAH

102, BIOL& 241, COLL 102.

### **SURG 128 - Pharmacology & Anesthesia (3)**

Introduces the student to basic surgically related pharmacologic and anesthetic principles, including drug classification, proper medication labeling and handling, aseptic medication preparation and usage, principles of anesthesia administration and monitoring, including complications and interventions.

Prerequisite: Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT&).

### **SURG 145 - Surgical Lab I (5)**

Explores the operative environment, aseptic principles and practices, methodologies of opening sterile packages, preparation of the sterile field, positioning and prepping, scrub role, assistant circulator role, instruments, supplies, equipment, patient positions, incisions, draping, procedural steps and care of specimens, surgical counts, instrument handling, medication handling, suture handling, loading and unloading of blades, backtable and mayo setups, room disinfection, turnover and termination.

Prerequisite: Successful completion of SURG 110, SURG 115, SURG 120, BIOL& 242, and CAH 105.

### **SURG 148 - Operating Room Theory I (5)**

Explores the OR environment, instrumentation, equipment, supplies, patient positions, specimen care, postoperative considerations, abdominal incisions, surgical anatomy and procedures in general, laparoscopic, ob-gyn, ophthalmic, and genitourinary surgeries.

Prerequisite: Successful completion of SURG 110, SURG 115, SURG 120, BIOL& 242, and CAH 105.

### **SURG 150 - Surgical Environment (2)**

Explore the history of surgical technology, career opportunities, communication skills, and the effects of teamwork, law, ethics, documentation, and the health care facility environment.

Prerequisite: Successful completion of SURG 110, SURG 115, SURG 120, BIOL& 242, and CAH 105.

### **SURG 152 - Care of the Surgical Patient II (2)**

Covers the physical, and biophysiological needs of the patient and religious and cultural influences. Methods of handling death and dying, and the ethical issues surrounding death and dying. Explores the processes

related to management and care of the surgical wound, including hemostasis, sutures, dressings, drains and application of various types of dressings.

Prerequisite: Successful completion of SURG 110, SURG 115, SURG 120, BIOL& 242, and CAH 105.

### **SURG 153 - Surgical Lab II (5)**

Covers intermediate level skills for the OR environment, aseptic principles and practices, scrubbing, gowning, gloving, preparation of the sterile field, disinfection and sterilization, scrub role, assistant circulator role, instrumentation, supplies, equipment, patient positions, draping, incisions, procedural steps, and care of specimens as appropriate for the second quarter

Prerequisite: Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT&).

### **SURG 154 - Operating Room Theory II (5)**

Continued exploration of surgical specialties to include otorhinolaryngologic, oral/ maxillofacial, plastic/reconstructive, and orthopedic procedures along with surgical anatomy, instrumentation, equipment, supplies, patient positions, specimen care and postoperative considerations.

Prerequisite: Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT&).

### **SURG 160 - Care of the Surgical Patient III (2)**

Explores disaster readiness, sterility, disinfection, steps for reprocessing instruments, decontamination of surgical environment, and the use of technology within the surgical environment.

Prerequisite: Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT&).

### **SURG 201 - Operating Room Theory III (5)**

Assesses the anatomy, physiology, and path physiology of the surgical specialties. Classroom activities will analyze procedures and anatomy related to pediatric, thoracic/ pulmonary, cardiac, peripheral vascular neurosurgical and trauma procedures.

Prerequisite: Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC& 101.

### **SURG 205 - Clinical Preparation (2)**

Students will earn HIPAA and Blood Borne Pathogens certificates, and complete all paperwork related to attending clinical rotation.

Prerequisite: Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC& 101.

### **SURG 208 - Microbiology for Surgical Technology (3)**

Explores the relationship of microbiology and surgical practice, types and identification process of various microbes, cell structure of microbes, and disease process of microbes

Prerequisite: Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC& 101.

### **SURG 212 - Surgical Lab III (5)**

Preclinical level lab for practice of aseptic principles and practices, scrubbing, gowning, gloving, and preparation of the sterile field. Will practice draping patient, placing multiple types of drains and patient positioning. Demonstrate critical thinking skills and prioritizing the situations and corrections of contaminations. The course will teach care of specimens, and learn the roles of assistant circulator.

Prerequisite: Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC& 101.

### **SURG 215 - Clinical Applications I (5)**

Provides the framework for students to receive experience in the operating room. Through one-on-one training in a perioperative setting, students will develop the professional attitude, behavior and skills to reinforce their role as a member of the perioperative team.

Prerequisite: Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

### **SURG 220 - Clinical Applications II (5)**

See Clinical Applications.

Prerequisite: Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

### **SURG 225 - Clinical Applications III (5)**

See Clinical Applications.

Prerequisite: Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

### **SURG 230 - Clinical Applications IV (5)**

See Clinical Applications.

Prerequisite: Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

### **SURG 235 - Seminar I (3)**

Classroom presentations on health and wellness and death and dying. Classroom preparation for the NBSTSA Certification Exam.

Prerequisite: Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

### **SURG 237 - Certification Test Preparation I (2)**

Prepares students to take the NBSTSA National Certification Test.

Prerequisite: Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

### **SURG 240CAP - Seminar II (3)**

Classroom presentations of employability skills, preoperative routines, and transportation. Classroom preparation for the NBSTSA Certification Exam.

Prerequisite: Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

### **SURG 242 - Certification Test Preparation II (2)**

Prepares students to take the NBSTSA National Certification Test. Students will participate in the National Certification Test.

Prerequisite: Successful completion of SURG 201, SURG 215, SURG 220, SURG 235, and SURG 237.

## **SVL - College Success**

### **SVL 101 - Service Learning (3)**

Participate in organized service that addresses local community needs - specifically, the issue of poverty - while developing academic and professional skills. Work directly with community partners to link community activities and projects to academic growth and self-discovery through reflection. Relate service experience to local and global social issues, and broaden knowledge of your chosen profession. Requires a minimum of 20 hours of community service work in addition to class assignments and activities.

## UPH - Upholstery

### UPH 101 - Introduction to Upholstery I (4)

Introduces tools and materials commonly used in the upholstery trade. Provides hands-on experience in proper use of various hand and power tools and their maintenance and storage. Students will learn how to set up an efficient work station.

### UPH 103 - Introduction to Upholstery II (4)

Introduces types of foam and fabrics along with their characteristics and uses in upholstery. Equips students with skills needed to design patterns, measure and calculate materials needed for an upholstery project. Continuation of skills learned in Introduction to Upholstery I.

### UPH 105 - Basic Sewing I (4)

Covers the setup and threading of commercial upholstery sewing machines. Provides a foundation for students to learn to sew on commercial machines with control and accuracy.

### UPH 107 - Basic Sewing II (4)

Focuses on building a foundation of sewing skills. Provides instruction introduction to troubleshooting and maintenance of commercial sewing machines. Introduces students to various machine stitches and their uses. Continuation of skills learned in Basic Sewing I.

Prerequisite: Instructor's permission.

### UPH 109 - Intermediate Sewing I (4)

Develop sewing skills, speed and accuracy by constructing cushions, pillows and automotive inserts.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

### UPH 111 - Intermediate Sewing II (4)

Continuation of sewing skills learned in Intermediate Sewing I. Increase speed and accuracy by constructing cushions, pillows and automotive inserts.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

### UPH 113 - Advanced Sewing I (4)

Provides students the opportunity to develop advanced sewing skills by constructing complex seats and custom designs.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

### UPH 115 - Advanced Sewing II (4)

Continuation of Advanced Sewing I to develop students' advanced sewing skills. Provides practical application of sewing skills on a 2015 Corvette seat frame or similar. Students will design a pattern, cut, sew, and fit a new upholstery cover for a seat back.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

### UPH 118 - Doors and Quarter Panels I (4)

Provides students the opportunity to apply practical design, sewing and upholstery skills to automotive doors and quarter panels. Students will learn to remove existing panels, design replacement pieces and prepare automotive interior for upholstery.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### UPH 120 - Doors and Quarter Panels II (4)

Continuation of development of skills learned in Doors and Quarter Panels I. Instruction also includes reinstallation of upholstered vehicle door and quarter panels.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### UPH 122 - Bucket Seats I (4)

Covers the removal of an automotive bucket seat as well as pattern and fabrication of a replacement seat cover and headrest covers. Provides students with the opportunity to apply knowledge and skills learned in design, measurement and sewing.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### UPH 124 - Bucket Seats II (4)

Covers various sewing techniques for automotive bucket seat as well as preparation and fitting of upholstery covers for bucket seats and head rests. Students will also learn to reinstall automotive bucket seats and headrests after reupholstering. Continuation of skills learned in Bucket Seats I.

Prerequisite: Instructor Permission or successful

completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 126 - Bench Seats I (4)**

Covers the removal of an automotive bench seat as well as pattern and fabrication of a replacement seat cover and headrest covers. Provides students with the opportunity to apply knowledge and skills learned in design, measurement and sewing.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 128 - Bench Seats II (4)**

Covers various sewing techniques for automotive bench seats as well as preparation and fitting of upholstery covers for bench seats and head rests. Students will also learn how to reinstall automotive bench seats and headrests after reupholstering. Continuation of skills learned in Bench Seats I.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 132 - Headliners (4)**

Introduces fabrication of bow headliners, upholstery of hard shell headliners and installation and creation of matching sun visors.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 136 - Carpets (4)**

Covers removal of automotive carpet for replacement, preparation of the trunk and other interior areas, cutting and sewing new carpet and reinstallation of an automotive carpet.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 140 - Convertible Tops (4)**

Students will learn how to disassemble a convertible top, fabricate top pads, prepare care and bows for a new top, and install a new top.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 145 - The Art of Tying Springs (3)**

Students will learn how to install springs using eight-way tie and adjust to proper height.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 150 - Upholstering a Louis-Type Chair I (4)**

Covers professional upholstery techniques and skills needed to upholster a Louis-type chair, overview of materials and tools of furniture upholstery and best practices.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 155 - Upholstering a Louis-Type Chair II (4)**

Continuation of Upholstering a Louis-type Chair I, building on skills learned in UPH 150, including instruction on designing and sewing sofa skirts and furniture arm covers.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 160 - Upholstering a Wingback Chair I (4)**

Introduces skills needed to upholster a wingback chair. Provides an overview of professional upholstery techniques, materials, tools, and best practices.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 165 - Upholstering a Wingback Chair II (4)**

Continues building on skills learned in Upholstering a Wingback Chair I course.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 170 - Upholstering a Sofa I (4)**

Covers professional upholstery techniques and skills needed to upholster a sofa, overview of materials and tools of furniture upholstery and best practices.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107,



UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 175 - Upholstering a Sofa II (4)**

Continues building on skills learned in Upholstering a Sofa I course, includes instruction on designing and sewing sofa skirts and furniture arm covers.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 180 - Diamond Tufting (4)**

Create a diamond tufted sample board or furniture piece.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 183 - Pillow Backs (4)**

Fabricate a pillow back using essential patterning and sewing skills.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 189 - Design and Construction of a Headboard (4)**

Build a headboard using essential skills, professional upholstery techniques, tools and materials and best practices.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 200 - Special Projects (4)**

Students will develop skills in advanced and/or specialized techniques. Students will have the opportunity to apply knowledge to projects of personal interest as assigned and/or job shadowing. Learning outcomes will be written by the instructor and student on a case-by- case basis.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

## **WLD - Welding**

#### **WLD 106 - Welding Theory (5)**

Introduces the tools and equipment used in welding. Includes safety considerations, electrical principles, welding quality, and technical orientation for select

welding and cutting processes.

#### **WLD 110 - Thermal Cutting & Gouging (3)**

Develops the knowledge and skills for manual and machine-guided oxyfuel cutting, manual plasma arc cutting, and carbon arc gouging.

Corequisite: WLD 112, WLD 117, and instructor's permission.

#### **WLD 112 - Oxyacetylene Welding & Brazing (4)**

Covers skills to safely use oxy-fuel torch equipment to preform welding and brazing on a variety of joint designs.

Corequisite: WLD 110, WLD 117, and instructor's permission.

#### **WLD 117 - Shielded Metal Arc Welding I (7)**

Introduction to the shielded metal arc welding (SMAW) process, including: equipment safety and skill development using deep-penetrating electrodes in the flat, horizontal, vertical-up and overhead positions.

Corequisite: WLD 110, WLD 112, and instructor's permission.

#### **WLD 123 - Shielded Metal Arc Welding II (7)**

Develops further understanding with shielded metal arc welding (SMAW) process, including: equipment safety and skill development with low hydrogen electrodes (E7018) in the flat, horizontal, vertical-up and overhead positions.

Prerequisite: Successful completion of WLD 110, WLD 112, WLD 117, and instructor's permission. Corequisite: WLD 152.

#### **WLD 143 - Materials and Testing (5)**

Covers welding processes and electrode selection, welder qualifications, and welding inspection.

#### **WLD 144 - Print Reading for Welders (5)**

Covers interpretation of job drawing views and details including: dimensioning, orthographic projections, pictorial drawings and welding symbols.

#### **WLD 152 - Gas Metal Arc Welding (7)**

Develops the ability to use the gas metal arc welding process to join carbon steels and aluminum with various joint designs in all positions.

Prerequisite: Successful completion of WLD 110, WLD

112, WLD 117, and instructor's permission. Corequisite: WLD 123.

### **WLD 157 - Metallurgy (5)**

Examines the properties, behavior and internal structures of metal and how they are affected by welding.

### **WLD 168 - Flux Cored Arc Welding I (7)**

Covers welding techniques in all positions for Flux Core Arc Welding with shielding gas in a variety of joint designs in all positions.

Prerequisite: Successful completion of WLD 123 and WLD 152 and instructor's permission. Corequisite: WLD 210.

### **WLD 210 - Gas Tungsten Arc Welding (7)**

Covers welding techniques in all positions for Gas Tungsten Arc Welding for a variety of steel and aluminum joint designs.

Prerequisite: Successful completion of WLD 123 and WLD 152 and instructor's permission. Corequisite: WLD 168.

### **WLD 211 - Advanced Gas Tungsten Arc Welding I (GTAW) (7)**

Covers welding techniques in all positions for Gas Tungsten Arc welding for a variety of light gauge steel and aluminum joint designs of aerospace quality.

Prerequisite: Successful completion of WLD 210 or instructor's permission.

### **WLD 214 - Advanced Gas Tungsten Arc Welding II (7)**

This course continues the exercises from WLD 211 welding techniques in all positions for Gas Tungsten Arc Welding for a variety of light gauge steel, aluminum (and exotic metals as available) joint designs of aerospace quality.

Prerequisite: Successful completion of or concurrent enrollment in WLD 211.

### **WLD 217CAP - Special Projects (1-5)**

Develops skills including: print reading, project planning, layout distortion control, fixturing, and other fabrication techniques. Students will have the opportunity to apply knowledge to projects of personal interest or as assigned.

Prerequisite: Advanced standing with instructor's permission.

### **WLD 219 - Special Projects II (1-5)**

A continuation of WLD 217, closing the circle on print reading, fabrication, metallurgy, and welding by developing concepts to be made into working drawings, which will be used in fabricating a project. This process allows a student to further develop skills in print reading, project planning, layout methods, fixturing, distortion control, and the use of tools and equipment for metal fabrication. Students will have the opportunity to apply knowledge to projects of personal interest or as assigned.

Prerequisite: Advanced standing with instructor's permission.

### **WLD 223 - GTAW Pipe Welding (7)**

Covers welding techniques required to make sound weld GTAW welds on steel plate and pipe in the 2G, 3G, 4G & 5G positions.

Prerequisite: Instructor's permission.

### **WLD 225 - Shielded Metal Arc Welding Pipe (7)**

Covers welding techniques required to make sound SMAW welds on steel plate (3G & 4G positions) and pipe (2G & 5G positions) using E6010 and E7018 electrodes.

Prerequisite: Instructor's permission.

### **WLD 227 - Advanced Pipe Welding (7)**

Covers welding techniques required to make sound GTAW and SMAW welds on steel pipe (2G, 5G, 6G & 6GR positions) using ER70S filler rod, E6010 and E7018 electrodes.

Prerequisite: Instructor's permission.

### **WLD 229 - Metal Forming (7)**

Develops knowledge of safe metal forming methods with a variety of hands on projects utilizing smithing/metal forming equipment and techniques.

Prerequisite: Successful completion of WLD 157 or instructor's permission.

### **WLD 238 - FCAW II (Flux Core Arc Welding) (7)**

Covers welding techniques fro self-shielding Flux Cored Arc Welding for a variety of joint designs in all positions.

### **WLD 233CAP - Layout and Fabrication (7)**

Covers layout and fabrication techniques required for building production welding projects from a plan. Project

planning, layout methods, fixturing, distortion control and the use of tools and equipment for metal fabrication are also covered.

Prerequisite: Instructor's permission.

**WLD 235CAP - WABO Test Prep (7)**

Develops skills in preparation for employer, Washington Association of Building Officials (WABO) or similar welder qualification tests in the 3G, 4G, 5G and 6G positions using a variety of welding processes.

Prerequisite: Instructor's permission.

# Short-Term Training Programs

Students interested in flexible training schedules may choose from several short-term training programs, courses, and workshops. Courses may be offered in a traditional classroom environment, fully online, or in a hybrid format and may be offered on a credit or non-credit basis. Short-term training courses vary in length from 4 to 500+ hours, change quarterly, and often may be applied to various industry requirements for continuing education or professional development.

Some short-term training programs are composed of a course or series of courses mapped to an industry-recognized certification or license. Such courses often use curriculum and materials specified by industry associations to assist students to prepare for proctored certification examinations. Other short-term training programs include training in the skills necessary for specific entry-level job opportunities.

The menu of courses is subject to change as labor market demands change. Courses listed may not be offered every quarter. Consult the quarterly class schedule for short-term options and costs or contact the Workforce and Community Education office at 253-589-5575.

## Construction Technologies

### Construction Trades Academy Pre-Apprenticeship Program (C-TAPP) Certificate

This apprenticeship readiness program prepares students with the knowledge and skills necessary for employment in the construction industry. This one-quarter program covers safety, hand and power tool use, math, carpentry trades, print and plan reading, and employment preparation. C-TAPP includes industry certifications and credentials such as: First Aid/CPR, Forklift Operator, OSHA 10 Construction Safety, and Flagger Certification.

#### Credits:

18

#### Physical Requirements

Should be able to lift 40 pounds.

#### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Fall and spring quarters.

#### Prerequisite(s):

None.

## CPR and First Aid For Health Care Providers

This American Heart Association-approved course consists of adult, child, and infant CPR and First Aid and an overview of AED procedures. Class meets OSHA and WISHA requirements. The Healthcare Provider Basic Life Support and the First Aid cards are valid for two years. Recertify with us! You must pay for the class and pass both the written and skills exams to receive your certifications. Students must read, write, and understand the English language well enough to pass a written exam.

## CPR For Health Care Providers (BLS)

Participants will be instructed in the proper techniques of doing chest compressions, delivering ventilation, and early use of an Automated External Defibrillator (AED). The course follows the curriculum of the American Heart Association's Basic Life Support (BLS) training, which includes adult, child, and infant rescue techniques. Students will receive an American Heart Association BLS card for health care providers, which is valid for 2 years.

## Flagger Training

This course presents approved training by the Washington State Department of Labor and Industries for flagging and traffic control, with hands-on practice. This course is geared towards individuals interested in obtaining their first flagger card, or those interested in getting re-certified. Flagger card presented after full payment and successful completion of the class. The card is valid for 3 years. You

must be at least 18 years of age to register and take this class.

## Forklift Operations and Safety

Created for those who use forklifts on the job, with a strong emphasis on safety. This course is approved by the Washington State Department of Labor and Industries and is OSHA compliant. In addition to the safety training, the course includes hands-on practice on counterbalance, propane-powered forklift. All materials included in the cost of course. Forklift card presented after payment and successful completion of safety and hands-on skill practice. Certification is valid for 3 years. You must be at least 18 years of age to register and take this class.

## Fundamental Skills for Manufacturing and Engineering (FSME)

The Fundamental Skills for Manufacturing and Engineering (FSME) Certificate of Completion is a Washington State Recognized Apprenticeship Preparation program and is designed to provide students with a foundational set of skills and background knowledge that will equip them for an entry-level position in a manufacturing organization and provide a solid foundation for further technical studies. The FSME certificate is also the first quarter of CPTC's AAS-T Mechatronics program.

### Credits:

18

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

### Prerequisite(s):

None.

## Phlebotomy Program (PHLEB 120)

This class is designed to develop basic phlebotomy skills for blood collection and safe handling. Students will learn proper technique and order of draw for venipuncture using a variety of collection methods (syringes, vacutainers, and butterfly needle). Students will also learn proper techniques for collecting blood specimens using finger and heel sticks. Students will have lab time to practice their skills on other students in a mock laboratory setting.

### Please Note

*This is a five-week intensive program aimed toward health care professionals currently employed in the field. It is composed of lecture and lab times. There is no clinical component to this course*

### Credits:

4

### Completion Requirements

#### Prerequisites

At least three months of clinical experience and/or formal training in a health care field. Students must provide documentation of work experience or training in order to enroll in the Continuing Education Workforce & Community Education Phlebotomy Program. Students must obtain written approval to register.

## Upholstery Fundamentals Certificate

This two-quarter program is designed to provide graduates with a foundation in measuring, cutting, and sewing using industrial sewing machine equipment. Students will also learn how to set up an efficient workstation for upholstery work and the basics of sewing machine maintenance. Students will continue to develop basic upholstery skills, speed, and accuracy in the second quarter while working on projects such as furniture pillows and automotive seat covers. This certificate is a prerequisite to the Automotive Upholstery Certificate and Furniture Upholstery Certificate.

**Credits:**

18

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall, winter, spring and summer quarters.

**Prerequisite(s):**

**None.**

# Policies and Procedures

## Academic Standards

Clover Park Technical College is committed to facilitating the academic success of students. The primary purpose of Academic Standards is to provide guidance in academic processes and procedures, which govern student progress through programs of study.

## Student Academic Responsibilities

Admission to Clover Park Technical College carries with it the understanding that students will conduct themselves as responsible members of the college community. This includes an expectation that students will obey appropriate laws, comply with the rules of the college and its departments, and maintain a high standard of integrity and honesty.

1. Dishonesty: Honest assessment of student performance is of crucial importance to all members of the college community. Acts of dishonesty are serious breaches of honor and shall be dealt with in the following manner:
  - a. It is the responsibility of the college administration and faculty to provide reasonable and prudent security measures designed to minimize opportunities for acts of dishonesty that occur at the college.
  - b. Any student who, for the purpose of fulfilling any assignment or task required by a staff member as part of the student's program of study, shall knowingly tender any work product that the student fraudulently represents to the staff member as the student's work product, shall be deemed to have committed an act of dishonesty. Acts of dishonesty shall be cause for disciplinary action and be subject to the processes described in the Code of Student Conduct WAC 494C-121-060.
  - c. Any student who aids or abets the accomplishment of an act of dishonesty, as described in sub-paragraph (b) above, shall be subject to disciplinary action.
  - d. This section shall not be construed as preventing an instructor from taking immediate disciplinary action when the instructor is required to act upon

such breach of dishonesty in order to preserve order and prevent disruptive conduct in the classroom. This section shall also not be construed as preventing an instructor from adjusting the student's grade on a particular project, paper, test, or class grade for dishonesty.

2. Classroom Conduct: Faculty members and instructional administrators are authorized to take appropriate action to maintain order and proper conduct in the classroom and the cooperation of students in fulfilling course objectives. See Code of Student Conduct WAC 495c-121-070.
3. Any student who substantially disrupts any college class by engaging in conduct that renders it difficult or impossible to maintain the decorum of the class shall be subject to disciplinary action as defined in the Code of Student Conduct WAC 495C-121-050-070.

## Attendance Policy

The student is expected to attend all classes for which the student is registered in order to gain the maximum benefit. The instructor may establish an attendance policy for the program. It is the responsibility of the student to know and comply with the policy. Programs having established attendance policies will include relevant information in course syllabi. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

A student who does not attend the first two class sessions and/or comply with the established attendance policy for the class or program may forfeit the right to continue and may be subject to administrative withdrawal.

## Grades

The quality of a student's performance is measured by a grading system using grades "A" through "F." The grade for a course is calculated into a student's GPA as 4 to 0 grade points. Faculty may choose to utilize or not utilize the + or - designation with grades.

Each individual program establishes criteria for achieving each grade based on percentage scores and specific assessment criteria as listed in the course syllabi.

The grade points allotted to each grade are as follows:

<b>A</b>	<b>4.0</b>	<b>C</b>	<b>2.0</b>
<b>A-</b>	<b>3.7</b>	<b>C-</b>	<b>1.7</b>
<b>B+</b>	<b>3.3</b>	<b>D+</b>	<b>1.3</b>
<b>B</b>	<b>3.0</b>	<b>D</b>	<b>1.0</b>
<b>B-</b>	<b>2.7</b>	<b>F</b>	<b>0.0</b>
<b>C+</b>	<b>2.3</b>		

Some programs require that the student complete each individual course at a certain minimum grade level in order to progress in the program. Programs with this requirement will have it noted in the program description section of the catalog and in the course syllabus. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

### Other Grade Indicators

- \* Course not graded. No grade point assigned.
- I Incomplete. An incomplete grade indicates that the student completed most of the course requirements at a passing level and intends to complete missing course work. Prior to the last day of the quarter, the instructor must complete a Clover Park Technical College Agreement for Incomplete Grades form indicating the work to be completed and the expected completion date, not to exceed one academic quarter from the date of issue. The form must be signed by both the instructor and the student. A grade of "I" reverts to an "F" if work has not been satisfactorily completed by the end of the following quarter.
- N Audit Course. No grade point assigned.
- P Pass. No grade point assigned. A "P" grade indicates passing with a "C" (2.0) in courses designated as pass/fail. Courses graded with "P" may not meet program requirements for graduation.
- R Repeated Courses. The "R" will be placed next to the lowest grade, and only the highest grade received for the course will be used in GPA calculation.
- V Unofficial Withdrawal. No grade point assigned. Instructor-initiated, a "V" appears on the transcript when an instructor withdraws a student who has never attended (No Show) or has discontinued participation without initiating official withdrawal.
- W Official Withdrawal. No grade point assigned. Student-initiated, a "W" appears on the transcript when a student officially withdraws from a course in accordance with the college Drop/Withdrawal procedure.

### Course Numbering

Courses numbered below 100 are not considered college level and do not meet degree/certification requirements.

### Criterion for Good Standing

A student is in good academic standing when his or her quarterly grade point average remains at or above 2.0. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

### Grade Changes

Students who believe that an error has been made in the



grade received for a course should contact the instructor as soon as possible to discuss the issue. Requests for grade changes will be accepted no later than one quarter from the date the grade was issued. Appeals will be addressed through the Academic Appeal Process described in this catalog.

## Adding a Course

Students may add courses online through the second day of the quarter without faculty permission. After that date, faculty permission is required. Add/Drop forms are available in the Enrollment Services Office.

## Withdrawing from a Course

Students dropping or withdrawing from any course or program must meet with their program adviser and complete the withdrawal paperwork. If an emergency occurs preventing the student from coming to the college, the student may contact their program adviser through email or telephone. Failure by the student to officially withdraw will affect grades and possible refunds. Financial Aid recipients are subject to the Satisfactory Academic Progress Policy and should contact the Student Aid & Scholarships Office prior to withdrawing from a program or course.

Withdrawals through the fifth class day after the start of a course or program will be considered a drop and will not appear on the student transcript. Students receiving aid will be subject to the 10th day overpayment policy.

Withdrawals after the fifth class day and through the 35th class day of a quarter may receive a “W” grade. Students withdrawing after the end of the 35th class day of a quarter will receive the grade earned for the quarter at the time of withdrawal.

Students re-enrolling in a course or program for which a “W,” “F,” or “V” was assigned must begin the course or program in the first week of the quarter and in accordance with established prerequisites.

## Administrative Withdrawal

Clover Park Technical College reserves the right to administratively withdraw students under the following conditions:

1. Student has not attended the first two class sessions and/ or complied with the established attendance policy for the class or program

2. Student has not successfully fulfilled the prerequisites for the class or program. Student will be notified of the withdrawal and provided registration options.
3. If a student violates the Student Code of Conduct, an administrative withdrawal may be done. Student will be notified of this action.

## Auditing a Course

A student may enroll to audit a course with permission of the program faculty. The auditing student is expected to pay tuition and fees but is not required to take examinations and will not receive credit for the course. A grade of “N” will be listed on the student’s transcript and will not be computed in their GPA.

Registration status changes from audit to credit or from credit to audit are not allowed after the start of the course.

## Repeating a Course

Students may repeat a course in which they have not received a passing grade, unless prohibited by program policy. To repeat a course, a student must register for the course and pay all necessary fees.

A course may be repeated no more than twice (this is defined as two repeats in addition to the original enrollment). All courses and earned grades will remain on the student’s transcript, with only the highest grade received for a repeated course used in the calculation of the GPA.

Financial aid recipients and veterans should check with the Student Aid & Scholarships and the Veteran’s Business Offices regarding funding for repeated courses.

Other colleges may not accept a grade earned in a repeated course.

## General Education

All degree or certificate programs of 45 credits or longer require a minimum of five credits each in three college-level (100-level or above) General Education areas: communication, quantitative reasoning (math), and social sciences. Students are responsible for registering and completing these courses prior to graduation. Specific courses are identified in the program descriptions. General Education courses are offered at convenient hours throughout the day each quarter.

Students must earn a grade of “C” (2.0) in all pre-college

course work in order to advance to the next level course or any 100-level course.

## Core Abilities

Clover Park Technical College has identified four core abilities that all certificate- and degree-seeking students should possess upon completion of their program. These competencies represent workplace skills that will prepare graduates to be valued employees and will contribute to their success.

### Communication

Students will receive and deliver written, spoken, and visual information clearly and accurately.

### Critical Thinking/Problem Solving

Students will apply principles and strategies of purposeful, active, organized thinking.

### Personal/Professional Responsibility

Students will apply effective work habits and attitudes within an organizational setting and work successfully with others as part of the total team, both inside and outside the workplace.

### Information/Technological Literacy

Students will use modern electronic and industrial devices to accomplish tasks in today's workplace.

## College Success Course

A course entitled "College 102 – College Success for All" is required for all students entering a certificate or degree program over 20 credits in length. The course must be completed during the first quarter of study at CPTC. Transfer credit may be awarded if applicable.

## Additional Degree Requirements

To receive an Associate of Applied Technology degree (AAT), an Associate in Applied Science – T (AAS-T) degree, or an Associate of Arts and Science Degree Direct Transfer Agreement/Major Related Program (DTA/MRP) at Clover Park Technical College, the following degree requirements must be met:

- Completion of a high school diploma or high school equivalency exam. Students who do not have a high school diploma or high school equivalency exam may request one at the time they apply for their degree.

- Completion of a capstone project course. Courses that satisfy the degree requirement for a capstone project are identified in the catalog with a CAP postscript following the course number.
- Completion of a diversity requirement. Courses that satisfy the diversity degree requirement are identified in the catalog with a "DIV" postscript following the course number.
- Completion of a computer literacy requirement. Computer literacy may be demonstrated by either passing a competency test or successfully completing a computer literacy course designated with a "CL" postscript following the course number.

To receive a Bachelor of Applied Science degree, the following degree requirements must be met:

- Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree, or a bachelors degree or higher from a regionally accredited college or university with an overall minimum college-level grade point average of 2.3 in all coursework.
- Completion of required lower and upper division general education courses.
- A minimum of 180 quarter credits, to include 90 credits from one of the degrees listed above.

## Transfer of Credit to Clover Park Technical College

Programs may have exceptions to the maximum credits accepted in transfer due to special articulations or consortium agreements. These exceptions will be noted in the program description section of this catalog.

### Credit from Colleges and Universities

Clover Park Technical College curriculum is based on current industry standards. Transfer credit from an accredited institution may be accepted if the course work:

1. Was college level.
2. Was graded as "C" (2.0) or better. NOTE: Some programs may have a higher standard.
3. Technical Courses must meet the program's requirements as described in the Clover Park Technical College Catalog.

4. General Education Courses do not have a required time limitation, unless specified by an individual program. Requirements can be found in the program description of this catalog.
5. Transfer credit combined with all sources may constitute no more than 75 percent of the credits needed for program completion.
6. Transfer of credit for programs with license requirements are subject to current licensing laws.

### **High School Learning Experience/Dual Credit**

Credit/dual credit may be accepted for high school learning experience where formal articulation agreements are in place. Courses that have Dual Credit Articulation agreements are marked with an asterisk \* in both program and course description. Please contact Enrollment Services at 253-589-5638 for specific agreements.

### **Military Experience**

Credit may be accepted for military experience or education based on the Joint Services Transcript (JTS) and guidelines from the American Council on Education. Please request an evaluation of your JST from the Enrollment Services Office located in Bldg. 17, Rm. 130, at the Lakewood Campus.

### **Academic Credit for Prior Learning (Formerly Known As Prior Learning Assessment [PLA] Credit or Prior Experiential Learning)**

Four categories for academic credit for prior learning have been established: Prior Experiential Learning (Portfolio Review), Credit by Examination, Extra-Institutional Learning, and Course Challenge. All options are explained below.

#### **Prior Experiential Learning (Portfolio Review)**

Instructors will evaluate the prior learning portfolio of a student in relation to the competencies of the program and may award credit for demonstrated learning outcomes appropriate to the subject, course, or program offered. Credit for prior learning portfolio may constitute no more than 25 percent of the credits needed for program completion.

Students who wish to receive credit for prior learning will complete the Request Form available from the Enrollment Services Office and pay the following fees for assessment services: \$50 evaluation fee and \$20 transcription fee for each course for which prior learning credit is requested.

### **Credit by Examination/CLEP and DSST Credit**

The College-Level Examination Program (CLEP) is a way to earn credit for comprehensive knowledge you may have acquired through independent or prior study, cultural pursuits, work, or other life experiences. If you successfully pass the CLEP tests, you may receive credit for completing certain certificate or degree requirements.

Clover Park Technical College (CPTC) accepts the following subject tests when passed with the recommended American Council on Education (ACE) score: College Mathematics, College Algebra, Introductory Psychology, and English Composition. Information about CLEP tests and testing sites can be obtained on the College Board website at [www.collegeboard.com](http://www.collegeboard.com).

DSST (formerly known as DANTES Subject Standardized Tests) is also accepted as a way to earn credit for prior knowledge or experience. The subject must be equivalent to CPTC courses and will be accepted according to the ACE recommendations for passing and credit value. Information about DSST tests and testing sites can be obtained online at [www.dantes.doded.mil](http://www.dantes.doded.mil).

### **Advanced Placement (AP)**

Clover Park Technical College grants credits to students who have earned a score of three or more on the Advanced Placement Tests of the College Board in the subject areas listed on the Course Equivalency Guide (visit [www.cptc.edu/transfer-to](http://www.cptc.edu/transfer-to) and scroll to "Advanced Placement"). For more information about AP study and testing, please see the AP counselor at your high school or go to [www.collegeboard.com](http://www.collegeboard.com) and search for Advanced Placement. When you take your test, be sure to indicate that the results should be sent to CPTC.

### **International Baccalaureate (IB)**

International Baccalaureate students who have earned successful IB higher-level test scores may request college credit for IB higher-level work that is the equivalent of CPTC degree and certificate course requirements. For more information, please contact the Credentials Evaluator at 253-589-6003 or email [evaluator@cptc.edu](mailto:evaluator@cptc.edu).

### **Credit by Extra-Institutional Learning**

Knowledge and skills acquired outside the institution and objectively verified through third-party certifications, industry-recognized testing/training, and crosswalks. Students who wish to receive credit for by extra-institutional learning will complete the Request Form available from the Enrollment Services Office.

## Credit by Course Challenge

Challenge examinations are sufficiently comprehensive to determine that the student has the same knowledge and skills as those students who enroll in, and successfully complete, the course. A student should have previous training, private study, work experience, or other bona fide qualifications indicating the student has knowledge or abilities equivalent to course completers. Students who wish to receive credit for course challenges will complete the Request Form available from the Enrollment Services Office and pay the following fees for assessment services: \$50 evaluation fee and \$20 transcription fee for each course for which a course challenge is requested. Should the course challenge be unsuccessful, the student will be required to take the course.

## Alternative Credit Options

CPTC accepts many alternative credit options for completion of degrees and certificates; however, if your plans include transfer to another college or university, they may not provide the same credit, and you should check with their admissions office to determine your best options for meeting your educational goals.

## Transferability of Clover Park Technical College Credit

Many Clover Park Technical College programs have individual agreements with other academic institutions that provide for the transfer of credits. Acceptance of credit taken at one educational institution is always at the discretion of the receiving institution. Students are advised to contact the registrar of the receiving institution to discuss its policies and procedures for transfer credit.

## Transfer Rights and Responsibilities

### Student Rights and Responsibilities

1. Students have the right to clear, accurate, and current information about their transfer admission requirements, transfer admission deadlines, degree requirements, and transfer policies that include course equivalencies.
2. Transfer and freshman-entry students have the right to expect comparable standards for regular admission to programs and comparable program requirements.
3. Students have the right to seek clarification regarding their transfer evaluation and may request the reconsideration of any aspect of that evaluation. In

response, the college will follow established practices and processes for reviewing its transfer credit decisions.

4. Students who encounter other transfer difficulties have the right to seek resolution. Each institution will have a defined process for resolution that is published and readily available to students.
5. Students have the responsibility to complete all materials required for admission and to submit the application on or before the published deadlines.
6. Students have the responsibility to plan their courses of study by referring to the specific published degree requirements of the college or academic program in which they intend to earn a bachelor's degree.
7. When a student changes a major or degree program, the student assumes full responsibility for meeting the new requirements.
8. Students who complete the general education requirements at any public four-year institution will have met the lower division general education requirements of the institution to which they transfer.

## College and University Rights and Responsibilities

1. Colleges and universities have the right and authority to determine program requirements and course offerings in accordance with their institutional missions.
2. Colleges and universities have the responsibility to communicate and publish their requirements and course offerings to students and the public, including information about student transfer rights and responsibilities.
3. Colleges and universities have the responsibility to communicate their admission and transfer-related decisions to students in writing (electronic or paper).

## Clover Park Technical College Degrees

### Bachelor of Applied Science (BAS)

**Bachelor of Applied Science degrees** are awarded for completion of at least 90 credits of appropriate 300- and 400-level coursework. An applied associate degree (AAS or equivalent) with the required distribution of academic core coursework in written communication, quantitative reasoning, social science, and humanities is a prerequisite for program admission. Other program admission

requirements can be found online.

### **Associate of Applied Technology (AAT)**

**The Associate of Applied Technology (AAT) degree** is awarded to students who satisfactorily complete the competencies and requirements in programs approved by the college's Curriculum Committee and by the State Board for Community and Technical Colleges. AAT degree options are available in programs 90 credits or more in length, containing a core of 15 college-level academic credits. College-level academic courses in communication, quantitative reasoning, and social sciences required for AAT degrees are designed to prepare students for work. While they meet program graduation requirements, they are not likely to transfer to other colleges or universities.

### **Associate in Applied Science – T (AAS-T)**

**The Associate in Applied Science - T (AAS-T) degree** is awarded to students who satisfactorily complete the competencies and requirements in programs approved by the college's Curriculum Committee and by the State Board for Community and Technical Colleges. AAS-T degrees are workforce degrees with a core of General Education courses commonly accepted in transfer. The General Education component of the AAS-T degree is composed of not less than 20 credits of courses, including a minimum of 5 credits in communication; 5 credits in quantitative reasoning; and 10 credits in social science, humanities, or science. It is assumed that many AAS-T degrees will have significantly more than the minimum 20 credits of General Education courses.

### **Associate of Arts and Sciences (Direct Transfer Agreement/Major Related Program)**

**The Associate in Pre-Nursing (DTA/MRP)** is the degree awarded by Clover Park Technical College to students who have completed specified curriculum with the intent of transferring to one of Washington's four-year institutions. Direct Transfer Agreement/Major Related Program (DTA/MRP) degrees prepare students with general education requirements necessary to pursue further study. They do not alter the admission criteria established by the baccalaureate institution, nor do they guarantee admission to the institution. Students should contact an adviser at the potential transfer institution regarding their interests and specific course choices.

Degree options are indicated on individual program descriptions in this catalog.

## **Clover Park Technical College Transfer Agreements**

In general, Clover Park Technical College's Associate of Applied Technology (AAT) degrees are not designed with the intent for transfer to other colleges or universities. However, Clover Park Technical College has established transfer agreements with specific baccalaureate programs. Graduates of our Associate in Applied Science – T (AAS-T) degrees and the Associate in Pre-Nursing (DTA/MRP) program may find opportunities to further their education at these institutions. Students desiring to transfer to a bachelor's program are encouraged to contact the desired colleges and universities early in their studies to ensure the best possibility of transfer upon completion of an AAS-T or DTA/MRP.

### **Ashford University**

Ashford University (AU) offers 50-plus degree programs (undergraduate and graduate) both on-site and online. Students can keep in touch with professors and classmates "on-the-go" with the Ashford mobile app. CPTC students earning an approved associate degree may qualify for a "block" of credits to transfer to Ashford University. Ashford is regionally accredited by the Western Association of Schools and Colleges (WASC). Contact AU at [www.ashford.edu](http://www.ashford.edu) to learn more about transfer opportunities and requirements.

### **Bellevue College**

Bellevue College (BC) is an open-access, community-based public institution. BC offers a pathway for qualifying Clover Park Interior Design graduates (AAS-T) to pursue a Bachelor of Applied Arts in Interior Design (BAA). Bellevue College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact BC at [www.bellevuecollege.edu](http://www.bellevuecollege.edu) for details about transfer.

### **Boston Architectural College**

The Boston Architectural College (BAC) Bachelor and Master of Architecture programs, accredited by the National Architectural Accrediting Board, prepare students to become successful licensed architects through real-world practical experience, professional networks, and creative scholarly opportunities. The BAC's Bachelor of Science in Architecture is a pre-professional program that can lead to our 2-Year Master of Architecture program. An articulation agreement with BAC allows graduates of CPTC's Interior Design degree program to transfer into the Bachelor of Interior Architecture at the Boston

Architectural College (BAC) upon meeting all requirements. Contact BAC at <https://www.the-bac.edu/academics/school-of-architecture> to learn more about transfer opportunities and requirements.

### **Brandman University**

Brandman University (BU) is a private, non-profit, accredited university in the Chapman University System that serves the unique needs of the working adult. Current CPTC students may apply for entrance to Brandman's Early Advantage Program (EAP), which is designed to maximize transfer success and minimize the time and costs involved in attaining a bachelor's degree in various disciplines. EAP students receive comprehensive advising and planning services and will be able to precisely map their transfer plan to BU while continuing to take transferrable coursework at CPTC. They may also qualify for a one-time scholarship. BU is accredited by the Western Association of Schools and Colleges (WASC). Contact BU at [www.brandman.edu](http://www.brandman.edu) for more information about the Early Advantage Program.

### **Capella University**

Capella University (CU) is an accredited online university that combines foundational theory with real-world application to ensure students receive a high-quality education. If CPTC graduates of approved programs (including Computer Information Technology, Human Services, and Nursing) meet Capella's admissions requirements, they may apply for specific upper-division bachelor's degree programs at CU. Self-identifying students may be eligible to receive a tuition discount. CU offers additional benefits to U.S. Armed Forces learners. Capella University is accredited by the Higher Learning Commission (North Central Association). Contact [www.capella.edu](http://www.capella.edu) for details and admission requirements.

### **Central Washington University**

Central Washington University (CWU) provides a pathway to a baccalaureate degree for Clover Park students. Your applied associate degree provides you the skills to work in your chosen field. The Bachelor of Applied Science (BAS) degree in Information Technology and Administrative Management (ITAM) at CWU complements that degree with the management/leadership skills to help you become a leader in your knowledge area. Students with degrees in Accounting, Aviation Maintenance, Human Services, and Medical Laboratory Technology (to name a few) will benefit from a university degree that gives them the skills to manage people and projects. Many more career opportunities will be available with the BAS-ITAM

degree. CWU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For information about CWU, visit the website at [www.cwu.edu](http://www.cwu.edu). For specific information about the BAS-ITAM program, please visit [www.cwu.edu/it-management/bas-overview](http://www.cwu.edu/it-management/bas-overview).

### **Chamberlain College of Nursing**

As part of the DeVry Education Group, Chamberlain College of Nursing is committed to graduating compassionate, ethical, and knowledgeable nurse leaders who are empowered to transform healthcare. CPTC graduates earning an associate degree in nursing who are accepted into Chamberlain's Bachelor of Science in Nursing or Master of Science in Nursing may qualify to receive reduced tuition rates. Chamberlain is accredited by The Higher Learning Commission and is a member of the North Central Association of Colleges and Schools (NCACS). For more information on transfer requirements, contact Chamberlain at [www.chamberlain.edu](http://www.chamberlain.edu).

### **City University of Seattle**

City University of Seattle (CityU) is a private nonprofit university regionally accredited through the doctorate level. It is dedicated to serving working adults and transfer students looking to start, change, or grow their career. CityU welcomes students from Clover Park Technical College and invites them to explore CityU's 60-plus degree and certificate programs offered online and on-site. U.S. News & World Report has ranked City University of Seattle as having one of the top 30 Best Online Bachelor Degree Programs in the U.S. and as being one of the top 20 online programs for veterans in the country. CityU is proud to be a top-ranked institution in the country and a top producer of teachers, counselors, and MBAs in Washington State. They offer a transfer scholarship of \$5,680 to Washington students. City University of Seattle is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Explore your opportunities at [www.cityu.edu](http://www.cityu.edu) or stop by CityU's Tacoma campus at 1145 Broadway Plaza, Tacoma, WA, 98402.

### **Colorado Technical University**

With a strong focus on technology and curriculum, Colorado Technical University (CTU) enables students to move upward while providing support from an experienced network of faculty and alumni. CPTC graduates completing a transfer program with a GPA of 2.0 or greater and meeting admission requirements will have the opportunity of admission into a baccalaureate degree program through CTU's Virtual Campus. CTU is accredited by the Higher Learning Commission and is a

member of the North Central Association of Schools and Colleges. For full details, contact Colorado Technical University at [www.coloradotech.edu](http://www.coloradotech.edu).

### **Eastern Washington University**

Eastern Washington University (EWU) is a regional, comprehensive public university located in Cheney, Washington, with programs also offered at various locations across the state. EWU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact EWU at [www.equ.edu](http://www.equ.edu) for more information about transfer.

### **Embry-Riddle Aeronautical University**

Embry-Riddle Aeronautical University (ERAU) is the world's preeminent university for aviation and aerospace education offering associate through doctorate-level degrees. Transfer eligibility is determined upon transcript evaluation by ERAU (with over 100 CPTC courses on the Common Course/Equivalency List) and is based on the current catalog at the time of transfer. ERAU is accredited by the Southern Association of Colleges and Schools Commission on Colleges. To learn more about Embry-Riddle, go to [www.erau.edu](http://www.erau.edu).

### **The Evergreen State College**

The Evergreen State College (TESC) is a progressive, public liberal arts and sciences college located in Olympia, Washington. TESC reviews eligible transfer candidates (19 programs) for admission into either a Direct Transfer Degree (7 CPTC degrees) or the Upside Down Degree Program (from list of approved AAS-T degrees). The "Upside Down" degree allows CPTC graduates from approved technical degree programs to earn a bachelor's degree from TESC by taking a broad array of general education coursework in their final two years. The Evergreen State College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). To learn more about eligible direct transfer programs and Upside Down degree opportunities, contact TESC at [www.evergreen.edu](http://www.evergreen.edu).

### **Excelsior College**

Excelsior College is a not-for-profit institution of higher education that provides educational opportunity to adult learners with an emphasis on those historically underrepresented in higher education whether wanting to finish a degree, earn a promotion at work, or change careers. Excelsior is chartered by the New York State Board of Regents and accredited by the Middle States Commission on Higher Education (CHE/MSA). Under an

"umbrella" agreement, CPTC graduates meeting eligibility requirements will be considered for transfer. Contact Excelsior at [www.excelsior.edu](http://www.excelsior.edu) to obtain a transfer guide and more information about transfer opportunities.

### **Fashion Institute of Design and Merchandising**

The Fashion Institute of Design and Merchandising (FIDM) educates students for professional careers in Fashion, Entertainment, and Digital Media. Transfer opportunities are available for approved Interior Design and General Studies courses toward FIDM core requirements. Additional courses may be considered on a case-by-case basis. FIDM is accredited by the Western Association of Schools and Colleges (WASC) and the National Association of Schools of Art and Design (NASAD). To learn more, contact the Fashion Institute at [www.fidm.edu](http://www.fidm.edu).

### **Green River College**

Green River College is a public college where students from all over the world come together to learn, grow, and enrich their lives. Green River's main campus is located in the Lea Hill neighborhood of Auburn, with branch campuses in downtown Auburn, Kent, and Enumclaw. Transfer opportunities are available for CPTC graduates completing specific Computer Networking & Information Systems Security (CNISS) degrees to transfer to Green River's Bachelor in Applied Science in Network Administration and Security or Bachelor in Applied Science in Software Development. Go to [www.greenriver.edu](http://www.greenriver.edu) to learn more about these transfer opportunities.

### **Northwest University**

Northwest University (NWU) is a Christian coeducational institution awarding degrees through doctorate level. NWU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* Northwest is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact NWU at [www.northwestu.edu](http://www.northwestu.edu) to find out more about BSN transfer.

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **Pacific Lutheran University**

Pacific Lutheran University (PLU), located in Tacoma, Washington, seeks to educate students for lives of thoughtful inquiry, service, leadership, and care for other people, for their communities, and for the earth. PLU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* Pacific Lutheran University is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For additional information about transfer, contact PLU at [www.plu.edu](http://www.plu.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **Saint Martin's University**

Saint Martin's University (SMU) is a Catholic Benedictine institution of higher education located in Lacey, Washington. The transfer agreement with SMU has the goal of increasing the number of nurses with a baccalaureate education in nursing to meet the needs of an increasingly complex health care system. SMU offers qualified students graduating from CPTC's Nursing degree programs and passing the NCLEX-RN exam the opportunity to seamlessly transition into their Bachelor of Science in Nursing (RN-to-BSN) program (dual admission). SMU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact SMU to find out which programs transfer and for specific requirements at [www.stmartin.edu](http://www.stmartin.edu).

### **Seattle Pacific University**

Seattle Pacific University (SPU) is a Christian university fully committed to engaging the culture and changing the world by graduating people of competence and character, becoming people of wisdom, and modeling grace-filled community. SPU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* SPU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For additional information about transfer, contact SPU at [www.spu.edu](http://www.spu.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **Seattle University**

Seattle University (SU), a Jesuit Catholic university and law school located in Seattle's Capitol Hill neighborhood, is dedicated to educating the whole person, to professional formation, and to empowering leaders for a just and humane world. SU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* SU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Those interested in transferring to pursue a baccalaureate degree in Nursing should contact SU at [www.seattleu.edu](http://www.seattleu.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **South Seattle College**

South Seattle College (SSC) is a constantly evolving educational community dedicated to providing quality learning experiences that prepare students to meet their goals for life and work. SSC offers transfer opportunities for qualified Accounting and Culinary Arts graduates (AAS-T) to pursue a Bachelor of Applied Science (BAS) in Hospitality Management. SSC is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact SSC at [www.southseattle.edu](http://www.southseattle.edu) to find out more about transfer.

### **University of Phoenix**

University of Phoenix (UP) offers online courses, as well as classes at more than 100 locations across the United States. UP will provide transcript evaluation for CPTC students interested in pursuing a Bachelor of Science in Management (BSM) degree. Qualifying students nearing completion (within 12 months of receiving degree) may pre-apply to a UP baccalaureate program. To find out more about the University of Phoenix, including accreditation and transfer opportunities, and to obtain a program transfer guide, go to [www.phoenix.edu](http://www.phoenix.edu).



### University of Washington (Seattle)

Founded in November 1861, the University of Washington (UW) is one of the oldest state-supported institutions of higher education on the Pacific coast with three campuses. The primary mission of the University of Washington is the preservation, advancement, and dissemination of knowledge. UW is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* UW is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact UW for more information about BSN transfer at [www.washington.edu](http://www.washington.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### University of Washington Tacoma

University of Washington Tacoma (UWT) serves a diverse student population creating a rich learning environment with many points of view where students will feel at home whether full-time or pursuing a degree while juggling other responsibilities. CPTC graduates of the Environmental Sciences and Technology (AAS-T) program meeting transfer requirements will have the opportunity to apply to UWT's Bachelor of Arts in Interdisciplinary Arts and Sciences Environmental Studies Concentration degree program. UWT is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact UWT for more information at [www.tacoma.uw.edu](http://www.tacoma.uw.edu).

### Walla Walla University

Founded in 1892, Walla Walla University (WWU) is a private university affiliated with the Seventh-day Adventist Church that welcomes any student who desires an exceptional Christian education. WWU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* Walla Walla is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact WWU at [www.wallawalla.edu](http://www.wallawalla.edu) to find out more about BSN transfer.

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### Washington State University

Washington State University (WSU) opened its doors in 1892 and is a nationally recognized research university enrolling more than 25,000 students worldwide. WSU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/ MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* The Washington State University Intercollegiate College of Nursing (WSU-ICN), a consortium whose members include Eastern Washington University, Gonzaga University, and Whitworth University, admits associate degree transfers through WSU. WSU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact WSU for more information about BSN transfer at [www.wsu.edu](http://www.wsu.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### WGU Washington

Western Governors University (WGU) is an online university driven by a mission to expand access to higher education through online competency-based degree programs. WGU has flourished into a national university, serving more than 40,000 students from all 50 states. WGU offers several pathways for transfer. WGU Washington actively encourages students to complete their associate degree before transferring to WGU, understanding that students with associate degrees are more likely to attain a bachelor degree. WGU Washington and the Washington Community and Technical Colleges executed a formal articulation agreement in May 2011 to assist associate degree graduates to transition into WGU bachelor programs.

WGU Washington also recognizes that some college students will enroll in WGU Washington before completing an associate degree and, during the course of completing their bachelor credentials at WGU, will earn sufficient credits to complete an associate degree. In order

to encourage degree completion among Washingtonians, WGU and the Community and Technical Colleges (CTC) have advanced their partnership by offering a reverse articulation agreement, whereby the CTCs will award an earned associate degree for students post-transfer. The agreement enables eligible students who transfer credits from a community or technical college to receive their associate degree (from a CTC) while enrolled at WGU, once they have satisfied the degree requirements of the Community or Technical College. WGU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). To learn more about transferring to WGU Washington, visit [www.wgu.edu/admissions/transferring](http://www.wgu.edu/admissions/transferring).

### Western Washington University

Western Washington University (WWU), a public four-year institution in Bellingham, Washington, brings together individuals of diverse backgrounds and perspectives in an inclusive, student-centered university that develops the potential of learners and the well-being of communities. WWU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact WWU at [www.wwu.edu](http://www.wwu.edu) for more information about transfer.

## Honors

The CPTC purple honor cord is worn during the annual graduation ceremony to recognize students who finish their coursework with the honors designation. The honors designation on a student's final transcript is based on a cumulative GPA 3.75 or higher in all college-level courses for those students earning a degree or a certificate of 45 credits or more. To determine honor cord eligibility:

- For students completing their program of study in the current spring or summer quarters, the previous winter quarter college-level GPA is used.
- For students who completed their program the previous fall or winter quarters, the final college-level GPA is used.

Students who meet the requirements to wear the purple honor cord will be notified by letter and through their student email account by May 20 of each year. The graduation honors are different than the quarterly president's and vice president's lists.

### Other Distinctions

Students who receive a quarterly grade point average

(GPA) of 3.75-4.0 are eligible for one of the following lists of distinction:

#### President's List

Granted to students with a minimum quarterly enrollment of 12 college-level credits in courses receiving grades other than "V," "W," "N," or "I" and a minimum quarterly grade point average of 4.0.

#### Vice President's List

Granted to students with a minimum quarterly enrollment of 12 college-level credits in courses receiving grades other than "V," "W," "N," or "I" and a minimum quarterly grade point average of 3.75-3.99.

#### Academic Honor Societies

Phi Theta Kappa is the largest honor society in American higher education. Clover Park Technical College's Beta Omicron Gamma chapter is one of 1,200 chapters. Phi Theta Kappa's focus is on scholarship, leadership, service, and fellowship. Students with a 3.50 GPA are eligible to join Phi Theta Kappa. A one-time induction fee is required. Please contact a Phi Theta Kappa adviser at 253-589-5780 for more information.

## Student Progress Policy

Clover Park Technical College is a state technical college. Tuition covers about 46 percent of the cost of a student's education. State tax dollars provide the rest. Washington State Law (SB 5135. RCW 28B.10.695) requires all state colleges to adopt policies that ensure students seeking degrees and certificates complete in a timely manner.

Clover Park Technical College is in a partnership with students to work towards an educational plan that will assist them in making consistent progress. The following Student Progress Policy and Degree/Certification Completion Procedures will assist students with their responsibilities to make progress towards their goals.

### Degree/Certificate Completion Procedures

The college requires that students complete their degree or certificate within 125 percent of the published length of the program. The college will take the following steps to ensure that students are completing programs within a timely manner:

**Step 1** When a student has completed the credits of the published length of the program, registration will be restricted until the student has developed a completion plan

in consultation with instructional faculty. The plan must show that the student will be able to complete within 125 percent of the normal timeframe. If the student has mitigating circumstances, such as a disability, they must be documented with the Disabilities Specialist, and an appropriate plan should be in place.

**Step 2** At 150 percent of credits required for the degree/certificate, the student will be blocked from further registration. The student may appeal to the appropriate dean for special circumstances.

### Academic Progress

These policies are intended to support a successful learning experience at Clover Park Technical College.

At the conclusion of each quarter, the grades of all students enrolled in that quarter will be reviewed. A student whose quarterly grade point average is less than 2.0 and who is taking six or more credits that quarter will be notified of his/her standing. Through this process the student will be alerted to potential problems in a timely manner, so that the student may take effective corrective action. Any student whose quarterly GPA is under 2.0 will be encouraged to take advantage of the assistance provided by the college to help ensure student success.

The following guidelines have been established to ensure that academic standards are maintained:

**Step 1** The first quarter in which the grade point average is less than 2.0 will cause the student to receive notification of the level of academic achievement. The student may not be allowed to continue to the next course in accordance with established program prerequisites.

**Step 2** If the student experiences two consecutive quarters of work in which the GPA is less than 2.0 (each quarter), the student will be placed on academic probation for the following quarter of attendance.

**Step 3** If a student experiences three consecutive quarters of work in which the GPA is less than 2.0 (each quarter), the student will be suspended from attendance at the college and may not register for the next academic quarter.

Students placed on academic probation or suspension must meet with their program adviser prior to future quarter registration. Financial Aid recipients are subject to the Student Progress Policy.

Reinstatement to the college, following one quarter of academic suspension, requires the student to meet with Advising & Counseling staff to develop an educational

plan. Upon reinstatement, the student will resume classes on academic probation.

## Student Concerns

### General Information

It is the policy of Clover Park Technical College to provide students with an opportunity to resolve any alleged violation of college academic policy, procedure, or regulation, or to resolve any alleged case of inequitable treatment. The college encourages informal resolution of disputes whenever possible, and also maintains fair and equitable procedures for formally expressing and resolving concerns. Student rights are protected in the concern process, and the college must ensure that a student will not suffer repercussions because they choose to file a concern.

The following are guidelines for determining who can assist a student with a concern regarding:

Academic/Instructional	Division Dean/Instruction
Accommodations	Division of Student Success
Disciplinary/Student Code of Conduct	Division of Student Success
Discrimination/Sexual Harassment	Human Resources
Facilities/Bookstore	Business Office
Financial Aid	Financial Aid Office
Financial (College)	Business Office

Federal and state laws, rules, and regulations, in addition to policies, regulations, and procedures adopted by the State Board for Community and Technical Colleges, shall not be grievable matters. Students shall use Chapter WAC 495C-300 and 495C-310 for grievances pertaining to sexual discrimination or equal opportunity discrimination based upon disability.

### Academic Appeal Process

The process outlined below is for Academic concerns or Grade Appeals. It is not to be used for filing an appeal based on the outcome of a summary or disciplinary proceeding, financial appeal, or discrimination/harassment complaint as described in other areas of the College Catalog or Student Handbook.

Note: Academic Appeal must be made within 15 instructional days following the issuance of the grade or

decision.

**Step 1** Before a student can file a written concern or appeal, they should try to resolve the problem informally. The college expects the student to address their concern by first meeting with and/or discussing the concern with the college employee(s) whose actions resulted in the concern, and documenting the discussion with notes. If not resolved, the student may proceed to the next step.

**Step 2** If, within five instructional days following the informal resolution attempt, the student feels a satisfactory resolution has not been achieved, the student may file a formal written concern with the employee's immediate supervisor or department chair. The concern or appeal must be in writing, utilizing the appropriate form, and include the documentation from Step 1 as well as any supporting documentation as an attachment. A "Student Academic Concern Form" or "Grade Appeal Form" is available online, or from any instructor, division dean's office, or the Advising Center.

**Step 3** Within five instructional days after receiving the concern or appeal in writing, the supervisor (or designee) will be responsible to investigate the concern. The supervisor (or designee) will provide the employee or instructor with a copy of the written concern or appeal; the employee or instructor will have five instructional days in which to provide a written response to their supervisor/dean.

**Step 4** The supervisor (or designee) will convene a meeting of both parties in an attempt to resolve the issue, provided that the parties agree to meet for this purpose. In the event that one or both parties do not agree to meet, the supervisor (or designee) will investigate and render a decision based on the written statements and testimony of the parties. The supervisor (or designee) will impart this decision in writing to both parties within five instructional days. If the student feels a satisfactory resolution has not been achieved, the student may proceed to the next step.

**Step 5** Within five instructional days after Step 4, the student will notify the appropriate vice president, in writing, to request a hearing before the Appeal Review Committee. The committee will be chaired by the Vice President for Instruction (or designee) and will also include the Vice President for Student Success (or designee), two student representatives appointed by the Student Council, and two faculty members appointed by the Faculty Union.

**Step 6** Within 10 instructional days, the Appeal Review Committee will meet with the student, instructor or employee, and director, department chair, or supervisor, to

hear the points at issue in the appeal. The committee will provide its written decision to all parties within five instructional days following the hearing. The decision is final and may not be reviewed.

*The process above is used for filing a concern in which a resolution has been requested that is specific to the student filing. If a student wishes to file an official complaint that has no personal resolution, or wishes to remain anonymous, that complaint will not follow the above steps.*

## Academic Forgiveness (Fresh Start)

A student may petition the Associate Dean for Student Success to have sub-standard Clover Park Technical College course work set aside.

- The student must be currently enrolled.
- The forgiveness date must be at least two years prior to the current quarter.
- All course work taken prior to the forgiveness will be set aside. The student may not elect to retain individual courses and set aside others.
- The academic forgiveness option may be exercised only once. Forgiven course work will remain on the transcript but will not be used in determining the cumulative grade point average or the calculation of honors. Forgiven course work may not be reinstated or used to satisfy prerequisites or degree/diploma requirements.

Students are advised that a decision to set aside course work may or may not be honored by other educational institutions, since each institution interprets transcripts according to its own policies.

## Degree and Certificate Completion

Clover Park Technical College grants four bachelor of applied science degrees and three associate degrees: the Associate of Applied Technology degree, the Associate of Applied Science-T degree, and the Associate of Arts and Sciences (DTA/ MRP). These degrees are defined in this catalog, and the degree programs are listed in the Programs & Courses section.

A certificate is awarded to students who satisfactorily complete the competencies and requirements for programs that are not defined as degree programs. General Education courses are required in certificate programs of 45 credits or more.

Courses numbered below 100 are not considered college level and do not meet degree/certificate requirements.

### **Standard for Completion**

To be eligible for completion, a student must have:

1. A cumulative grade point average of no less than 2.0;
2. Met all of the program requirements;
3. Completed 25 percent of the technical coursework at Clover Park Technical College
4. Completed the Application for Degree/Certificate

### **Application for Degree or Certificate**

To receive a bachelor's degree, associate degree, or certificate from Clover Park Technical College, a student must complete an Application for Degree or Certification form available from the Enrollment Services Office or online at MyCC. The application should be completed by the fourth week of the quarter in which the student expects to complete their degree/certificate. For a student completing a degree or certificate who does not complete the Application for Degree or Certificate form, the degree and/or the certificate will be automatically awarded.

### **Commencement Ceremony**

Annually, Clover Park Technical College will host an annual commencement ceremony to honor any eligible student completing a degree, certificate, high school diploma, or High School Equivalency exam granted through Clover Park Technical College at any time during the current academic year may participate. To find out more about the annual ceremony and to register to attend, please visit: [www.cptc.edu/graduation](http://www.cptc.edu/graduation).

### **Time Limitation**

Clover Park Technical College curriculum is based on current industry standards. Returning Clover Park Technical College students who left prior to completion of their program must meet the program's graduation requirements as described in the current Clover Park Technical College Catalog.

Clover Park Technical College students who have completed the technical requirements of their program but have not completed the General Education requirements for a degree or certificate will have one year from their date of withdrawal to complete the required General Education classes. If a longer period of time elapses before

General Education courses are completed, the student will be required to meet the program's graduation requirements as described in the current Clover Park Technical College Catalog.

### **Additional Information**

For additional information call the degree evaluator at 253-589-6003 or [evaluator@cptc.edu](mailto:evaluator@cptc.edu).

## **Enrollment Services**

### **Annual Notification of Rights under FERPA**

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records:

1. The right to inspect and review the student's education records within 45 days of the day Clover Park Technical College receives a request for access. Students should submit to the registrar a written request that identifies the record(s) they wish to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, the student will be advised of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. Students may ask Clover Park Technical College to amend a record that they believe is inaccurate or misleading. They should write to the CPTC official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If Clover Park Technical College decides not to amend the record as requested by the student, Clover Park Technical College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by CPTC in an administrative, supervisory, academic, research, or support staff position (including law enforcement personnel and health staff); the federal Department of Defense; the federal Department of Veteran's Affairs; clinical sites; Clinical Placements Northwest; a person or company with whom CPTC has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; a volunteer or others performing institutional functions; a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Clover Park Technical College designates the following information as Directory Information: Student name, dates of attendance (quarter start and end dates only), full- or part-time enrollment status, certificates and degrees awarded, honors, eligibility for and participation in officially recognized activities and organizations.

Directory Information may be released by Clover Park Technical College without student consent, unless the student specifically requests that such information, or portions thereof, not be released. Clover Park Technical College will not release Directory Information for commercial purposes or other purposes not related to the school program or the conduct of official government business. Students currently attending Clover Park Technical College should complete a Request to Prevent Disclosure of Directory Information form in the Enrollment Services Office if they do not wish Directory Information released.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Clover Park Technical College to comply with the requirements of FERPA. The name and address of the office that administers FERPA:

Family Policy Compliance Office  
U.S. Department of Education  
600 Independence Avenue SW  
Washington DC 20202-4605

## Transcripts

A transcript is a copy of a student's academic record and is released only with written permission of the student. All students are eligible to receive a transcript.

A \$10.00 processing fee is charged for each transcript. Official transcripts may be requested on the Clover Park Technical College website at [www.cptc.edu/transcript](http://www.cptc.edu/transcript). Students may obtain an unofficial copy of their transcript at [www.cptc.edu/mycc](http://www.cptc.edu/mycc) by selecting "View Unofficial Transcript."

## Change of Address

Student information, admission letters, statements, and degrees/certificates are frequently mailed to students; therefore, it is important to maintain the student's current address.

Change of Address forms are available in the Enrollment Services Office in Building 17. Students may change their own address on the college website at [www.cptc.edu/mycc](http://www.cptc.edu/mycc).

## Residency Requirements

Tuition for CPTC is calculated based on your residency status. CPTC follows state-regulated criteria for residency status and the documents needed to verify residency status. Please visit <http://access.wa.gov/topics/living/becomeresident.html> for official information on state residency requirements.

## Student Code of Conduct

### Definitions

The following definitions shall apply for the purposes of this student conduct code, chapter 495C-121 WAC:

1. "College" means Clover Park Technical College, College District Twenty-nine.
2. "College facilities" includes all campuses of the college, wherever located, and all land, buildings, vehicles, equipment, and other real and personal property which are owned, leased, used, or controlled by the college.
3. "Committee" and "student conduct committee" means the committee which is formed under WAC 495C-121-140 and which hears the matters specified in WAC 495C-121- 110.
4. "Conduct review officer" is the vice-president of student services or other college administrator designated by the president to be responsible for receiving and then either reviewing or referring an appeal of student disciplinary action in accordance

- with WAC 495C-121-110 and following sections of this chapter. The president may reassign any and all of the conduct review officer's responsibilities as set forth in this chapter as he/she deems appropriate.
5. "Day" means a calendar day, except that when a "business day" is specified, business day means a weekday, excluding weekends and college holidays.
  6. "Disciplinary action" is the process by which the student conduct officer, or the committee upon a referral, imposes discipline against a student for violation of WAC 495C-121-050. Disciplinary action does not include instructional decisions and actions which are under the authority of faculty members and instructional administrators, such as determinations of academic credit and grading; any such determinations, and any review or appeal of these, are outside the scope of this chapter.
  7. "Disciplinary appeal" is the process by which an aggrieved student can appeal discipline, as provided in WAC 495C-121-110 through 495C-121-180.
  8. "Family Educational Rights and Privacy Act" and "FERPA" mean the law and regulations known by those names (20 U.S.C. §1232g; 34 C.F.R. Part 99).
  9. "Filing" is delivery of a document to the college official who is designated under this chapter to receive it for the purpose of review of a disciplinary action. Unless otherwise provided, filing shall be accomplished by:
    - a. Hand delivery of the document to that official or the official's assistant during regular office hours; or
    - b. Sending the document both by first class mail postage prepaid to the official's office and by e-mail to his/her college e-mail address.
  10. "Includes" and "including" means contained as part of a larger described whole or grouping, but these terms are not a limitation and mean "but not limited to."
  11. "President" is the president of the college. The president may delegate any of his or her responsibilities under this chapter as he/she deems appropriate.
  12. "Respondent" is the student against whom disciplinary action is initiated.
  13. "Service" is the delivery of a document or copy of a document to a party. Unless otherwise provided, service upon a party shall be accomplished by:
    - a. Hand delivery of the document to the party; or
    - b. Sending the document both by first class and/or certified mail postage prepaid to the party's last known address and by e-mail to the e-mail address shown in the college's records. Service is deemed complete either upon hand delivery or when the document has been both deposited in the mail and e-mailed.
  14. "Student" includes all persons taking courses at or through the college, whether on a full-time or part-time basis, and whether such courses are credit courses, noncredit courses, online courses, or otherwise. Persons who withdraw after allegedly violating the code, who are not officially enrolled for a particular term but who have a continuing relationship with the college, or who have been notified of their acceptance for admission are considered "students."
  15. "Student conduct officer" is a college administrator designated by the president or vice-president of student services to be responsible for investigating allegations of student misconduct and taking disciplinary action as provided in WAC 495C-121-100. The president or vice-president of student services may reassign any of the student conduct officer's responsibilities under this chapter as he/she deems appropriate.
  16. "Vice-president of student services" is the position which reports directly to the president and which the president assigns overall operational responsibility for this chapter. The president may reassign, or the vice-president may delegate, any such responsibility as he/she deems appropriate.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-010, filed 5/19/14, effective 6/19/14.]

## Authority

The board of trustees, acting pursuant to RCW 28B.10.528 and 28B.50.140(14), delegates to the president the authority to administer student disciplinary actions and appeals. The president may delegate and/or further assign responsibilities related to student discipline to other college officials and positions.

[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-020, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-020, filed 5/19/14, effective 6/19/14.]

## Jurisdiction

1. The student conduct code, chapter 495C-121 WAC, shall apply to student conduct that occurs:
  - a. In or on college facilities;
  - b. At or in connection with college-sponsored activities; or
  - c. Off-campus when in the judgment of the college it adversely affects the college community or the pursuit of its objectives.
2. This chapter applies to conduct which occurs at all locations where students are engaged in college activities, including foreign or domestic travel, activities funded or sponsored by the associated students, athletic or recreational events, training internships, cooperative and distance education, online education, practicums, supervised work experiences, or any other college-sanctioned activities.
3. This chapter applies to conduct from the time of application for admission through the actual receipt of a degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment. This chapter shall apply to a student's conduct even if the student withdraws from college while a disciplinary matter is pending.
4. The college has sole discretion, on a case-by-case basis, to determine whether this student conduct code will be applied to conduct that occurs off campus.
5. In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state, or local laws to civil and criminal authorities for disposition. The college may proceed with student disciplinary proceedings regardless of whether the underlying conduct is subject to civil proceedings or criminal prosecution.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-030, filed 5/19/14, effective 6/19/14.]

## Student Rights

As members of the academic community, students are encouraged to develop the capacity for critical judgment and to engage in an independent search for truth. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students should exercise their freedom with responsibility. The responsibility to secure and to respect general conditions conducive to the freedom to learn is shared by all members of the college community.

The following enumerated rights are guaranteed to each student within the limitations of statutory law and college policy which are deemed necessary to achieve the educational goals of the college:

1. Academic freedom.
  - a. Students are guaranteed the rights of free inquiry, expression, and assembly upon and within college facilities that are generally open and available to the public.
  - b. Students are free to pursue appropriate educational objectives from among the college's curricula, programs, and services, subject to the limitations of RCW 28B.50.090 (3)(b).
  - c. Students shall be protected from academic evaluation which is arbitrary, prejudiced, or capricious, but are responsible for meeting the standards of academic performance established by each of their instructors.
  - d. Students have the right to a learning environment which is free from unlawful discrimination, inappropriate and disrespectful conduct, and any and all harassment, including sexual harassment.
2. Due process.
  - a. The rights of students to be secure in their persons, papers, and effects against unreasonable college searches and seizures are guaranteed.
  - b. No disciplinary sanction may be imposed on any student without notice to the accused of the nature of the charges.
  - c. A student accused of violating this code of conduct is entitled, upon request, to the procedural due process set forth in this chapter.



[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-040, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-040, filed 5/19/14, effective 6/19/14.]

## Prohibited Student Conduct

The college may impose disciplinary sanctions against a student who commits, attempts to commit, or aids, abets, incites, encourages, or assists another person to commit any act of misconduct, which includes, but is not limited to, the following:

1. Academic dishonesty. Any act of academic dishonesty, including cheating, plagiarism, and fabrication.
  - a. Cheating includes any attempt to give or obtain unauthorized assistance relating to the completion of an academic assignment or requirement.
  - b. Plagiarism includes taking and using as one's own, without proper attribution, the ideas, writings, or work of another person in completing an academic assignment or requirement.
  - c. Fabrication includes falsifying data, information, or citations in completing an academic assignment or requirement, or providing false or deceptive information to an instructor concerning the completion of an assignment or requirement, including submitting for credit without authorization academic work also submitted for credit in another course.
2. Other dishonesty. Any other act of dishonesty, including:
  - a. Forgery, alteration, submission of falsified documents, or misuse of any college document, record, or instrument of identification;
  - b. Tampering with an election conducted by or for college students; or
  - c. Furnishing false information, or failing to furnish correct or complete information, in response to the request or requirement of a college official or employee.
3. Conduct which significantly obstructs or disrupts any operation of the college, any college meeting, any college class or other activity, any activity authorized to occur at a college facility, or any college-sponsored activity, including obstructing the free flow of pedestrian or vehicular movement or blocking access to or from any college facility or college-sponsored event.
4. Assault, physical abuse, verbal abuse, threat(s), intimidation, harassment, bullying, stalking, reckless conduct, or other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person or another person's property or which unreasonably disrupts the educational environment. For purposes of this subsection:
  - a. Bullying is severe or pervasive physical or verbal abuse involving an apparent power imbalance between the aggressor and victim.
  - b. Stalking is intentional and repeated following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such an intent.
  - c. Reckless conduct means acts performed with a heightened degree of carelessness or indifference so as to create a significant risk of physical, mental, or emotional harm to another person.
5. Cyber misconduct. Cyberstalking, cyberbullying or online harassment. Use of electronic communications including, but not limited to, electronic mail, instant messaging, texting, electronic bulletin boards, and social media sites, to harass, abuse, bully, or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health, safety, or well-being of another person. Prohibited activities include, but are not limited to, unauthorized monitoring of another's electronic communications directly or through spyware, sending threatening messages, disrupting electronic communications, sending a computer virus or malware, sending false messages to third parties using another's identity, nonconsensual recording of sexual activity, or nonconsensual distribution of a recording of sexual activity.
6. Property violation. Damage to, or theft or misuse of, real or personal property or money of:
  - a. The college or state, including college facilities;
  - b. Any college student, official, employee, or organization; or

- c. Any other member of the college community or a college organization. Property violation also includes possession of such property or money after it has been stolen.
- 7. Failure to comply with directive. Failure to comply with the direction of a college official or employee who is acting in the legitimate performance of his or her duties, including failure to properly identify oneself to such a person when requested to do so.
- 8. Weapons. Holding, wearing, transporting, storing, or otherwise possessing any firearm, dagger, sword, knife or other cutting or stabbing instrument, club, explosive device, or any other weapon or device which is apparently capable of producing bodily harm, on or in any college facility, subject to the following exceptions:
  - a. Commissioned law enforcement personnel or legally authorized military personnel while in performance of their duties;
  - b. College-owned knives, tools, etc., that are being used for a legitimate educational purpose as part of a college instructional program;
  - c. A student with a valid concealed pistol license may store a pistol in his or her vehicle parked on campus in accordance with RCW 9.41.050 (2) or (3), provided the vehicle is locked and the pistol is concealed from view;
  - d. The president may grant permission to bring such a weapon or device on or into a college facility when he/ she determines that it is reasonably related to a legitimate pedagogical purpose, provided that such permission shall be in writing and shall be subject to all terms and conditions incorporated in that writing; and
  - e. This policy does not apply to the possession and/or use of disabling chemical sprays when possessed and/ or used for self-defense.
- 9. Hazing. Hazing includes, but is not limited to, any initiation into a student organization, or any pastime or amusement engaged in with respect to such an organization, that causes, or is likely to cause, bodily danger, physical harm, or serious mental or emotional harm to any student, regardless of whether the victim has consented.
- 10. Alcohol, drug, and tobacco violations.
  - a. Alcohol. Use, possession, delivery, sale, or being observably under the influence of any alcoholic beverage, except as permitted by law and applicable college policies.
  - b. Marijuana. Use, possession, delivery, sale, or being observably under the influence of marijuana, the psychoactive compounds found in marijuana, or any product containing marijuana or such compounds that is intended for human consumption, regardless of form. While state law permits the recreational use of marijuana, federal law prohibits such use on college facilities or in connection with college activities.
  - c. Drugs. The use, possession, delivery, sale, or being observably under the influence of any legend drug, including anabolic steroids, androgens, or human growth hormones as defined in chapter 69.41 RCW, or any other controlled substance under chapter 69.50 RCW, except as prescribed for a student's use by a licensed health care practitioner.
  - d. Tobacco, electronic cigarettes, and related products. Use of tobacco, electronic cigarettes or smoking devices, and/or related products on or in any college facility is prohibited, except that such use in a designated smoking area or in a closed private vehicle is permitted when consistent with applicable law and rules. "Related products" include cigarettes, pipes, bidi, clove cigarettes, water pipes, hookahs, chewing tobacco, and snuff.
- 11. Lewd conduct. Conduct which is lewd or obscene.
- 12. Discriminatory conduct. Discriminatory conduct which harms or adversely affects any member of the college community because of her/his race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification.
- 13. Sexual misconduct. Any act of sexual misconduct, including sexual harassment, sexual intimidation, and sexual violence.
  - a. Sexual harassment means unwelcome conduct of a sexual nature, including unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual

nature, that is sufficiently serious as to deny or limit, and that does deny or limit, based on sex, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for campus community members.

- b. Sexual intimidation. The term "sexual intimidation" incorporates the definition of "sexual harassment" and means threatening or emotionally distressing conduct based on sex including, but not limited to, nonconsensual recording of sexual activity or distribution of such a recording.
- c. Sexual violence is a type of sexual discrimination and harassment. Nonconsensual sexual intercourse, nonconsensual sexual contact, domestic violence, dating violence, and stalking are all types of sexual violence.
- d. Nonconsensual sexual intercourse is any sexual intercourse (anal, oral, or vaginal), however slight, with any object, by a person upon another person, that is without consent and/or by force. Sexual intercourse includes anal or vaginal penetration by a penis, tongue, finger or object, or oral copulation by mouth to genital contact or genital to mouth contact.
- e. Nonconsensual sexual contact is any intentional sexual touching, however slight, with any object, by a person upon another person that is without consent and/or by force. Sexual touching includes any bodily contact with the breasts, groin, mouth, or other bodily orifice of another individual or any other bodily contact in a sexual manner.
- f. Domestic violence includes asserted violent misdemeanor and felony offenses committed by the victim's current or former spouse, current or former cohabitant, person similarly situated under domestic or family violence law, or anyone else protected under domestic or family violence law.
- g. Dating violence means violence by a person who has been in a romantic or intimate relationship with the victim. Whether there was such relationship will be gauged by its length, type, and frequency of interaction.
- h. Stalking means intentional and repeated harassment or following of another person, which places that person in reasonable fear that the

perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such intent.

- i. Consent means knowing, voluntary and clear permission by word or action, to engage in mutually agreed upon sexual activity. Each party has the responsibility to make certain that the other has consented before engaging in the activity. For consent to be valid, there must be at the time of the act of sexual intercourse or sexual contact actual words or conduct indicating freely given agreement to have sexual intercourse or sexual contact.

A person cannot consent if he or she is unable to understand what is happening or is disoriented, helpless, asleep or unconscious for any reason, including due to alcohol or other drugs. An individual who engages in sexual activity when the individual knows, or should know, that the other person is physically or mentally incapacitated has engaged in nonconsensual conduct. Intoxication is not a defense against allegations that an individual has engaged in nonconsensual sexual conduct.

- 14. Harassment. Unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person's protected status and that is sufficiently serious as to deny or limit, and that does deny or limit, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for other campus community members. Protected status includes a person's race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification. See "Sexual misconduct" for the definition of "sexual harassment." Harassing conduct may include, but is not limited to, physical conduct, verbal, written, social media, and electronic.
- 15. Retaliation. Taking adverse action against any individual for reporting, providing information, or otherwise participating in a process for addressing alleged violations of federal, state, or local law, or college policies, including allegations of discrimination or harassment.

16. Misuse of electronic resources. Theft or other misuse of computer time or other electronic information resources of the college, which includes:
  - a. Unauthorized use of such resources or opening of a file, message, or other item;
  - b. Unauthorized duplication, transfer, or distribution of a computer program, file, message, or other item;
  - c. Unauthorized use or distribution of someone else's password or other identification;
  - d. Use of such time or resources to interfere with someone else's work;
  - e. Use of such time or resources to send, display, or print an obscene or abusive message, text, or image;
  - f. Use of such time or resources to interfere with normal operation of the college's computing system or other electronic information resources;
  - g. Use of such time or resources in violation of applicable copyright or other law;
  - h. Adding to or otherwise altering the infrastructure of the college's electronic information resources without authorization; or
  - i. Failure to comply with the college's policies or procedures governing the use of such time or resources.
17. Unauthorized access. Unauthorized possession, duplication, or other use of a key, keycard, or other restricted means of access to college property, or unauthorized entry onto or into college property.
18. Safety violations. Any nonaccidental conduct that violates, interferes with, or otherwise compromises any law, rule, policy, procedure, or equipment relating to the safety and security of college facilities or the college community, including tampering with fire safety equipment or triggering false alarms or other emergency response systems.
19. Motor vehicle operation. Operation of any motor vehicle in an unsafe manner or contrary to posted signs or college procedures.
20. Violation of laws or policies. Violation of any federal, state, or local law or regulation, or college rule, policy, or procedure, which regulates the

behavior of the college's students, including a parking rule.

21. Student procedures violations. Misuse of or failure to follow any of the procedures relating to student complaints or misconduct, including:
  - a. Falsification or misrepresentation of information;
  - b. Failure to obey a subpoena;
  - c. Disruption or interference with the orderly conduct of a proceeding;
  - d. Destroying or altering potential evidence, or attempting to intimidate or otherwise improperly pressure a witness or potential witness;
  - e. Attempting to influence the impartiality of, or harassing or intimidating, a student conduct committee member or other disciplinary official; or
  - f. Failure to comply with any disciplinary action, term, or condition imposed under this chapter.
22. Ethical violation. Ethical violations include, but are not limited to, breach of a generally recognized and published code of ethics or standard of professional practice that governs the conduct of a particular profession, which the student has been specifically informed about and is required to adhere to as a condition of enrolling in a course or participating in an educational program.

In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state or local laws to civil and criminal authorities for disposition. The college shall proceed with student disciplinary proceedings regardless of whether the underlying conduct is subject to civil or criminal prosecution.

[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-050, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-050, filed 5/19/14, effective 6/19/14.]

## Disciplinary Sanctions and Conditions

1. Disciplinary sanctions. The following disciplinary sanctions may be imposed upon students found to have violated the student conduct code:
  - a. Disciplinary warning. An oral statement to a student that there is a violation and that any further violation may be cause for further

disciplinary action. Although verbal, the student conduct officer should make a record of the warning. The respondent cannot appeal a disciplinary warning.

- b. Written disciplinary reprimand. A written notice informing a student that he/she has violated one or more terms of the code of conduct and that future misconduct involving the same or similar behavior may result in the imposition of a more severe disciplinary sanction.
  - c. Disciplinary probation. A written notice placing specific term(s) and condition(s) upon the student's continued attendance at the college. Disciplinary probation may be for a limited period of time or for the duration of the student's attendance at the college.
  - d. Disciplinary suspension. Temporary revocation of enrollment and termination of student status, for a stated period of time. The student may be prohibited from coming onto any college facility and may be subject to law enforcement action for criminal trespass for violating that prohibition. There will be no refund of tuition or fees for the quarter in which the action is taken.
  - e. Dismissal. Revocation of enrollment and of all rights and privileges of membership in the college community, and exclusion from college facilities, without any time limitation. There will be no refund of tuition or fees for the quarter in which the action is taken. The student may be subject to law enforcement action for criminal trespass for violating that exclusion. A dismissal may be rescinded only by a written decision of the president, for documented good cause.
2. Disciplinary conditions. Disciplinary conditions that may be imposed alone or in conjunction with the imposition of a disciplinary sanction under subsection (1) of this section include:
- a. Restitution. Reimbursement for
    - i. damage to, or theft or misuse of, real or personal property or money, or
    - ii. injury to persons. This reimbursement may take the form of money, appropriate service, or other compensation.
  - b. Professional evaluation. Referral for drug, alcohol, psychological, or medical evaluation, at

the student's expense, by an appropriately certified or licensed professional. The student may choose the professional within the scope of practice and with the professional credentials as specified by the college. The student must sign all necessary releases to allow the college access to any such evaluation. The student's return to college may be conditioned upon compliance with recommendations set forth in the evaluation. If the student has been suspended, the student may remain suspended until the most recent evaluation finds that the student is capable of reentering the college and complying with the college's expectations for conduct.

- c. Restrictions on activities. A student may be subjected to the following restrictions:
  - i. Ineligible to hold any college office or position or any office in any student organization;
  - ii. Ineligible to participate in any college activity(ies); and/or
  - iii. Ineligible to represent the college outside the college community, including at any event or in any form of competition.
- d. Required activities. Assignment of appropriate tasks or responsibilities, or required attendance at an appropriate program, instructional course, or other educational activity, which may be at the student's expense.
- e. Protective or no contact order. An order directing a student to have limited or no contact with any specified student(s), college employee(s), member(s) of the college community, or college facility.
- f. Loss of state funding. A student found to have committed hazing shall forfeit any entitlement to state-funded grants, scholarships, or awards, pursuant to RCW 28B.10.902.

[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-060, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-060, filed 5/19/14, effective 6/19/14.]

## Faculty/Administrator Authority Regarding Classroom Disruption

1. Faculty members and instructional administrators are authorized to take appropriate action to maintain

order and proper conduct in the classroom and the cooperation of students in fulfilling course objectives.

2. If a faculty member or instructional administrator determines that a student has created a disruption which makes it unreasonably difficult to maintain the learning and teaching environment or the decorum of a class or activity, he/she may suspend that student from the class or activity for up to a total of one day per day of disruption. The faculty member or administrator shall report this suspension to the student conduct officer, who shall have the option, depending on the severity, to treat the suspension as insufficient and also initiate further discipline under this chapter.
3. The suspension of up to one day per day of disruption shall not be subject to any further appeal or review. However, any further discipline imposed by the student conduct officer shall be processed in accordance with this chapter.
4. Any suspension initiated by a faculty member or instructional administrator under this section will not affect any student grading that is based directly on attendance.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-070, filed 5/19/14, effective 6/19/14.]

## Disciplinary Records

1. Records of a disciplinary proceeding under this chapter are disciplinary records which must be maintained by the office of the vice-president of student services separately from student academic records and in accordance with applicable state records retention requirements.
2. Disciplinary records are confidential to the extent required by applicable laws, including the Family Educational Rights and Privacy Act. To the extent permitted by such laws, the respondent, or if a minor, the student's parent, may review his/her disciplinary records, obtain a copy of such records upon payment of any lawful charges for duplication, and/or authorize disclosure of such records.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-080, filed 5/19/14, effective 6/19/14.]

## Initiation of Disciplinary Action

1. All disciplinary actions will be initiated by the

student conduct officer. If that officer is the subject of a complaint initiated by the respondent, the president shall, upon request and when feasible, designate another person to fulfill any such disciplinary responsibilities relative to the complainant.

2. The student conduct officer shall initiate possible disciplinary action by serving the respondent with written notice directing him or her to attend a disciplinary meeting. The notice shall briefly describe the factual allegations, the specific apparent misconduct under WAC 495C-121-050, and the range of possible disciplinary sanctions, and specify the time and location of the meeting. At the meeting, the student conduct officer will present the allegations to the respondent and the respondent shall be afforded an opportunity to explain what took place. If the respondent fails to attend the meeting after proper service of notice, the student conduct officer may impose disciplinary sanction(s) and conditions based upon the available information.
3. Within ten days of the scheduled initial disciplinary meeting, and after considering the information obtained by investigation and any information presented by the respondent, the student conduct officer shall serve the respondent with a written decision setting forth the facts and conclusions supporting his or her decision, the specific student conduct code provisions found to have been violated, the discipline imposed, if any, the consequences if a student fails to satisfy any disciplinary condition(s) which are being imposed, and a notice of the respondent's appeal rights, if any, with an explanation of the consequences of failing to file a timely appeal.
4. The student conduct officer may take any of the following actions:
  - a. Terminate the proceeding, with any appropriate exoneration of the respondent or counseling or advice to the respondent. The respondent cannot appeal a termination of the proceedings;
  - b. Specify misconduct under WAC 495C-121-050 which he/she finds to have occurred and impose disciplinary sanction and/or condition(s), as described in WAC 495C-121-060; or
  - c. Refer the matter directly to the student conduct committee for a hearing and imposition of such disciplinary sanction and/or condition(s) as the committee deems appropriate. Such referral shall

be to the attention of the chair of the committee with a copy served on the respondent.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-100, filed 5/19/14, effective 6/19/14.]

## Appeals and Referrals—Routing

1. The respondent may appeal a disciplinary action by filing a written notice of appeal with the conduct review officer within twenty-one days of service of the student conduct officer's decision. Failure to file a timely notice of appeal constitutes a waiver of the right to appeal, and the student conduct officer's decision shall be deemed final.
2. The notice of appeal must include a brief statement explaining why the respondent is seeking review.
3. Except as provided in WAC 495C-121-230 or elsewhere in these rules, the parties to an appeal shall be the respondent and the student conduct officer.
4. On appeal, the student conduct officer bears the burden of establishing the factual elements of the alleged misconduct by a preponderance of the evidence, i.e., that it is more likely than not that the respondent engaged in the alleged misconduct.
5. Imposition of a disciplinary sanction and conditions shall be stayed during an appeal, except for a summary suspension that has been imposed under WAC 495C-121-190.
6. The student conduct committee shall hear:
  - a. Appeals from disciplinary suspensions in excess of ten instructional days, and any related disciplinary condition(s);
  - b. Appeals from dismissals, and any related disciplinary condition(s); and
  - c. Cases referred by the student conduct officer, the conduct review officer, or the president.
7. Appeals from the following disciplinary sanctions and related disciplinary conditions shall be reviewed through a brief adjudicative proceeding:
  - a. Written disciplinary reprimands, and any related disciplinary condition(s);
  - b. Disciplinary probation, and any related disciplinary condition(s); and

c. Disciplinary suspensions of ten instructional days or less, and any related disciplinary condition(s).

8. Except as provided elsewhere in these rules, disciplinary warnings and terminations of proceedings are final actions and are not subject to appeal.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-110, filed 5/19/14, effective 6/19/14.]

## Brief Adjudicative Proceedings— Initial Hearing and Decision

1. Brief adjudicative proceedings shall be conducted by a conduct review officer. The conduct review officer shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction to the student conduct officer.
2. Before making a decision, the conduct review officer shall schedule an informal hearing to provide each party an opportunity (a) to be informed of the agency's view of the matter, and (b) to explain the party's view of the matter.
3. The conduct review officer shall serve an initial decision upon the parties within ten days of the scheduled hearing. The initial decision shall contain a brief written statement of the reasons for the decision and information about how to seek review under WAC 495C-121-130.
4. If the conduct review officer, upon review, determines that the respondent's conduct may warrant imposition of a disciplinary suspension of more than ten instructional days or a dismissal, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-120, filed 5/19/14, effective 6/19/14.]

## Brief Adjudicative Proceedings— Review of Initial Decision

1. A party may obtain review of an initial decision by the president, by filing a written request for review with the conduct review officer within twenty-one days of service of the initial decision. That officer shall promptly forward the request to the president. If no timely request for review is filed, the initial

decision shall become the final decision.

2. The president shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction.
3. During the review, the president shall give each party an opportunity to file a written statement explaining their view of the matter and shall make any inquiries to the parties which are necessary to ascertain whether the discipline should be modified or whether the proceedings should be referred to the student conduct committee for a hearing.
4. The president shall serve a written decision on review on all parties within twenty days of the later of the filing of the request for review or any deadline for parties' explanatory statements. A request for review may be deemed to have been denied if the president does not serve a decision within those twenty days. The decision shall include a brief statement of its reasoning. The president's decision shall be the final college action in the matter, and shall include notice of any right to request reconsideration and of the right to seek judicial review under chapter 34.05 RCW.
5. If the president, upon review, determines that the respondent's conduct may warrant imposition of a dismissal or a disciplinary suspension of more than ten instructional days, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-130, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee— Formation

1. Proceedings of the student conduct committee shall be governed by the Administrative Procedure Act, chapter 34.05 RCW, and by the Model Rules of Procedure, chapter 10-08 WAC. To the extent there is a conflict between this chapter and chapter 10-08 WAC, this chapter shall control.
2. The student conduct committee shall consist of five members:
  - a. Two full-time students appointed by the student government to terms of up to one academic year;
  - b. Two faculty members appointed by the president

to terms of up to two academic years, beginning in alternating years;

- c. One faculty member or administrator, other than an administrator serving as a student conduct or conduct review officer, appointed as chair by the president for a term of up to two academic years. Members may be reappointed for subsequent terms. Any member may be replaced by the appointing authority for the remainder of the term for good cause shown.
3. The faculty member or administrator appointed as chair may take action on preliminary hearing matters prior to convening the committee. The chair shall receive annual training on protecting victims and promoting accountability in cases involving allegations of sexual misconduct.
4. A member of the student conduct committee shall not participate in any case in which he/she is a party, complainant, or witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction. Any party may petition for disqualification of a committee member pursuant to RCW 34.05.425(4).
5. Hearings may be heard by a quorum of three members of the committee, so long as one faculty member and one student are included on the hearing panel. Committee action may be taken upon a majority vote of all committee members attending the hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-140, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee— Prehearing Proceedings

1. The student conduct committee chair shall serve all parties with written notice of the hearing not less than seven days in advance of the hearing date, as further specified in RCW 34.05.434 and WAC 10-08-040 and 10-08-045. The chair may shorten this notice period if both parties agree, and also may continue the hearing to a later time for good cause shown.
2. The chair may conduct prehearing conferences and/or make prehearing decisions concerning the simplification of issues, the extent and form of any discovery, issuance of protective orders, and similar procedural matters.
3. Discovery will be available as determined by the



chair and in accordance with RCW 34.05.446. Upon request, the chair shall provide reasonable assistance to a party in obtaining relevant and admissible evidence that is within the college's control.

4. The chair may provide to the committee members in advance of the hearing copies of (a) the conduct officer's notification of imposition of discipline or referral to the committee, and (b) the notice of appeal. If doing so, however, the chair should remind the members that these documents are not evidence of any facts they may allege.
5. Upon request filed at least five business days before the hearing by any party, or at the direction of the committee chair, the parties shall exchange, no later than the third business day prior to the hearing, lists of potential witnesses and copies of potential exhibits that they reasonably expect to present to the committee. Failure to participate in good faith in such a requested exchange may be cause for exclusion from the hearing of any witness or exhibit not disclosed, absent a showing of good cause for such failure.
6. The parties may agree before the hearing to designate specific exhibits as admissible without objection and, if they do so, whether the chair may provide copies of these admissible exhibits to the committee members before the hearing.
7. Communications between a committee member and any other nonmember hearing participant regarding any issue in the proceeding, other than communications necessary to procedural aspects of maintaining an orderly process, are generally prohibited without notice and opportunity for all parties to participate. Any improper "ex parte" communication shall be placed on the record, as further provided in RCW 34.05.455.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-150, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee— Hearings

1. Upon the failure of any party to attend or participate in a hearing, the chair may either:
  - a. Proceed with the hearing; or
  - b. Serve a default order in accordance with RCW 34.05.440.

2. The committee will ordinarily be advised by an assistant attorney general.
3. Each party may be accompanied at the hearing by a nonattorney assistant of his/her choice. A party other than the student conduct officer may elect to be represented by an attorney at his or her own cost, but will be deemed to have waived that right unless, at least four business days before the hearing, written notice of the attorney's identity and participation is filed with the chair, with a copy to the student conduct officer. If such a party is represented by an attorney, the student conduct officer may also be represented by a second, appropriately screened, assistant attorney general.
4. The chair shall preside at the hearing and decide procedural questions that arise during the hearing, except as overridden by majority vote of the committee. Evidence shall be admitted or excluded in accordance with RCW 34.05.452. All testimony shall be given under oath or affirmation.
5. The hearing will ordinarily be closed to the public, in light of the Family Educational Rights and Privacy Act. However, if all parties agree on the record to open some or all of the proceedings, the chair shall determine any extent to which the hearing will be open. If any person disrupts the proceedings, the chair may exclude that person from the hearing room.
6. The chair shall afford opportunity to all parties to present their cases, and shall cause the hearing to be recorded by a method that he/she selects, in accordance with RCW 34.05.449. That recording, or a copy, shall be made available to any party upon request. Other recording shall also be permitted, in accordance with WAC 10-08-190.
7. The chair shall assure maintenance of the record of the proceeding which is required by RCW 34.05.476. This record shall be available upon request by any party for inspection and copying, except as limited by FERPA.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-160, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee—Initial Decision

1. At the conclusion of the hearing, the committee shall permit the parties to make closing arguments in whatever form it wishes to receive them. The

committee also may permit each party to propose findings, conclusions, and/or a proposed decision for its consideration. Only evidence presented at the hearing will be considered by the committee.

2. Within twenty days following the later of the conclusion of the hearing or the committee's receipt of closing arguments, the committee shall issue an initial decision in accordance with RCW 34.05.461 and WAC 10-08-210. The initial order shall include:
  - a. Findings on all material issues of fact and conclusions on all material issues of law, including which, if any, provisions of WAC 495C-121-050 were violated. Any findings based substantially on the credibility of evidence or the demeanor of witnesses shall be so identified.
  - b. A determination on appropriate disciplinary sanction and/or disciplinary conditions, if any. The committee may affirm, reverse, modify, or supplement any disciplinary sanction and/or disciplinary condition(s) imposed by the student conduct officer.
  - c. A statement that the initial order will become final unless a party seeks review of that decision in accordance with WAC 495C-121-180.
3. The chair shall cause copies of the initial decision to be served on the parties, including any legal counsel of record. The committee chair shall also promptly transmit the record of the committee's proceedings and a copy of its decision to the president.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-170, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee—Review of Initial Decision

1. A party who is aggrieved by the committee's initial decision may obtain review of that decision by filing a notice of appeal with the president within twenty-one days after it was served on that party. If no timely notice of appeal is filed, the initial decision shall become the final decision.
2. The notice of appeal must identify the specific findings of fact and/or conclusions of law in the initial decision that are challenged, and must contain an argument why the appeal should be granted.
3. The president may ask for additional argument from

the parties on the issues raised in the notice of appeal. The president's review will ordinarily be limited to those issues, and shall be restricted to the committee hearing record. The president shall not engage in ex parte communication with any of the parties regarding the appeal.

4. The president shall serve a written decision on review on all parties within forty-five days after receipt of the notice of appeal. The decision shall include appropriate findings and conclusions. Unless it remands the case to the committee for further proceedings or gives a right to request reconsideration, the president's decision shall be the final college action in the matter and shall include notice of the right to seek judicial review under chapter 34.05 RCW.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-180, filed 5/19/14, effective 6/19/14.]

## Summary Suspension

1. Summary suspension is a temporary exclusion from specified college facilities and denial of access to all activities or privileges for which a respondent might otherwise be eligible, while an investigation, disciplinary procedures, and/or an appeal are pending.
2. The student conduct officer may impose a summary suspension if there is probable cause to believe, i.e., there are reasonable grounds for believing, that the respondent has committed misconduct under WAC 495C-121-050 and that either:
  - a. The situation involves an immediate danger to the public health, safety, or welfare which requires immediate college action; or
  - b. The student's behavior poses an ongoing threat of substantial disruption of, or interference with, the operations of the college.
3. A summary suspension shall be effective when the respondent receives written or oral notice of that suspension. If oral notice is given, a written notification must be served on the respondent within two business days of the oral notice. The written notification shall be entitled "Notice of Summary Suspension" and shall include:
  - a. The reasons for imposing the summary suspension, including a description of the misconduct and specification of the provisions of

WAC 495C-121-050 allegedly violated;

- b. The date, time, and location when the respondent must appear before the conduct review officer for a hearing on the summary suspension; and
  - c. The conditions, if any, under which the respondent may physically access college facilities or communicate with members of the college community. If the respondent is prohibited from entering college facilities, he/she may be given a notice against trespass which warns that his/her privilege to enter college facilities has been withdrawn, subject to any specified exceptions such as an invitation to meet with the student conduct officer or conduct review officer or to attend a scheduled disciplinary hearing, and that he/she shall be considered to be trespassing and subject to arrest for criminal trespass for any violation.
4. The hearing before the conduct review officer shall be scheduled as soon as practicable after service of the notice of summary suspension. If the respondent fails to appear at the scheduled time, the conduct review officer may order that the summary suspension remain in place. During the summary suspension hearing, the issues shall be:
- a. Whether the requirements under subsection (2) of this section are satisfied; and
  - b. Whether the summary suspension should be continued pending the conclusion of disciplinary proceedings and/or should be less restrictive in scope.
5. As soon as practicable following the hearing, the conduct review officer shall issue, and serve on the respondent and student conduct officer, a written decision which addresses the issues at the hearing. The conduct review officer shall also provide information about the decision, to the extent legally permissible under FERPA, to all persons and offices who may be bound or protected by it.
6. The respondent may request a de novo review of the summary suspension hearing decision by the student conduct committee. The review will be scheduled promptly. Either party may request the review to be consolidated with any other disciplinary proceeding arising from the same matter.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-190, filed 5/19/14, effective 6/19/14.]

## Supplemental Definitions

The following supplemental definitions apply in student disciplinary matters involving allegations of sexual misconduct by a student:

1. A “complainant” is an alleged victim of sexual misconduct.
2. “Sexual misconduct” has the meaning ascribed to this term in WAC 495C-121-050.
3. “Title IX compliance officer” is the college position designated by the president as having the primary direct responsibilities related to Title IX, 20 U.S.C. §§ 1681-88.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-200, filed 5/19/14, effective 6/19/14.]

## Supplemental Sexual Misconduct Procedures

In student discipline matters involving allegations of sexual misconduct by a student:

1. Both the respondent and the complainant shall be provided the same, or substantially equivalent, procedural rights to participate. For the complainant, this includes the rights to meet with the student conduct officer during the initial disciplinary process under WAC 495C-121-100 and to appeal as provided in WAC 495C-121-230.
2. These rules shall supplement the foregoing student disciplinary rules in WAC 495C-121-010 through 495C-121-190. In the event of conflict between these supplemental sexual misconduct rules and the foregoing rules, these supplemental rules shall prevail.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-210, filed 5/19/14, effective 6/19/14.]

## Supplemental Complaint Process

With respect to complaints or other reports of alleged sexual misconduct by a student:

1. The college’s Title IX compliance officer shall investigate, or assure investigation of, complaints or other reports of alleged sexual misconduct by a student. The investigation will be completed in a timely manner and the results of the investigation

shall be referred to the student conduct officer for possible disciplinary action.

2. Informal dispute resolution shall not be used to resolve sexual misconduct complaints without written permission from both the complainant and the respondent. If the parties elect to mediate a dispute, either party shall be free to discontinue the mediation at any time. Mediation shall not be used to resolve complaints involving allegations of sexual violence.
3. College personnel will honor requests to keep sexual misconduct complaints confidential to the extent this can be done without unreasonably risking the health, safety, and welfare of the complainant or other members of the college community or compromising the college's duty to investigate and process such complaints.
4. The student conduct officer, prior to serving a disciplinary decision under WAC 495C-121-100, will make a reasonable effort to contact the complainant to discuss the results of the investigation and possible disciplinary sanctions and/or disciplinary conditions that may be imposed.
5. The student conduct officer, on the same date that a disciplinary decision is served on the respondent under WAC 495C-121-100, will serve a written notice, in compliance with FERPA, informing the complainant whether the allegations of sexual misconduct were found to have merit and describing any disciplinary sanctions and/or conditions which are being imposed upon the respondent for the complainant's protection. The notice will also inform the complainant of her/his rights to appeal as stated in WAC 495C-121-230. If protective disciplinary sanctions and/or conditions are imposed, the student conduct officer shall also make a reasonable effort to have the notice served upon the complainant prior to service upon the respondent.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-220, filed 5/19/14, effective 6/19/14.]

## Supplemental Appeal Rights

In student discipline matters involving allegations of sexual misconduct by a student:

1. The following actions by the student conduct officer may be appealed by the complainant:
  - a. The dismissal of a sexual misconduct complaint;

or

- b. Any disciplinary sanction(s) and conditions imposed against a respondent for a sexual misconduct violation, including a disciplinary warning.
2. A complainant may appeal a disciplinary decision by filing a notice of appeal with the conduct review officer within twenty-one days of service of the notice of the discipline decision provided for in WAC 495C-121-220(5). The notice of appeal may include a written statement setting forth the grounds of appeal. Failure to file a timely notice of appeal constitutes a waiver of this right and the disciplinary decision shall be deemed final.
  3. If the respondent timely appeals a decision imposing discipline for a sexual misconduct violation, the college shall notify the complainant of the appeal and provide the complainant an opportunity to intervene as a party to the appeal.
  4. Except as otherwise specified in this supplemental procedure, a complainant who timely appeals a disciplinary decision or who intervenes as a party to the respondent's appeal of a disciplinary decision shall be afforded the same procedural rights as are afforded the respondent.
  5. An appeal by a complainant from the following disciplinary actions involving allegations of sexual misconduct against a student shall be handled as a brief adjudicative proceeding:
    - a. Termination of the proceedings;
    - b. A disciplinary warning;
    - c. A written disciplinary reprimand;
    - d. Disciplinary probation;
    - e. Suspensions of ten instructional days or less; and/or
    - f. Any conditions or terms imposed in conjunction with one of the foregoing disciplinary actions.
  6. An appeal by a complainant from disciplinary action imposing a suspension in excess of ten instructional days or an expulsion shall be reviewed by the student conduct committee.
  7. In proceedings before the student conduct committee, respondent and complainant shall have the right to be

accompanied by a nonattorney assistant of their choosing during the appeal process. Complainant may choose to be represented at the hearing by an attorney at his or her own expense, but will be deemed to have waived that right unless, at least four business days before the hearing, he or she files a written notice of the attorney's identity and participation with the committee chair, and with copies to the respondent and the student conduct officer.

8. The complainant and respondent shall not directly question or cross-examine one another in either brief adjudicative proceedings or proceedings before the committee. In proceedings before the committee, all questions shall be directed to the chair, who will act as an intermediary and pose questions on the party's behalf.
9. Student conduct hearings involving sexual misconduct allegations shall be closed to the public, unless respondent and complainant both waive this requirement in writing and request that the hearing be open to the public. Complainant, respondent and their respective nonattorney assistants and/or attorneys may attend portions of the hearing where argument, testimony, and/or evidence are presented to the student conduct committee.
10. On the same date as the initial decision is served on the respondent under WAC 495C-121-120 or 495C-121-170, the conduct review officer or committee chair, as appropriate, will serve complainant with a written notice consistent with FERPA which states whether the allegations of sexual misconduct were found in the initial decision to have merit and describing any disciplinary sanction(s) and/or disciplinary condition(s) imposed upon the respondent for the complainant's protection. The notice will also inform the complainant of his/her appeal rights.
11. Complainant, as a party, may appeal the initial decision to the president, under either WAC 495C-121-130, after a brief adjudicative proceeding, or WAC 495C-121-180, after a committee proceeding.
12. On the same date that the president serves his/her decision on review on the other parties, under WAC 495C-121-130 or 495C-121-180, he/she shall serve complainant either with that decision, if allowed under FERPA, or with a written notice consistent with FERPA which both states whether the allegations of sexual misconduct were found to have

merit and describes any disciplinary sanction(s) and/or disciplinary condition(s) imposed upon the respondent for the complainant's protection. This notice shall communicate the final college action in the matter and shall include notice of the right to seek judicial review under chapter 34.05 RCW.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-230, filed 5/19/14, effective 6/19/14.]

## Campus Policies

### Campus Speakers

1. Student organizations officially recognized by the college may invite speakers to the campus to address their own membership and other interested students and staff, if suitable space is available and there is no interference with the regularly scheduled program of the college. Although properly allowed by the college, the appearance of such speakers on the campus implies neither approval nor disapproval of them or their viewpoints. In the case of speakers who are candidates for political office, equal opportunities shall be available to opposing candidates if desired by them. Speakers are subject to the normal considerations for law and order and to the specific limitations imposed by the state constitution, which prohibits religious worship, exercise, or instruction on state property.
2. In order to ensure an atmosphere of open exchange and to ensure that the educational objectives of the college are not obscured, the president or designee, in a case attended by strong emotional feeling, may prescribe conditions for the conduct of the meeting, such as requiring a designated member of the staff as moderator, or requiring permission for comments and questions from the floor. Likewise, the president or designee may encourage the appearance of one or more additional speakers at any meeting or at a subsequent meeting, so that other points of view may be expressed. The president or designee may designate representatives to recommend conditions such as time, manner, and place for the conduct of particular meetings.
3. Hold

### Civil Disturbances

See Washington State Legislature Revised Code of Washington (RCW) RCW 28B.10.570, RCW 28B.10.571,

and RCW18B.10.572.

## Commercial Activities

1. College facilities will not be used for commercial solicitation, advertising, or promotional activities except when such activities clearly serve educational objectives, including but not limited to display of books of interest to the staff or the display or demonstration of technical or research equipment, and when such commercial activities relate to educational objectives and are conducted under the sponsorship or at the request of the college.

## Distribution of Information

See Washington Administrative Code (WAC) 495C-141-050 regarding distribution of information.

## Drug Free Environment

Clover Park Technical College aims for a Drug-Free Environment. A program has been developed to prevent the illicit use of drugs and the abuse of alcohol by students and employees on college property or as any part of the college's activities. Possession and/or use of illicit drugs and alcohol is a violation of the Student Code of Conduct and subject to disciplinary action.

## Suspended Operations

<http://cptc.edu/risk/emergency-management>

In the event Clover Park Technical College must close or operate on a delayed schedule due to weather or other emergency conditions, the College will seek to provide such information by no later than 5 a.m. The information will be posted on the home page of the College web site, [www.cptc.edu](http://www.cptc.edu); and at [www.FlashAlert.net](http://www.FlashAlert.net) where the information will be shared with news media. In addition, notification will be made via CPTCWarn, the college's emergency notification system.

No announcement means normal operation. Announcements are generally for one day only.

## Non-Discrimination Policy

Clover Park Technical College provides equal opportunity and access in education and employment and does not discriminate on the basis of race; ethnicity; creed; color; sex; gender; gender identity; citizenship status; national origin; age; marital status; religious preference; the

presence of any sensory, mental, or physical disability; reliance on public assistance; sexual orientation; veteran status; political opinions or affiliations; or genetic information in any of its programs, activities, and services.

CPTC offers more than 40 career and technical education programs in seven Schools: Aerospace and Aviation; Science, Technology, Engineering, and Design; Automotive and Trades; Advanced Manufacturing; Nursing; Health and Human Development; and Business and Personal Services. CPTC will take steps to ensure that the lack of English language skills will not be a barrier to admission and participation in all educational and vocational education programs

The following individual has been designated to handle inquiries regarding the non-discrimination policy:

Kirk Walker  
Title IX Coordinator & Director for Human Resources  
4500 Steilacoom Blvd SW  
Lakewood, WA 98499-4004  
253-589-5533

## Registered Sexual Offender Policy

The full policy and regulations for enrollment of registered sexual offenders is available in the College Policy and Procedures Handbook. When the college is notified by a law enforcement agency that a sexual offender is planning on attending or is attending the college, appropriate notification of the offender's presence will be made to faculty, staff, and students depending on the offender's classification level. For details, contact the office of the vice president for student success.

## Safety and Hazardous Materials

The Accident Prevention Plan can be found on the CPTC.edu website at <http://cptc.edu/risk/occupational-health-safety>. Accidents should be immediately reported to a college staff member or security at 253-589-5682 and an Accident/Injury Report completed. Some program areas utilize materials which are classified as hazardous chemicals. The Occupational Safety Health Act (OSHA) Communication Standard 1910.120, and the State of Washington Right to Know Statutes require that chemicals be appropriately labeled and that the college has on file a Safety Data Sheet (SDS) for each of the hazardous chemical products being packaged, handled, or transferred. The SDS provides a description of how the identified chemical is to be handled and is readily available in case of an emergency, or upon request. Questions or concerns

regarding hazardous chemicals should be referred to program faculty for further information.

contractual rights. We encourage readers to contact the college or appropriate office to obtain current information.

## Smoking Policy

Smoking or the use of any tobacco product is permitted only in closed private vehicles and designated smoking shelters. Smoking or the use of any tobacco product will not be permitted in any state-owned building or vehicle. This includes e-cigarettes and similar devices.

## Student Right to Know

In compliance with the federal Student Right-to-Know (SR2K) and Campus Security Act of 1990 (Public Law 101-542), Clover Park Technical College makes available information about program completions on the college website, [www.cptc.edu/right-to-know](http://www.cptc.edu/right-to-know). A printed copy of this information may be obtained by calling 253-589-4520.

## Disclaimer and Limitation of Liability

The Clover Park Technical College Catalog provides an overview of the college's courses, programs, services, and policies. We make every effort to convey accurate information; however, the college's classes, programs, and other activities are subject to change at any time without notice. The catalog is not intended to create a contractual obligation.

### Limitation of Liability

The college's total liability for claims arising from a contractual relationship with the student in any way related to classes or programs shall be limited to the tuition and expenses paid by the student to the college for those classes or programs. In no event shall the college be liable for any special, indirect, incidental, or consequential damages, including, but not limited to, loss of earning or profits.

### Publication Disclaimer

Clover Park Technical College has made reasonable efforts to ensure the accuracy of the information throughout this catalog. However, the college reserves the right to make appropriate changes in procedures, policies, calendars, requirements, programs, courses, and fees. When feasible, changes will be announced prior to their effective dates, but the college assumes no responsibility for giving particular notice of any such changes. Changes may apply not only to prospective students, but also to those who are currently enrolled. Nothing contained in this catalog shall be construed to create any offer to contract or any

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Certificate in Historic Preservation

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*Mathematics Instructor*  
MA, Western Governor's University  
BA, Evergreen State College

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*Pharmacy Technician Instructor*  
Licensed Pharmacy Technician

**BARTON, RICHARD**

*HVAC Instructor*  
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EPA Universal Certification  
06A Electrical Training

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*Director of Compliance*  
BA, Washington State University

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*HVAC Instructor*  
Electrician EL6A-HVAC/Refrigerator License

**BOON, CELVA**

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Parson's School of Design  
ASID Certification  
NCIDQ Certification

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ASE Certified Master Automobile Technician Automotive Technician, Denver Automotive and Diesel College

WA State Journey Level Machinist / Jig & Fixture Toolmaker, the Boeing Company

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*Vice President for Instruction*  
EdD, Oregon State University  
MA, California State University Fullerton  
CA, California State University Fullerton

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*Architectural Engineering Instructor*  
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AAT, Clover Park Technical College

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MA, Chapman University  
BS, Southern Illinois University

**CHESNES, THOMAS**

*Fundamental Skills for Manufacturing and Engineering (FSME) Instructor*  
MS, Western Governor's University  
BA, Ashford University  
OSHA Authorized General Industry Trainer

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*Cosmetology Instructor*  
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AAS, Spokane Community College

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*Professional Pilot Instructor*  
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ME, Lesley College  
BA, Gonzaga University

**COOKE, SUZANNE**

*Accounting Instructor*  
BA, Texas A&M University  
AAS-T, Clover Park Technical College

**COOPER, DUSTIN**

*Avionics Instructor*  
AAS, College of the Air Force  
AMT, Community College of the Air Force



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*Communications/English Instructor*  
 MA, Liberty University  
 BS, Pensacola Christian College

**COVINGTON, GARY**

*Automotive Technician Instructor*  
 WA State Journey Level Automotive Technician  
 Associate Level Certified Electronic Technician  
 ASE Certification  
 BTI Consumer Electronics  
 Automotive Technician Certificate, Clover Park Technical  
 College

**COYNER, BILL**

*Professional Pilot Instructor*  
 BS, Southern Illinois University  
 AAS, Fort Steilacoom Community College  
 Airline Transport Pilot Certification  
 Flight Engineer-Turbojet  
 Certified Flight Instructor  
 Certified Instrument Instructor-Flight, Federal Aviation  
 Administration

**CROUCHET, CRISTEEN**

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 MPA, Anna Maria College  
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*Nursing Instructor*  
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 Registered Nurse

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 Machinist Certificate, Clover Park Vocational Technical  
 Institute

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 MS, Johns Hopkins University  
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 MLS, University of Hawaii

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*Accounting Instructor*  
 BS, Western Washington University

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*Aviation Maintenance Technician Instructor*  
 Airframe & Powerplant Mechanic Certification  
 Inspection Authorization-Aircraft Certification  
 Federal Aviation Administration  
 ASE Master Technician Certification  
 ASE L1 Advanced Engine Diagnosis Certification  
 Aviation Maintenance, Airframe Powerplant License

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 MA, Western Washington University  
 BA, Gonzaga University

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 CDAi MEd, Lesley University  
 BA, Pacific Lutheran University

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*English Instructor*  
 MA, Oregon State University  
 BA, Seattle University

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*Environmental Sciences & Technology Instructor*  
 PhD, Mississippi State University  
 MS, Texas Tech University  
 BS, Elizabethtown College

**FEIST, SHANNON**

*Assistant Chief Pilot*  
 Flight Instructor License  
 Commercial Pilot License

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*Digital Media & Design Instructor*  
 MA, Full Sail University

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 MEd, Lesley University  
 BA University of Puget Sound  
 AA, Spokane Falls Community College

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 MEd in TESOL, Seattle University  
 BA, The Evergreen State College

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BA, University of Washington

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Licensed WA State Cosmetology Instructor/ Operator

**FREEMAN, KURT**

*Automotive Collision Technician Instructor*  
ASE Certification—Nonstructural Analysis and Damage Repair  
Structural Analysis and Damage Repair  
Automotive Structural Repair Certificate  
Shark Electronic Measuring System Certificate  
Mobile Air Conditioning Society Worldwide Certificate  
Journey Level

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*Cosmetology Instructor*  
Licensed WA State Cosmetology Instructor/ Operator

**GEARY, SHAWN**

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BA, University of Advancing Technologies

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BA, Brandman University  
AAT, Central Texas College  
Certified Level 2 Ultrasonic Technician

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BA, University of Washington  
Registered Central Services Technician

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MSN, University of Washington  
BS, Pacific Lutheran University

**GUTTROMSON, CURTIS**

*Aviation Maintenance Instructor*  
AAT, Fort Steilacoom Community College  
Airframe and Power Plant License  
Inspection Authorization

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*Histology Instructor*  
AA, Shoreline Community College  
ASCP Certified Histology Technician

**HEATON, CHEYENNE**

*Nursing Instructor*  
MSN, University of Washington

BS, Western Washington University

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BSN, University of Phoenix  
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WA State RN License Registered Nurse

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MS, Western Governors University  
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Certified Microsoft Pre-installation Specialist for:  
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Cashier/Checker Certificate, Clover Park Vocational  
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BA, University of Washington,  
AAS, Tacoma Community College  
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Private Pilot's License  
 Airframe & Powerplant Mechanic Certification  
 Master Logistician  
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 EdD, Brandman University  
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 CompTIA Certified Security  
 CompTIA Certified Server  
 CompTIA Certified Network  
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 MS, University of Tennessee, Knoxville  
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 EdD, Argosy University  
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 BE, Tongji University

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 Phlebotomy Certified  
 Certified Hemodialysis Technician

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 Pierce County Food Service Management License  
 Food Service Specialist Certification  
 Advanced Food Service Specialist Certification

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 WA 06A Electrical License  
 EPA Universal Certified  
 Basic Electricity Certified  
 GAS Furnace Certified  
 Electric Furnace Certified  
 AC and Heat Pump Certified  
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 MA, Faith Seminary  
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 WABO Certifications

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ServSafe Certification  
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DC, Life Chiropractic College  
BS, University of Washington  
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Pittsburgh Registered Nurse

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AS, Olympic College  
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MS, University of California, Los Angeles

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MEd, University of Washington-Tacoma

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Professional Diploma, University of Hawaii

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Community College

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Licensed Esthetician

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Cidesco International Certification and License

Institute fFor Advanced Clinical Esthetics

Cosmetic Chemistry Certification UCLA

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Technician Licenses

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*Environmental Sciences & Technology Instructor*

MES, The Evergreen State College

BA, Washington State University

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ASE Certified in: Engine Repair, Automatic Transmission,

Transaxle, Manual Drive Train & Axles, Suspension &

Steering, Brakes, Electrical/Electronic Systems, Heating &

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Performance

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Certification, MCP

CompTIA Certified A+

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MS, University of Massachusetts

MS, Brown University

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AAS, Computer Programming

AAS, Web Development

AAS, Anthropology

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*Instructor*

MA, Webster University

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AAT, Clover Park Technical College

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BME, Pacific Lutheran University

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AAS, Clover Park Technical College

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MS, Chalmers University of Technology

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University of Washington

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## Index



