### **Drafting Technology**

#### **Degree Type**

**Certificate of Completion** 

The WVC Drafting Technology certificate provides training for individuals seeking employment as drafting technicians for architects, construction companies, contractors, utilities and engineering firms.

Before entering the drafting technology program, students are strongly advised to complete one year of high school algebra or its equivalent. Keyboarding and computer literacy are important. Course work in basic drawing or drafting is also beneficial and recommended before entering the program.

For students who plan to continue their education to earn a two-year or four-year degree beyond this one-year certificate, please meet with an advisor to select a math course and elective credits best suited for future degree programs.

### **Required Courses: Certificate of Completion**

Suggested course sequence for fall start. Winter start also available.

#### Offered at Wenatchee campus

Financial Aid eligible beginning April 13, 2023.

### **Program Course Sequence**

Total Credits	45

**Course Sequencing** 

### Required Courses

Course ID	Title	Credits
ENGR 102	Interpreting Engineering Graphics	2.0
ENGR 105	Computer-Aided Design (CAD)	5.0
ENGR 106	Computer Aided Design: Solid Modeling	4.0
	Intro to Geographical Information Systems	3.0-5
ENGR 267	Introduction to Survey Techniques	5.0
ENGL& 101	Composition: General	5.0
MATH 100	Tech Math for Industrial Field	5.0
BCT 130	Spreadsheets	5.0
	Technical Writing	5.0
	Drafting Certificate Elective Group	1.0-6
	Cooperative Work Experience (Drafting Technology)	1.0-5

<u>ENGR 102</u>, <u>ENGR 105</u>: One or more of these courses may be taken in high school for Tech Prep credit if the student's school has an articulation agreement.

MATH 100 may be replaced with a higher level MATH course.

## Program outcomes

Drafters generate technical drawings and three- dimensional models for architectural, civil, electrical or mechanical fields. WVC's Drafting Certificate teaches students the basic operation of a variety of industry standard software to

supplement their chosen specialty. Students pursuing employment in industrial fields such as machining or electronics should be able to apply their drafting skills to their trade just as students pursuing their transfer degrees would be able to apply their drafting knowledge to engineering or architecture fields.

Students who complete the drafting certificate should be able to demonstrate an understanding of engineering graphic principles and should be able to generate two- dimensional technical drawings as well as 3D models of parts and assemblies.

### Intro to Geographical Information Systems

#### **Elective Credits** 3-5

Course ID	Title	Credits
NATR 125	Introduction to Geographical Information Systems	3.0
GEOG 215	Introduction to GIS	5.0

## **Drafting Certificate Elective Group**

#### **Elective Credits** 1-6

Up to 6 electives credits may be used to meet the 45 credit requirement; recommended electives listed below

Course ID	Title	Credits
ART 110	Drawing I	5.0
ART 132	3D Digital Design 1:Intro to 3D Computer Aided Modeling	5.0
MATH& 107	Math In Society	5.0
MATH& 141	Precalculus I	5.0
MATH& 142	Precalculus II	5.0
MATH& 146	Introduction to Statistics	5.0
MATH& 151	Calculus I	5.0
MATH& 152	Calculus II	5.0
MATH& 153	Calculus III	5.0
CHEM& 161	General Chemistry I	5.0
CHEM& 162	General Chemistry II	5.0
PHYS& 114	General Physics I W/Lab	5.0
PHYS& 115	General Physics II W/Lab	5.0
PHYS& 116	General Physics III W/Lab	5.0

# Cooperative Work Experience (Drafting Technology)

#### **Elective Credits 1-5**

Complete 1-5 credits within one of the following.

Course ID	Title	Credits
CWE 195	Work Experience Practicum	5.0
INDT 196	Cooperative Work Experience	1.0-5
BUS 196	Cooperative Work Experience	1.0-5