

## ENGINEERING

The Engineering Program includes two tracks: 1) Engineering Transfer and 2) Engineering Technology. The focus of the Engineering Technology track is to be job ready after graduation, although there are options for transfer after a third year at UCC. The transfer track closely follows the first two years of study for engineering programs at most universities in Oregon. The Engineering program has multiple educational and career pathways, and includes the following degrees and certificates.

### Pathway Certificate (12 credit minimum)

- Drafting
- GIS
- Surveying
- Water Quality

### Completion Certificate (45 credit minimum)

Engineering & Drafting Technician

### AAS Degree (90 credit minimum)

- Civil & Surveying Technology
- Applied Surveying Option, Civil & Surveying Technology
- Applied Water Quality Option, Civil & Surveying Technology

### AS Degree (90 credit minimum)

- Engineering
- Surveying & Geomatics

## ENGINEERING

### Drafting Pathway Certificate

#### PROGRAM MISSION

The Drafting Pathway Certificate program prepares students with the knowledge and skills to use Computer Assisted Drafting (CAD).

#### PROGRAM DESCRIPTION

The Drafting Pathway Certificate provides training for entry-level careers in Computer-Assisted Drafting (CAD). All courses in the certificate are found in the Civil Engineering & Surveying Technology, AAS degree.

#### PROGRAM OUTCOMES

Students who successfully complete the Pathway Certificate in Drafting will:

1. Demonstrate functional use of 3D computer-aided drafting and design software used for a variety of drawing techniques

#### CAREER CONSIDERATIONS

The Drafting Pathway Certificate prepares students for entry level jobs in CAD and focuses on introductory drafting skills for architectural, civil, mechanical, and manufacturing design and construction.

#### PROGRAM COURSE REQUIREMENTS

##### Year One

|                    |                                   |     |
|--------------------|-----------------------------------|-----|
| DRF 112            | Computer Aided Drafting (CAD) I   | 3   |
| DRF 113            | Computer Aided Drafting (CAD) II  | 3   |
| ENGR 245           | Engineering Graphics - SolidWorks | 3   |
| Approved Elective* |                                   | 3-4 |

**Total Credits (minimum) 12**

##### \* Approved Electives (Select one of following):

|         |                                |   |
|---------|--------------------------------|---|
| CIV 214 | Virtual Design - CAD - Civil3D | 3 |
| CIV 280 | Cooperative Work Experience    | 3 |
| DRF 116 | Structural Drafting            | 3 |
| GIS 234 | GIS I: Intro to GIS            | 4 |
| VC 114  | Intro to InDesign              | 3 |
| WLD 140 | Blueprint Reading & Sketching  | 3 |