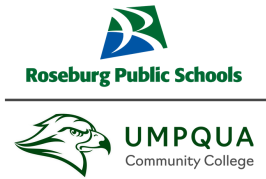




# CAREER PATHWAYS

Grow here. Learn here. Work here.



## Sciences - Civil Engineering & Survey Technology

The Associate of Applied Science (AAS) degree prepares graduates to be job ready after graduation in two years. Some of the courses are application based and will not transfer. However, it is possible to transfer with the AAS degree and a third year of coursework at UCC. Two quarters of calculus are included in the second-year of classes for the AAS degree. Civil engineering and surveying are some of the broadest fields of engineering, and are part of virtually all construction-related projects. Graduates have local, state-wide, and nation-wide employment opportunities. The field of civil engineering deals with planning, design, construction, and maintenance of private and public projects. Projects include highways, bridges, dams, subdivisions, water supply and wastewater systems. Land Surveyors perform a variety of important tasks such as boundary surveys, topographic mapping and construction staking. Civil Engineering and Surveying Technology graduates work with or in support of professional architects, engineers and land surveyors.

### CAREER PATHWAYS

**PATHWAY TYPES:**



- Civil Engineer
- Design Engineer
- City/County Engineer
- Project Engineer
- Geotechnical Engineer



**SALARY RANGE:** Varies widely by final field of study and chosen career path within field



**LOCAL INDUSTRY:**

- Knife River
- Urban Sanitation District
- RomTec Utilities
- Lone Rock Resources
- Cow Creek Band of Umpqua Tribe of Indians
- Roseburg Forest Products
- Governmental Agencies

**Available Pathway(s)**



**AVAILABLE PATHWAY:**  
**Civil Engineering & Survey Technology**  
 Associate of Applied Science  
 94-95 credits required  
 Two years of college coursework

# Engineering Pathway

CIVIL ENGINEERING & SURVEY TECHNOLOGY AAS		RHS
Math 9 Honors Engineering Graphics and Blueprint Reading		GRADE 9
Math 10 Honors Intro to Computer Aided Design (DRF112)		GRADE 10
Precalculus Computer Aided Mechanical Design (DRF113)		GRADE 11
Calculus (MTH251/252) Writing 121/122 (WR121Z) Honors Physics		GRADE 12
<b>Graduate from Roseburg High School and enroll at UCC</b>		
Com218Z Interpersonal Communication or PSY101 Psychology of Human Relations DRF112 Drafting and Design I ENGR111 Engineering Orientation I MTH111Z Precalculus I Functions WR121Z Composition I		YEAR 1 FALL
DRF113 Drafting and Design II ENGR112 Problem Solving and Technology MTH112Z Precalculus II Trigonometry WR227Z Technical Writing		WINTER
CIV214 Cad-Civil 3D-Virtual Design ENGR245 Engineering Graphics MTH251 Calculus I SUR161 Survey I		SPRING
CIV280 CWE-Engineering ENGR211 Statics GIS203 Digital Earth- Geospatial SUR162 Plane Survey II		YEAR 2 FALL
CIV280 CWE-Engineering ENGR213 Strength of Materials GIS234 GIS 1-Intro to Geographic Info SUR163 Route Surveying		WINTER
CIV280 CWE-Engineering ENGR212 Dynamics GIS235 GIS II Data Analysis - App SOIL205 Soil Science SOIL206 Soil Science Lab SUR242 Land Description - Cadastre^		SPRING

