



# **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





**Knife River Urban Sanitation District RomTec Utilities** Lone Rock Resources Cow Creek Band of Umpqua Tribe of Indians

**Governmental Agencies** 

**Roseburg Forest Products** 

### TWO PATHWAYS **AVAILABLE:**

**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
Graduate from Roseburg High School and	
enroll at UCC	
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



Civil Engineering & Survey Technology Associate of Applied Science Degree