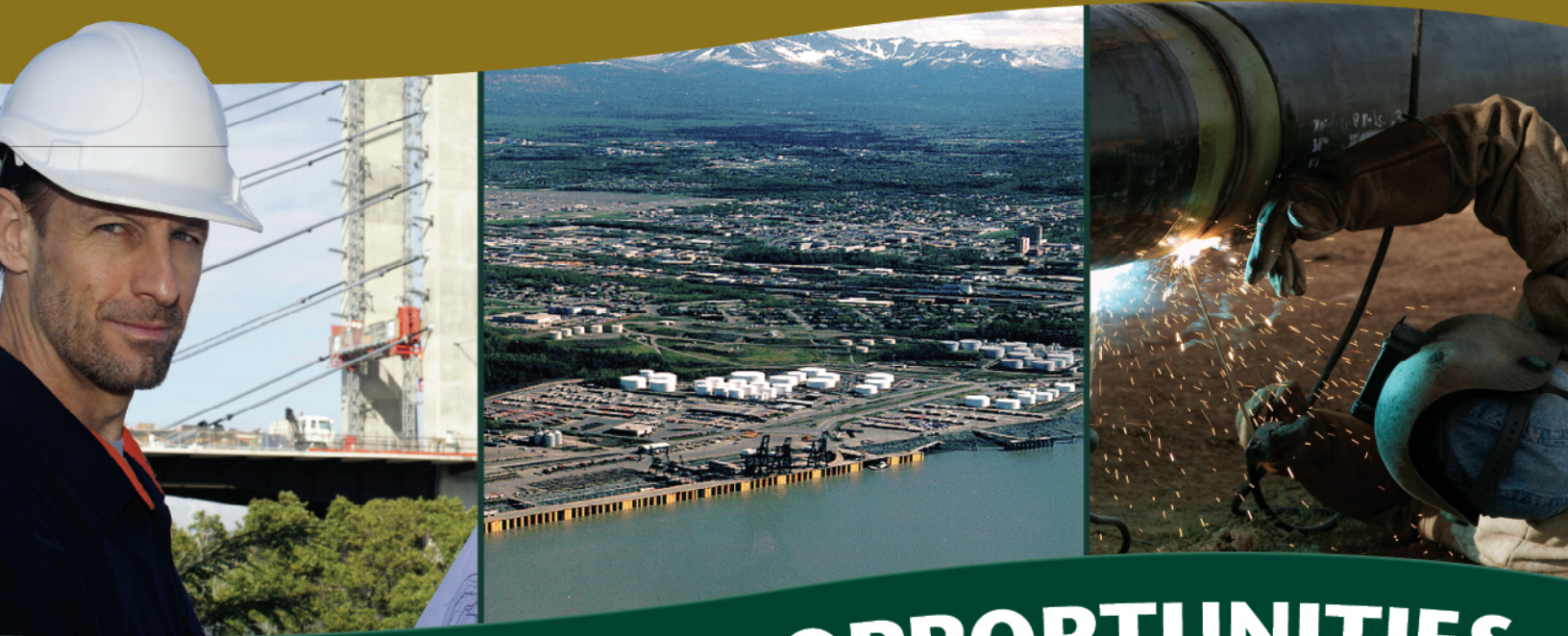


Civil; Port & Coastal Engineering (MS, MCE, GRAD CERT)



CAREERS WITH OPPORTUNITIES

Graduate students who seek a broad professional practice may pursue the Master of Civil Engineering degree while students who want a specialized program with an emphasis on research and advanced study can pursue a Master of Science in Civil Engineering. The Port and Coastal Engineering Graduate Certificate provides graduate engineers with specialized education to deal with problems of the coastal zone.

Educational Pathway Options

Bachelor of Science (BS)

4-5 Years

- Civil Engineering
- Engineering
 - ▶ Computer Systems
 - ▶ Electrical
 - ▶ Mechanical

Graduate Certificate

1-2 Years

Port & Coastal Engineering

A bachelor of science degree in an engineering discipline from an ABET-accredited program, or foreign equivalent is required.

Master's Degrees

1-3 Years

Civil Engineering

- Master of Science (MS)
- Master of Civil Engineering (MCE)

A baccalaureate degree in an engineering discipline from a regionally-accredited program, or foreign equivalent is required

CAREER CONNECTIONS

- Science, Mathematics, Engineering, & Research
- Natural Resources & Environmental Sciences
- Transportation, Distribution, & Logistics
- Architecture & Construction

APPLICATION PROCESS

ENROLLMENT SERVICES

- 1 Apply for admission at www.uaa.alaska.edu/admissions.
- 2 Submit official transcripts reflecting:
 - For MS and MCE – completion of an undergraduate degree in an engineering discipline from a regionally accredited institution
 - For Grad Cert – completion of a bachelor of science degree in an engineering discipline from an ABET-accredited institution
 - All graduate-level credit
- 3 TOEFL scores if applicable.
- 4 Contact 907.786.1900 for additional information.

The University of Alaska Anchorage has been continuously accredited by the Northwest Commission on Colleges and Universities since 1974. This brochure is for information purposes only and does not constitute a contract. UAA is an EO/AA employer and educational institution.

PROGRAM HIGHLIGHTS

Opportunities for:

- Teaching and research assistantships
- Tuition waivers
- Fellowships
- Research activities guided by program faculty in
 - ▶ Structural dynamics
 - ▶ Seismic engineering
 - ▶ Environmental engineering
 - ▶ Highway engineering
 - ▶ Sediment transport in rivers and the sea
 - ▶ Coastal engineering

PORT & COASTAL ENGINEERING (GRAD CERT)

▶ COMPLETE THE FOLLOWING COURSES (9 credits)

CE A674	Waves, Tides, and Ocean Processes (3)
CE A675	Design of Ports and Harbors (3)
CE A676	Coastal Engineering (3)

▶ COMPLETE ONE OF THE FOLLOWING COURSES (3 credits)

CE A677	Coastal Measurements and Analysis (3)
GEO A433	Hydrographic Surveying (3)

A total of 12 credits is required for this graduate certificate.

Note: A student who earns the Port & Coastal Engineering Graduate Certificate may apply up to 9 credits from the Certificate program toward other graduate degrees at UAA.

CIVIL ENGINEERING (MS, MCE)

▶ MASTER OF SCIENCE

Complete 30 credits of course and thesis work approved in advance by the student's graduate committee, of which 6 credits will be CE A699 Thesis. Within the 30 credits, students must complete with a grade of 'B' or better at least one course in each of the core competency areas of analysis, theory, design, and project management.

• Analysis

MATH A422	Partial Differential Equations (3)
MATH A423	Advanced Engineering Mathematics (3)
MATH A426	Numerical Methods (3)
STAT A402	Scientific Sampling (3)
STAT A601	Statistical Methods (3)

• Theory

AEST A601	Aquatic Processes Chemistry (3)
AEST A608	Fundamentals of Air Pollution (3)
CE A600	Fundamentals of Environmental Science and Engineering (3)
CE A603	Arctic Engineering (3)
CE A610	Engineering Seismology (3)
CE A631	Structural Finite Elements (3)
CE A633	Structural Dynamics (3)
CE A662	Surface Water Dynamics (3)
CE A663	Ground Water Dynamics (3)
CE A674	Waves, Tides, and Ocean Processes for Engineers (3)
CE A676	Coastal Processes (3)
CE A677	Coastal Measurements and Analysis (3)
CE A682	Ice Engineering (3)
CE A683	Arctic Hydrology and Hydraulic Engineering (3)
ME A664	Corrosion Processes and Engineering (3)

• Design

AEST A602	Water Quality Management (3)
AEST A603	Solid Waste Management (3)
AEST A613	Remediation (3)
CE A605	Chemical, Physical Water, and Wastewater Treatment Processes (3)
CE A606	Biological Treatment Processes (3)
CE A611	Geotechnical Earthquake Engineering (3)
CE A612	Advanced Foundation Engineering (3)
CE A634	Earthquake Engineering (3)
CE A675	Design of Ports and Harbors (3)
CE A681	Frozen Ground Engineering (3)
CE A684	Arctic Utility Distribution (3)
ES A411	Northern Design (3)

• Project Management

AEST A604	Regulatory and Permitting Processes (3)
ESM A601	Engineers in Organizations (3)
ESM A608	Legal Environment for Engineering Mgmt (3)
ESM A610	Cost Estimating (3)
ESM A613	Management of Technical People (3)
PM A601	Project Management Fundamentals (3)

▶ MASTER OF CIVIL ENGINEERING

Complete 30 credits of course work approved in advance by the student's graduate committee, of which 3 credits will be CE A686 Civil Engineering Project. Within the 30 credits, students must complete with a grade of 'B' or better at least one course in each of the core competency areas of analysis, theory, design, and project management.

CIVIL ENGINEERING: 907.786.1900
ACADEMIC ADVISOR: 907.786.1951
WEBSITE: www.engr.uaa.alaska.edu/programs/ce
EMAIL: ayced@uaa.alaska.edu

UAA ENROLLMENT SERVICES: 907.786.1480
ADDRESS: P.O. Box 141629, Anchorage, AK 99514-1629



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