



Certifications

Construction Managers can apply for a variety of professional certifications, which attest to the attainment of a specified body of knowledge and capability. In the field of transportation safety, the American Road and Transportation Builders Association (ARTBA) Safety Certification for Transportation Project Professionals provides an industry-recognized credential to those demonstrating specific transportation project safety competencies.

Year 5-6



Master's Degree in Civil or Construction Engineering or Construction Management

Year 6: Students complete electives and required research thesis or professional paper requirements for the degree.

Year 5: Students complete core and elective courses within their concentration while selecting specialized independent research activities.

Core Courses

Industry Law & Regulations
Quality Assurance & Risk Management
Project Delivery Systems
Cost Analysis and Management
Heavy Construction Estimating
Construction Procurement Systems

Safety Courses

Safety Risk Management
Leadership in Construction
Transportation Safety
Data-Driven Const. Health & Safety

Experiential learning includes planning studios / labs, internship, and field-

Year 3-4



Bachelor's Degree in Civil or Construction Engineering or Construction Management

Year 4: Students take senior-level courses and fulfill internship, fieldwork, or senior capstone requirements. Core courses may include heavy equipment methods, structural elements, and project management.

Year 3: Students take specialized technology and core courses such as design, estimating and bidding, mechanics, and foundations.

GE Courses

Science, Social Sciences, Humanities & Arts and Foundational Courses

Construction-Related Courses

Materials & Testing Methods
Design, Information Modeling, Documentation
Budgeting and Finance
Project Planning & Scheduling

Safety-Related Courses

Construction Safety
Transportation Safety
Safety Management
Risk Assessment
Incident Investigation
Work Zone Traffic Control
Senior Capstone
Internship

Experiential learning includes design courses, labs, internships, & research

Year 1-2



Associate Degree in Civil or Construction Engineering Technology

Year 1 and 2: Course requirements vary by institution. Students will complete institutional requirements for the degree sought. The Associate's degree will provide students with general education requirements as well as basic theoretical knowledge and practical skills in the chosen field. Students wishing to transfer into a 4-year degree program should work with an advisor early on to ensure they take all pre-requisite courses for their intended major.

General Education Courses

Students will develop writing, communication, math, and critical thinking skills.

Construction-Related Courses

AutoCAD
Surveying
Materials Structures & Properties
Concrete Technologies
GIS
Construction Docs & Specifications

Safety-Related Courses

Safety Management
Construction Safety
Incident Investigation
Risk Management

Transfer Program Prerequisites

Calculus
Chemistry I, II
Physics I, II
Applied Mechanics

Experiential learning includes labs, internships, co-ops, and fieldwork

Year 0



High School Diploma or G.E.D.

Construction or Engineering CTE coursework if available.