## Bachelor of Science in Construction Management

The Bachelor of Science in Construction Management (BSCM) prepares students to work as entry-level managers in the construction industry. Managers help control construction costs and schedules; administer contracts; determine construction means and methods; and manage people, material, and equipment while ensuring compliance with design criteria and safety standards.

The BSCM is nationally accredited by the American Council for Construction Education.

## **Admission Requirements**

Complete the Admission Requirements for Baccalaureate Programs (http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/ undergraduate/).

## **Graduation Requirements**

- Complete the General University Requirements for Baccalaureate Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/ baccalaureaterequirements/).
- Complete the General Education Requirements for Baccalaureate Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/ baccalaureaterequirements/gers/).
- Complete the following major requirements with a minimum grade of C:

Code	Title	Credits
Support Courses		
ACCT A201	Principles of Financial Accounting	3
ACCT A202	Principles of Managerial Accounting	3
ES A411	Northern Design	3
BA A241	Business Law I	3
BA A300	Organizational Theory and Behavior	3
ECON A101	Principles of Microeconomics	3
ECON A102	Principles of Macroeconomics	3
WRTG A212	Writing and the Professions	3
GEO A181	Construction Surveying	1
PHIL A301	Ethics	3
or PHIL A305	Professional Ethics	
PHYS A123	College Physics I	3
PHYS A123L	College Physics I Laboratory	1
Complete one of the foll laboratory class:	owing science courses with a	4

CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory		
GEOL A111 & A111L	Planet Earth and Planet Earth Laboratory		
Complete one additional above the 100 level in C	science course with laboratory at or HEM, ENVI, GEOL or PHYS	4	
Complete one of the following: 3-6			
MATH A221	Applied Calculus for Managerial and Social Sciences		
MATH A251	Calculus I		
MATH A251F	F.A.T. Calculus I		
STAT A253	Applied Statistics for the Sciences		
Core Courses			
AET A101	Fundamentals of Construction Documents	3	
AET A102	Methods and Materials of Building Construction	3	
AET A123	Codes and Standards	3	
AET A242	Mechanical, Electrical and Plumbing Systems	4	
AET A332	Structural Technology	3	
CM A163	Building Construction Cost Estimating	3	
CM A201	Construction Project Management I	3	
CM A202	Project Planning and Scheduling	3	
CM A232	Statics and Strength of Materials	3	
CM A263	Civil Construction Cost Estimating	3	
CM A301	Construction Project Management II	3	
CM A313	Soils in Construction	3	
CM A401	Construction Law	3	
CM A422	Sustainability in the Built Environment	3	
CM A440	Financial Management for Construction	3	
CM A450	Construction Management Professional Practice	3	
CM A460	Construction Equipment Management and Methods	3	
CM A495	Advanced Construction Management Internship	3	
OSH A405	Construction Industry Safety Management	3	
Total		101-104	

A minimum of 120 credits is required for the degree, of which 39 credits must be upper-division.

All BSCM majors are also required to sit for the eight-hour, comprehensive American Institute of Constructors, Associate

Constructor (Level 1) Exam as part of CM A450. CM A450 should be taken during the last or second-to-last semester before graduation.

## **Program Student Learning Outcomes**

- Create written communications appropriate to the construction discipline.
- Create oral presentations appropriate to the construction discipline.
- Create a construction project safety plan.
- Create construction project cost estimates.
- Create construction project schedules.
- Analyze professional decisions based on ethical principles.
- Analyze construction documents for planning and management of construction processes.
- Analyze methods, materials, and equipment used to construct projects.
- Apply construction management skills as a member of a multidisciplinary team.
- Apply electronic-based technology to manage the construction process.
- Apply basic surveying techniques for construction layout and control.
- Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.
- Understand construction risk management.
- Understand construction accounting and cost control.
- Understand construction quality assurance and control.
- Understand construction project control processes.
- Understand the legal implications of contract, common, and regulatory law to manage a construction project.
- Understand the basic principles of sustainable construction.
- Understand the basic principles of structural behavior.
- Understand the basic principles of mechanical, electrical and piping systems