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
AE A403 or ES A411	Arctic Engineering Northern Design	3
BA/JUST 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 or PHIL A305	Ethics Professional Ethics	3
PHYS A123	College Physics I	3
PHYS A123L	College Physics I Laboratory	1
Complete one of the following science courses with a laboratory class:		4
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	
Complete one additional science course with laboratory at or above the 100 level in CHEM, ENVI, GEOL or PHYS		4
Complete one of the following:		3-4
MATH A221	Applied Calculus for Managerial and Social Sciences	
MATH A251	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		**101-102**

A minimum of 120 credits is required for the degree, of which 42 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.

1. Create written communications appropriate to the construction discipline.

2. Create oral presentations appropriate to the construction discipline.

3. Create a construction project safety plan.

4. Create construction project cost estimates.

5. Create construction project schedules.

6. Analyze professional decisions based on ethical principles.

7. Analyze construction documents for planning and management of construction processes.

8. Analyze methods, materials, and equipment used to construct projects.

9. Apply construction management skills as a member of a multi-disciplinary team.

10. Apply electronic-based technology to manage the construction process.

11. Apply basic surveying techniques for construction layout and control.

12. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.

13. Understand construction risk management.

14. Understand construction accounting and cost control.

15. Understand construction quality assurance and control.

16. Understand construction project control processes.

17. Understand the legal implications of contract, common, and regulatory law to manage a construction project.

18. Understand the basic principles of sustainable construction.

19. Understand the basic principles of structural behavior.

20. Understand the basic principles of mechanical, electrical and piping systems