

# DESIGN AND CONSTRUCTION MANAGEMENT

College of Engineering and Mines  
Department of Civil and Environmental Engineering  
907-474-7241  
<http://cem.uaf.edu/cee/>

## Graduate Certificate

Minimum Requirements for Certificate: 15 credits

The graduate certificate in design and construction management is designed to advance the managerial skills and decision-making abilities of engineers and other professionals in the construction industry. The program was designed in collaboration with construction industry employers and continues to engage industry as a partner in the program. Engineers and other construction professionals will enhance their skills to help prepare them for more responsible jobs and help them advance to more responsible management positions.

The program permits flexibility of course selection within the major rubrics: human relations, communications, construction project management and technical construction areas.

## Graduate Certificate

1. Complete the following admission requirements:
  - a. A four-year ABET college degree in engineering and at least two years' construction management experience;  
or a four-year non-ABET college degree in engineering, science or mathematics and at least four years construction experience;  
or a four-year college degree and at least six years construction experience;  
or at least 10 years construction management experience.
2. Complete the general university requirements (page 215), and
  - a. Enroll in one course per year to remain in good standing.
  - b. The graduate advisory committee will be a construction management certificate faculty member or faculty committee as appointed by the dean of CEM.
  - c. Complete a graduate study plan after completing 5 credits.

3. Complete the graduate certificate requirements (page 216).
4. Complete 15 credits from three main construction management rubrics and two associated rubrics as approved by the student's advisory committee.
  - a. Human relations and communication  
MBA F607—Human Resources Management (3)  
or ESM F601—Managing and Leading Engineering Organizations (3)  
or other approved human relations courses.....4-6
  - b. Construction project management and scheduling  
CE F620—Civil Engineering Construction (3)  
or ESM F609—Project Management (3)  
or ESM F608—Legal Principles for Engineering Management (3)  
or other approved construction project management courses.....4-6
  - c. Technical management of construction and costs  
CE F451—Construction Cost Estimation and Bid Preparation (3)  
or CE F603—Arctic Engineering (3)  
or ESM F622 —Engineering Decisions (3)  
or other approved technical management of construction and costs courses.....4-6
  - d. Business and financial aspects of construction  
MBA F602—Accounting for Managers (3)  
or ESM F605—Engineering Economics (3).....0-3
  - e. Other technical areas  
CE F603—Arctic Engineering (3)  
or ENVE F644 —Environmental Laws and Permitting (3) .....0-3
5. Minimum credits required .....15