

Construction Management

Construction Management Major

Construction management is a combination of technology, construction techniques, and management to meet the needs of the rapidly growing construction industry. The program is designed to prepare students for the art of achieving maximum profit by efficient use of people, machines, materials and other resources to complete a construction project on time and to the satisfaction of the owner. A meld of engineering, construction, management and business gives the student a background and understanding of a management point of view in the construction industry. The Bachelor of Science in Construction Management program is accredited by the American Council for Construction Education (<http://www.acce-hq.org>)

Graduation Requirement

A minor in Business Administration offered by the College of Business is required for all B.S. in Construction Management students. Juniors and seniors are required to have a minimum cumulative GPA of 2.50 to be admitted into the minor program. A minor in Business Administration requires a minimum GPA of 2.50 in the courses that satisfy the minor. In addition, a cumulative GPA of 2.50 overall is required to graduate with a B.S. in Construction Management degree.

Educational Program Objectives

1. Provide to construction students the basic skills necessary to plan, organize and control resources to manage the overall construction process.
2. Provide to construction students the technical knowledge and problem solving skills for a career in construction.
3. Provide to construction students the knowledge and skills necessary to identify, define and compare design alternatives.
4. Provide to construction students necessary communication skills for the successful practice of the construction profession.
5. Provide to construction students the professional opportunities and skills to pursue life-long learning within the broader societal context of the construction profession.

Major Requirements

Major: Construction Management

Degree Type: B.S.Cons.M.

Minimum Credits Required for Degree: 124

General Education Requirements for Baccalaureate Degree

- A list of approved general education courses is available here (<http://bulletin.ndsu.edu/past-bulletin-archive/2017-18/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).
- General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review the major, minor, and program emphases requirements for minimum grade restrictions, should they apply.

Code	Title	Credits
Communication (C)		12
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing [†]		
Quantitative Reasoning (R) [†]		3
Science and Technology (S) [†]		10
Humanities and Fine Arts (A) [†]		6
Social and Behavioral Sciences (B) [†]		6
Wellness (W) [†]		2
Cultural Diversity (D) ^{*†}		
Global Perspectives (G) ^{*†}		
Total Credits		39

* May be satisfied by completing courses in another General Education category.

† May be satisfied with courses required in the major. Review major requirements to determine if a specific upper division writing course is required.

Major Requirements

Code	Title	Credits
Construction Management Core Requirements		
CM&E 111	Introduction to Construction Management and Engineering	1
CM&E 200	Construction Documents and Codes	3
CM&E 203	Building Construction: Methods and Materials	3
CM&E 204	Construction Surveying	3
CM&E 212	Construction Graphic Communications	3
CM&E 240	Financial Cost Concepts for Construction Managers	3
CM&E 250	Construction Statics and Mechanics	3
CM&E 260	Soils and Foundations	3
CM&E 301	Construction Technology and Equipment	3
CM&E 305	Pre-Construction Management	3
CM&E 315	Specifications and Contracts	3
CM&E 380	Construction Estimating: Quantities and Costs	3
CM&E 403	Scheduling and Project Control	3
CM&E 405	Construction Support Operations	3
CM&E 421	Electrical and Mechanical Construction	3
CM&E 430	Land Development	3
CM&E 450	Steel Design and Construction	3
CM&E 453	Concrete Design and Construction	3
CM&E 488	Construction Management Capstone	3
Additional Courses:		
CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory (May satisfy general education category S)	4
ENGL 320 or ENGL 321	Business and Professional Writing (May satisfy general education category C) Writing in the Technical Professions	3
GEOL 105	Physical Geology (May satisfy general education category S)	3
MATH 105 or MATH 107	Trigonometry Precalculus	3
MATH 146	Applied Calculus I (May satisfy general education category R)	4
PHYS 211 & 211L	College Physics I and College Physics I Laboratory (May satisfy general education category S)	4
PSYC 111	Introduction to Psychology (May satisfy general education category B)	3
STAT 330	Introductory Statistics	3
Business Minor Courses:		24
ACCT 102	Fundamentals of Accounting	3
ECON 105	Elements of Economics (May satisfy general education category B and G)	3
MGMT 320	Foundations of Management	3
MRKT 320 or FIN 320	Foundations of Marketing Principles of Finance	3
BUSN 431	Business Law I-Contracts, Property and Torts	3
BA Minor 300/400 Elec. I		3
BA Minor 300/400 Elec. II		3
BA Minor 300/400 Elec. III		3
Students must apply for the minor through the College of Business and maintain a minimum 2.50 cumulative GPA to be eligible to enroll in all 300/400 level courses offered by the College of Business		
Total Credits		106

Degree Requirements and Notes

- A student must complete at least 60 semester credits of professional level course work in his/her program while in residence and enrolled in the College of Engineering. Students transferring into the College of Engineering from programs with professional accreditation are exempt from this residency requirement but are subject to the University residency requirement.
- An overall minimum cumulative GPA of 2.50 in all courses and a minor in Business Administration with a minor GPA of 2.50 are required to graduate with a B.S. in Construction Management.
- A cumulative GPA of 2.50 is required for both internal and external transfer students into this program.