

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 money 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>).

The Pre-Program (Freshmen Level)

The Department of Construction Management and Engineering has a policy of no pre-selection for incoming freshmen. However, transfer students (internal and external) must have a cumulative grade point average (CGPA) of at least 2.50. New students are placed into the pre-professional plan of the program.

Professional Program (Sophomore, Junior and Senior Level)

Applications for admission to the Construction Management Professional Program will be approved subject to the following condition:

- The Construction Management Pre-Program must be completed with a cumulative grade point average (CGPA) of 2.75.

Graduation Requirement

Juniors and seniors are required to maintain a minimum CGPA to enroll in upper division courses offered by the College of Business (<http://www.ndsu.edu/business>). A minor in Business Administration with a CGPA of 2.50 is required to graduate with a B.S. in Construction Management.

Educational 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.

Required Degree Credits to Graduate: 127

General Education Requirements

First Year Experience (F):

UNIV 189	Skills For Academic Success (Students transferring in 24 or more credits do not need to take UNIV 189. (PP))	1
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Communication (C):

ENGL 110	College Composition I (PP)	3
ENGL 120	College Composition II (PP)	3
ENGL 320 or ENGL 321	Business and Professional Writing Writing in the Technical Professions	3
COMM 110	Fundamentals of Public Speaking (PP)	3

Quantitative Reasoning (R):

MATH 146	Applied Calculus I (PP)	4
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Science & Technology (S):

CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory (PP)	4
PHYS 211 & 211L	College Physics I and College Physics I Laboratory	4
GEOL 105	Physical Geology	3

Humanities & Fine Arts (A): Select from current general education list

6

Social & Behavioral Sciences (B):

ECON 105	Elements of Economics (PP)	3
PSYC 111	Introduction to Psychology (PP)	3

Wellness (W): Select from current general education list

2

Cultural Diversity (D): Select from current general education list

Global Perspectives (G):

ECON 105	Elements of Economics	
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Total Credits 42

Major Requirements

General Education Requirements 40

Construction Management Core Requirements

CM&E 111	Introduction to Construction Management and Engineering (PP)	1
CM&E 200	Construction Documents and Codes (PP)	3
CM&E 203	Building Construction: Methods and Materials	3
CM&E 204	Construction Surveying	3
CM&E 212	Construction Graphic Communications (PP)	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:		
BUSN 431	Business Law I-Contracts, Property and Torts	3
MATH 105	Trigonometry (PP)	3
or MATH 107	Precalculus	
STAT 330	Introductory Statistics	3
Business Minor Courses:		24
Students must apply for the minor through the College of Business and maintain a 2.50 cumulative GPA to be eligible to enroll in all 300/400 level courses offered by the College of Business		
Total Credits		127

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. Students transferring into the college from programs with professional accreditation are exempt from this residency requirement but are subject to the residency requirement of NDSU.
- Admission to the Pre-Professional Construction Management program requires a 2.50 cumulative GPA in college-level coursework if a student transfers from another NDSU program or from another university.
- Admission to the Construction Management Professional program requires a 2.75 cumulative GPA.
- A minor in Business Administration with a CGPA of 2.50 is required to graduate with a B.S. in Construction Management.