

# Master of Engineering in Civil Engineering

## Admission Requirements

1. Minimum general admission requirements are in the Admission section of the graduate catalog.
2. A baccalaureate degree in civil engineering or related field(s).
3. Graduate Record Examination scores on the General Test will be optional.
4. A cumulative Grade Point Average (GPA) of at least 2.75 for all undergraduate work or a GPA of at least 3.0 for the junior and senior years of undergraduate work (based on A = 4.00).
5. Satisfy the School of Graduate Studies' English Language Proficiency requirements as published in the graduate catalog.

## Degree Requirements

Students seeking the Master of Engineering degree at the University of North Dakota must satisfy all general requirements set forth by the School of Graduate Studies as well as particular requirements set forth by the Civil Engineering Department.

1. A minimum of 30-semester credits in a major option, including the credits granted for the design project and the research leading to the design project. All credits must be pre-approved by the advisor.
2. At least one-half of the credits must be at or above the 500-level.
3. A minimum of 15-credit hours of coursework.
4. A maximum of one-fourth of the credit hours required for the degree may be transferred from another institution.
5. Preparation of a written design project approved by the faculty advisor.

## Required Courses

1. Code	Title	Credits
<b>Environmental Option</b>		
CE 536	Environmental Chemistry	3
CE 537	Unit Operations in Water and Wastewater Treatment	3
CHE 504	Air Pollution Control	3
CE 595	Design Project	6
Electives		15
<b>Structures Option</b>		
CE 502	Structural Stability	3
CE 503	Structural Dynamics	3
CE 555 or CE 557	Prestressed Concrete-Analysis and Design Advanced Steel Design	3
CE 595	Design Project	6
Electives		15
<b>Transportation Option</b>		
CE 517	Transportation Asset Management	3
CE 518	Pavement Engineering	3
CE 519	Sustainable Pavements	3
CE 595	Design Project	6
Elective		15
<b>Water Resources Option</b>		
CE 526	Applied Hydraulics	3
CE 524	Open Channel Hydraulics	3
CE 525 or GEOE 417	Surface Hydrology Hydrogeology	3
CE 595	Design Project	6
Electives		15
<b>General Civil Engineering Option</b>		

CE 517 or CE 518 or CE 519	Transportation Asset Management Pavement Engineering Sustainable Pavements	3
CE 502 or CE 503	Structural Stability Structural Dynamics	3
CE 526 or CE 524 or CE 525	Applied Hydraulics Open Channel Hydraulics Surface Hydrology	3
CE 536 or CE 537	Environmental Chemistry Unit Operations in Water and Wastewater Treatment	3
CE 595	Design Project	6
Electives		12

## Combined Accelerated Degree Program (BS/ MEng) in Civil Engineering

To encourage undergraduate engineering students to extend their studies to include a graduate degree, the civil engineering department College of Engineering and Mines has a combined program that permits students to earn both a bachelor's and master's degree. This program allows students to designate two three-credit graduate courses to count for both degrees. The selected courses must have graduate course standing and be designated when a student requests admission to the program.

Students may be admitted to the Civil Engineering Combined Degree program after the completion of 60 credit hours toward the bachelor's degree with a GPA of at least 3.3 and before completion of the bachelor's degree.

## Accelerated Bachelor and Master's (ABM) in Civil Engineering

### Accelerated Bachelor's/Master's (ABM) 5 Year Degree Program Admission Requirements

The ABM degree program, a unique opportunity exclusively for exceptional undergraduate students at UND, allows you to complete the requirements for both the bachelor's and master's degrees at an accelerated pace. All requirements for both degrees must be met, and you may double count up to 12 graduate-level credits towards the requirements for both your Bachelor's and Master of Engineering in Civil Engineering degree requirements. As an ABM student, you must obtain your Master of Engineering degree in Civil Engineering within 12 months of completing the bachelor's degree, provided the degree requirements can be met in that timeframe.

High achieving high school students (GPA of at least 3.5/4.0 and an ACT score of 25 or higher) will initially be considered for "identified" status and become eligible for formal admission when they meet the same criteria that undergraduates must meet for admission into the ABM program. Admission is a competitive process. The following are the minimum eligibility requirements:

1. Students must have completed a minimum of 60 credits, including credits earned from advanced placement and dual credit. Students must apply before completing their undergraduate degree.
2. Transfer students with a minimum of 60 credits-whether from the transfer institution alone or in combination with UND credits-must have a minimum cumulative GPA of 3.5/4.0 at the time of admission to the ABM program.
3. Students must have a minimum cumulative GPA of 3.5/4.0 at UND at the time of admission into the ABM program.
4. ABM program applicants must submit the standard application to the School of Graduate Studies, the application fee, a personal statement, and transcripts.
5. Additionally, ABM program applicants must submit a detailed Program of Study that describes the 12 credits of double counted courses, the courses that will be taken after being accepted into the ABM program, the courses that will be taken before graduation from the Bachelor program, and the expected graduation date for each degree. The submitted program of study must be signed by the student, the student's undergraduate advisor, the student's graduate advisor, and the Graduate Program Director.

## **Degree Requirements**

The School of Graduate Studies lists the requirements for the Master of Engineering degree in the graduate school catalog.