CIVIL ENGINEERING MINOR

Contacts

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Faculty

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Description

The civil engineering minor is designed to give students the opportunity to learn and apply basic engineering knowledge to solve problems related to the analysis, design and construction of civil infrastructure.

Students enrolled in this program have the option to focus on one specific discipline or explore several areas of civil engineering.

Admission

This minor is available to all University students who have the necessary prerequisites (see the section on restrictions) and have a cumulative GPA of 2.00 or above on a space-available basis. To be admitted to the program, students must submit a Declaration of Minor form signed by their academic advisor, the civil engineering minor coordinator, and the academic dean of their home school/college.

Student Learning Outcomes

Upon completion of the program, students will be able to:

1. Apply mathematics and engineering principles to solve simple civil engineering problems.
2. Carry out analysis and design in at least one of the following civil engineering disciplines: construction and infrastructure engineering, geotechnical engineering, structural engineering.
3. Analyze and interpret data and use engineering judgment to draw conclusions.

Requirements

To complete a minor in civil engineering, students are required to declare the minor using the minor declaration form, and take a minimum of six courses (at least 18 credits) as described below with a combined GPA of at least 2.00.

Code	Title	Credits
Core Courses		
ECS 221	Statics	3
CEE 325	Mechanics of Materials	3
Focus Areas		
Select two courses selected from any one of the following three focus areas:		6-7
Construction and Infrastructure Engineering		
CEE 401	Construction Engineering and Project Management	
CEE 405	Construction Estimating and Scheduling	
CEE 465	Modern Urban Infrastructure	
Any 300 level and above CEE courses on construction engineering and management (3 Credits)		
Geotechnical Engineering		
CEE 337	Introduction to Geotechnical Engineering	
CEE 338	Foundation Engineering	
Structural Engineering		
CEE 331	Analysis of Structures and Materials	
CEE 332	Design of Concrete Structures	
Select two Additional 300 Level and Above CEE Courses		6-7
Total Credits		**18-20**

Restrictions

Students enrolled in this program should have taken MAT 295 Calculus I, MAT 296 Calculus II, and PHY 211 General Physics I; or their equivalents.

Notes

Student who do not have the above prerequisites should seek advice from the minor coordinator before enrollment.