MS Civil Engineering – Construction Engineering

This course plan serves as an example of the program. Program requirements and course offerings are subject to change.

Fall 2024	Spring 2025
● Core Course (4 units) ● Core Course (4 units)	● Core Course (4 units) ● Approved Elective (4 units)
Fall 2025	Spring 2026
● Approved Elective (4 units) ● Approved Elective (4 units)	● Approved Elective (4 units)

Core Courses (12 units)

- CE 501: Architecture, Engineering and Construction Practices (4 units)
- CE 502: Construction Business (4 units)
- CE 569: Project Controls (4 units)

Approved Electives (16 Units)

- CE 402: Computer Methods in Engineering (2 units)
- CE 412: Construction Contracts and Law (2 units)
- CE 462: Construction Methods and Equipment (2 units)
- CE 469: Sustainable Design & Construction (2 units)
- CE 470: Building Information Modeling: Project Visualization and Simulation (4 units)
- CE 525: Engineering Mathematical Analysis (3 units)
- CE 526: Engineering Mathematical Methods (4 units)
- CE 554: Risk and Reliability Analysis for Civil Infrastructure Systems (3 units)
- CE 558: International Construction and Engineering (3 units)
- CE 573: Advanced Technologies in AEC Practices (4 units)
- CE 574: Construction Means & Methods (4 units)
- ENE 505: Energy and the Environment (4 units)
- CSCI 455x: Introduction to Programming systems Design (4 units)
- MATH 501: Numerical Analysis and Computation (4 units)
- ISE 530: Optimization Methods for Analytics (3 units)