## Civil and Environmental

### Master of Engineering: 30 Credits / 10 Courses

Students in the Master of Engineering in Civil and Environmental engineering program must focus on one of four areas of study:
- Geotechnical and Pavements
- Structures
- Environmental and Water Resources
- Transportation

In addition to the recommended courses in a given area, students may select technical electives approved by the academic advisor. All electives must be part of an integrated program of study. There is no research or thesis required for this degree.

#### Geotechnical and Pavements (choose 6):

- ENCE441 Foundation Design
- ENCE444 Experimental Methods in Geotechnical Structural Engineering
- ENCE640 Advanced Soil Mechanics
- ENCE641 Advanced Foundations Systems
- ENCE644 Adv. Pavement and Civil Engineering Materials
- ENCE645 Geotechnics of Waste Disposal
- ENCE646 Geosynthetic Engineering
- ENCE647 Slope Stability and Seepage
- ENCE741 Earth Retaining Structures
- ENCE743 Soil Dynamics and Earthquake Engineering
- ENCE744 QA/QC and Specification for Highway Materials
- ENPM808Q Forensic Engineering

Geotechnical and Pavements core courses can be supplemented with Structures courses

#### Transportation (choose 6):

- ENCE670 Highway Traffic Characteristics and Measurements
- ENCE672 Regional Transportation Planning
- ENCE673 Urban Transportation
- ENCE674 Urban Transit Planning and Rail Transport Engineering
- ENCE675 Airport Planning and Design
- ENCE676 Highway Traffic Flow Theory
- ENCE677 OR Models for Transportation Systems Analysis
- ENCE681 Freight Transportation Analysis
- ENPM808Q Forensic Engineering

#### Environmental and Water Resources (choose 6):

- ENCE630 Environmental and Water Resource Systems I
- ENCE631 Hydrologic and Nonpoint Pollution Models
- ENCE634 River Engineering
- ENCE635 Geographic Info. Systems for Watershed Analysis
- ENCE652 Biological Principles of Environmental Engineering
- ENCE655 Environmental Behavior of Organic Pollutants
- ENCE656 Environmental and Water Resource Systems II
- ENCE730 Unit Operations of Environmental Engineering
- ENCE756 Bioremediation
- ENPM808Q Forensic Engineering
- ENPM8090 River Engineering

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**KEY**

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**DISCLAIMER:** All offerings are tentative and subject to change.  

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