Civil Engineering MS and MCE Recommended Course of Study

Technical Area: Structural Engineering

Required Core Civil Engineering Courses:

- CE 5043 Advanced Civil Engineering Statistics or STA 5103 Applied Statistics or ES 5023 Environmental Statistics
- CE 5143 Numerical Methods
- If MS, CE 5983 Master’s Thesis (6 credits)
- If MCE, CE 5991 Graduate Seminar (1 credit)

Prescribed Courses:

- CE 5713 Advanced Structural Analysis
- CE 5713 Dynamics and Vibrations/ Structural Dynamics and Mechanical Vibrations
- Advanced Steel Design
- Advanced Reinforced Concrete

Recommended Elective Courses:

- CE 5023 Finite Elements
- ME 5413 Advanced Solid Mechanics
- CE 5123 Bridge Engineering
- CE 5153 Prestressed Concrete
- CE 5713 Experimental Stress Analysis
- CE 5713 Non-Linear Finite Elements
- CE 5713/ME 6973 Advanced Reliability Techniques/Reliability and Risk Analysis
- CE 5713 Advanced Reinforced Concrete Behavior
- CE 5713 Steel Design for Nuclear Facilities
- CE 5713 Earthquake Engineering
- CE 5713 Plates and Shells
- ME 5453 Advanced Strength of Materials
- ME 5013 Non-Destructive Evaluation
- ME 5743 Composite Materials
- ME 6043 Continuum Mechanics
- ME 6663 Advanced Fatigue and Fracture