CIVIL ENGINEERING

- Master’s of Civil Engineering
  *Focus Areas: Geotechnical Engineering; Structural Engineering*
- Graduate Certificate in Civil Engineering

COURSES

MATHEMATICS COURSES

SELECT ONE
535.441 Mathematical Methods for Engineers
615.441 Mathematical Methods for Physics and Engineering

COURSES BY FOCUS AREA

The focus areas offered represent related groups of courses that are relevant for students with interests in the selected areas. The focus areas are presented as an aid to students in planning their course schedules and are only applicable to students seeking a Master’s degree.

Focus areas are not required for this program. They do not appear as official designations on a student’s transcript or diploma. Students who do not identify with geotechnical engineering or structural engineering may work with their advisor to select a broad yet cohesive group of courses to make up a general program of study in Civil Engineering.

GEOTECHNICAL ENGINEERING

CORE COURSES
565.475 Advanced Soil Mechanics
565.480 Earth Engineering

ELECTIVES (SELECT AT LEAST FOUR)
575.426 Hydrogeology
575.429 Modeling Contaminant Migration through Multimedia Systems
565.625 Advanced Foundation Design
565.635 Ground Improvement Methods
565.640 Instrumentation in Structural and Geotechnical Engineering
565.645 Marine Geotechnical Engineering
575.703 Environmental Biotechnology
565.742 Soil Dynamics and Geotechnical Earthquake Engineering
565.745 Retaining Structures and Slope Stability

STRUCTURAL ENGINEERING

CORE COURSES
565.415 Applied Finite Element Methods
565.600 Structural Mechanics

ELECTIVES (SELECT AT LEAST FOUR)
565.429 Preservation Engineering: Theory and Practice
565.430 Design of Wood Structures
565.605 Advanced Reinforced Concrete Design
565.620 Advanced Steel Design
565.629 Preservation Engineering in the Urban Context
565.630 Prestressed Concrete Design
565.640 Instrumentation in Structural and Geotechnical Engineering
565.660 Design of Ocean Structures
565.752 Structural Dynamics
565.756 Earthquake Engineering I
565.758 Wind Engineering
565.784 Bridge Design and Evaluation

Please refer to the course schedule (ep.jhu.edu/schedule) published each term for exact dates, times, locations, fees, and instructors.