MS in Civil and Environmental Engineering (Geotechnical Specialization)

A MS degree is comprised of 45 units of 400/500 level coursework. The following is a list of potential courses that can be taken to satisfy the unit requirements for students who want to specialize in geotechnical engineering.

Core Courses

CE 481 Shallow Foundation Analysis and Design
CE 482 Subsurface Exploration*
CE 486 Geological Engineering
CE 487 Rock Slope and Foundation Design
CE 581 Advanced Geotechnical Engineering*
CE 582 In Situ Testing*
CE 583 Geotechnical Earthquake Engineering
CE 584 Lateral Support Systems*
CE 585 Slope Stability Analysis
CE 586 Deep Foundation Analysis and Design*
CE 587 Geoenvironmental Engineering
CE 588 Ground Improvement
CE 589 Geosynthetics Engineering

Related Courses

BRAE 446 CAD Software for Land Modeling
BRAE 447 Advanced Surveying with GIS Applications
BRAE 532 Water Wells and Pumps
CE 404 Applied Finite Element Analysis
CE 407 Structural Dynamics
CE 434 Groundwater Hydraulics and Hydrology
CE 454 Structural Design
CE 457 Bridge Engineering
CE 488 Engineering Risk Analysis
CE 521 Airfield and Highway Pavement Design
CE 537 Groundwater Contamination
CE 552 Analysis and Seismic Design of Reinforced Concrete
CE 557 Seismic Analysis and Design for Civil Engineers
CE 559 Prestressed Concrete Design
CRP 458 Hazard Mitigation and Design
GEOL 401 Field Geology Methods
GEOL 402 Geological Mapping
GEOL 415 Structural Geology
GEOL 420 Applied Geophysics
SS 423 Soil and Water Chemistry
SS 442 Soil Vadose Zone Remediation

*offered on 1.5 year rotation or offered infrequently