Master's of Science in Civil Engineering Program Plan

Student Information

Name ______________________________

Student # ______________________________

UW NetID ______________________________

Program ☐ Thesis ☐ Non-Thesis

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Faculty Adviser Signature Date

Area of Study (select one)

☐ Construction, Energy & Sustainable Infrastructure

☐ Environmental Engineering (select subarea)

☐ Geotechnical Engineering

☐ Hydrology & Hydrodynamics (select subarea)

☐ Structural Engineering

☐ Transportation Engineering

Quarter		
Year		
Course #	Title	Credits

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Course #	Title	Credits

Submit your approved Program Plan to the Graduate Advisers in More 201 by the end of your first quarter and an updated plan in your final quarter. Failure to do so may delay graduation.

Master's of Science in Civil Engineering Program Plan

Geotechnical Engineering - Research Track (Thesis Option)

General Degree Requirements (42 total credits)

- ☐ 9 credits CEE 700 - Thesis (max 12 credits with faculty approval)
- ☐ 18 credits minimum 500 level coursework
- ☐ 18 credits minimum of 400-500 level coursework
- ☐ 3 credits minimum outside of CESG coursework
- ☐ All CEWA coursework (except seminars) taken for numeric grade
- ☐ 3 credits maximum of CEE 600 - Independent Study
- ☐ 3.0 Minimum cumulative GPA overall
- ☐ 3.0 Minimum cumulative GPA in Geotechnical coursework
- ☐ 2.7 minimum grade for a course to count
- ☐ 499 credits do not count towards a graduate degree
- ☐ 300 and below coursework does not count towards a graduate degree
- ☐ 6 year max to complete degree (including official On Leave status)
- ☐ 6 credits maximum of approved transfer credits

Required Coursework

- ☐ CESG 561 (prev. CEE 599) Adv Soil Mech (4)
- ☐ CESG 562 (prev. CEE 527) Adv Geotech Lab (5)
- ☐ CESG 563 (new) Phys-chem Aspects of Soil Beh (3)
- ☐ CESG 564 (prev. CEE 599) Computational Geomechanics (4)
- ☐ CESG 565 (prev. CEE 599) Soil Dynamics (3)
- ☐ CESG 566 (new) Slope Stability and Landslides (3)
- ☐ CESG 571 (prev CEE 599) Case Histories (3)
- ☐ CESG 567 (prev. CEE 523) Advanced Foundation Engineering (3)
- ☐ CESG 568 (prev. CEE 599) Geotechnical Earthquake Eng (3)
- ☐ CESG 569 (prev. CEE 599) Geological Eng & Rock Mechanics (3)
- ☐ CESG 570 (new) Geosystems Engineering (3)

Note: There will be updates to the Geotech core coursework numbering over 2018-19. The titles of the courses will not change. If you have any questions please speak to your faculty or academic adviser.

Suggested Electives

The remaining course requirements for the MSCE degree can be satisfied by any 5XX and some 4XX courses in the CEWA program, as well as a variety of relevant courses from other departments at the UW. Students are encouraged to explore the availability of these courses and decide on an individual plan of study that balances depth and breadth, in line with the student's career goals, with guidance and approval from their faculty adviser.

Note: This is not a comprehensive list but rather suggestions for some relevant courses. Refer to the UW Time Schedule or the corresponding department for course offering details. Students should always confirm their elective choices with their faculty adviser.

- AA 540/541 Finite Element Analysis I & II (3 each)
- AMATH 506 Applied Probablility Statistics (4)
- AMATH 581, 582, 583 Scientific Computing (5)
- AMATH 584, 585, 586 Numerical Analysis (5)
- ARCH 574 Design and Construction Law (3)
- ATM S 552 Objective Analysis
- CESG 508 (prev. CEE 503) Materials Modeling (3)
- CESG 501 (prev. CEE 501) Structural Mechanics
- ESS 512 Seismology
- ESS 522 Geophysical Data Collection and Analysis
- ESS 523 Geophysical Inverse Theory
- STAT 504, 506 Applied Regression, Applied Prob. & Stat.
- STAT 512 Statistical Inference
- STAT 520 Spectral Analysis of Time Series