# Master's of Science in Civil Engineering Program Plan

## Student Information

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<th>Name</th>
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<td>Student #</td>
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<td>UW NetID</td>
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Program  □ Thesis  □ Non-Thesis

## Area of Study (select one)

- □ Construction, Energy & Sustainable Infrastructure
- □ Hydrology & Hydraulics
- □ Environmental Engineering
- □ Structural Engineering
- □ Geotechnical Engineering
- □ Transportation Engineering

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<tr>
<th>Quarter</th>
<th>Year</th>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
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Faculty Adviser Signature  Date

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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)
☐ 33 credits of coursework
☐ 9 credits of CEE 700 - Master's Thesis
(max 12 credits with faculty approval in place of 3 coursework credits)

Professional Master's Program (Coursework Option)
☐ 42 credits of coursework

General Degree Requirements (42 total credits)
☐ 18 credits minimum 500 level coursework
☐ 18 credits minimum of 400-500 level coursework
☐ 3 credits minimum outside of CESG coursework
All CESG coursework (except seminars) taken for numeric grade

Required Coursework
Autumn Quarter
☐ CESG 561 Adv Soil Mech (4)
Winter Quarter
☐ CESG 566 Slope Stability and Landslides (3)
Spring Quarter
☐ CESG 567 Advanced Foundation Engineering (3)

Required Electives
19 credits of the following courses are required for PMP student, 15 credits for Thesis Students
Autumn Quarter
☐ CESG 562 Adv Geotech Lab (5)
☐ CESG 563 Phys-chem Aspects of Soil Beh (3)
Winter Quarter
☐ CESG 564 Computational Geomechanics (4)
☐ CESG 565 Soil Dynamics (3)
☐ CESG 571 Case Histories (3)
Spring Quarter
☐ CESG 567 Advanced Foundation Engineering (3)
☐ CESG 569 Geological Eng & Rock Mechanics (3)

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.

AA 540/541 Finite Element Analysis I & II (3 each)
AMATH 506 Applied Probability 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 Materials Modeling (3)
CESG 501 Structural Mechanics
ESS 512 Seismology
ESS 522 Geophysical Data Collection and Analysis
ESS 523 Geophysical Inverse Theory
STAT 512 Statistical Inference
STAT 520 Spectral Analysis of Time Series
STAT 526 Spectral Analysis of Time Series