Water Resources Engineering MSCE Option

For thesis, report, or courses-only options, the core courses and four engineering or other appropriate electives must be taken. One course in geographic information systems must be included. The additional courses for the latter two non-thesis options should be determined after consulting the graduate faculty advisor. In the list below, the following abbreviations appear in parentheses.

f = offered in fall semester s = offered in spring semester ss = offered in summer session [r] = rotating, non-annual course [course] = prerequisite

Core Courses

CE 5360 Open Channel Hydraulics (f)

CE 5361 Surface Water Hydrology (s)

CE 5362 Surface Water Modeling (s [CE 5360])

CE 5363 Groundwater Hydrology (s)

Engineering Electives

CE 5364 Groundwater Transport Phenomena (f, [CE 5363])

CE 5365 Stormwater Management and Erosion Control Theory (ss)

CE 5366 Water Resources Management (f[r])

CE 5368 Surface Water Quality Modeling (f[r])

CE 53xx Stochastic Hydrology (new course to be added, s[r])

CE 5391 Advanced Water Treatment (s, [ENVE 5307])

ENVE 5307 Physical and Chemical Wastewater Treatment (f)

ENVE 5399 Biological Municipal Wastewater Treatment (s, [ENVE 5307])

Other environmental, civil, or other engineering graduate course approved by graduate advisor

Non-engineering Electives

STAT 5384 Statistics for Engineers and Scientists I (f)

GEOG 5300 Geographic Information Systems (f,s)

GEOG 5301 Remote Sensing of the Environment (f,s)

NRM 6305 Geospatial Technologies in Natural Resources Management (ss)

GEOL 5428 GIS in Natural Science and Engineering (f)

Other graduate courses as approved by graduate advisor

Research Courses

CE 6000 Thesis

CE 6330 Master's report (sign up for report the last semester before graduation)

CE 7000 Research (only for thesis option)

Program Requirements

- The first semester here, students must submit a degree program to the Graduate School.
- .Scholarships run from the beginning of the fall semester to the start of the next fall semester; to maintain the scholarship, a GPA of 3.5 is required.
- The three program options that are offered are as follows.

Thesis Option	Report Option	Exam Option
24 hrs - Course Work	27 hrs - Course Work	30 hrs - Course Work
6 hrs - Thesis	3 hrs - Report	Comprehensive Exam
30 hrs - Total	30 hrs - Total	30 hrs - Total