

MS in Civil and Environmental Engineering (Water Resources 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 water resources engineering.

CE/ENVE Electives

CE 431 Coastal Hydraulics I (4)
CE 432 Coastal Hydraulics II (4)
CE 433 Open Channel Hydraulics (4)
CE 434 Groundwater Hydraulics and Hydrology (4)
CE 435 Engineering Hydrology (4)
CE 440 Hydraulic Systems Engineering (4)
CE 533 Advanced Water Resources Engineering (4)
CE 535 Water Resources Systems Planning and Analysis (4)
CE 536 Computer Applications in Water Resources with GIS (4)
CE 537 Groundwater Contamination (4)
CE 538 Urban Water Systems (4)
CE 539 Environmental Hydraulics (4)
ENVE 438 Water and Wastewater Treatment Design (3)
ENVE 516 Advanced Environmental Modeling (4)
ENVE 535 Physico-Chemical Water and Wastewater Treatment (4)
ENVE 536 Biological Wastewater Treatment Processes Engineering (4)
ENVE 537 Decentralized Wastewater Management (4)
ENVE 542 Sustainable Environmental Engineering (4)

Outside CE/ENVE Electives

CRP 408 Water Resource Law and Policy (3)
ERSC 415 Applied Meteorology and Climatology (4)
BRAE 435 Drainage (4)
BRAE 437 Conservation Engineering (3)
BRAE 438 Drip/Micro Irrigation (4)
BRAE 521 Systems Analysis of Agricultural Systems (4)
BRAE 522 Instrumentation Control/Microprocessors (4)
BRAE 532 Water Wells and Pumps (4)
BRAE 533 Irrigation Project Design (4)
IME 541 Advanced Operations Research (4)
FPE 523 Water-based Fire Suppression (4)