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) (Winter)
- CE 432 Coastal Hydraulics II (4) (Spring)
- CE 433 Open Channel Hydraulics (4) (Fall)
- CE 434 Groundwater Hydraulics and Hydrology (4) (Winter and Spring)
- CE 435 Engineering Hydrology (4) (Fall)
- CE 440 Hydraulic Systems Engineering (4) (Winter)
- CE 474. Environmental Compliance and Permitting (2) (Winter)
- CE 488. Engineering Risk Analysis (4) (Fall)
- CE 533 Advanced Water Resources Engineering (4) (Spring)
- CE 536 Computer Applications in Water Resources with GIS (4) (Winter)
- CE 537 Groundwater Contamination (4) (Fall)
- CE 538 Urban Water Systems (4) (Spring)
- CE 539 Environmental Hydraulics (4) (Winter)
- CE 570 Extreme Events (4) (Spring)
- ENVE 438 Water and Wastewater Treatment Design (3) (Spring)
- ENVE 535 Physico-Chemical Water and Wastewater Treatment (4) (Fall)
- ENVE 536 Biological Wastewater Treatment Processes Eng. (4) (Winter)
- ENVE 537 Decentralized Wastewater Management (4) (Spring)
- ENVE 542 Sustainable Environmental Engineering (4) (Fall)

**Outside CE/ENVE Electives**
- CRP/NR 408 Water Resource Law and Policy (3) (Spring)
- BRAE 532 Water Wells and Pumps (4) (Spring)
- NR 418. Applied GIS (3) (Fall, Winter, Spring)
- NR 420 Watershed Assessment and Protection (4) (Winter)
- NR 422. Stream Measurements and Water Quality Monitoring (1) (Spring)
- ERSC 442. Applied Environmental Groundwater Hydrology (4) (Spring)
- ERSC 443. Applied Environmental Contaminant Transport (4) (Spring)