

## Master of Science in Civil Engineering/PhD Engineering

Area of Emphasis – Hydraulics and Water Resources Engineering

### Course Requirements

Bachelor of Science in Civil Engineering or must take sequence of required undergraduate courses first.

Required for Degree: 32 credits total – 24 credits coursework, 6 credits thesis, 2 credits seminar.

### Suggested Courses:

Course Number	Course Name	Credits
CE 541	Hydrogeology	3
CE 542	Intermediate Hydrology	3
CE 545	Open Channel Hydraulics	3
CE 547	GIS in Water Resources Engineering	3

### Required Courses for Master's Students:

CE691	Seminar (2 semesters, 1 credit each)	2
CE599	Thesis – Major Advisor	6

### Hydraulics/WR Electives:

Course Number	Course Name	Credits
CE 531	Physical-Chemical Water & Wastewater Treatment	3
CE 534	Environmental Engineering Chemistry	3
CE 536	Biological Wastewater Treatment	3
CE 539	Radioactive Waste Management	3
CE 540	Design of Hydraulic Systems	3
CE 560	Advanced Soil Mechanics	3
CE 563*	Earth Structures	3

\*Nominally offered every other year.

Students must work with their faculty advisor to identify other appropriate elective courses for this degree program.

Note: Course offerings are subject to change each semester based on enrollment and instructor availability.

Revised October 2015