

**Sample Course Plan for Coursework MSCE: Water Resources****Assumed student background**

The sample course plan shown below was designed assuming that a student has taken (as a minimum) CEE 3620 (Water Resources Engineering) and CEE 3501/3503 (Environmental Engineering) or equivalents.

Requirements: 30 credits *minimum* (12 maximum credits at 3000-4000 level; 18 credits at 5000 level)

Sample Coursework List

	Credits	Semester
1) CEE 4507 – Distribution and Collection w lab	3	Spring
2) CEE 4620 – River & Floodplain Hydraulics	3	Fall
3) CEE 5501 - Environmental Process Engineering	3	Fall
4) CEE 5504 – Lake and River Management	3	Spring
5) CEE 5630 – Advanced Hydrology	3	Fall
6) CEE 5640 – Stormwater Management and LID	3	Summer
7) CEE 5665 – Stream Restoration	3	Spring
8) CEE 5666 – Water Resources Planning & Management	3	Fall
9) CEE 5800 – Mathematical Modeling of Earth Systems	3	Fall
10) Systems Elective		

Systems Elective (Must take at least one of these courses.)

CEE 5710 – Modeling and Simulation Applications	3	Fall
CEE 5730 – Probabilistic Analysis and Reliability	3	Fall
CEE 5740 – Introduction to System Identification	3	Spring
CEE 5760 – Optimization Methods	3	Spring

Sample Graduate Electives

CEE 4505 – Surface Water Quality Engineering w lab	3	Fall
CEE 5690 – Special Topics in Water Resources	1-3	Fall/Spr/Sum
CEE 5520 – Introduction to Hydrodynamic Modeling	3	Spring
BL 5447 – Stream Ecology & Fish Biology	4	Fall
FW 3540 – Intro to GIS for Nat. Res. Manage.	4	Spring
FW 4220 - Wetlands	4	Fall
FW 4370 – Forest & Landscape Hydrology	3	Spring
FW 4540 – Remote Sensing of the Environ.	3	Fall
FW 5510 – Watershed Analysis and Management	3	Fall
FW 5550 – Geographical Information Systems w/Lab	4	Spring
FW 5555 - Adv GIS Concepts & Analysis	3	Spring
FW 5556– GIS Project Management w lab	3	Spring
GE 4800 - Groundwater Engineering	3	on demand

Disclaimer: This course plan is meant to serve as a sample for a student interested in pursuing a coursework-only MSCE degree with a focus on water resources engineering. This plan may not be appropriate for all students, nor is it necessary for a student to follow this schedule to earn a coursework-only degree. Student-specific goals and prior education must be considered and consultation with faculty members is required. Consult with instructors before enrolling in courses that are outside of the Department to ensure that the course will be consistent with your goals and background since sometimes other courses may provide more value to the student. **All MSCE degree requirements and rules set forth by the Department and the Graduate School must be met in order for a student to finish the program.**