## ENVIRONMENTAL & WATER RESOURCES ENGINEERING TRACK – EWRE

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(1) EWR Core – students pursuing the EWR ME must complete at least four of the following courses.

- CE 5010  Introduction to Geographic Information Systems
- CE 6010  Computational Methods in Civil Engineering
- CE 6030  Green Engineering and Sustainability
- CE 6200  Fate and Transport Modeling of Ecosystems
- CE 6220  Water Chemistry for Environmental Engineering
- CE 6230  Hydrology
- CE 6240  Groundwater Hydrology and Contaminant Transport
- CE 6250  Environmental Systems Modeling and Management
- CE 6260  Environmental Microbiology

(2) EWR Electives – chosen from the following list, or any EVSC course at or above the 5XXX level.

- CE 6009  The Art and Science of Systems Modeling
- CE 6210  Wastewater Treatment
- CE 6270  Hydraulics of Rivers, Streams, and Channels
- CE 6280  Paleo-Engineering
- CE 6130  Advanced Geotechnical Engineering
- CE 6500  Transportation Sustainability
- CHE 6450  Energy Science and Technologies
- CHE 6630  Mass Transfer
- SYS 6050  Risk Analysis
- SYS 6070  Environmental Systems Processes

(3) Technical Elective – chosen from any course at or above the 5XXX level, as approved by the student’s advisor. For one of the two electives, ME students are encouraged but not required to pursue a meaningful hands-on experience (i.e., research or professional internship) via the CE 6995 course listing.

(4) Pre-requisites of the EWRE track include: college calculus through ordinary differential equations, college chemistry, and college physics; plus, Introduction to Environmental Engineering (CE 2100 or equivalent), and a class in either water resources engineering (CE 3220 or equivalent) or water/wastewater treatment (CE 3100 or equivalent).

(5) Students may be permitted to modify this framework, pending approval of their academic advisor and the CEE Director of Graduate Studies.