



EGR 241: Clean Water Technology I

This course introduces students to the physical, chemical, and biological processes associated with water quality, pollution, and the treatment of liquid wastes. Topics covered will include: Basic environmental concerns, hydrology, types of pollution, wastewater flow characteristics, collection systems, wastewater treatment processes, process monitoring and calculations, and sampling procedures. This course includes a laboratory component. The course will also help prepare the student for the lower level Massachusetts State Wastewater Treatment Plant Operator Certification Examination. Three lecture hours, and three laboratory hours per week.

Course Student Learning Outcomes

Students who successfully complete the course will: 1. Describe the movement of water around the planet through the hydrologic cycle. 2. Describe the movement of water from homes and industries to wastewater treatment systems. 3. Describe various wastewater treatment technologies. 4. Perform process control calculations. 5. Perform various wastewater laboratory analyses.

Credits: 4

Program: Engineering