

## EGR 145: Computerized Systems in the Water Treatment Industry

This course will introduce students to Supervisory Control and Data Acquisition (SCADA), the Computerized Maintenance Management Systems (CMMS), Water Information Management Solutions (WIMS), and Geographic Information Systems (GIS). Three lecture hours per week.

## Course Student Learning Outcomes

Upon successful completion of this course, students will be able to: 1. Describe the many ways that computers are integrated into the operation of water systems. 2. Explain the benefits and functions of a Computerized Maintenance Management System (CMMS) 3. List the functions of a Supervisory Control and Data Acquisition (SCADA) 4. List the functions of a Water Information Management System (WIMS) 5. List the components of a SCADA system. 6. Create basic maps using Geographic Information System (GIS) Software 7. Prepare inventory lists and job orders. 8. Perform data input and process control calculations. 9. Use trending data to assist in process control decisions.

Credits: 3

**Program:** Engineering

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