

ENV: Engineering: Environmental

* This course may be taken prior to or during the same term.

Courses

ENV 3001 Environmental Engineering

College of Sci and Engineering, Department of Civil Engineer & Construct Mgt

3 sh (may not be repeated for credit)

Prerequisite: CHM 2045 AND EML 3016*

The course introduces environmental engineering issues such as: environmental regulations, engineering ethics, engineering solutions, and basic approaches to abatement system design including water supply, water treatment, water pollution, wastewater treatment, air pollution, solid and hazardous waste management, and environmental impacts.

ENV 3001L Environmental Engineering Lab

College of Sci and Engineering, Department of Civil Engineer & Construct Mgt

1 sh (may not be repeated for credit)

Prerequisite: ENV 3001*

This course introduces the basic chemistry and chemical calculations to measure physical, chemical, and bacteriological parameters of water and wastewater. Laboratory methods and interpretation of results regarding environmental engineering applications such as design and operation of water and wastewater treatment processes, and to the control of the quality of natural waters are also covered.

ENV 4330 Hazardous Waste Engineering

College of Sci and Engineering, Department of Civil Engineer & Construct Mgt

3 sh (may not be repeated for credit)

Prerequisite: ENV 3001

Students examine the definition, characterization, classification, regulation, treatment, and disposal of hazardous waste. Evaluation of unit operations and processes of importance in the treatment and disposal of common organic and inorganic hazardous wastes are also covered.

ENV 4351 Solid Waste Engineering

College of Sci and Engineering, Department of Civil Engineer & Construct Mgt

3 sh (may not be repeated for credit)

Prerequisite: ENV 4351*

This course introduces the concepts of generation, storage, collection, transfer, treatment, and disposal of solid waste. Students also address related engineering and management issues.

ENV 4514 Environmental Engineering Design

College of Sci and Engineering, Department of Civil Engineer & Construct Mgt

3 sh (may not be repeated for credit)

Prerequisite: ENV 3001

This course provides a comprehensive coverage of the environmental engineering design of unit processes and pollution abatement systems such as: water treatment plant design, wastewater treatment plant design, and sludge management system design.