Courses

**ENVE 5504 Environmental Risk Assessment: 3 semester hours.**
Quantitative and qualitative approaches to characterizing and controlling contaminant pathways. Risk assessment requirements and implications in superfund projects for engineers working on remediation. PREREQ: BIOL 5521 and ENGR 5501.

**ENVE 5508 Water and Waste Water Quality: 3 semester hours.**
Principles of chemistry in applications to water and waste water treatment systems for water quality control and reuse. COREQ: ENVE 5509. PREREQ: CHEM 1111 or equivalent.

**ENVE 5509 Water and Waste Water Lab: 1 semester hour.**
Fundamental analytical procedures for measurement of water and wastewater quality. Introduction to materials and protocols associated with general environmental analytical techniques. COREQ: ENVE 5508.

**ENVE 5510 Introduction to Environmental Engineering: 3 semester hours.**
Introduction to physical, chemical, and biological principles of solid and hazardous waste management, water and waste water treatment, air pollution control, and national environmental regulation. PREREQ: ENVE 5508, ENVE 4408, or equivalent.

**ENVE 5530 Air Pollution and Solid Waste: 3 semester hours.**
Sources, characteristics, regulations, and effects of air pollution and solid waste on environmental quality analysis and design of control systems, including the recovery of resources from solid waste. PREREQ: Permission of instructor.

**ENVE 5599 Experimental Course: 1-6 semester hours.**
This is an experimental course. The course title and number of credits are noted by course section and announced in the class schedule by the scheduling department. Experimental courses may be offered no more than three times. May be repeated.

**ENVE 6610 Introduction to Radioactive Waste Management: 3 semester hours.**
Principles and practices of radioactive waste storage, transportation and disposal. Evolution of government regulations and current solutions developed in response to the regulations. PREREQ: ENGR 5501.

**ENVE 6611 Treatment Systems for Environmental Engineering: 3 semester hours.**
Fundamental principles and processes for physical, chemical, and biological treatment of wastes including mixing, flocculation, sedimentation, stripping, aeration, sorption and leaching. Some experiments required. PREREQ: ENVE 5510 or ENVE 4410.

**ENVE 6615 Water Quality Modeling and Control: 3 semester hours.**
Fundamental principles for mathematical modeling and analysis of environmental contaminant’s fate and transport in lakes, rivers, estuaries, and groundwater. PREREQ: ENVE 5510 or ENVE 4410.

**ENVE 6616 Biological Treatment of Wastewater: 3 semester hours.**
Fundamental principles, design, and operation of aerobic and anaerobic biological waste treatment processes. PREREQ: ENVE 5510 or ENVE 4410.

**ENVE 6617 Environmental Systems Engineering and Design: 3 semester hours.**
Application of physical, chemical, and biological operations and processes to the design of water, waste water, and industrial waste treatment systems. PREREQ: ENVE 5510, ENVE 4410 or previous design experience.