

Course Number	Course Title	Department	Course Description	Focused or Topics
CEE 471-010	Environmental Risk Assessment	CE-Civil and Environmental Engr	Effects of chemical releases on human health; ecological risks. Application of risk assessment methodology, including hazard identification, exposure assessment, toxicity assessment, and risk characterization. Accounting for uncertainty in data during risk management, risk reduction and implementation of regulations and environmental policy. Term project.	Topics
CEE 477-010	Environ Engineering Processes	CE-Civil and Environmental Engr	Processes applied in environmental engineering for air pollution control, treatment of drinking water, municipal wastewater, industrial wastes and environmental remediation. Kinetics, reactor theory, mass balances, application of fundamental physical, chemical and biological principles to analysis and design.	Topics
ESE 401-010	Energy Generation	IDPE-Interdepartmental Engineering	This course provides an overview of the different methods of generating electricity, such as turbine driven electrochemical generators, fuel cells, photovoltaics, and thermoelectric devices. Topics include the combustion of fossil fuels (coal, natural gas, and oil), nuclear fission and fusion, and renewable resources (solar, wind, hydro, tidal, and geothermal sources). Sustainability, energy efficiency issues, as well as public interest and policy drivers are also addressed.	Topics
ESE 403-010	Energy And The Environment	IDPE-Interdepartmental Engineering	This course provides an overview of the direct and indirect impact of energy generation and transmission technologies on the environment. Topics include global climate change, clean energy technologies, energy conservation, air pollution, water resources, and nuclear waste issues.	Focused
ME 468-010	Adv. Energy Efficiency Practicum	ME-Mechanical Engr & Mechanics	Critical assessments of energy management systems. Establishment of framework for industrial facilities to manage energy systems. Fundamentals of best practices for energy efficiencies associated with industrial energy savings. Progress and final reports required. Engineering graduate students only. Consent of instructor required.	Topics