



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Manufacturing of Energy Systems

ISE 5463

Credit Hours:

3.00 - 3.00

Course Levels:

Undergraduate (1000-5000 level)

Graduate

Course Components:

Lecture

Course Description:

Teaches the design, manufacture and integration of conventional and renewable energy systems including their environmental impact.

Prerequisites and Co-requisites:

Prereq: Sr standing in ISE, or Grad standing; or permission of instructor.

Course Goals / Objectives:

- Design of energy sources, conventional and renewable: capability and utilization Analysis of energy, demand and sustainability metrics (environmental impact) Integration of generation, distribution and utilization functions
 - Design of energy systems for given load and utilization scenario Cost analysis for installation and management of energy systems
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Course Topics:

- Introduction to Societal Energy Needs
 - Potential of Various Energy Sources
 - Economic and environmental impact
 - Design and manufacture of energy systems
 - Energy distribution and consumption
 - Integration of system functions
 - Critical issues in the system selection
 - Term Project Presentations
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Designation:

Elective