THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

High Energy Density Welding Processes

WELDENG 4024

Credit Hours:
2.00

Course Levels:
Undergraduate (1000-5000 level)

Course Components:
Lecture

Course Description:
Theory and practice of laser, electron beam, and other high energy density welding processes.

Prerequisites and Co-requisites:
Prereq: 4001, and enrollment as a WeldEng-BS or MatScEn-BS major; or permission of instructor.

Course Goals / Objectives:
- Understand how the physical laws affect the design and operation of electron beam and laser material processes and processing systems

Course Topics:
- Electron beam welding systems
- Electron beam welding processes
- Lasers and systems
- Optics
- Laser beam welding process
- laser cutting and drilling processes

Designation:
Elective