



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

High Energy Density Welding Processes

WELDENG 7024

Credit Hours:

2.00 - 2.00

Course Levels:

Graduate (5000-8000 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: Grad standing, 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