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