



Resistance Welding Processes

WELDENG 7012

Credit Hours:

3.00 - 3.00

Course Levels:

Graduate (5000-8000 level)

Course Components:

Lecture

Lab

Independent Study

Course Description:

Addresses the fundamentals, theory, and application of Resistance Welding processes, with emphasis on processes, equipment, materials, and quality control.

Prerequisites and Co-requisites:

Prereq: 7002 or 4002, and Grad standing; or permission of instructor.

Course Goals / Objectives:

- Develop an understanding of the theories and fundamentals of Resistance Welding processes
 - Understanding of Resistance Welding equipment details including power supplies and tooling
 - Understanding of methods for quality control and mechanical testing of Resistance Welds
 - Understanding of the Resistance Welding of important structural materials including carbon and low alloy steels, stainless steels, aluminum, and titanium
 - Understanding of the Resistance Welding of coated steels including galvanized, aluminized, tin coated, and terne coated steels
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Course Topics:

- Resistance Welding fundamentals.
 - Resistance Welding equipment, tooling and power supplies.
 - Resistance Welding of materials.
 - Resistance Welding of coated steels.
 - Resistance Welding quality, quality control, and testing.
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Designation:

Elective