

# **Principles of Welding Process Control**

# **WELDENG 4003**

## **Credit Hours:**

3.00 - 3.00

#### **Course Levels:**

Undergraduate (1000-5000 level)

#### **Course Components:**

Lecture

Lab

#### **Course Description:**

Study of principles and practical application of control systems and control elements of welding processes.

#### Prerequisites and Co-requisites:

Prereq: 4001, and enrollment in the WeldEng-BS or MatScEn-BS major; or permission of instructor.

#### **Course Goals / Objectives:**

- Rudimentary understanding of welding as a process
- Acquaintance with the various technologies used to implement industrial process controls

## **Course Topics:**

- Introduction to welding processes & control
- Relay logic controls
- Servo motors
- Programmable logic controls
- Sensors
- Computer data acquisition

#### **Designation:**

Elective