

# WPT 260 - INTRO TO WELDING AUTOMATION

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## Course Description

This course provides students an opportunity to learn the theory behind common forms of automation utilized throughout the welding industry. Lab assignments will focus on equipment set-up and operations along with analysis of results. Group 2 course.

## Credit Hours

3

## Contact Hours

5

## Lecture Hours

1

## Lab Hours

4

## Required Prerequisites

WPT 113, WPT 114

## General Education Outcomes supported by this course

Critical Thinking - Direct

## Course Learning Outcomes

### Knowledge:

- Understand the role of automation in the manufacturing environment and the different ways in which it can be employed.
- Identify common forms of welding automation.

### Application:

- Develop weld parameters to achieve defined results.
- Use formulae to estimate cost of work.

### Integration:

- Integrate mathematical reasoning with welding process knowledge to estimate cycle times / increase efficiency.

### Human Dimension:

- Recognize the importance of weld quality on the health, safety, and welfare of the public.

### Caring - Civic Learning:

- Be aware of their personal impact on the quality of the projects in which they are involved.

### Learning How to Learn:

- Evaluate hypothetical applications and determine efficacy of different processes.