

WPT 260 - INTRO TO WELDING AUTOMATION

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.