

Course Objectives/Course Outline
Spokane Community College

Course Title: Programmable Controller Integration
Prefix and Course Number: ELMT 268

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Describe the process controllers and control devices function.
- Test and adjust analog scaling values per field conditions.
- Explain applications and implementation of process controls.
- Identify communication network types.
- Apply communication networks for industrial control.
- Demonstrate how operator interface devices function and communicate.
- Install and configure Allen-Bradley RSView software
- Develop and modify RSView tag and screen displays.

Course Outline

- I. Process control and Data Acquisition
 - A. Types of Processes
 - B. Structure of Control Systems
 - C. Controllers and Interface Devices
- II. PLC Networking Basics
 - A. Network Basics
 - B. Network Types Used
 - C. Network communications
- III. Human Machine Interfaces and PLC Integration
 - A. Operator Interfaces
 - B. Allen-Bradley RSView Overview
 - C. RSView Installation and Runtime configurations