



AUTOMATION | ELECTRICAL
DATA COMM & SECURITY
INDUSTRIAL & SAFETY
FLUID POWER

AUTOMATION

TUE. NOV. 21
8 AM - 5 PM

SMC JOPLIN
923 W. 4TH ST.
JOPLIN, MO 64801

COURSE NUMBER PRS010

PROCESS CONTROL - PID LOOP DEVELOPMENT & TUNING COURSE

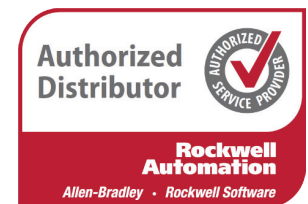
TRAINING EVENT

This course is designed for individuals who need to learn the following:

- How to make basic PID design decisions
- How to program and configure PIDE instructions using function block diagram
- How to tune basic PID loops using manual methods and ladder diagram
- How to auto-tune

In this basic-level course, you will learn the skills needed to obtain a tuned process control loop for typical applications. You will create and develop a process model; calculate proportional, integral, and derivative gains; verify gains using ladder diagrams; practice PID programming in function block diagrams; and learn how to autotune typical PID loops.

This course will award 0.7 IACET CEUs.



+ HANDS-ON

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises.

COST

\$875
Includes lunch

REGISTER

To register, contact Suzan McPherson at smcpherson@smcelectric.com by Tuesday, November 14.

COURSE NUMBER PRS010

This course enables you to develop an understanding of process control by allowing you to practice PID control methods for the majority of systems encountered on the job. Although it does not provide you with all skill needed for every situation, it does prepare you for further process control classes with more specialized applications and design involvement.

Prerequisites

To successfully complete this course, the following prerequisites are required:

- RSLogix 5000 Level 1: ControlLogix Systems Fundamentals (Course No. CCP146) or equivalent experience

The following skills and knowledge are helpful:

- Experience using function block diagram programming language or attending training (Course No. CCP152)
- Knowledge of automation systems
- ISA Process Control Fundamentals training or equivalent experience

SCHEDULE

Day 1

- Creating a Process Reaction Curve
- Developing a Process Model
- Determining the Control Action
- Configuring Program Timing
- Programming a Simple PID Loop Using Function Block Diagram
- Calculating and Verifying PID Gains
- Autotuning a PID Loop