This training aims to equip participants with a comprehensive understanding of PID controllers and the skills necessary for effective tuning. The training covers fundamentals concepts, various tuning methods, and advanced techniques, ensuring participants can apply their knowledge to real-world scenarios.

Scope:

This training goes beyond theoretical knowledge, offering a unique blend of in-depth learning and practical experience, utilizing the school's very own DCS (Distributed Control System) lab to understand process tuning.

Instructor led topics include, but are not limited to:

- Introduction to PID Control Systems
  - Overview of PID Controllers
  - Basics of Process Tuning
- Understanding PID Tuning Concepts
- Process Reaction Curve
- Tuning Techniques

The course delivery will include in-class group work and hands-on lab work.

Objectives:

Upon completion of this course, attendees will be able to:

- Define PID controllers and their significance in process control.
- Explain the concepts of process tuning in the context of PID controllers.
- Differentiate between manual and automatic tuning approaches.
- Explain the process reaction curve and its role in tuning.
- Demonstrate open-loop tuning methods.
- Address the reasons for the need to retune PID controllers.

Prerequisites:

Basic understanding of control systems, process control fundamentals, experience with PID controllers, and background in instrumentation and automation.

Suggested Class Size:
Minimum 10
Maximum 18

Course Length:
8 hours (1 day)
*The training duration is initially set at 8 hours (1 day). However, customization options are available, allowing for an extended format of 16 hours (2 day).