

## Process Dynamics and Control Laboratory

Main objectives of Process Dynamics and Control Lab are

- Understand and be able to describe quantitatively the dynamic behavior of process systems.
- Learn the fundamental principles of classical control theory, including different types of controllers and control strategies.
- Develop the ability to describe quantitatively the behavior of simple control systems and to design control systems.
- Develop the ability to use computer software to help describe and design control systems.
- Learn how to tune a control loop and to apply this knowledge in the laboratory.
- Gain a brief exposure to advanced control strategies.





## Major Equipment

1. Process Station – Temperature, Pressure, Level & Flow
2. Process Controller Simulator
3. Level Controller (Interacting & Non-Interacting)
4. Control Valve Test Rig
5. Split Range Control Rig
6. Ratio Control Rig
7. Digital Storage Oscilloscope
8. DAQ Card (USB Device)
9. Customized Process Station with Accessories - Spherical Tank System
10. .GE-Fanuc Distributed Control System
11. GE-Fanuc PLC with Bottle Filling System
12. Eight Computer Systems

## This Lab is utilized for

### Even Semester

U14EIP601-Process Control Lab U15EIP601- Process Control Lab