

Course Overview:

This Basic field of Instrumentation training course is introduction to instrumentation for beginners, but also as Instrumentation-I and calibration. This basic instrumentation course is meant to provide an understanding of instrumentation and calibration to a trainee that is new to the field of instrumentation. Further, this basic instrumentation course should be assigned to students with no or little experience, but with a mechanical and electrical aptitude.

Course Objective:

- Make accuracy statements for various types of Instrumentation and calibration.
- Differentiate between digital and analog Instrumentation and describe the advantages of each.
- Use basic electronic test equipment for simple troubleshooting applications.
- Describe the operation of various devices used to measure both level and flow.
- Make temperature measurements using both thermocouples and resistive temperature devices.
- Describe the operation of instruments used for various combustion control and moisture
- Understand how instruments and calibrate are used for process control.

Course Outline:

- Electrical Measurements
- Introduction to instrumentation
- Direct current meters
- Ammeters
- Voltmeters
- Ohmmeters
- Watt meters
- Ac current meters
- Potentiometer circuits
- Dc and ac bridges
- Electronic Measurements
- Electronic voltmeters
- Oscilloscopes
- Recording instruments
- Transducers
- Digital instruments
- Noise
- Troubleshooting with instruments
- Signal analyzers and data acquisition systems

Who Should Attend:

This course is intended for Engineers & technicians working in plants, Factory, power generation plants and production companies

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation