

Advanced Instrumentation Techniques



GTI - Coordination Office and International Relations (Accredited Programs)

Course Description

This course explores advanced instrumentation techniques used in industrial applications, focusing on the selection, installation, and maintenance of various instruments.

Who Should Attend

- Instrumentation Engineers
- Maintenance Technicians
- Calibration Specialists
- Process Control Engineers

Course Objectives

- Understand the principles behind advanced measurement techniques.
- Learn about the latest instrumentation technologies and their applications.
- Develop skills in instrument selection and specification.
- Gain knowledge in calibration and maintenance practices.
- Explore the integration of instrumentation with control systems.
- Analyze case studies to understand real-world instrumentation challenges.

Course Content

- Overview of Instrumentation Principles
- Types of Measurement Instruments
- Advanced Sensors and Transducers
- Calibration Techniques and Standards
- Installation and Maintenance Best Practices
- Signal Conditioning and Processing
- Integration with Control Systems
- Data Acquisition Systems
- Troubleshooting Instrumentation Issues
- Case Studies and Practical Applications