London TDM

Engineering and Technical Skills Training Courses

Course Venue: United Kingdom - London

Course Date: From 18 January 2026 To 22 January 2026

Course Place: London Paddington

Course Fees: 7,500 USD

Introduction

In today's fast-paced industrial environment, understanding and effectively utilizing Process Control and SCADA Systems is essential for optimizing operations, enhancing productivity, and maintaining safety. This 5-day professional course is designed to provide participants with comprehensive knowledge and practical skills in the design, implementation, and management of these systems across various industries.

- Understand the fundamentals of process control and SCADA systems.
- Learn how to design and implement efficient SCADA systems.
- Gain hands-on experience with real-world industry applications.
- Develop troubleshooting and maintenance skills.
- Explore the future trends and innovations in process automation and control.

Course Outlines

Day 1: Introduction to Process Control and SCADA Systems

- Overview of process control fundamentals.
- Introduction to SCADA systems and components.
- Historical development and evolution of SCADA.
- Key industries utilizing SCADA systems.
- Basic terms and concepts in automation and control.

Day 2: Design and Implementation of SCADA Systems

- System architecture and design principles.
- Choosing the right hardware and software.
- Developing SCADA specifications and requirements.
- Network and communication protocols in SCADA.
- Cybersecurity considerations in SCADA systems.

Day 3: SCADA System Programming and Configuration

- Introduction to SCADA programming languages.
- Configuring Human Machine Interfaces (HMIs).
- Data acquisition and reporting functionalities.
- Alarm management and notifications.
- Integration with other systems and databases.

Day 4: Troubleshooting and Maintenance of SCADA Systems

- Identifying common issues in SCADA systems.
- Preventative and corrective maintenance strategies.
- Diagnostic tools and techniques.
- Developing robust maintenance plans.
- Case studies on troubleshooting complex systems.

Day 5: Future Trends and Innovations in Process Control and SCADA

- The role of the Internet of Things (IoT) in SCADA.
- Advancements in big data and analytics for SCADA.
- The impact of artificial intelligence and machine learning.
- Emerging technologies in process control.
- Preparing for the future: skills and knowledge areas for professionals.