

HUMAN MACHINE INTERFACE BASED ON SIMATIC WINCC FLEXIBLE

“Design, Configure, and Operate Smart HMI Systems Using Siemens WinCC Flexible.”

Schedule

| Venue (In-house) | Fees |
|-------------------------------|-----------------------|
| At Your Organization Premises | Ask For The Quotation |

Introduction

Human Machine Interface (HMI) systems are essential for monitoring and controlling industrial automation processes efficiently and safely. Siemens WinCC Flexible is a powerful configuration software that allows engineers to design interactive operator panels and control systems for various automation applications.

This course provides a detailed understanding of HMI concepts, configuration techniques, and application development using Siemens SIMATIC WinCC Flexible. Participants will learn to design, program, and troubleshoot HMI screens that communicate effectively with PLCs, ensuring smooth and reliable process operation.

The training combines theoretical knowledge with practical exercises to enable participants to create professional, user-friendly, and efficient HMI solutions for real-world automation systems.

Objectives

By the end of this course, participants will be able to:

- Understand the role and architecture of Human Machine Interfaces in automation systems
- Configure HMI projects using SIMATIC WinCC Flexible software
- Design and customize graphical user interfaces (GUI) for process visualization
- Integrate HMI systems with Siemens PLCs for data exchange and control
- Implement alarms, trends, recipes, and data logging features
- Apply best practices for system design, maintenance, and troubleshooting
- Download, test, and deploy HMI projects on operator panels
- Ensure efficient and safe operation through optimized interface design

Why Attend

Modern automation requires skilled professionals who can design and manage intelligent HMI systems that bridge operators and machines. This course equips you with practical expertise in using Siemens WinCC Flexible for effective visualization and control of industrial processes.

Attending this course will help participants enhance plant performance, reduce downtime, and improve operator efficiency through well-designed and intuitive interfaces.

Target Audience

This course is ideal for:

- Automation and Control Engineers
- Electrical and Instrumentation Engineers
- PLC Programmers and Technicians
- System Integrators and Project Engineers
- Maintenance and Production Engineers
- Anyone involved in HMI/SCADA design and configuration using Siemens tools

Individual Benefits

- Gain hands-on experience in SIMATIC WinCC Flexible software
- Learn to design intuitive and efficient operator interfaces
- Improve knowledge of HMI-PLC integration and communication
- Strengthen troubleshooting and project deployment skills
- Enhance career opportunities in industrial automation and control

Organizational Benefits

- Develop in-house expertise in HMI configuration and maintenance
- Improve plant monitoring, safety, and operational efficiency
- Reduce downtime through better process visualization and control
- Standardize HMI designs across production facilities
- Support digital transformation and modern automation initiatives

Instructional Methodology

The course applies a practical, application-oriented approach using:

- Instructor-led technical presentations and live demonstrations
- Step-by-step HMI configuration exercises
- Hands-on practice with Siemens WinCC Flexible software
- Case studies and real project examples
- Group discussions and troubleshooting sessions

Course Outline

- Module 1: Introduction to HMI Systems and Their Role in Automation
- Module 2: Overview of Siemens SIMATIC WinCC Flexible Software
- Module 3: Creating and Configuring HMI Projects
- Module 4: Designing and Customizing Operator Screens
- Module 5: Communication Setup Between HMI and PLC
- Module 6: Implementing Alarms, Trends, and Data Logging
- Module 7: Recipes, Passwords, and User Access Management
- Module 8: Simulation, Testing, and Downloading to HMI Panels
- Module 9: Troubleshooting and Maintenance of HMI Projects
- Module 10: Best Practices in HMI Design and Project Optimization

Certification

Upon successful completion, participants will receive a Certificate in Human Machine Interface (HMI) Based on SIMATIC WinCC Flexible, recognizing their skills in designing, configuring, and maintaining advanced HMI systems for industrial automation applications.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

+601116373203

EMAIL:

info@mawaevents.net

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.