CELTEC

Centre for Emerging Leading Edge Technology Empowering Change

PLC Based Automation and Human Machine Interfaces

This course outlines the fundamentals of PLC and Human Machine Interfaces (HMI).

For more information and to apply, visit
www.celtec.ie/hmi

Course Learnings

HMI Design Principles
Develop the knowledge and practical skills to design intuitive, user-centred Human Machine Interfaces (HMIs) that enhance operator interaction, usability, and process visibility in industrial automation systems.

HMI Development with Siemens TIA Portal
Configure and program Siemens HMI devices using TIA Portal, including screen creation, navigation, alarms, trends, recipes, and PLC communications to support effective machine control.

System Integration and Commissioning
Integrate HMI applications with Siemens PLCs, commission operator interfaces, and verify reliable communication between control systems and visualisation platforms.

Diagnostics, Alarms, and Troubleshooting
Implement alarm management, fault diagnostics, and monitoring tools that enable operators to identify issues quickly and improve system reliability and maintenance efficiency.

Industrial Visualisation and Best Practice
Apply industry best practices to develop professional HMI applications that improve operational efficiency, safety, and the overall user experience in automated manufacturing environments.

APPLY

www.fetchcourses.ie

AT A GLANCE

DURATION
2 Classroom Days

LOCATION
CELTEC, Celbridge, Co. Kildare, W23 HCK2

DELIVERY
Classroom Based

SUITABILITY
Those in employment in the Kildare and Wicklow regions

TECHNOLOGY
This course uses Siemens TIA 1500 PLC's

COST
This course is partially funded under the Skills To Advance initiative for eligible applicants

COURSE REQUIREMENT
Experience in related industrial sectors would be beneficial for the learner.

CERTIFICATION
Certificate of Completion

Skills to Advance
boost skills - boost business

BORD OIDEACHAIS AGUS OILIÚNA CHILL DARA AGUS CHILL MHANTÁIN
KILDARE AND WICKLOW EDUCATION AND TRAINING BOARD

SOLAS An tSeirbhís Oideachais Leanúnaigh agus Scileanna
Further Education and Training Authority