

PLC Based Communication With HART

This course outlines the fundamentals of the HART (Highway Addressable Remote Transducer) communication protocol.



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

Course Learnings



HART Communication Fundamentals

Develop an understanding of HART protocol principles, including hybrid analogue-digital communication, signal structure, and how field devices exchange diagnostic and process data in industrial systems.



HART Device Configuration and Integration

Learn how to configure and integrate HART-enabled instruments with PLC systems, including parameter setup, addressing, and communication via compatible interfaces.



PLC-Based Data Acquisition

Apply Siemens TIA Portal programming techniques to read, interpret, and manage HART device data for process monitoring and control applications.



Diagnostics and Troubleshooting

Develop structured fault-finding skills to diagnose HART communication issues, interpret device diagnostics, and ensure reliable field device performance.



Industrial Applications of HART Systems

Gain practical experience using HART technology in real-world automation scenarios to improve asset monitoring, maintenance efficiency, and process reliability.



APPLY

22 October 2026

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