

Robotics Fundamentals & Robot Integration

This course will provide the learner with the learning necessary to operate a robot cell compliant with robot safety regulations and perform operating tasks on the robot.



For more information and to apply, visit

www.celtec.ie/applicationintegration

Course Learnings



Robot Cell Integration Fundamentals

Develop an understanding of how to integrate industrial robots into production cells, including installation, commissioning, and operational requirements for advanced manufacturing environments.



Robot Safety and Compliance

Learn to apply robot safety regulations, risk assessments, lockout/tagout procedures, safety I/O, and protective devices to ensure safe and compliant robot cell operation.



Robot Cell Components and Peripheral Integration

Gain practical knowledge of integrating PLCs, end-of-arm tooling, sensors, conveyors, vision systems, and other peripheral devices into a complete robotic work cell.



System Design and Performance Optimisation

Build the skills to evaluate robot deployment, perform load and tooling analysis, select suitable robot configurations, and optimise cell performance for specific manufacturing applications.



Industrial Implementation and Operational Readiness

Develop the capability to commission, operate, troubleshoot, and support integrated robotic systems while understanding their role in improving manufacturing productivity and operational efficiency.



APPLY

Expression of Interest

AT A GLANCE



DURATION

6 Classroom Days



LOCATION

CELTEC, Celbridge, Co. Kildare, W23 HCK2



DELIVERY

Classroom Based



SUITABILITY

Those in employment in the Kildare and Wicklow regions



COST

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



COURSE REQUIREMENT

No prior knowledge of Robotics is expected. Basic PC Skills and solid understanding of English is essential



CERTIFICATION

QQI Level 6 Micro Qualification in Robotic Integration