

Robotics Fundamentals, Development and Future Trends

This course will provide the learners with an understanding of current and emerging use cases showing where robotics can support the manufacturing environment.



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

Course Learnings



Robotics Fundamentals and Applications

Develop a solid understanding of how industrial robots operate, their capabilities, and how they can be applied to improve manufacturing processes and operational efficiency.



Current Robotics Technologies

Explore state-of-the-art robotics technologies, including collaborative robots, connected robotics, digital twins, predictive maintenance, artificial intelligence, virtual commissioning, and robotics-as-a-service.



Emerging Trends and Future Innovation

Examine future developments in robotics such as swarm robotics, autonomous supply chains, humanoid robots, service robotics, voice and gesture control, and advanced inspection and exploration systems.



Vision Systems and Smart Automation

Gain practical knowledge of configuring, calibrating, integrating, and programming machine vision systems to support intelligent robotic automation applications.



Strategic Robotics Deployment

Build the capability to evaluate manufacturing environments, identify suitable robotics use cases, and make informed decisions on the selection and deployment of advanced robotic technologies within Industry 4.0 operations.



APPLY

Expression of Interest

AT A GLANCE



DURATION

5 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 Development and Future Trends