Advanced Robotics

FESTO

Level 3

The Advanced Robotics certification provides in-depth training on robotic systems, their history, and modern applications. Participants will gain comprehensive knowledge of robotics, focusing on key topics such as cyber-physical systems, safety protocols, robot control, and automation. This certification emphasizes hands-on learning, where participants will engage in programming, operating, and troubleshooting advanced robotic systems. The training prepares learners for practical applications in manufacturing, engineering, and industrial automation, leveraging the latest in robotics technology and standards. This certification provides participants with both theoretical knowledge and hands-on experience in advanced robotics, covering topics from basic principles to cutting-edge technologies in automation and control.

Industry Recognized Certification Topics

- History of Robotics
- Cyber-Physical Systems (CPS) in Robotics
- Lean Methods in Robotics
- Network Topologies in Robotic Systems
- Robotic Safety and Hazards
- Production Planning and MES Integration in Robotics
- Robotic Programming and Control Systems
- Standards for Industrial and Collaborative Robots
- Robot Geometry and Degrees of Freedom
- Path Planning and Motion Control

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Industry Recognized Certification Competencies

- Understand the Evolution of Robotics
- Implement Cyber-Physical Systems (CPS)
- Apply Lean Manufacturing Techniques
- Design and Analyze Network Topologies
- Identify and Mitigate Robotic Hazards
- Plan and Implement Robotic Production
- Program and Troubleshoot Robotic Systems
- Apply International Robotics Standards
- Analyze Robot Geometry and Degrees of Freedom
- Optimize Path Planning and Motion Control