



Course technical sheet

Quality 4.0 Awareness Training – Exam

Fee

99,00 €

Final exam only

Course code

Q4_0_AWR_LA

Test duration

60 min

Passing score

70%

Issued

27/05/2026

Executive summary

The "Quality 4.0 Awareness Training – Exam" course provides an in-depth understanding of the principles and technologies underpinning Quality 4.0, integrating quality management with Industry 4.0 innovations. Participants will explore the evolution of Quality Management Systems (QMS) towards data-driven approaches, focusing on digitizing quality processes through workflows and electronic QMS (eQMS). The course covers quality data analytics and key performance indicators (KPIs, SPC, predictive quality), alongside IoT and sensor technologies for real-time monitoring. It also addresses the application of AI and machine learning for inspection, anomaly detection, and predictive maintenance, as well as end-to-end traceability and automation in quality processes. Key topics include risk management, cybersecurity of quality data, digital change management, and the linkage to standards such as ISO 9001. Real-world use cases and an adoption roadmap for Quality 4.0 are featured, concluding with an exam to assess the knowledge and skills acquired.

Certification process

- Registration or login to the Academy platform.
- Completion of the final course examination only. Any training or preparation may be completed externally or through other channels.
- The test questions refer to the objectives, skills and topics described in this technical sheet.
- Assessment of the result, possible validation and certificate issuance according to the rules applicable to the course.

Important note

On Academy, candidates take only the final course examination. Any training or preparation activity may be delivered externally or through other channels. The test questions refer to the topics described in this technical sheet and in the course syllabus summary.

Syllabus summary

Introduction to Quality 4.0 and the integration of quality with Industry 4.0 technologies + evolution of QMS towards data-driven quality + digitalization of quality processes (workflows, eQMS) + quality data and analytics (KPIs, SPC, predictive quality) + IoT and sensors for real-time monitoring + AI/ML for inspection, anomaly detection and predictive maintenance + end-to-end traceability (MES/ERP, blockchain overview) + automation and RPA in quality processes + risk management and cybersecurity for quality data + skills and change management (digital culture, roles) + compliance and linkage with ISO 9001 and process approach + use cases and adoption roadmap

Certification Bodies Management systems

IFZA Business Park - Building A2 - Nadd Hessa - Dubai Silicon Oasis
United Arab Emirates
Phone: +971 502475030
Email: info@certificatioiwz.org
VAT/Tax ID: 104216397000003

Course technical sheet

Q4_0_AWR_LA
Page 1
Document generated automatically by Academy
Quality 4.0 Awareness Training – Exam

Learning objectives

- Understand key concepts of Quality 4.0 and its Industry 4.0 integration
- Explore the evolution of QMS towards data-driven quality
- Learn digital tools for quality process management
- Apply IoT, AI, and machine learning technologies in quality processes
- Evaluate best practices for risk management and cybersecurity
- Get acquainted with ISO 9001 standards and digital change management

Skills acquired

- Analyze and interpret real-time quality data
- Digitize and automate quality processes
- Use eQMS systems and IoT solutions
- Apply predictive methodologies and machine learning
- Manage risks and ensure data security
- Implement Quality 4.0 methodologies in business contexts

Target audience

- Quality professionals
- Production and process managers
- IT/OT technicians and specialists
- Managers involved in digital transformation
- Consultants and auditors

Prerequisites

- Basic knowledge of quality management and production systems
- Familiarity with Industry 4.0 concepts is a plus

Program

- Introduction to Quality 4.0 and Industry 4.0
- QMS evolution: from traditional to data-driven
- Digitalization of processes: workflows and eQMS
- Data and analytics: KPIs, SPC, predictive quality
- IoT and sensors for real-time monitoring
- AI/ML for inspection and predictive maintenance
- End-to-end traceability (MES/ERP, blockchain overview)
- Automation and RPA in quality processes

- Risk management and cybersecurity for quality data
- Digital skills and change management
- Links with ISO 9001 and process approach
- Use cases and adoption roadmap

Teaching methodology

- Theoretical lessons with practical examples
- Case studies and mock exam questions
- Discussion and analysis of real scenarios

Evaluation method

- Final exam with multiple-choice questions
- Passing threshold: 70%

Duration

- 60 minutes

Certification

- Certificate of exam passing (certification fee: €99.00)

Expected outcomes

- Mastery of Quality 4.0 concepts and tools
- Ability to integrate quality and Industry 4.0 in organizations
- Preparedness to tackle digital challenges in quality management