



MAINTENANCE AND ENGINEERING

Advanced Maintenance for Engineering Managers

Course code: ME-001



SPARK TRAINING

Professional training courses for leaders, specialists, and organizations seeking practical capability development.

info@sparktraining.eu

+31 85 115 0004 | sparktraining.eu

— Workshop Overview

Maintenance management is a critical function that directly impacts asset reliability, operational efficiency, safety, and profitability. Engineering managers are increasingly expected to move beyond reactive maintenance and adopt strategic, data-driven approaches that optimize performance and reduce downtime. This course provides advanced knowledge and practical tools to design, implement, and manage modern maintenance strategies. Participants will gain insights into reliability-centered maintenance (RCM), predictive maintenance, asset lifecycle management, and the integration of digital technologies in maintenance operations.

Why Attend

This course combines advanced theoretical concepts with real-world industrial case studies and practical exercises. Participants will engage in scenario-based discussions, maintenance planning simulations, and problem-solving workshops. The course also includes exposure to modern maintenance tools and technologies such

Who Should Attend

Engineering Managers and Maintenance Managers
Plant Managers and Operations Managers
Reliability Engineers and Asset Managers
Maintenance Supervisors and Team Leaders
Technical Professionals in manufacturing, oil & gas, utilities, and infrastructure

— Learning Objectives

- Develop and implement advanced maintenance strategies
- Apply reliability-centered and risk-based maintenance approaches
- Improve asset performance and reduce downtime
- Plan and optimize maintenance schedules and resources
- Use data and analytics for predictive maintenance
- Implement effective maintenance KPIs and performance metrics
- Manage maintenance teams and workflows efficiently
- Integrate digital technologies into maintenance management

Course Outline

DAY
1

Maintenance Strategy and Asset Management

- Evolution of maintenance (reactive !' preventive !' predictive)
- Role of maintenance in organizational performance
- Asset lifecycle management principles
- Maintenance strategies and frameworks
- Introduction to reliability engineering

DAY
2

Reliability-Centered and Risk-Based Maintenance

- Principles of Reliability-Centered Maintenance (RCM)
- Failure modes and effects analysis (FMEA)
- Risk-based maintenance planning
- Criticality analysis of assets
- Maintenance optimization techniques

DAY
3

Predictive Maintenance and Data Analytics

- Condition monitoring techniques
- Predictive maintenance concepts and tools
- Data collection and analysis for maintenance
- Introduction to IoT and smart maintenance systems
- Using data to prevent failures

DAY
4

Maintenance Planning, Scheduling, and Control

- Maintenance planning and work management
- Scheduling techniques and resource allocation
- Spare parts and inventory management
- Computerized Maintenance Management Systems (CMMS)
- KPI development and performance tracking

DAY
5

Leadership, Continuous Improvement, and Best Practices

- Leading maintenance teams effectively
- Continuous improvement methodologies (Lean, Six Sigma basics)
- Maintenance audits and performance reviews
- Safety and compliance in maintenance operations

- Case studies and maintenance strategy development workshop

— Upcoming Classroom Dates

DATE	LOCATION	FEE
5 - 9 October 2026	Amsterdam - Netherlands	€2,100
16 - 20 November 2026	Paris - France	€1,925
7 - 11 December 2026	Barcelona - Spain	€2,200
21 - 25 December 2026	London - United Kingdom	€2,250
18 - 22 January 2027	Munich - Germany	€2,125
15 - 19 February 2027	Amsterdam - Netherlands	€2,125
15 - 19 March 2027	Istanbul - Türkiye	€1,425
19 - 23 April 2027	London - United Kingdom	€2,100

— Certificate and Registration

Participants who attend and complete the full programme receive a SPARK Training Certificate of Completion. For registration, in-house delivery, or availability questions, contact info@sparktraining.eu or +31 85 115 0004.