

## SMART MANUFACTURING STRATEGIES

*“Leveraging Industry 4.0 for Agile, Data-Driven and Sustainable Manufacturing”*

### Schedule

Date	Venue	Fees (Face-to-Face)
07 - 11 Jun 2026	Kuwait	USD 3495 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

### Introduction

As global competition intensifies and digital transformation accelerates, manufacturers must evolve to remain competitive, agile, and sustainable. Smart manufacturing integrates advanced technologies such as IoT, AI, robotics, data analytics, and cloud platforms to revolutionize operations and unlock new value across the production lifecycle.

This intensive course offers a strategic and practical framework for implementing smart manufacturing in both greenfield and legacy facilities. Participants will explore core technologies, maturity assessments, digital strategy, and roadmap development with real-world case studies and solution templates.

### Objectives

By the end of this course, participants will be able to:

- Understand smart manufacturing concepts, tools, and ecosystems
- Identify opportunities to digitize manufacturing value chains
- Evaluate key enabling technologies (IoT, AI, cloud, robotics)
- Develop a digital transformation roadmap for operations
- Apply performance metrics for smart manufacturing ROI

## Why Attend

- Build a solid foundation in Industry 4.0 technologies and strategy
- Learn how leading manufacturers improve agility and throughput
- Translate smart factory principles into cost-saving initiatives
- Explore digitization approaches for various manufacturing environments
- Develop a scalable roadmap tailored to your organization's readiness

## Target Audience

This program is designed for:

- Manufacturing and plant managers
- Process engineers and industrial technologists
- Digital transformation and IT leaders in operations
- Continuous improvement and lean manufacturing teams
- Supply chain, innovation, and R&D professionals

## Individual Benefits

Key competencies that will be developed include:

- Digital transformation planning for manufacturing
- Understanding smart sensors, automation, and cyber-physical systems
- Data-driven decision making and operational analytics
- Strategic integration of IT/OT systems
- Change leadership in industrial innovation initiatives

## Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Increased productivity and reduced waste through smart processes
- Enhanced responsiveness to market demand and disruptions
- Stronger integration of manufacturing and enterprise systems
- Structured implementation of digital roadmaps and KPIs
- Competitive advantage through innovation and automation

## Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings - Industry 4.0 frameworks, use cases, and trends
- Case Studies - Global examples of smart manufacturing in action
- Workshops - Digital maturity assessments, ROI modeling, tech roadmaps
- Peer Exchange - Group discussions on transformation challenges
- Tools - Templates for strategy planning, vendor selection, KPI tracking

## Course Outline

**Training Hours: 7:30 AM - 3:30 PM** Daily Format: 3-4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 - 02:00

### Day 1: Foundations of Smart Manufacturing

- Module 1: Smart Manufacturing Concepts & Trends (07:30 - 09:30) • Definitions, evolution of Industry 4.0, and digital value creation
- Module 2: Global Strategies and Benchmarking (09:45 - 11:15) • Case studies from top manufacturing nations
- Module 3: Readiness Assessment Models (11:30 - 01:00) • Maturity models, self-assessments, and organizational gaps
- Module 4: Workshop - Assess Your Factory's Digital Readiness (02:00 - 03:30) • Use maturity tools to identify readiness stage

### Day 2: Enabling Technologies for Smart Factories

- Module 5: Industrial Internet of Things (IIoT) and Smart Sensors (07:30 - 09:30) • Data acquisition, edge devices, and sensor integration
- Module 6: Cloud, Edge, and Connectivity Infrastructure (09:45 - 11:15) • Architectures for scalable, secure connectivity
- Module 7: Robotics, Automation & AI in Production (11:30 - 01:00) • Machine learning, collaborative robots (cobots), and intelligent control
- Module 8: Workshop - Map Technology Use Cases to Your Facility (02:00 - 03:30) • Match technology with challenges in your plant

### Day 3: Data, Analytics, and Integrated Operations

- Module 9: Data Management and Analytics for Operations (07:30 - 09:30) • Big data, dashboards, and performance monitoring
- Module 10: Cybersecurity for Smart Manufacturing (09:45 - 11:15) • Threats, standards, and defense-in-depth strategies
- Module 11: Real-Time Monitoring and Predictive Maintenance (11:30 - 01:00) • Condition-based and predictive models using sensor data
- Module 12: Workshop - Design a Predictive Maintenance Dashboard (02:00 - 03:30) • Use case for OEE and asset reliability monitoring

### Day 4: Transformation Strategy and Change Management

- Module 13: Digital Transformation Roadmap Development (07:30 - 09:30) • Milestones, phasing, budgeting, stakeholder alignment
- Module 14: Workforce Skills and Organizational Change (09:45 - 11:15) • Training, talent gaps, and resistance management
- Module 15: KPIs and Performance Monitoring (11:30 - 01:00) • ROI measurement, benchmarking, and reporting tools
- Module 16: Workshop - Build a Plant-Level Strategy Roadmap (02:00 - 03:30) • Tailored roadmap for participants' factories

### Day 5: Execution, Scaling, and Innovation

- Module 17: Scaling and Integrating Smart Manufacturing Across Sites (07:30 - 09:30) • Enterprise-wide scaling strategies and governance
- Module 18: Innovation Ecosystems and Emerging Tech (09:45 - 11:15) • Digital twins, 5G, AR/VR, and blockchain in manufacturing
- Module 19: Case Study - Successful Transformation Journey (11:30 - 01:00) • Lessons learned from a regional manufacturer
- Module 20: Final Workshop - Present Your Transformation Plan (02:00 - 03:30) • Participant presentations and expert feedback

## Certification

Participants will receive a Certificate of Completion in Smart Manufacturing Strategies, validating their knowledge of digital transformation concepts, maturity assessment, and readiness to lead and support smart manufacturing initiatives across operations.

## Why Choose MAWA Events

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<p><b>In-House / Customized Training</b></p> <p>Interested in running this course for your team?</p> <p>Please contact us:</p>	<p>TEL:</p> <p><b>+601116373203</b></p>	<p>EMAIL:</p> <p><b>info@mawaevents.net</b></p>
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