MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

AUTOMATION IN THE OIL & GAS INDUSTRY FOR MANAGERS

"Empowering oil & gas leaders to drive productivity, safety, and cost-efficiency through smart automation technologies."

Schedule

Venue	Fees
In-House	ASK FOR THE QUOTATION

Introduction

As the oil & gas sector embraces digital transformation, automation is becoming a key enabler for reducing human error, optimizing production, and ensuring safety. This course is designed for non-technical managers and supervisors who need a strategic understanding of how automation technologies—from PLCs and SCADA to robotics and AI-driven systems—can be applied across upstream, midstream, and downstream operations. Participants will learn to align automation strategies with business goals, oversee implementation, and manage associated risks.

Objectives

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

- Understand the fundamentals of industrial automation and control systems
- Identify automation applications across exploration, production, and refining
- Evaluate technologies such as PLCs, SCADA, DCS, robotics, and smart sensors
- Align automation initiatives with cost savings, safety, and efficiency goals
- Lead automation projects in collaboration with technical teams
- Manage cybersecurity and change risks associated with automation

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Why Attend

With increasing pressure to improve operational efficiency and reduce downtime, managers must lead automation-driven change. This course gives you the strategic insight and cross-disciplinary knowledge to champion automation in your department and organization—even without an engineering background.

Target Audience

- Operations, Maintenance, and Production Managers
- Asset and Facility Managers
- HSE and Risk Professionals
- Digital Transformation Leaders
- Executives overseeing innovation or process improvement
- Engineering Support Managers

Individual Benefits

- Gain a clear, practical understanding of automation systems and trends
- Communicate more effectively with engineers and automation vendors
- Learn to evaluate ROI and risk before committing to automation solutions
- Build confidence to lead or support automation initiatives

Organizational Benefits

- Reduce downtime and human error in field operations
- Improve process reliability, consistency, and output quality
- Enhance worker safety through robotics and remote operations
- Streamline maintenance with predictive automation and condition monitoring
- Accelerate your organization\'s digital transformation journey

Instructional Methodology

- Manager-focused case studies from global oil & gas operations
- Scenario-based workshops and problem-solving exercises
- Live demos of automation architectures and interfaces
- Strategy planning templates and implementation toolkits
- Instructor-led sessions by automation experts with oil & gas backgrounds

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Course Outline

DETAILED 5-DAY COURSE OUTLINE (CUSTOMIZABLE)

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: Understanding Automation in the Oil & Gas Context

Module 1: Overview of Automation in Oil & Gas – Trends and Drivers (07:30 – 09:30)

Module 2: Automation Systems 101 – PLCs, SCADA, DCS, and IIoT (09:45 – 11:15)

Module 3: Automation Applications in Upstream, Midstream, and Downstream (11:30 – 01:00)

Module 4: Workshop – Automation Opportunity Mapping for Your Facility (02:00 – 03:30)

Day 2: Control Systems & Data-Driven Operations

Module 1: Understanding Control Loops, Sensors, and Actuators (07:30 – 09:30)

Module 2: Real-Time Monitoring, SCADA Dashboards, and Field Instrumentation (09:45 – 11:15)

Module 3: Alarm Systems and Event Management (11:30 – 01:00)

Module 4: Case Study – Control System Failures and Lessons Learned (02:00 – 03:30)

Day 3: Automation for Safety, Maintenance, and Asset Integrity

Module 1: Emergency Shutdown Systems (ESD) and Safety Instrumented Systems (07:30 – 09:30)

Module 2: Predictive Maintenance with Smart Sensors and Data Analytics (09:45 – 11:15)

Module 3: Robotics and Drones for Hazardous Operations and Inspections (11:30 – 01:00)

Module 4: Workshop – Building a Maintenance Automation Roadmap (02:00 – 03:30)

Day 4: Human-Machine Collaboration & Risk Management

Module 1: Operator Interfaces, HMI Design, and Human Factors (07:30 – 09:30)

Module 2: Change Management for Automation Projects (09:45 – 11:15)

Module 3: Cybersecurity and Automation Systems Risk (11:30 – 01:00)

Module 4: Group Scenario – Responding to Automation Incidents (02:00 – 03:30)

Day 5: Strategic Planning and Implementation

Module 1: Building the Business Case – ROI, KPIs, and TCO (07:30 – 09:30)

Module 2: Vendor Selection, Contracts, and Lifecycle Management (09:45 – 11:15)

Module 3: Leadership Strategies for Automation Adoption (11:30 – 01:00)

Module 4: Final Presentations – Your Automation Strategy Roadmap (02:00 – 03:30)

Certification

Participants will receive a **Certificate of Completion: Automation in the Oil & Gas Industry for Managers**, validating their capability to lead and manage automation-related projects and investments.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

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