MAWA EVENTS

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

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

APPLICATIONS OF AI IN THE OIL & GAS INDUSTRY FOR MANAGERS

"Empowering oil & gas leaders to make data-driven decisions through AI-enabled solutions for exploration, production, maintenance, and safety."

Schedule

Venue	Fees
In-House	ASK FOR THE QUOTATION

► **Available delivery methods:** In-House Training

Introduction

Artificial Intelligence (AI) is revolutionizing the oil & gas sector by unlocking efficiencies, improving safety, and enabling predictive insights. This course provides non-technical managers and decision-makers with a strategic overview of how AI can be integrated into upstream, midstream, and downstream operations. Emphasis is placed on real-world applications, cost-saving strategies, and risk management enabled by AI technologies such as machine learning, computer vision, digital twins, and predictive analytics.

Objectives

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

- Understand the fundamentals of AI, machine learning, and data analytics in an industrial context
- Identify key areas where AI is transforming oil & gas operations
- Evaluate AI applications for predictive maintenance, drilling optimization, asset integrity, and safety
- Lead AI implementation initiatives with a focus on ROI and operational readiness
- Address data governance, cybersecurity, and ethical concerns in deploying AI solutions

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Why Attend

Managers in oil & gas who are not AI-literate risk falling behind in a rapidly digitalizing industry. This course offers the strategic insight needed to identify high-impact AI opportunities, oversee implementation, and collaborate effectively with technical teams—without requiring coding or data science expertise.

Target Audience

- Operations, Safety, and Maintenance Managers
- Asset Integrity and Production Managers
- HSE and Risk Management Professionals
- IT Managers supporting O&G operations
- Project Managers and Strategic Planners
- Executives exploring AI-driven transformation

Individual Benefits

- Gain clarity on AI jargon, tools, and use cases relevant to oil & gas
- Understand where and how AI adds value in your department
- Increase effectiveness in working with data science or IT teams
- Build confidence in leading innovation and digital strategy projects

Organizational Benefits

- Enhance decision-making with predictive intelligence
- Reduce downtime and improve maintenance strategies using AI
- Improve safety monitoring and risk detection with smart sensors
- Streamline exploration and production with data-driven efficiency
- Align AI adoption with corporate digital transformation goals

Instructional Methodology

- Executive-level case studies and use cases
- Visual learning aids and real-time dashboards
- Group scenario workshops and planning sessions
- Interactive lectures from industry-experienced instructors
- AI-readiness evaluation tools and templates

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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: AI Fundamentals for Oil & Gas Leaders

Module 1: Introduction to AI, Machine Learning & Industry 4.0 (07:30 – 09:30)

Module 2: Types of AI – Predictive, Prescriptive, and Cognitive Systems (09:45 – 11:15)

Module 3: Data Infrastructure: Big Data, IoT & Cloud in Oil & Gas (11:30 – 01:00)

Module 4: Workshop – Identifying AI Opportunities in Your Operation (02:00 – 03:30)

Day 2: AI Applications in Upstream Operations

Module 1: Exploration & Seismic Interpretation using AI (07:30 – 09:30)

Module 2: AI in Drilling Optimization and Real-Time Well Monitoring (09:45 – 11:15)

Module 3: Reservoir Modeling & Production Forecasting with Machine Learning (11:30 – 01:00)

Module 4: Case Study – Upstream AI Deployment Success Stories (02:00 – 03:30)

Day 3: Midstream & Downstream AI Use Cases

Module 1: AI in Pipeline Monitoring & Leak Detection (07:30 – 09:30)

Module 2: Refinery Process Optimization with AI (09:45 – 11:15)

Module 3: Supply Chain & Logistics AI Applications (11:30 – 01:00)

Module 4: Workshop – Risk Mitigation Through AI-Powered Asset Intelligence (02:00 – 03:30)

Day 4: Predictive Maintenance & Safety Analytics

Module 1: Predictive Maintenance with Digital Twins and ML Algorithms (07:30 – 09:30)

Module 2: AI for Worker Safety: Wearables, Sensors, and Vision AI (09:45 – 11:15)

Module 3: Smart Inspections & Robotics Integration (11:30 – 01:00)

Module 4: Group Exercise – Building an AI-Enabled Maintenance Strategy (02:00 – 03:30)

Day 5: Leadership, Ethics & Implementation Strategy

Module 1: Governance, Cybersecurity, and Responsible AI (07:30 – 09:30)

Module 2: Roadmap for AI Adoption in Oil & Gas Organizations (09:45 – 11:15)

Module 3: Change Management for AI Projects (11:30 – 01:00)

Module 4: Final Strategy Presentation & AI Readiness Assessment (02:00 – 03:30)

Certification

Participants will receive a **Certificate of Completion: AI Applications in Oil & Gas for Managers**, attesting to their readiness to lead and support AI integration across oil & gas operations.

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**

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