AI in IT: Mastering Tools, Applications, and Strategies

(Malaysia)

Duration:

Date: 16-20/2/2025

5 Days | 4 Hours per Day

Target Audience:

IT professionals, managers, and technical staff interested in learning, applying, and implementing AI in IT environments.

Day 1: Foundations of AI in IT

Session 1: Introduction to AI

- Understanding Artificial Intelligence, Machine Learning (ML), and Deep Learning (DL).
- The role of AI in IT operations.
- Differences between traditional IT processes and AI-driven processes.

Session 2: Key AI Use Cases in IT

- Predictive maintenance for hardware and systems.
- IT security and anomaly detection.
- IT service automation (e.g., chatbots and virtual assistants).

- Optimizing IT workflows and resource allocation.

Session 3: Hands-on Activity

- Identifying AI opportunities in participants' organizations.
- Group discussion and brainstorming.

Day 2: AI Tools and Platforms for IT

Session 1: Overview of AI Tools

- Open-source frameworks: TensorFlow, PyTorch.
- Cloud-based AI platforms: AWS AI, Azure AI, Google Cloud AI.
- Prebuilt AI solutions for IT: Rasa, Dialogflow, Microsoft Copilot.

Session 2: Introduction to Automation

- Chatbots for IT service desks.
- Tools for automating repetitive IT tasks.

Session 3: Hands-on Demo

- Building a simple chatbot for IT helpdesk using Dialogflow or Rasa.

Day 3: AI-Powered IT Infrastructure Management

Session 1: AI in Infrastructure Monitoring

- Tools and techniques for AI-powered server and network performance monitoring.
- Using AI to predict server outages or downtime.

Session 2: AI in IT Security

- Identifying anomalies in network traffic using AI.
- AI-powered threat detection and prevention systems.

Session 3: Case Study and Activity

- Real-world examples of AI in IT infrastructure management.
- Group activity: Designing an AI-powered solution for a specific IT challenge.

Day 4: Implementing AI in IT Workflows

Session 1: AI Project Planning

- Steps to implement AI solutions in IT.
- Best practices for AI adoption in IT workflows.
- Addressing common challenges in AI implementation.

Session 2: Integration with Legacy Systems

- Strategies for integrating AI with existing IT systems.
- Overcoming scalability and compatibility issues.

Session 3: Hands-on Workshop

- Participants create a basic AI implementation strategy tailored to their organizations.

Day 5: Ethics, Challenges, and Future of AI in IT

Session 1: Challenges in AI Implementation

- Technical challenges: bias, data quality, and scalability.
- Organizational challenges: resistance to change and lack of expertise.

Session 2: Ethical Considerations

- Data privacy and security concerns.
- Responsible AI usage in IT.

Session 3: Future Trends in AI and IT

- Emerging technologies: AI for DevOps, hyper-automation, and beyond.
- Preparing for the future of AI in IT operations.

Session 4: Final Project Presentations

- Participants present their AI implementation strategies.
- Group feedback and discussion.

Learning Outcomes:

By the end of the course, participants will:

- Understand AI's role and impact in IT workflows.
- Gain hands-on experience with AI tools and platforms.
- Develop skills to implement AI-driven solutions in IT operations.
- Create a practical AI strategy tailored to their organization.