# AI IN ACTION

Harnessing Artificial Intelligence for Better Workflows and Results





### **Course Duration**



16 HOURS/8 SESSIONS



2 SESSIONS PER WEEK/EACH 2 HOURS

### **About The Instructor:**

ENGINEER AMR HILAL

Engineer Amr Hilal is an engineer specializing in artificial intelligence and machine learning, certified by AWS, and holds a diploma in artificial intelligence from MIT in the United States. He is the founder of a company specializing in providing training programs in artificial intelligence and data science.

He also delivers technical courses for the Ministry of Communications and Information Technology and conducts training sessions on machine learning for the Egyptian Cabinet. He has presented numerous academic lectures at more than 35 Egyptian and international universities, including the American University in Cairo, Cairo University, Ain Shams University, the German University, and others.

Additionally, he offers courses on several major educational platforms and serves as a lecturer in machine learning at a well-known Egyptian university. He is also the founder of an annual forum for artificial intelligence enthusiasts at Nile University.

## Why do you need to attend this course?

leveraging AI to enhance business performance will give you a competitive edge.

Al can streamline repetitive tasks, reducing time and costs. Al provides data-driven insights to improve decision making and make you avoid costly mistakes.

Al can reveal untapped opportunities in product development, customer engagement, or market penetration which help you explore areas or markets you wouldn't have thought of.

Competitors are increasingly adopting AI to automate processes, reduce costs, and offer innovative services.

Without AI integration, businesses risk falling behind. Career wise AI expertise is highly valued in roles such as marketing, operations, HR, and IT. this course gives participants an edge in the job market.

### How will this course transform you?

attending this course doesn't just teach new skills, it reshapes how a person thinks, works, and approaches problem-solving. Here's how such a course can transform you:

- Many people feel overwhelmed by the complexity of Al and uncertain about how to start or leverage
  it. Gain clarity and confidence to use Al tools and techniques effectively.
- Spending significant time on repetitive, low-value tasks. Learn to automate workflows using AI tools,
  freeing up time for more strategic and creative endeavors.
- Gain skills to use AI for predictive analytics and real-time insights, enabling better proactive decision making.
- Become a specialist in Al applications, making you indispensable in your workplace or industry.
- Develop an innovative mindset, learning how to integrate AI to create new solutions, disrupt markets,
  and enhance competitiveness.

#### Course overview:

Master the power of Artificial Intelligence (AI) with this comprehensive course designed for professionals and business leaders. you'll explore AI fundamentals, industry-specific applications, real-world case studies, and hands-on tools like prompt engineering and automation.

Learn how to align AI strategies with business goals, measure ROI, and develop actionable roadmaps.

Packed with expert insights and practical exercises, this course equips you to leverage AI for growth, efficiency, and innovation in your organizations.

## What you'll learn:

- 1. Foundations of Al and Machine Learning
- 2. Al in Specific Industries
- 3. Real-World Case Studies. Deep dives into successful Al implementations.
- 4. Hands-On Tools and Techniques
- 5. Prompt Engineering: Best practices for crafting effective prompts for AI tools like ChatGPT.
- 6. Aligning Al Strategies with Business Goals
- 7. Measuring ROI of Al Initiatives
- 8. Future Trends and Opportunities



## **Course Content**

#### Module 1: Introduction to AI Fundamentals

- Demystifying Al
- o Topics:
- Definition and history of Al
- Difference between AI, Machine Learning (ML), and Deep Learning (DL)
- Key terminologies: algorithms, models, data sets
- o Activities:
- Interactive discussion on perceptions of AI
- Short video on the evolution of Al

#### Module 2: Real-World AI Case Studies

- o Topics & Case Studies:
- Amazon: Al in logistics and recommendation systems
- Netflix: Personalizing content with AI
- Tesla: Autonomous driving technologies
- Common challenges in Al implementation
- Strategies to overcome obstacles
- o Activities:
- Interactive analysis of each case study
- Group brainstorming on potential challenges and solutions

#### Module 3: Mastering Prompt Engineering

- Communicating Effectively with Al
- o Topics:
- Understanding Al language models
- Principles of prompt engineering
- Hands-On Prompt Engineering Workshop
- o Activities:
- Participants craft prompts for specific scenarios
- Al model responses and analysis
- Demonstration of effective vs. ineffective prompts

## **Course Content**

#### Module 4: Essential Al Tools for Business Leaders

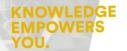
- Topics:
- Al platforms (e.g., TensorFlow, PyTorch)
- Al services (e.g., AWS Al Services, Google Al)
- No-code Al solutions
- Activities:
- Demonstrations of selected AI tools
- Tool comparison chart
- Q&A session

#### Module 5: Al Applications in Key Business Functions

- Session: Al in Finance and Management
- Al in HR and Marketing
- Al in Product Management and Development
- o Topics:
- Financial forecasting and analytics
- Al for decision support
- Talent acquisition and retention
- Customer segmentation and targeting
- Product design optimization
- Al-driven innovation
- o Activities:
- Interactive scenarios
- Role-playing exercise: Implementing AI solutions

#### Module 6: The Future of Al in Business

- Session : Emerging Al Trends
- Insights from AI Thought Leaders
- o Topics:
- Al ethics and governance
- Explainable AI (XAI)
- Al and cybersecurity
- o Key Figures:
- Andrew Ng: Al transformation strategies
- Fei-Fei Li: Human-centered Al
- Elon Musk: Al safety considerations
- Sundar Pichai: Al for everyone
- o Activities:
- Group discussion on future impacts
- Video clips and analysis



## **Course Content**

#### Module 7: Selecting the Right Al Projects

- Session : Aligning AI with Business Goals
- ROI and Feasibility Analysis
- o Topics:
- Strategic alignment
- Stakeholder engagement
- Cost-benefit analysis
- Risk assessment
- o Activities:
- Mapping exercise: Al projects to business objectives
- Case study evaluation

#### Module 8: Planning and Launching Al Initiatives

- Session : Developing an Al Roadmap
- Creating a Proof of Concept
- o Topics:
- Setting realistic timelines and milestones
- Resource allocation
- Prototyping techniques
- Testing and validation methods
- o Activities:
- Participants create a draft roadmap
- Group exercise on POC development

