ARTIFICIAL INTELLIGENCE: INTERMEDIATE

📅 **2 – 6 DECEMBER 2026**

💤 **ACCOMODATION PROVIDED**

📍 **DE PALMA HOTEL SHAH ALAM**

PROGRAMME FEE

RM4,200

OVERVIEW

The Artificial Intelligence (Intermediate level) programme is a 5-day, hands-on course designed to expand participants' foundational AI knowledge into practical, technical, and analytical competencies. Building upon basic AI concepts, this course emphasises real-world implementation, model optimisation, and data-driven decision-making using advanced tools and techniques. Participants will explore the deeper workings of machine learning algorithms, neural networks, and natural language processing, while also gaining exposure to computer vision, generative AI. Through guided labs, case studies, and project-based learning, participants will develop confidence in building, evaluating, and deploying AI models using tools like Python (Google Colab). This course is designed to bridge the gap between theoretical understanding and real-world application, preparing learners to manage and implement AI initiatives effectively within their organisations.

METHOD

Presentations, hands-on labs, real-world case studies, project-based learning, discussions and Q&A sessions

FOR WHOM

Data analysts, developers, engineers, digital transformation teams, and professionals with basic AI knowledge looking to apply AI in real-world projects

KEY LEARNING OUTCOMES

- **Apply Advanced Machine Learning & Feature Engineering Techniques**
  Build high-performing predictive models using ensemble methods, feature engineering, and dimensionality reduction techniques.

- **Design & Train Deep Learning Models for Vision and Sequence Data**
  Develop neural networks, including CNNs and RNN/LSTMs, for image recognition, time-series, and text-based applications.

- **Develop NLP, Conversational & Generative AI Solutions**
  Perform core NLP tasks, build chatbots using transformer models, and apply Generative AI techniques for content creation and data augmentation.

- **Deploy, Evaluate & Scale AI Models Effectively**
  Integrate AI models with visualization and deployment tools, apply advanced evaluation metrics, and understand MLOps fundamentals for scalable solutions.

- **Deliver Ethical, Future-Ready & Industry-Relevant AI**
  Work with real-world datasets while addressing ethical concerns and exploring emerging AI trends such as XAI, Edge AI, and Federated Learning.

COURSE OUTLINES

DAY 1: ADVANCED MACHINE LEARNING CONCEPTS

Module 1: AI Project Lifecycle and Workflow

Module 2: Supervised Learning – Advanced Techniques

Module 3: Feature Engineering and Model Evaluation

DAY 2: DEEP LEARNING ESSENTIALS

Module 4: Understanding Deep Learning Architecture

Module 5: Convolutional Neural Networks (CNNs)

Module 6: Model Optimisation and Transfer Learning

DAY 3: NATURAL LANGUAGE PROCESSING (NLP) AND TEXT ANALYTICS

Module 7: Text Preprocessing and Tokenisation

Module 8: Deep Learning for NLP

Module 9: Conversational AI and Chatbots

DAY 4: AI APPLICATIONS AND GENERATIVE MODELS

Module 10: Introduction to Generative AI

Module 11: AI in Industry Applications

Module 12: AI Integration with Business Tools

DAY 5: RESPONSIBLE AI, FUTURE TRENDS, AND CAPSTONE PROJECT

Module 13: Responsible and Ethical AI

Module 14: Future Trends in AI

Module 15: Capstone Project Presentation

Who Can Apply?

To enroll in this programme, you must meet the following requirements:

Eligibility

✅ Malaysian Bumiptera.

✅ Diploma holder & above.

✅ Open to students, fresh graduates, working professionals, and career switchers.

✅ Alumni of Yayasan Peneraju are welcome to apply.

Prerequisites

✅ Recommended for participants with foundational AI knowledge OR

✅ Completion of an AI beginner course.

✅ Basic Python understanding is helpful but not mandatory.

Check Your AI Level Proficiency

**Scan the QR code to complete a short AI Level Check.
This helps us understand your current proficiency and recommend the most suitable programme level.**

After submission, our team will reach out to confirm details and guide you on the next steps and financing options.

SCAN TO SUBMIT INTEREST

TRAINER PROFILE

MUHAMMAD AQIL LUQMAN

Data Science & Industry 4.0 trainer specialising in programming, analytics, and problem-solving. Delivers hands-on sessions that help participants apply data-driven solutions with confidence.

KHAVINDIRREN NALARAJAH

Industry 4.0 trainer with 7+ years' experience in Big Data, Data Science, IoT, AI, and analytics. Experienced in practical delivery using Excel, Power BI, and Tableau.

MUHILAN NALARAJAH

Big Data & Industry 4.0 trainer with 8 years' experience in Python, Java, Hadoop/Spark, and SQL. Delivers tool-based analytics and visualisation training using Power BI, Tableau, and Excel.

ZAIFEEDA ZADA BINTI AMIR ZADAH

Industry 4.0 trainer with 6 years' experience in training operations and capability development. Focus areas include soft skills, strategic thinking, marketing management, and project management.

Questions & Queries met with Quality Solutions