

FOR ENGINEERS

BY ELITE INDIGO

Enhance your engineering expertise and master the art of leveraging artificial intelligence to optimize design, analysis, and problem-solving.

Walk away with practical "quick wins" to integrate Al into your engineering workflows and boost efficiency immediately.





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Artificial Intelligence for Engineers

Program Overview

Artificial intelligence (AI) is rapidly transforming the manufacturing industry. Alpowered technologies are being used to automate tasks, make better decisions, and improve quality. As an engineer, you can play a key role in this transformation. This program will teach you the skills you need to use AI in manufacturing and engineering. You will learn about the latest AI technologies, such as machine learning, deep learning, and natural language processing. You will also learn how toapply AI to real-world manufacturing problems, such as product design & development, process improvement, quality control, and maintenance.

Course Objectives

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

- Understand the basics of artificial intelligence (AI)
- Learn about the latest AI technologies, such as machine learning, deep learning,
- and natural language processing.
- Learn how to apply AI to real-world engineering and manufacturing problems.
- Develop the skills necessary to use AI in manufacturing
- Walk away with a list of Al 'quick wins' engineering– and manufacturing–driven
- business cases they can start right away in their organization

Methodology



Interactive group discussions, lectures, exercises, case studies and sharing of real-world experiences.

Number of Participants: Max 20 per workshop

Medium of Instruction: English and Bahasa Malaysia (where applicable)

Facility: Each participant to bring a laptop

Duration

2-day Full Workshop.





Artificial Intelligence for Engineers

Course Outline & Schedule (Day 1)

Duration	Details
1 Hour	Module 1 : Introduction to AI & Engineering Learning + Debrief: What is AI? History of AI. Applications of AI in engineering Benefits & Challenges of using AI in Engineering Ethical considerations in AI usage
2 Hours	Module 2 : Al Success Stories in Engineering Learning + Debrief: Case studies of how Al has been used to improve engineering processes and products Examples of how Al can be used to achieve real-word results
1 Hour	Lunch
2 Hours	Module 3 : The Data Science Process Learning + Debrief: A systematic approach to analyzing, visualizing, and modeling big data Different steps in the data science process How to use data science to solve engineering problems
2 Hours	Module 4 : Data Cleansing Learning + Debrief: The process of cleaning and preparing data for analysis Different types of data errors Techniques for correcting data errors



Artificial Intelligence for Engineers

Course Outline & Schedule (Day 2)

Duration	Details
1 Hour	Module 5 : Exploratory Data Analysis (EDA) Learning + Debrief: A technique for exploring data to gain insights and identify patterns Different methods for EDA How to use EDA to identify potential problems or opportunities in engineering
2 Hours	Module 6 : Models & Algorithms Learning + Debrief: Different models and algorithms that can be used for machine learning and artificial intelligence Different types of models, such as supervised, unsupervised and reinforcement learning Different types of algorithms, such as decision trees, neural networks, and SVM How to use models & algorithms to solve engineering problems
1 Hour	Lunch
1 Hour	Module 7 : Key Competencies Learning + Debrief: Skill that are needed for developing and deploying AI systems in engineering. Some of the key competencies include data science, ML, NLP, Computer vision, Cloud Computing and communication.
1 Hour	Module 8 : Industry-Specific Business Cases Learning + Debrief: How AI can be used to solve business problems in engineering Examples of how AI can be used to improve efficiency, productivity and customer service in engineering
2 Hours	Module 9 : Demos, Mini Projects, & Al Driven Business Case Brainstorming Learning + Debrief: Opportunity to apply the skills learned in the previous models Participation in demos of Al tools Work on engineering-driven Al mini projects & brainstorm Al-driven business cases



ABOUT ELITE INDIGO

We are dedicated to empowering businesses to achieve their full potential. With a team of seasoned professionals and a wealth of industry experience, we offer tailored consulting services to help organizations overcome challenges and seize opportunities.

WHY CHOOSE US?

98% Customer Satisfaction based on Google Reviews



4.9 ★★★★★ 600 Google reviews

All our courses are 100% HRDF claimable and no PO needed.

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OUR COURSES



ARTIFICIAL INTELLIGENCE (AI)

Dive into the cutting-edge world of Al, exploring algorithms, data analysis and more.



TECHNICAL SKILL

Sharpen your technical prowess from programming, software and more.



SOFT SKILL

Develop essential interpersonal skills to excel in any professional setting.



LEADERSHIP SKILL

Unleash your leadership potential with our Leadership Skills course



TEAMBUILDING

Understand the dynamics of teamwork, communication, and synergy



