



# DIGITAL TECHNOLOGY DEMYSTIFIED

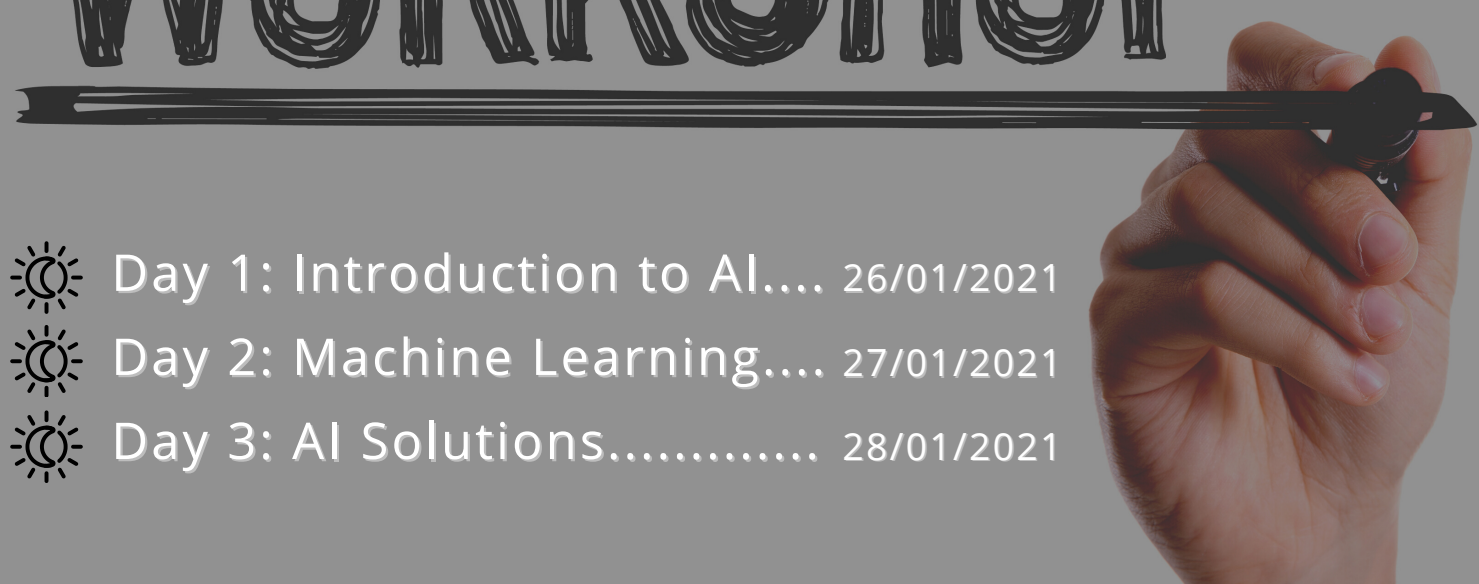


مؤسسة الكويت للتقدم العلمي  
Kuwait Foundation for the Advancement of Sciences

# COURSE DESCRIPTION

Digital Technology Demystified Course is a structured practical course that allows people interested in AI to begin understanding the possibilities that this technology presents.

## WORKSHOP

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- ☀ Day 1: Introduction to AI.... 26/01/2021
  - ☀ Day 2: Machine Learning.... 27/01/2021
  - ☀ Day 3: AI Solutions..... 28/01/2021

# COURSE ACTIVITY SCHEDULE

Workshop Name	Description
Day 1: Introduction to AI	<ul style="list-style-type: none"> <li>• What is AI and what is not AI</li> <li>• The history of Artificial Intelligence</li> <li>• Applications in the past, current progress and the future</li> <li>• Conceptualizing Machine learning, Deep Learning, Computer Vision, Natural Language Processing etc.</li> <li>• The decision-making process of machines, probabilities, moral issues and practical examples.</li> <li>• Kahoot Activity – Test your knowledge: Identify what is AI and what is not AI?</li> </ul>
Day 2: Machine Learning	<ul style="list-style-type: none"> <li>• What is data, what are the data sources of today and what repositories are being used.</li> <li>• Big Data Debate</li> <li>• Algorithmic biases caused by AI</li> <li>• Machine Learning</li> <li>• How machines learn, tapping into Supervised Learning, Unsupervised Learning and Reinforcement Learning.</li> <li>• ML Algorithms and application</li> <li>• Coding Challenge</li> <li>• Data Science processing</li> <li>• The difference between AI and ML</li> <li>• How can ML help businesses of any size</li> </ul>
Day 3: AI Solutions	<ul style="list-style-type: none"> <li>• Applying Design Thinking to further develop the idea Evaluating the idea and checking it against the feasibility criteria</li> <li>• Finalizing your idea and developing an action plan of turning it into reality</li> <li>• Addressing the barriers with Digital Transformation and AI</li> <li>• The future of workforce automation</li> <li>• The potential for a Superintelligence application</li> <li>• How legal frameworks can best help overcome the challenges in the Artificial Intelligence and Digital Transformation field.</li> <li>• AI statistics worldwide and in the MENA region.</li> <li>• Overview of the latest AI Index report</li> <li>• Overview of MENA AI Adoption report.</li> </ul>

# PROGRAM OUTCOMES

## At the end of this program, you will be able to:



Demystify what is possible with AI and what is currently not possible.



By understanding the mechanics of AI, delegates will know how to frame AI problems and solutions.



Delegates look at key technology building blocks and trends, and how technology can positively impact on business.



Understand the relationship between AI and Machine Learning, and how Machine Learning is the 'engine room' of AI.



Understand what Big Data and AI are and how to apply them in today's businesses



Enumerate Machine Learning applications, such as a simplified facial recognition example



Frame a Solution with Digital Technology, keeping People, Planning and Process elements



Create a Solution for a provided case study and use a framework to implement it



Understand all elements that go into the digital solutions and potential roadblocks.

```
18
19 class Man(games.Sprite):
20     """
21     A man which moves left and
22     """
23     def __init__(self, *args):
24         """ Initialize
25         super(Man
```

Kindly note that this course requires a basic proficiency with Python programming language.

# PREREADING

Timeframe	Course Topic	Learner Journey Milestone Activities
Pre-reading	<p><b>Digital Technology in Business - First Principles</b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Computing De-mystified</li> <li>• Programming De-mystified</li> <li>• The Internet De-mystified</li> <li>• Digital Business De-mystified</li> <li>• A Framework for Digital Technology</li> <li>• Video Resources</li> <li>• Knowledge Check</li> <li>• Answers to Raspberry Pi Questions</li> <li>• Technology Framework Challenge</li> </ul> <p><b>Dynamics in The Technology World</b></p> <ul style="list-style-type: none"> <li>• Garner Hype Cycle for Emerging Technologies</li> <li>• Hardware and Energy</li> <li>• Big Data and AI</li> <li>• Networks and Automaton</li> <li>• Human Computer Interface</li> <li>• Privacy and Security</li> <li>• Knowledge Check</li> <li>• Technology Radar Challenge</li> </ul> <p><b>Algorithms</b></p> <ul style="list-style-type: none"> <li>• What is an Algorithm?</li> <li>• The Chilli Sweet Algorithm</li> <li>• A Decision Tree Algorithm</li> <li>• Google's Page Ranking System</li> <li>• How Does Code Get Executed?</li> <li>• Video Resources</li> <li>• Knowledge Check</li> <li>• Code Challenge</li> </ul> <p><b>Business and Digital Technology</b></p> <ul style="list-style-type: none"> <li>• New Business Models</li> <li>• Case Study 1 - Rolls-Royce Creates New Digital Capabilities</li> <li>• Case Study 2 - Coca-Cola Amatil uses IoT to Deliver a Personalised Vending Experience</li> <li>• Case Study 3 - The Met Office Transforms User Experiences</li> <li>• Business Technology Values</li> <li>• Video Resources</li> <li>• Business Technology Value Challenge</li> </ul> <p><b>Solutions</b></p> <ul style="list-style-type: none"> <li>• The Solution Process</li> <li>• Solutions Framework</li> <li>• Video Resources</li> <li>• Knowledge Check</li> <li>• Solutions Challenge</li> </ul>	<p><b>Orientation</b></p> <p><b>Learning Coach Connection</b> Learning Coach Welcome Call</p> <p><b>Welcome Activity</b> Setting up a Whatsapp Group</p>

# ALWAYS LEARNING

Contact Us to Get More Details About Digital Technology Demystified Program:

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