

Deep Learning

Session No#	Session mode	Session Type	Week - Day No. #	Duration Hrs
1	EL-Async	<ul style="list-style-type: none"> • Deep Learning Fundamentals • Fundamentals of Computer Vision, Images, and image processing, • Deep Learning for computer vision, • Azure AI Vision. 	Before Sync Session	3
2	FC -Sync	Explore Azure AI Vision Image analysis capabilities and use cases	1-1	3
3	MS -Sync	Assignment 1: Utilize Vision Studio to analyse images captured by cameras throughout Northwind Traders' "smart store".	1-2	3
4	MS -Async	Additional Practice-1	Before Sync Session	8.5
5	EL-Async	<ul style="list-style-type: none"> • Understand face analysis, • getting started with facial analysis using Azure AI vision resource. • Reading text from Images and documents using Azure AI vision. 	Before Sync Session	3
6	FC- Sync	Explore Azure AI Vision facial recognition capabilities and optical character recognition capabilities.	1-3	3
7	MS -Sync	Assignment 2: Implement a "smart store" initiative to enhance customer service by utilizing AI-powered image analysis for text detection and facial recognition from images.	2-4	3
8	MS -Async	Additional Practice-2	Before Sync Session	8.5
9	EL-Async	<ul style="list-style-type: none"> • Provision Azure resources for Azure AI Custom Vision, • Train an image classifier using a custom vision portal, • Test, evaluate and publish the trained model to a prediction resource. 	Before Sync Session	3
10	FC- Sync	Steps and processes for designing and evaluating a custom vision solution	2-5	3
11	MS- Sync	Assignment 3: Design and implement a custom vision solution to classify fruit images.	2-6	3
12	MS -Async	Additional Practice-3	Before Sync Session	8.5
13	EL-Async	<ul style="list-style-type: none"> • Introduction to NLP, • NLP applications. • Question-answering chatbot using Azure AI language resource, • concept of knowledge base • Familiarization language portal, • Intents, Utterances, and Entities. 	Before Sync Session	3

		• Types of entities.		
14	FC -Sync	Demonstration of question-answering knowledge base and language understanding using the Azure Language portal	3-7	3
15	MS -Sync	Assignment 4: Design and deploy a FAQ chatbot using the Azure language portal	3-8	3
16	MS -Async	Additional Practice-4	Before Sync Session	8.5
17	MS- Sync	Discussion on data collection and pre-processing of the images collected and provision of Azure resources for project environment creation.	3-9	3
18	MS- Async	Implementation of data collection and project environment creation	Before Sync Session	3
19	MS -Async	Additional Practice-5	Before Sync Session	8.5
20	MS- Sync	Review of data collection and project environment creation. Discussion on optical character recognition on the collected images efficiently.	4-10	3
21	MS- Async	Implementation of optical character recognition on the collected images efficiently.	Before Sync Session	3
22	MS -Async	Additional Practice-6	Before Sync Session	8.5
23	MS- Sync	Review of optical character recognition on the collected images efficiently. Discussion on pre-processing the extracted text from the OCR.	4-11	3
24	MS- Async	Implementation of pre-processing the extracted text from the OCR.	Before Sync Session	3
25	MS -Async	Additional Practice-7	Before Sync Session	8.5
26	MS-sync	Review of pre-processing the extracted text from the OCR and discussion on text analysis on extracted text using Azure Language Portal.	4-12	3
27	MS-Async	Implementation of text analysis on extracted text using Azure Language Portal.	Before assessment	3
28	MS -Async	Additional Practice-8	Before assessment	10.5
29	AS-Sync	Summative Assessment (Per learner)	5-13	30 min

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