

Machine Learning Algorithms and Methods

Session No#	Session mode	Session Type	Week - Day No. #	Duration Hrs
1	EL-Async	<ul style="list-style-type: none"> • What is regression, • The fundamentals of regression algorithms, • The evaluation metrics for regression, • No-code Regression on Azure ML designer. 	Before Sync Session	3
2	FC -Sync	Steps and processes for designing and evaluating an ML model for regression tasks using no-code solutions	1-1	3
3	MS -Sync	Assignment 1: Design and implement a machine learning model using no-code solutions for forecasting the price of the automobile based on the vehicle features.	1-2	3
4	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	8
5	EL-Async	<ul style="list-style-type: none"> • What is classification, • The fundamentals of classification algorithms, • The evaluation metrics for classification tasks, • No-code classification on Azure ML designer. 	Before Sync Session	3
6	FC- Sync	Steps and processes for designing and evaluating an ML model for classification tasks using no-code solutions	1-3	3
7	MS -Sync	Assignment 2: Design and implement a Machine Learning model using no-code solutions for predicting whether the patient is having diabetes or not based on health features.	2-4	3
8	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	8
9	EL-Async	<ul style="list-style-type: none"> • What is clustering, • The fundamentals of clustering algorithms, • The evaluation metrics for clustering tasks, • No-code clustering on Azure ML designer 	Before Sync Session	3
10	FC- Sync	Steps and processes for designing and evaluating an ML model for clustering tasks using Azure ML designer.	2-5	3

11	MS- Sync	Assignment 3: Design and implement a Machine Learning model to apply clustering.	2-6	3
12	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	8
13	EL-Async	<ul style="list-style-type: none"> • Azure AI services, • AI services on the Azure platform, • Create Azure AI service resources, • Use Azure AI services, • Understand authentication for Azure AI services, • Introduction to text analytics. 	Before Sync Session	3
14	FC -Sync	Use cases and application areas of Azure AI services.	3-7	3
15	MS -Sync	Assignment 4: Create Azure AI Content Safety as Azure AI Services and explore the working of the content safety service in the content safety studio.	3-8	3
16	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	8
17	MS- Sync	Discussion on the use of pre-processed flight delay dataset for regression task using Azure ML Designer. Comparison of the regression algorithm performance.	3-9	3
18	MS- ASync	Implementation of regression task using Azure ML Designer and comparison of the regression algorithm performance.	Before Sync Session	3
19	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	8
20	MS- Sync	Review of data cleaning and pre-processing. Discussion on project tasks of using the processed data asset to use Automated ML and Designer for regression tasks.	4-10	3
21	MS- Async	Implementing regression task Automated ML and Designer for regression task	Before Sync Session	3
22	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	8

23	MS- Sync	Review of regression task using Azure Auto ML and Designer. Discussion on comparison of the regression algorithm performance.	4-11	3
24	MS- Async	Implementation of comparison of the regression algorithm performance.	Before Sync Session	3
25	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	8
26	MS-sync	Discussion on implementation of classification on AutoML and designer.	4-12	3
27	MS-Async	Implementation of classification on AutoML and designer.	Before assessment	3
28	MS -Async	Additional Practice-Complete all the pending works	Before Sync Session	14
29	AS- Sync	Summative Assessment (per learner)	5-13	30 min

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