**General Introduction to Machine Learning & Automated machine Learning**

* Overview of Machine Learning
* Machine Learning Life Cycle
* Overview of AutoML
* Advantages of using AutoML
* Use case for AutoML
* Current AutoML Platform

**Azure Machine Learning & AutoML Introduction**

* Introduction to Azure ML landscape
* Introduction to Azure AutoML
* Scope of Azure AutoML
* Advantage of Azure AutoML

**Azure Components Basics**

* Creating free Azure Account
* Creating Machine Learning Workspace
* Introduction to various Azure ML Components
  + Workspace
  + Compute
  + Dataset & Datastores
  + Environments
  + Experiments
  + Run & Run Configuration
  + Snapshots
  + Logging
  + Git Tracking & Integration
  + Model Registry
  + Deployment
  + Endpoints

**Machine Learning Basics**

* Classification - Introduction & model supported by AutoML
* Regression - Introduction & model supported by AutoML
* Time Series - Introduction & model supported by AutoML

**Getting Started with Azure AutoML**

* Automated machine Learning with coding in Python
  + Building First Classification Model
  + Building First Regression Model
  + Building First Time Series Model

* Automated Machine Learning with no coding
  + Building First Classification Model
  + Building First Regression Model
  + Building First Time Series Model

**Deep Dive into Classification Model**

* Select your experiment type: Classification
* Data source, formats, and fetch data
* Choose your compute target: local or remote
* Automated machine learning experiment settings
* Run an automated machine learning experiment
* Explore model metrics
* Register and deploy model
* Configuring the API
* Consuming the model

**Deep Dive into Regression Model**

* Select your experiment type: Regression
* Data source, formats, and fetch data
* Choose your compute target: local or remote
* Automated machine learning experiment settings
* Run an automated machine learning experiment
* Explore model metrics
* Register and deploy model
* Configuring the API
* Consuming the model

**Deep Dive into Time Series**

* Select your experiment type: Time Series Forecasting
* Data source, formats, and fetch data
* Choose your compute target: local or remote
* Automated machine learning experiment settings
* Run an automated machine learning experiment
* Explore model metrics
* Register and deploy model
* Configuring the API
* Consuming the model

MLOps in Azure

* Version the data
* Version the experiment
* Version the model
* Version the API

Building an end to end automated Machine Learning Pipeline

* Setup up data in blob
* Auto trigger ML Pipeline
* Process real-time response
* Save response in SQL database

Scaling the Architecture

* Adding more powerful compute
* Distributed Training
* Monitoring the logs

<https://docs.microsoft.com/en-us/azure/machine-learning/concept-automated-ml>

<https://docs.microsoft.com/en-us/azure/machine-learning/tutorial-automated-ml-forecast>

<https://docs.microsoft.com/en-us/azure/machine-learning/how-to-use-automated-ml-for-ml-models>