

Comprehensive Data Science Solutions on Azure





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#### Introduction:

In today's data-driven world, organizations rely on skilled professionals to design and implement effective data science solutions. This comprehensive program equips participants with the knowledge and skills needed to excel in the dynamic field of data science, specifically tailored to the Azure platform.

Note: This program is designed to prepare participants for the certification exam only.

# **Program Objectives:**

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

- Master Azure Data Services: Learn to use Azure tools for data science solutions.
- Excel in Data Preparation: Gain skills in exploring and transforming data effectively.
- Perfect Model Training: Learn techniques for training and evaluating ML models.
- Deploy and Monitor Solutions: Understand deployment and monitoring on Azure.
- Prep for Certification Exam by mastering the essential concepts and skills required to succeed.

# **Targeted Audience:**

- · Data scientists and analysts.
- · Azure developers.
- Data engineers.
- · Business analysts.
- · Azure solution architects.
- IT managers.

# Program Outlines:

#### Unit 1.

#### Getting started with Azure Machine Learning & Visual Tools for Machine Learning:

Azure Machine Learning Introduction.



- · Working with Azure Machine Learning.
- Automated Machine Learning.
- Azure Machine Learning Designer.

#### Unit 2.

## Running Experiments and Training Models & Working with Data:

- Introduction to Experiments.
- Training and Registering Models.
- · Working with Datastores.
- · Working with Datasets.

#### Unit 3:

# Working with Compute & Orchestrating Machine Learning Workflows:

- Environments.
- · Compute Targets.
- Introduction to Pipelines.
- Publishing and Running Pipelines.

#### Unit 4.

## Deploying and Consuming Models & Training Optimal Models:

- Real-time Inferencing.
- · Batch Inferencing.
- · Continuous Integration and Delivery.
- Hyperparameter Tuning.
- Automated Machine Learning.

#### Unit 5.

## Responsible Machine Learning & Monitoring Models:



- Differential Privacy.
- Model Interpretability.
- Fairness.
- Monitoring Models with Application Insights.
- Monitoring Data Drift.