CAREER SKILLS+™ Course Outline
**DP-604T00 Implement a data science and machine learning solution
for AI with Microsoft Fabric**

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Price	Duration	Delivery Methods
$495.00	1 Daytime Class or 2 Evening Classes	Virtual, Private Group,

CAREER SKILLS+™

The DSDT Career Skills+ program presents an immersive exploration into the realm of data science and machine learning, empowering learners to harness the power of Microsoft Fabric for artificial intelligence applications. This comprehensive course equips participants with the essential tools and techniques to navigate the data science lifecycle, from data exploration to model deployment, enabling them to tackle real-world challenges with confidence.

Who Should Attend

This course is designed for individuals seeking to enhance their data science and machine learning skills within the Microsoft Fabric environment. It caters to professionals, researchers, and students aspiring to integrate digital technology with career development, fostering practical, real-world applications of AI solutions.

Course Prerequisites

Participants should possess a basic understanding of data concepts and terminology. Prior experience with programming or statistical analysis is beneficial but not mandatory.

Course Objectives

Upon successful completion of this course, participants will be able to:

Comprehend the data science process and its applications in the Microsoft Fabric ecosystem.
Leverage advanced data exploration techniques and visualizations to gain insightful perspectives.
Preprocess and transform data using Microsoft Fabric's Data Wrangler for optimal model training.
Train, track, and manage machine learning models with MLflow and Microsoft Fabric's cutting-edge tools.
Generate and deploy batch predictions from trained models, tailoring their behavior for specific use cases.

Agenda

Introduction to Data Science in Microsoft Fabric
Understand the data science process and its applications
Explore and process data with Microsoft Fabric's tools
Train and score machine learning models using Fabric

Data Exploration with Notebooks
Explore the power of Notebooks in Microsoft Fabric
Load and preprocess data for exploration
Understand data distribution and handle missing data
Apply advanced data exploration techniques
Visualize data with interactive charts and plots

Data Preprocessing with Data Wrangler
Introduce Microsoft Fabric's Data Wrangler tool
Perform data exploration and identify preprocessing needs
Handle missing data and outliers
Transform data using Wrangler's operator library

Model Training and Tracking with MLflow
Understand machine learning model training in Fabric
Train and track models with MLflow and experiments
Manage and version models in Microsoft Fabric

Batch Prediction Generation and Deployment
Customize model behavior for batch scoring

Prepare and preprocess data for prediction
Generate and save predictions to a Delta table
Deploy models for real-time prediction services

Unleash the power of data science and machine learning with Microsoft Fabric, and gain a competitive edge in the ever-evolving digital landscape.