



MICROSOFT TRAINING

Designing Implementing Data Science On Azure

Design and implement data science solutions on Azure. Build robust machine learning models and scalable data pipelines.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level course, "Designing Implementing Data Science On Azure," is meticulously crafted by Microsoft to equip professionals with the practical skills required to build, deploy, and manage robust data science solutions within the Azure ecosystem. Over two intensive hours, you will delve into the core concepts of leveraging Azure Machine Learning, along with essential supporting services, to transform raw data into actionable insights and intelligent applications. The curriculum focuses on a hands-on approach, ensuring participants gain proficiency in every stage of the data science lifecycle on a leading cloud platform.

Participants will explore key technologies such as Azure Machine Learning Studio, Azure compute targets, and methods for deploying machine learning models as scalable endpoints. You will learn to prepare data, train various machine learning models using both automated and custom approaches, and crucially, implement MLOps (Machine Learning Operations) best practices for monitoring and managing models in production. This course is ideal for data professionals aiming to harness the power of cloud computing for their data science initiatives, enhancing their ability to design and implement enterprise-grade AI solutions that drive business value and innovation.

Successfully completing this course will not only validate your technical expertise in Azure-based data science but also significantly boost your career trajectory in the rapidly evolving field of cloud AI. It provides a solid foundation for professionals looking to specialize in developing and operationalizing intelligent systems, making you a highly valuable asset in any organization leveraging Microsoft Azure for its data and AI strategies.

Duration	2 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Foundations of Azure Data Science

- Introduction to Azure Machine Learning workspace and its components
- Exploring data storage options for ML: Azure Blob Storage and Azure Data Lake Gen2
- Data preparation and feature engineering using Azure ML Data Assets
- Understanding Azure compute targets for training and inferencing

02 Module 2: Building and Training ML Models on Azure

- Leveraging Automated Machine Learning (AutoML) in Azure ML for rapid model development
- Custom model training using the Azure ML Python SDK
- Hyperparameter tuning strategies and model evaluation metrics
- Managing experiments and runs within Azure Machine Learning

03 Module 3: Deployment, Management, and MLOps

- Deploying machine learning models as real-time endpoints (Azure Container Instances and Azure Kubernetes Service)
- Monitoring model performance and detecting data/model drift post-deployment
- Introduction to MLOps principles: model versioning, dataset versioning, and retraining pipelines
- Integrating deployed models with client applications via REST APIs

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Azure AI Engineer**
- > **Cloud Data Scientist**
- > **Machine Learning Operations (MLOps) Specialist on Azure**

FREQUENTLY ASKED QUESTIONS

Q: What specific prerequisites are recommended to get the most out of this 'Designing Implementing Data Science On Azure' course?

To fully benefit from this course, we recommend a foundational understanding of Python programming, basic machine learning concepts (e.g., supervised vs. unsupervised learning, model evaluation), and general familiarity with cloud computing principles, preferably with some exposure to Azure services. While not strictly required, prior experience with data manipulation libraries like Pandas or NumPy will be advantageous.

Q: What practical, hands-on skills will I acquire that are directly applicable to real-world Azure data science projects?

Upon completion, you will be proficient in setting up and navigating the Azure Machine Learning workspace, preparing data using Azure ML assets, training models efficiently with both AutoML and the Python SDK, and critically, deploying these models as robust real-time endpoints. You will also gain practical knowledge in foundational MLOps practices like model versioning and monitoring, which are essential for managing production-grade machine learning solutions.

Q: How does this particular course prepare me for a specialized role like an Azure AI Engineer or Cloud Data Scientist in an organization?

This course is designed to bridge the gap between theoretical data science and practical implementation on Azure. It provides you with the direct skills needed to operationalize machine learning models in a cloud environment, a critical requirement for Azure AI Engineers. For Cloud Data Scientists, it enhances your ability to leverage Azure's scalable infrastructure for data processing, model training, and deployment, making you adept at building and managing intelligent solutions within an enterprise cloud strategy.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

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50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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