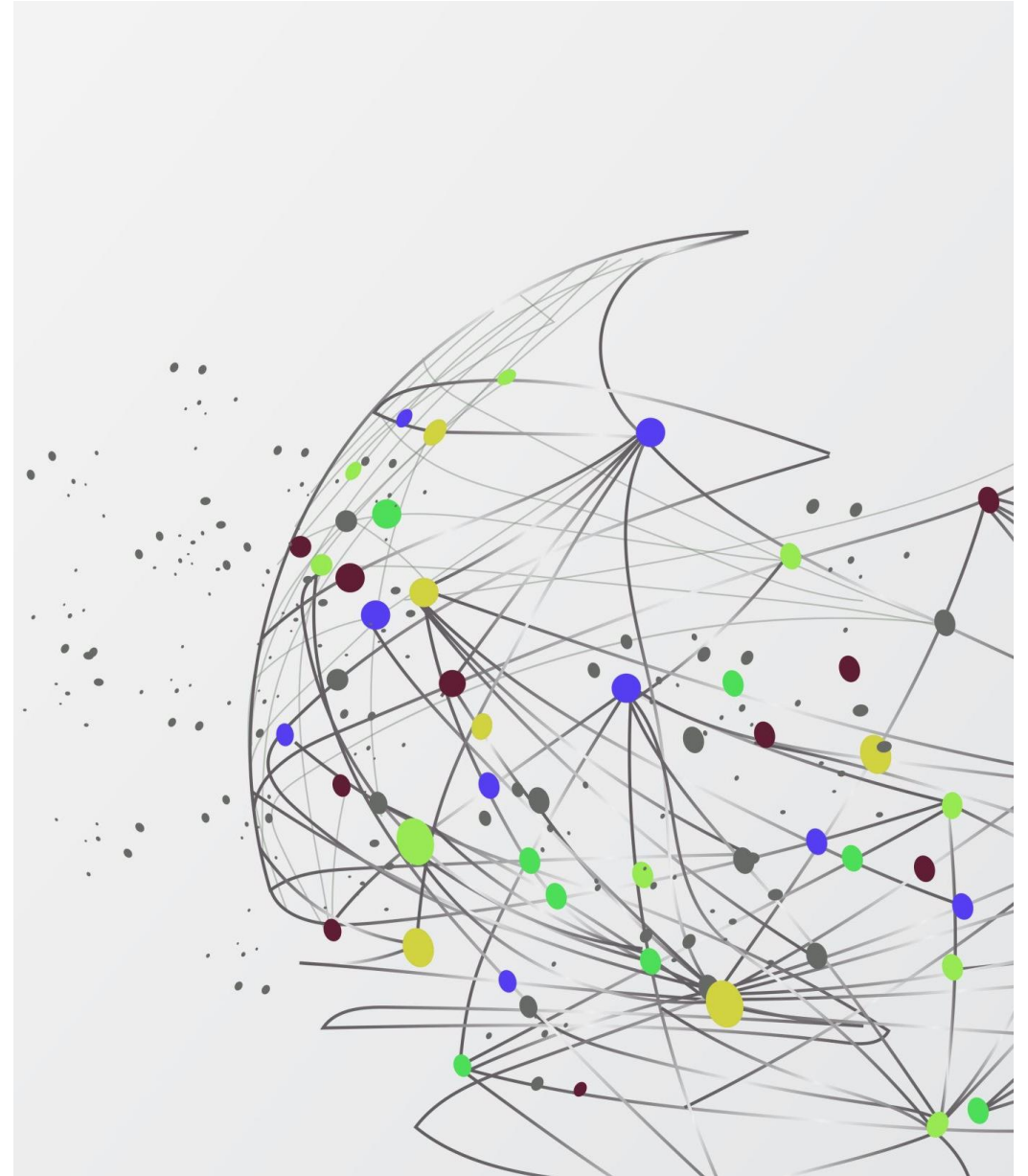# Microsoft Fabric Course Presentation

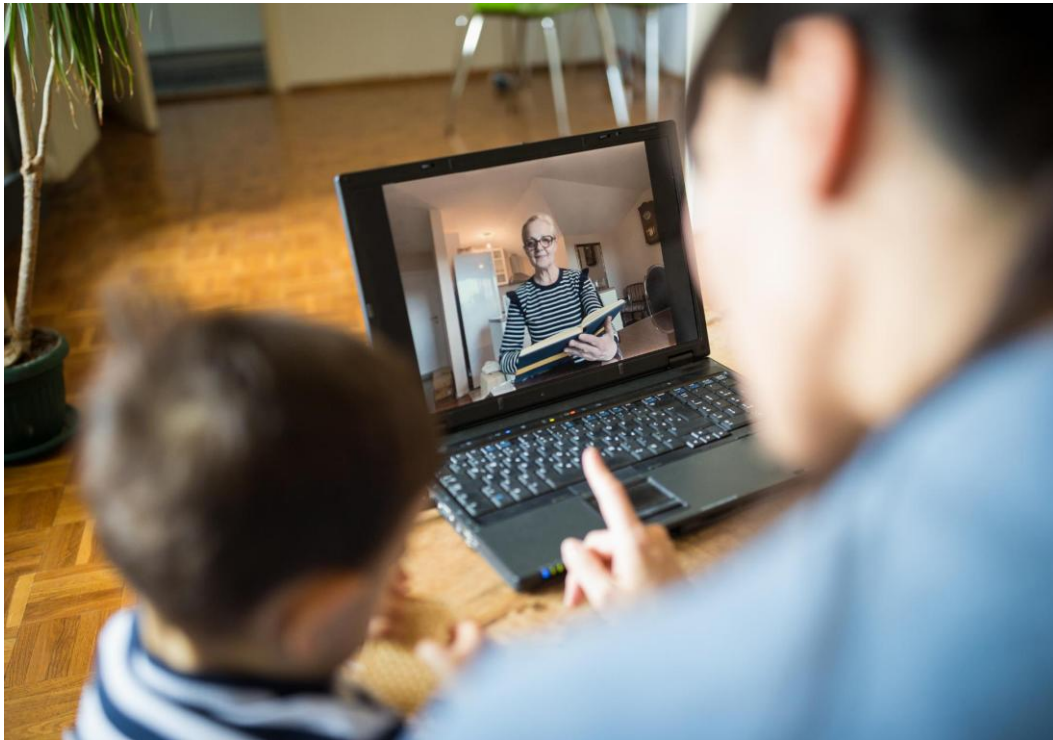*Exploring key components and learning objectives thoroughly*

Today's Course Outline

- Overview of Learning Labs

- Introduction to Microsoft Fabric

- Key Topics Covered in the Workshop

- Learning Objectives

- Prerequisites and Preparation

Overview of Learning Labs

Purpose and format of Learning Labs

Interactive Virtual Classrooms

Learning Labs provide dynamic virtual classrooms focused on hands-on and collaborative learning experiences.

Practical, Focused Trainings

Courses are designed to be practical and focused, delivering immediate value through curated content and expert instructors.

Skill Development for Real-World Challenges

Learning Labs equip participants with tools to tackle real-world challenges and deepen product knowledge or technical skills.

Beginner to Intermediate Workshops

Workshops cater to beginners and intermediate learners, ensuring accessibility and engagement for all skill levels.

Meet the instructors

Nikola Ilic
Founder, DataMozart

I'm making music from the data! PowerBI and SQLServer addict, MCT, Pluralsight Author, blogger, speaker...Interested in everything related to data - always eager to extract valuable info from raw data in the most effective way. Multi-year experience working with (predominantly) Microsoft Data Platform (SQL Server, SSAS, SSIS, SSRS, and Power BI). Father of 2 and true football (and Barca) fan!

Pablo Moreno
UG Expert

From Business Data Scientist to AI Product Manager, I've built a career focused on delivering impactful AI solutions that bridge the gap between strategy, technology, and financial operations.

With expertise in Business Intelligence, Robotic Process Automation, Artificial Intelligence, Machine Learning Engineering, and MLOps, I've worked across industries like finance, supply chain, and digital marketing. My passion for knowledge-sharing extends to teaching as a University Professor, publishing books, and speaking at international conferences.

Introduction to Microsoft Fabric

Comprehensive analytics platform and integrated services

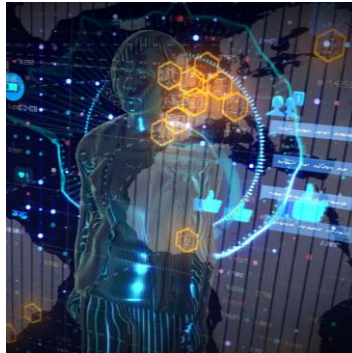### End-to-End Analytics

Microsoft Fabric consolidates diverse analytics services into a single, unified platform for comprehensive data insights.

Core Analytics Services

Key services include data lake, data engineering, warehousing, business intelligence, and semantic modeling.
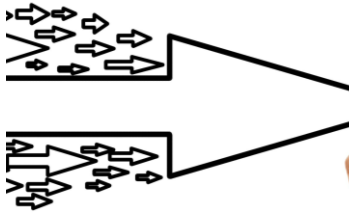
Advanced Capabilities

Supports data science, artificial intelligence, real-time analytics, and data governance for secure insights.

End-to-end data lifecycle and user roles

Diverse Data Roles

Workshop covers roles like data analysts, data engineers, analytics engineers, DBAs, developers, and data scientists using Microsoft Fabric.
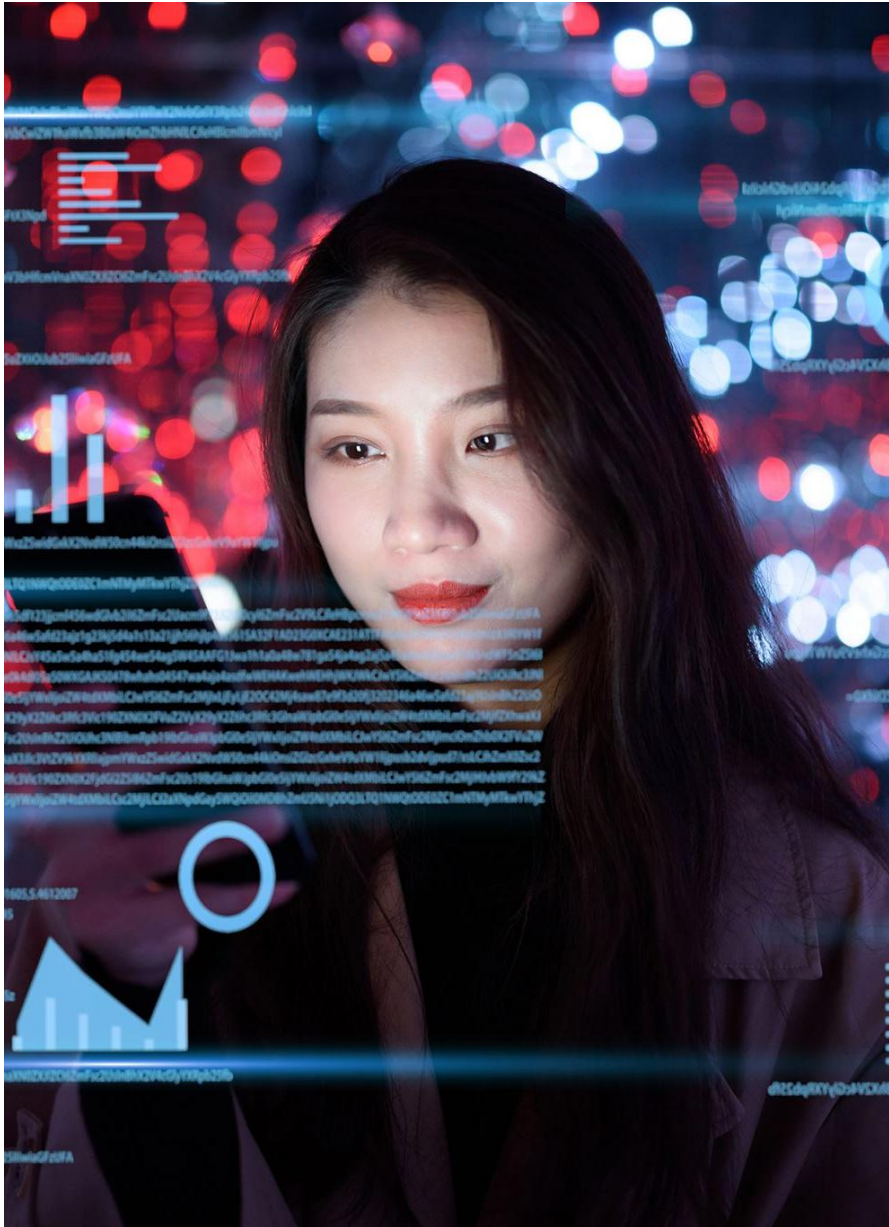

End-to-End Analytics Solution

Learn to use multiple Fabric tools for data ingestion, transformation, analysis, and delivering insights.

Comprehensive Data Governance

Governance and management of all data assets within the Fabric ecosystem ensures secure, compliant data usage.

Key Topics Covered in the Workshop

Getting started with Microsoft Fabric and its experiences

Microsoft Fabric Portal Access

Learn how to access the Microsoft Fabric portal easily and securely to start your experience.

Navigating the Portal

Explore intuitive navigation tools that help you find features and tools within Microsoft Fabric.

Understanding Fabric Experiences

Discover the variety of experiences available in Microsoft Fabric to make informed usage choices.

Organizing data in OneLake: lakehouse, Shortcuts, and Mirroring

Centralized Data Lakehouse

OneLake serves as a central repository combining data lake and data warehouse capabilities for efficient storage.

Shortcuts for Data Access

Shortcuts enable referencing data in original locations without moving it, simplifying data access.

Data Mirroring

Mirroring replicates data copies to enhance availability while retaining original data locations.
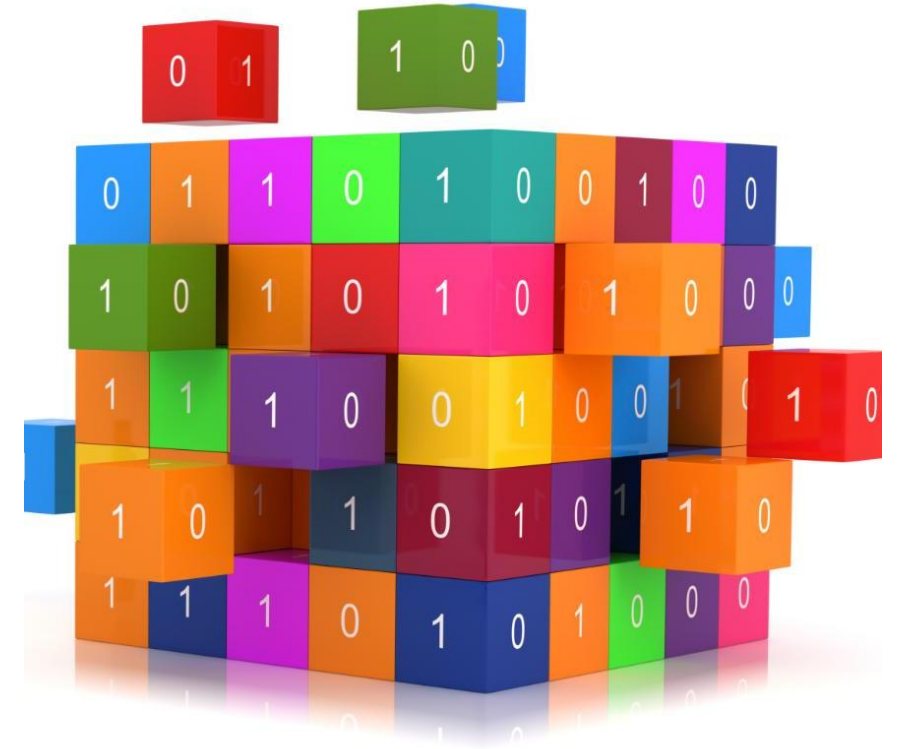
Semantic Model fundamentals for business reporting

Semantic Model Design

Learn how to design semantic models that organize business data effectively for reporting purposes.
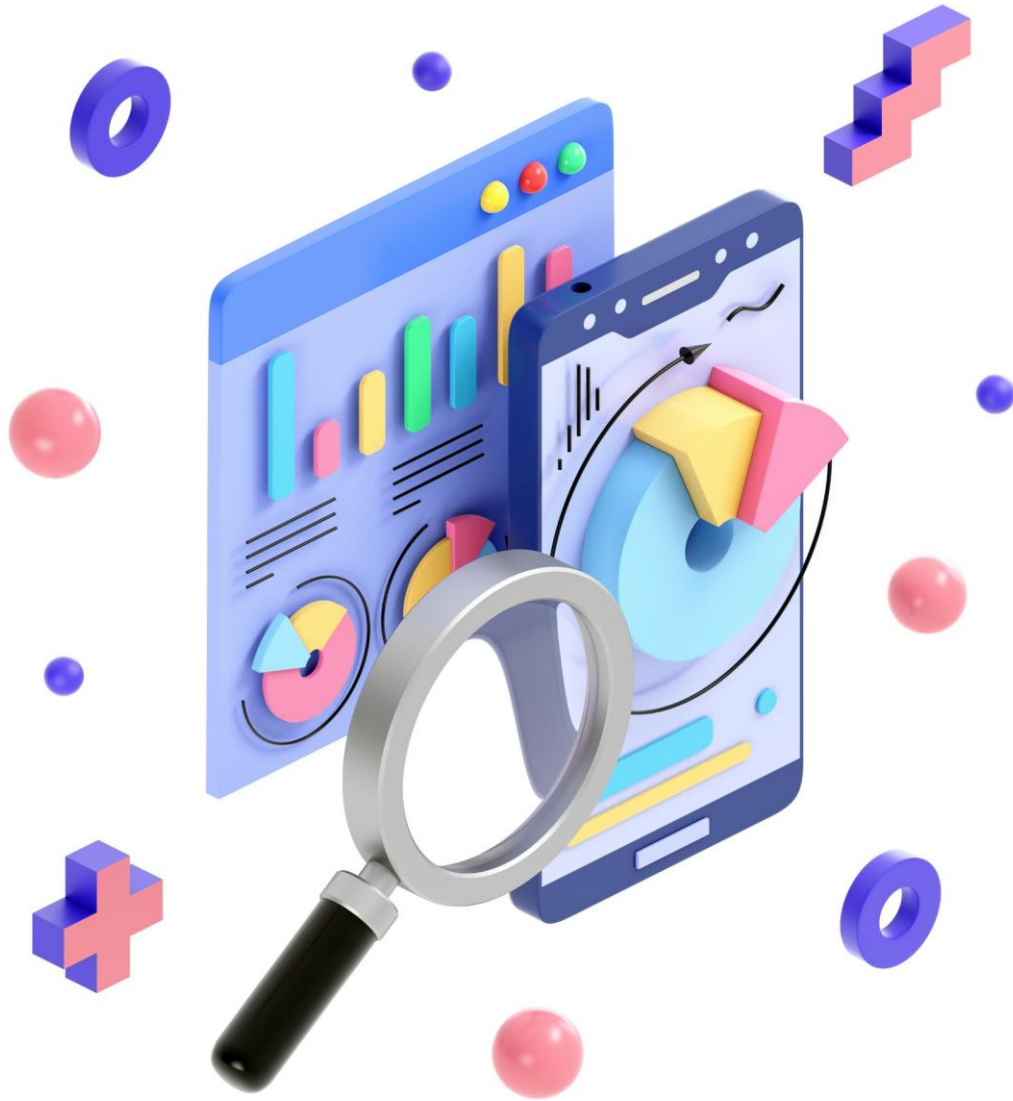
Efficient Implementation

Implement semantic models efficiently to ensure fast and accurate business reporting results.

Scalability in Reporting

Ensure semantic models are scalable to handle growing business data and reporting needs.
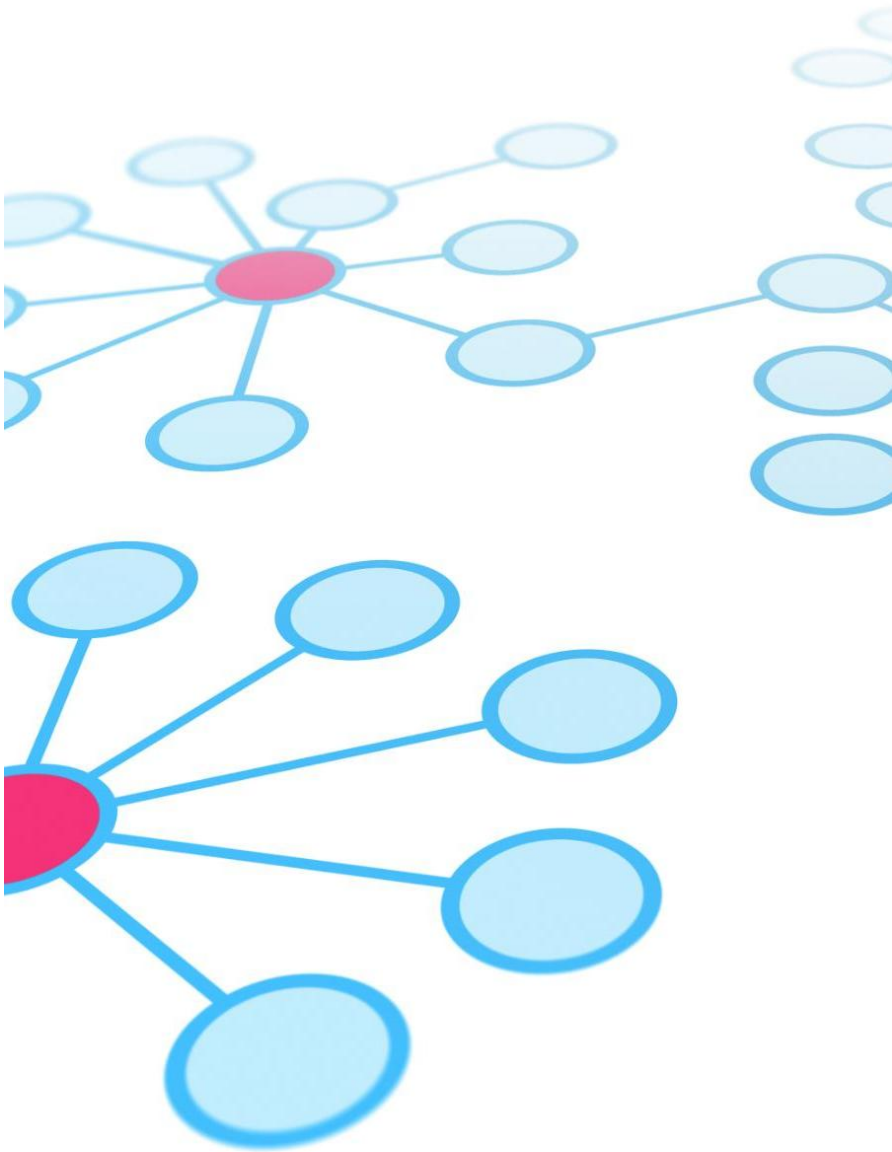
Visualization and Insights with Power BI integration

Power BI Integration

Power BI integrates seamlessly with Fabric to enhance data visualization and reporting capabilities.

Interactive Reports

Create rich and interactive reports that enable better insights and data-driven decision-making.

Machine Learning and advanced analytics

Machine Learning Integration

Using Fabric Synapse Analytics to build and deploy machine learning models for advanced data insights.
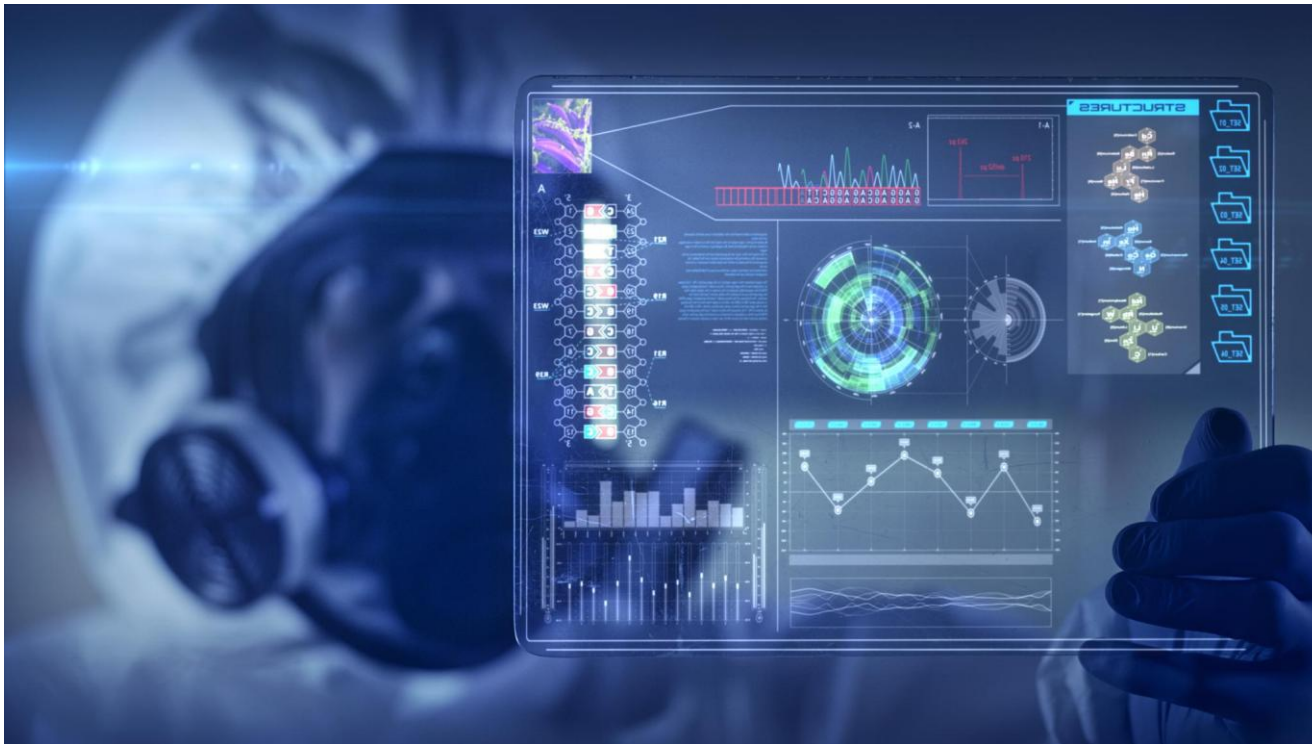
Advanced Analytics Development

Developing data science projects with advanced analytics capabilities powered by Synapse Analytics.

Semantic Link Utilization

Leveraging Semantic Link technology to enhance data understanding and relationship insights in analytics.
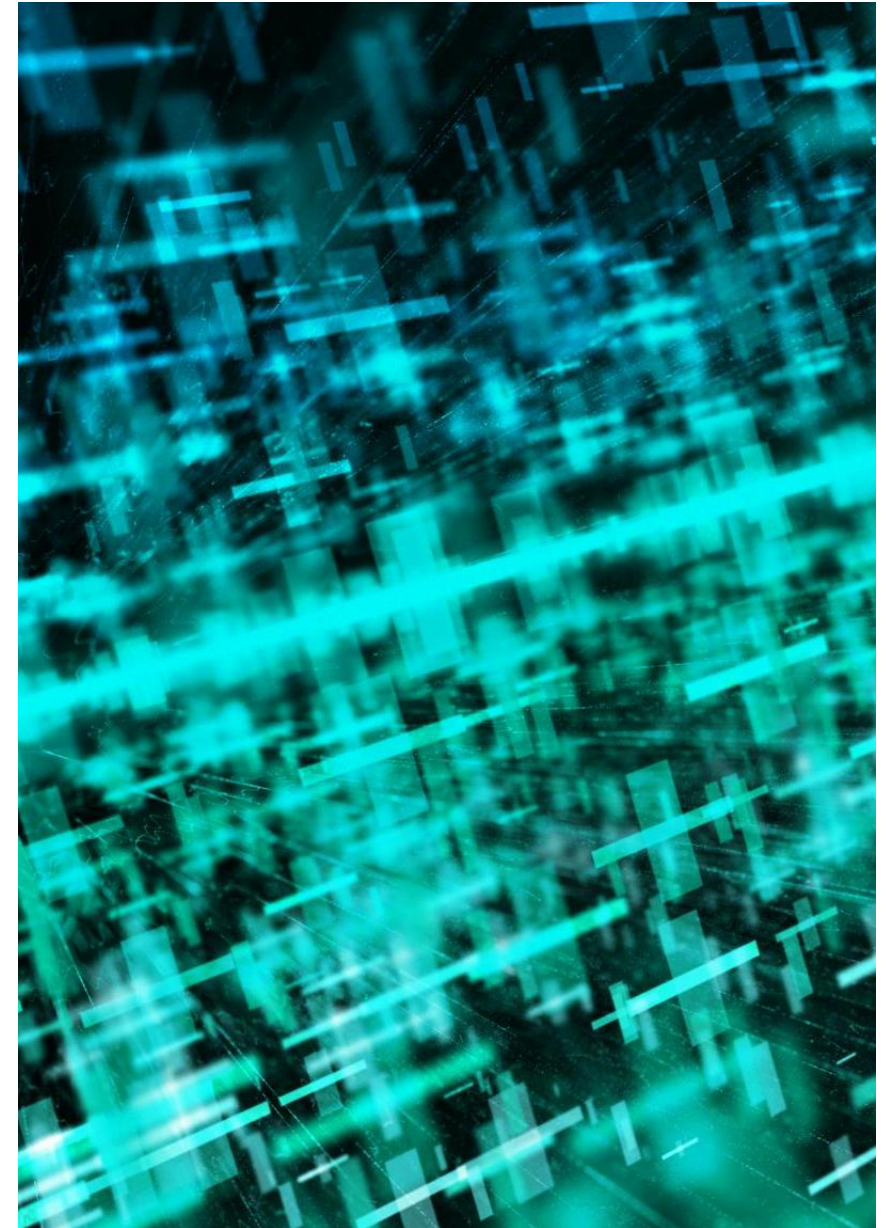
AI capabilities in Fabric: Copilot, Data Agent, and integrations

Fabric Data Agent

Fabric Data Agent automates data management and enhances AI-driven analytics within the Fabric ecosystem.

Copilot for Power BI

Copilot for Power BI offers AI-powered insights and standalone capabilities for advanced data visualization.

Integration with Copilot Studio and Teams

Integration with Copilot Studio enables seamless deployment of AI capabilities into collaboration platforms like Teams.

Data Engineering with Data Factory pipelines and Spark notebooks

Data Factory Pipelines

Data Factory pipelines automate data workflows to enable efficient data transformation and integration processes.

Spark Notebooks for Data Engineering

Spark notebooks provide an interactive environment for data transformation, analysis, and enrichment.

Data Governance using Purview: lineage and data quality

Data Lineage Tracking

Purview enables comprehensive tracking of data origin and transformation throughout its lifecycle.

Data Quality Management

Purview provides tools to monitor and improve data accuracy, consistency, and reliability.
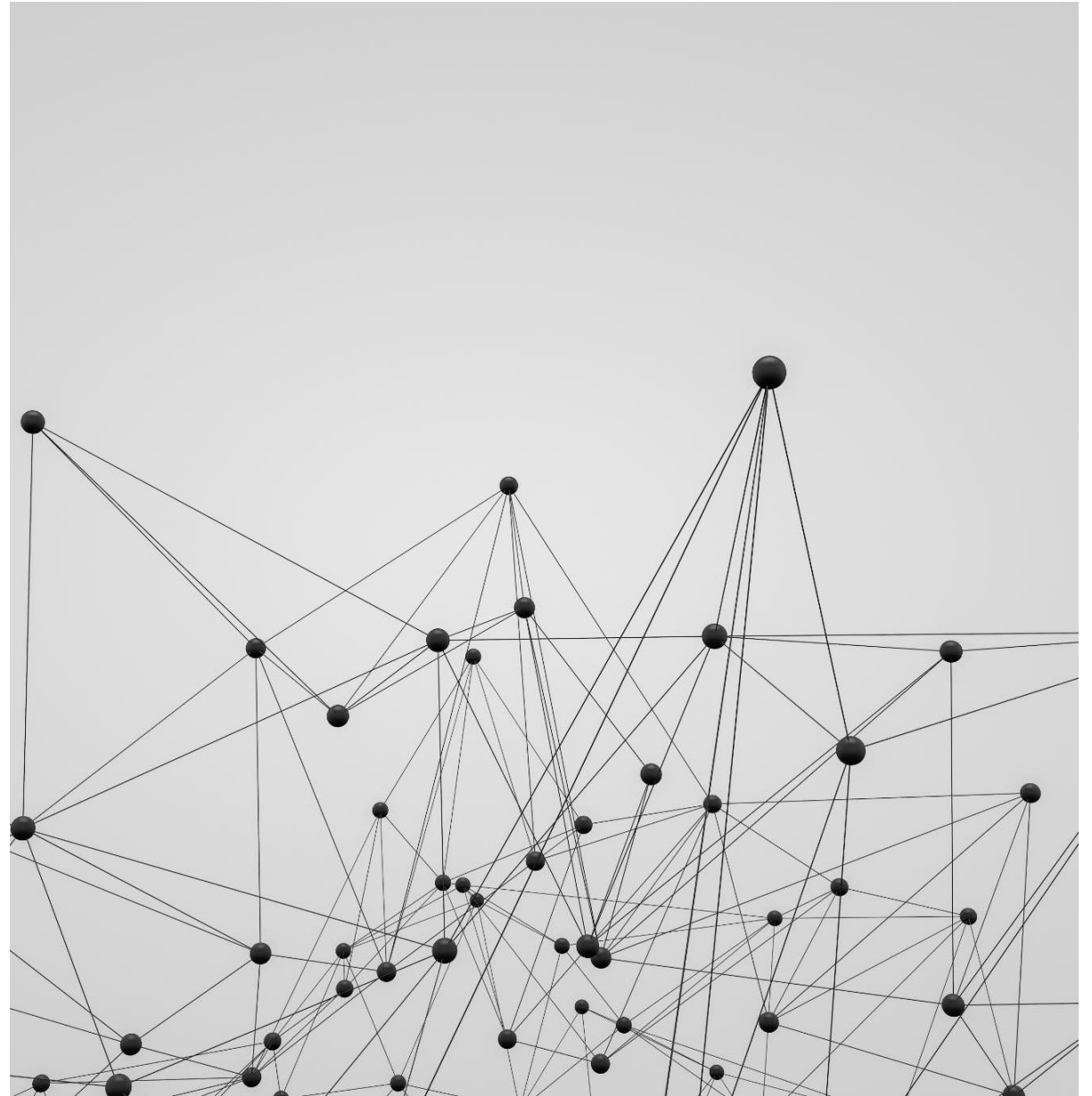
Learning Objectives

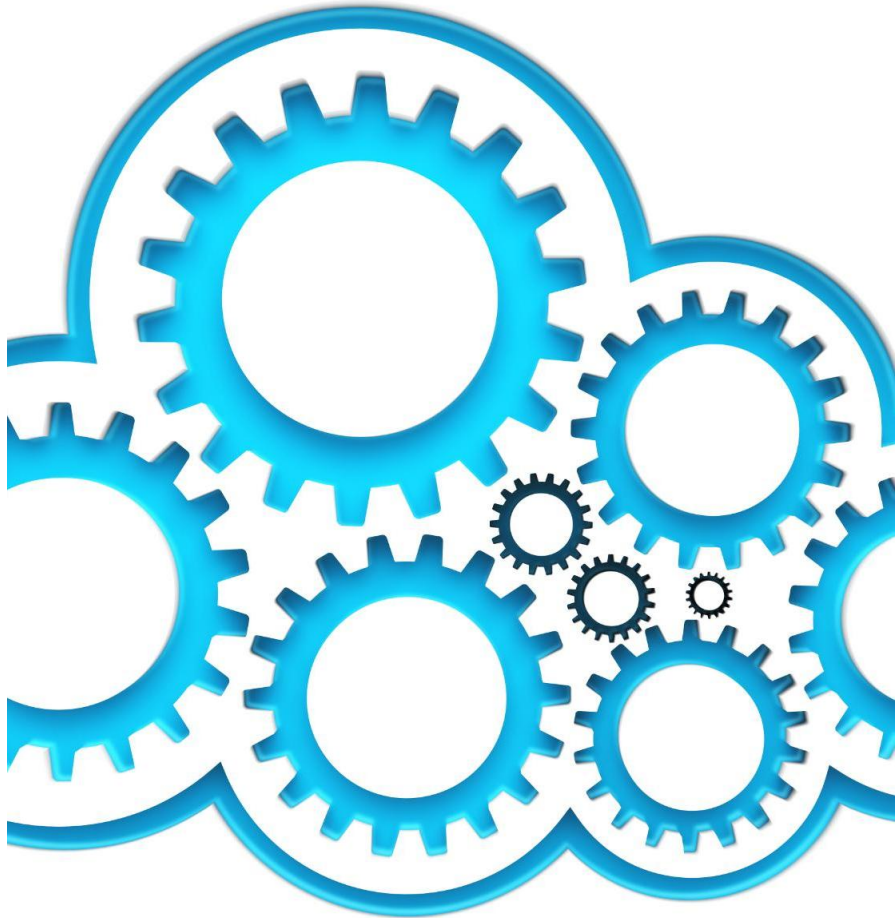# Understanding foundational capabilities and architecture

Foundational Capabilities Overview

Microsoft Fabric provides core capabilities that support scalable and flexible solutions.

Architecture Design

The architecture of Microsoft Fabric enables modular and efficient system integration.

Exploring unified experiences: Data Engineering, Data Science, and BI

Unified Data Platform

Microsoft Fabric provides an integrated platform combining data engineering, science, and BI capabilities.

Seamless Collaboration

Users can collaborate across data engineering, science, and BI workflows in one unified environment.
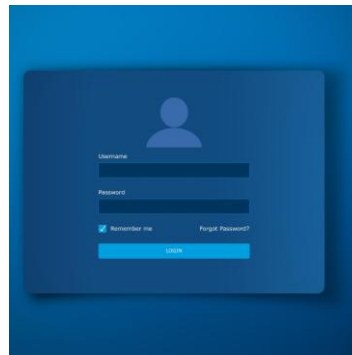
Enhanced Insights Delivery

Unified experiences enable faster, more insightful decision-making through integrated analytics.
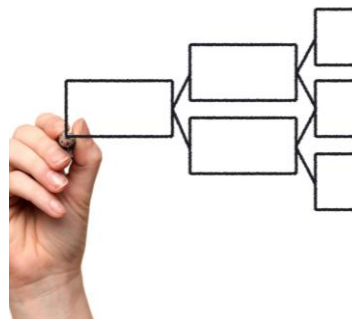
Managing, administering, and governing data assets

Data Asset Management

Understand strategies to efficiently organize and maintain diverse data assets across platforms.

Data Administration

Learn administrative tasks involved in controlling and maintaining data accessibility and security.

Data Governance

Implement policies and standards to ensure data integrity, privacy, and compliance within Fabric.

Prerequisites and Preparation

Recommended advance preparation: Microsoft Fabric 30-day challenge

30-Day Microsoft Fabric Challenge

Attendees are recommended to complete the 30-day Microsoft Fabric challenge on Microsoft Learn for better preparation.

Data Analytics Basics

A basic understanding of data analytics concepts is essential before starting the challenge.

Database Fundamentals

Familiarity with database basics such as tables, views, and relationships is important for effective learning.
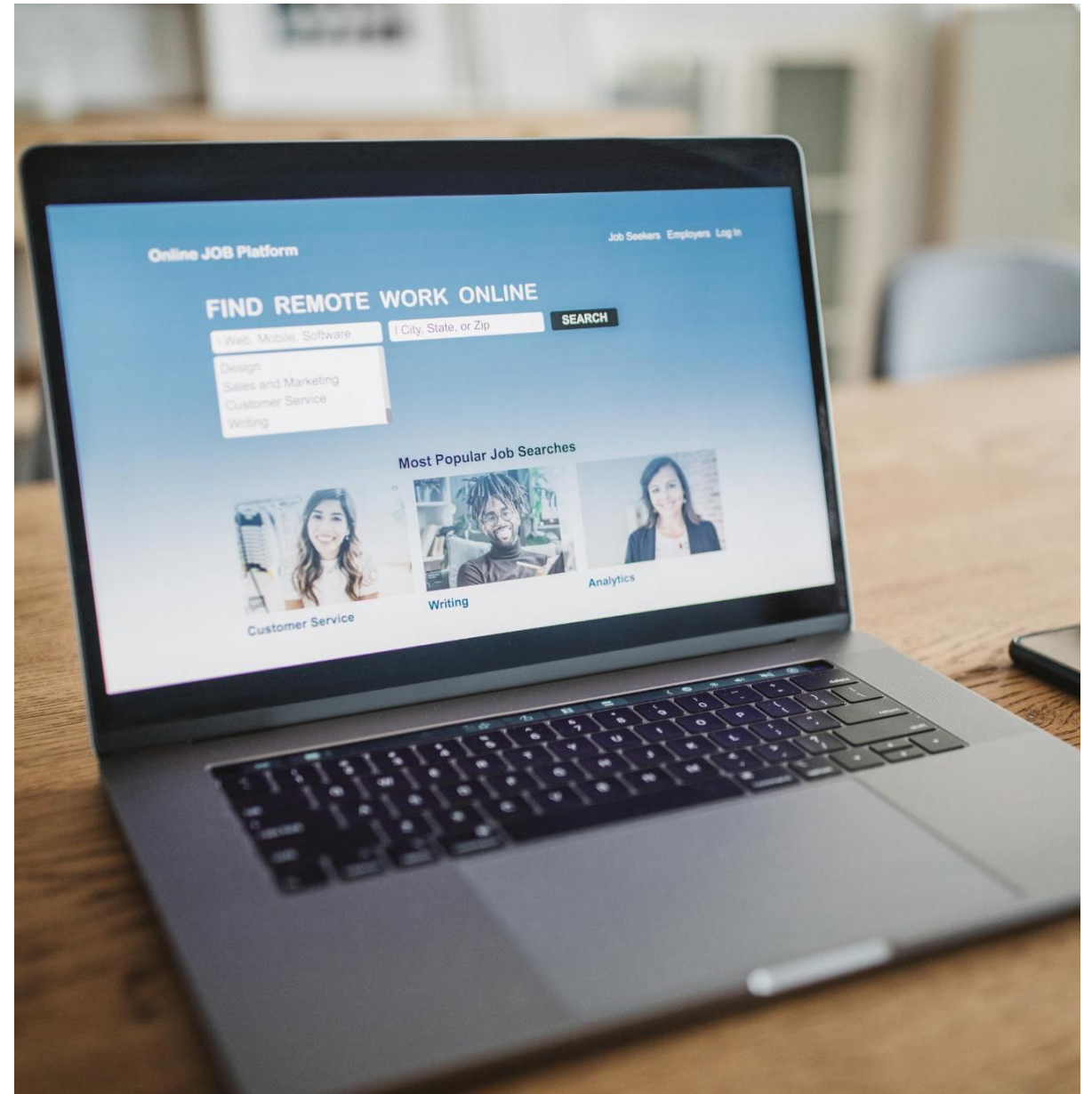
Technical requirements: Microsoft account, laptop, internet access

Microsoft Account Access

A Microsoft account with access to Microsoft Fabric is required; free trial licenses are acceptable.

Laptop with Browser

A laptop equipped with a web browser and internet connectivity is essential for accessing Microsoft Fabric online.

Come and Join Us!

Register Now

Course Details

- **Date:** Every Wednesday from Nov. 5-Dec. 17th

  No class Nov. 24th, due to the Thanksgiving holiday.

- **Time:** 8:00 am – Noon, PST

- **Location:** Online through Zoom

- **Bonus Resources Provided:** "Fundamentals of Microsoft Fabric" by Nikola Ilic & Ben Weissman and "Machine Learning in Power BI with R and Python" by Pablo Moreno.

- **Price:** USD 1,600.00

- **Registration:**

Learning Lab: Fabric Analytics Engineer – End-to-End Fabric view - Dynamics Communities

See you soon!

Integrated Analytics Platform

Microsoft Fabric provides a unified platform for analytics, data engineering, and artificial intelligence tasks.

Comprehensive Learning

This course offers a strong foundation to utilize Microsoft Fabric effectively in various data projects.