

# APPLIED TRAINING AZURE SYNAPSE ANALYTICS

The **data landscape** has changed **drastically** in the past few years, and what it means to build data platforms has evolved alongside it. The tools, languages and architectural patterns have all shifted to take advantage of **emerging technologies, cloud scalability** and advancements in Data Science... but how to you evolve alongside it?

Azure Synapse Analytics is Microsoft's new flagship Analytical Engine. It is more than just an amalgamation of other products, it is a **one-stop analytics powerhouse**.

In this three-day course, we will take you from **zero to hero** and demonstrate everything you need to understand to not just survive but to thrive with **Azure Synapse Analytics**.

We pioneered building **Modern Data Warehouses**, adapting as tools came and went. The architectural choice is vast and constantly changing but we have a simplified reference architecture, and we want to teach you to **master it**.

At **Advancing Analytics** we use our consultancy experience and close relationships with Microsoft to deliver the most up-to-date **Data Lakehouse** course available. We will show you what works, what does not work and most importantly how to build a **Data Lakehouse** for your business. We use hands-on labs to make sure you're getting the most out of the course and you'll build a solution to take away with you.

## AGENDA

### Power BI & Integrations

- Power BI Development
- Workspace Integration
- Data Access Patterns



### Lakehouse Architectures

- Designing Data Lakes
- Synapse Overview
- Big Data Processing Techniques



### Mapping Data Flows

- MDF Overview
- Expressions & Extension
- Common Patterns



### Synapse Setup & Config

- Provisioning Studio & Lake
- Linked Services & Workspace
- Security, Access & Monitoring
- The Synapse Metastores



### Provisioned SQL Pools

- Tables & Distribution
- Performance Tuning
- Workload Management
- Successful Patterns



### Orchestration & Data Acquisition

- Data Factory Overview
- Connecting & Loading Data
- Data Driven Orchestration



### On Demand SQL Pools

- OD SQL Pools Overview
- Performance & Cost
- Use Cases & Scenarios



### Spark Pools & PySpark Basics

- Spark Pools Overview
- Reading / Writing Data
- PySpark Deep Dive



## ABOUT ADVANCING ANALYTICS

We are a consultancy based in the UK who help global clients meet their *Advanced Analytics* objectives. We focus on Microsoft technologies and specialise in solving problems using Microsoft Azure and Databricks. By championing modern technologies, we are helping move the industry forward, either applying deep data engineering techniques or innovative data science solutions, we combine the best of both worlds for our customers.

We focus on three core pillars:

- **Advisory** - We will help you scope it
- **Delivery** - We will help you build it
- **Education** - We will help you understand it

## JUDGE FOR YOURSELVES

At *Advancing Analytics*, we think the best way to show you that we know what you're talking about, is to talk about it. A lot - You can find our *experts* at events or sharing their knowledge on *YouTube* and the *Data Science in Production* podcast.

We are known in the industry for **thought-leadership** and **bleeding-edge delivery**, we work directly with the Microsoft engineering teams, to bring you long-term insight.

One of our values is investing in our community, we share our thoughts and findings on the *Advancing Analytics* blog. Why not take a look.

*"The sessions were engaging, the content was easy to understand and pitched at the right level."*

## HOW WE DELIVER COURSES ONLINE

We have recently converted all our courses to be delivered remotely. We all consume information in different ways. Whether you're a hands-on learner, an auditory or visual learner, we have your needs catered for with extensive labs, deep theory, ample time for deep discussion and technical demonstrations. You can expect to find the following on our courses:

- **Flexible Learning Objectives** - We can adapt to meet your current needs.
- **Interaction** - Ask questions live, always with an opportunity to follow up
- **Labs and Exercises** - Practical exercises, stretch goals and handy references
- **Show & Tell** - Collaborative working / Interactive whiteboarding
- **Quizzes & Prizes** - If you needed more incentive, you could win Lego!

Explore and register for  
[\*Advancing Azure Synapse Analytics\*](#)



Gold Data Analytics  
Gold Data Platform  
Silver Cloud Platform



FIND OUT MORE BY VISITING OUR WEBSITE AT

**ADVANCING ANALYTICS**.CO.UK