

## **Capstone Projects:**

Real Time Business Scenario using **DP 700** 



#### Sales Performance Dashboard

Build a dashboard to show total sales, profit margin, topselling products, and regional performance. Include yearover-year growth and forecasting.



### **Customer Retention and Churn Analysis**

Import customer data and analyze metrics such as churn rate, retention rate, and average customer lifespan. Segment customers by behavior and demographics.



### **Financial Budget vs Actual Analysis**

Create a report to track budget utilization by department or project. Include variance analysis and dynamic drill-downs.



### **HR Analytics Dashboard**

Visualize employee demographics, attrition, recruitment funnel, and performance ratings. Analyze trends in headcount and diversity.



### Website Traffic & Marketing Insights

Connect to web analytics data (e.g., Google Analytics), visualize traffic sources, bounce rate, conversion funnels, and campaign ROI.



### **Inventory Management Dashboard**

Develop a dashboard to monitor stock levels, reorder alerts, aging inventory, and supplier lead times. Integrate with sales data for demand forecasting.

## **FABRIC DATA ENGINEER COURSE SYLLABUS**

**Duration: 40 hrs** 

### Section 1: Introduction to Microsoft Fabric

- Overview of Microsoft Fabric
- Components: Data Factory, Synapse, Power Bl, Data Activator
- Understanding the Unified Data Platform
- Role of a Data Engineer in Microsoft Fabric

## Section 2: Ingesting and Transforming Data with **Dataflow Gen2**

- Ingesting data using Dataflow Gen2
- Transform data using Power Query
- Data pipeline concepts and activities
- Managing and monitoring pipelines

### Section 3: Managing Data in One Lake and Lake Houses

- Introduction to One Lake
- Creating and managing Lake houses
- Working with files and tables
- Partitioning, indexing, and optimization

## Section 4: Data Engineering with Apache Spark in Fabric

- Introduction to Spark in Fabric
- Writing PySpark notebooks
- Data wrangling and processing using Spark
- Managing compute and performance

## Section 5: Building Data Pipelines with Data Factory

- Create and manage pipelines in Fabric
- Mapping and Wrangling Data Flows

- Pipeline triggers and dependencies
- Monitoring and troubleshooting

## Section 6: Creating and Managing Data Warehouses

- Data Warehouse vs Lake house
- Designing a Fabric Data Warehouse
- Ingesting data into warehouses
- Querying with T-SQL in Fabric

### Section 7: Designing End-to-End Data Solutions

- Integrating Lake house, Data Warehouse & Power BI
- Orchestrating pipelines and activities
- Real-time analytics and alerting with Data Activator
- Best practices for performance and scalability

## Section 8: Security, Governance & Monitoring

- Data access and workspace roles
- Row-level and column-level security
- Monitoring Fabric workloads and diagnostics
- Integration with Microsoft Purview

## Section 9: Data Governance & Compliance in Fabric

- Implement data classification and labeling
- Secure sensitive data with RLS & CLS
- Integrate with Microsoft Purview for governance
- Track lineage and auditing within workspaces

## Section 10: Automation with Fabric Pipelines

- Automate end-to-end data workflows
- Schedule and trigger pipelines for business
- Use Fabric API & Logic Apps for integration
- Error handling and retries in pipeline execution

## **SKILLS AND TOOLS**

## **Tools Covered**

Microsoft Fabric

OneLake

Warehouse

**Pipelines** 

Dataflows Gen2











**Spark Notebooks** 

Power BI

SQL

Git integration

**Azure Purview** 











## **Skills Covered**

Data Engineering **Fundamentals** 

Microsoft Fabric Architecturen

Data Integration

Data Transformation









Data Modeling

Security & Compliance Performance Optimization

Collaboration









## Earn your DP 700 Course **Completion Certificate**

Credo Systemz's certificate is highly recognized by 30K Global companies around the world.



## WHAT OUR TRAINEE SAYS?



4.7 \*\*\*\*

The trainer explained cloud concepts clearly with real-life examples, making it easy to understand for beginners. Practice sessions and doubt clearing were really helpful for building a strong foundation.



#### Nirosha

The course was well-structured with handson labs for each topic, which improved my practical skills. The trainer's guidance on managing Azure resources and services was excellent.



### Karthik M

 $5.0 \star \star \star \star \star$ 

The sessions focused on design patterns, architecture scenarios, and case studies that matched the exam syllabus. The instructor made complex concepts simple with diagrams and live use cases.



### **Srinivasan**

4.9 \*\*\*

The training covered pipelines, CI/CD, and DevOps practices in a very practical way. Tools like Azure DevOps and GitHub Actions were taught with real-time project examples.



### **Priya**



Security topics like IAM, Defender for Cloud, and Key Vault were explained with clarity. Lab exercises boosted my confidence to handle security tasks in a real environment.



#### Renuka Devi



Networking concepts like VNets, VPNs, and routing were made easy with step-bystep labs. The trainer's deep knowledge and support throughout the course were very helpful.

# **CHENNAI**

### **←--- VELACHERY** -

New # 30, Old # 16A, Third Main Road, Rajalakshmi Nagar, Velachery, (Opp. to Murugan Kalyana Mandapam), Chennai – 600 042.

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### **OMR**

Plot No.8, Vinayaga Avenue, Rajiv Gandhi Salai, (OMR), Okkiampettai, (Behind Okkiyampet Bus Stop) Chennai – 600 097.



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# **OVERSEAS**

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UAE

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