

**START YOUR
POWER BI
CAREER TODAY!!**

CREDO SYSTEMZ

**Power BI
Program**

Capstone Projects :

Real Time Business Scenario using
Power BI



Financial Forecasting

Developing a financial forecasting dashboard to predict future financial performance.



E-commerce Sales

Creating a comprehensive e-commerce sales dashboard for data-driven decision-making.



Healthcare Data Analysis

To analyze healthcare data for improving patient care using Power BI.



Employee Attendance Report

Visualize attendance trends, absenteeism, and employee-wise breakdowns.



Customer Feedback Analysis

Analyze sentiment scores, feedback categories, and satisfaction trends using survey data.



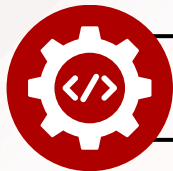
Product Inventory Management

Show stock levels, reorder alerts, fast/slow-moving items.



Power BI

Opportunities & Demand



Power BI Developer



BI Consultant



Business Intelligence Analyst



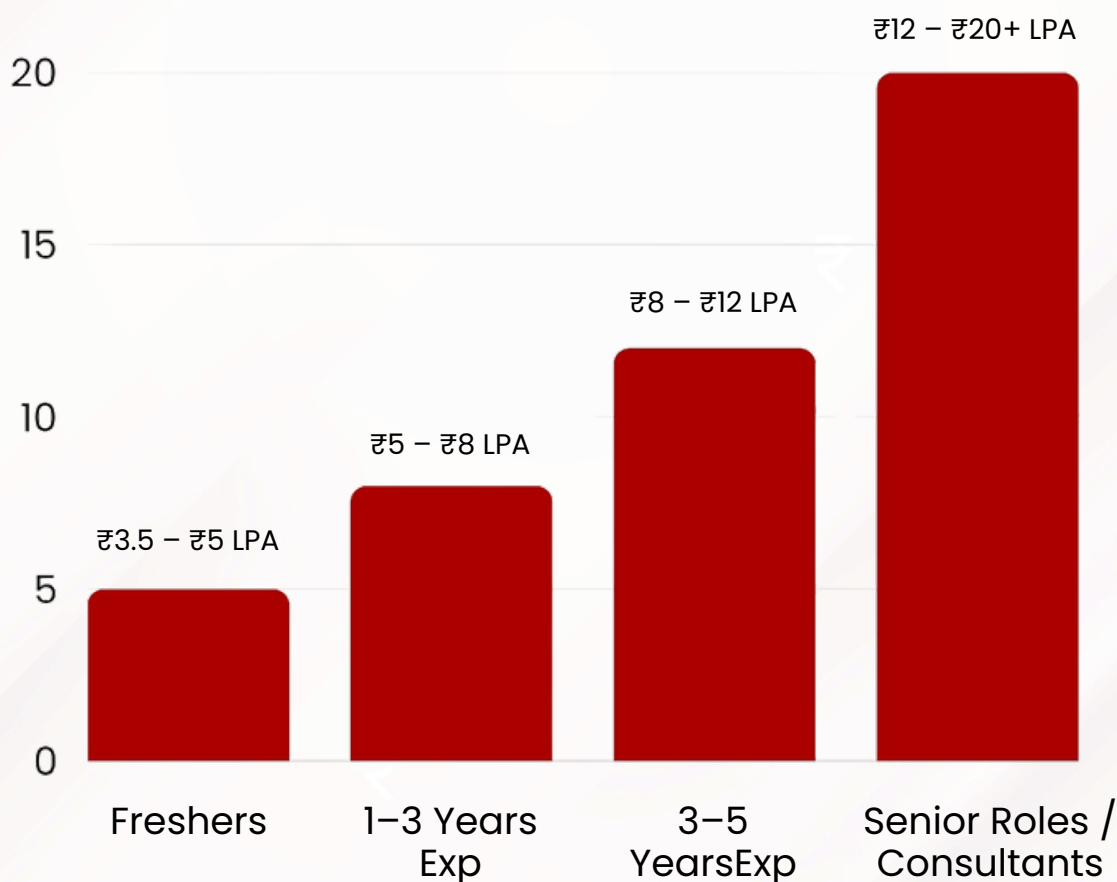
Power Platform Developer



Data Analyst



Data Visualization Specialist



POWER BI COURSE SYLLABUS

Section 1 : SQL Introduction



- Introduction to SQL (Structured Query Language)
- Advantages of SQL
- Database
- Tables
- SQL Data Types - Numeric Types, StringTypes, Date & Boolean
- SQL Commands - DDL, DML, DCL, TCL, and DQL
- Data Definition Language (DDL) - CREATE, ALTER, DROP, TRUNCATE
- Data Manipulation Language(DML) - INSERT, UPDATE, DELETE
- Data Query Language (DQL) - SELECT
- SQL Operator
- SQL Clauses - GROUP BY, HAVING & ORDER BY
- SQL JOINS - INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN
- SQL Keys - Primary Key & Foreign Key
- Tables Relations - One-to-One, One-to-Many, Many-to-Many

Section 2 : Power BI Fundamentals



- Overview of Power BI
- Power BI Components
- Understanding the Power BI Workflow
- Installing Power BI Desktop
- What is Power BI Interface

Section 3 : Connecting to Data Sources



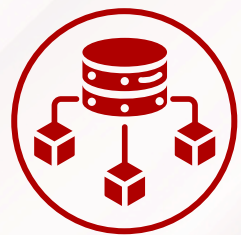
- Importing Data from Various Sources - Excel, CSV, PDF, SQL Server, Azure, JSON, Folders, and Web
- Understanding Data Connectivity Modes - Import Mode
- Understanding Data Connectivity Modes - Direct Query Mode

Section 4 : Data Transformation



- Power Query Editor
- Creating Custom Columns in Power Query
- Managing and Splitting Columns
- Reducing Rows in Power Query
- Applied Steps and Error Handling
- Transforming Unstructured Data
- Exploring Transform Menu Options
- Pivoting Data in Power Query
- Unpivoting Columns
- Transforming Text, Numbers, Dates, and Times
- Filtering and Sorting Data in Power Query
- Grouping Data in Power Query
- Merging Queries in Power Query
- Appending Queries in Power Query
- Removing Duplicate Rows in Power Query
- Creating Conditional Columns and Custom Logic
- Using Group By for Data Aggregation
- Extracting Data from JSON and XML Sources
- Applying Date and Time Functions in Power Query
- Creating and Using Query Parameters
- Data Profiling and Quality Control in Power Query
- Transforming Data from Web Sources

Section 5 : Data Modeling



- What is Data Modeling and Why is it Important?
- Key Concepts in Data Modeling – Tables, Relationships, Measures, Columns, and Schema Types
- Understanding Entities – Dimension Tables & Fact Tables
- Exploring Data Relationships
- Creating Relationships (Cardinality) in Power BI with Real-World Examples
- Establishing a One-to-One Relationship



- Establishing a One-to-Many Relationship
- Establishing a Many-to-Many Relationship
- Cross Filter Direction
- Best Practices for Managing Relationships
- Data Models
- Gaining insight into Flat or Denormalized Structures with a real-life example
- Exploring the Star Schema with an actual use case
- Understanding the Snowflake Schema with a real-world illustration
- Normalization & Denormalization
- Understanding How to Normalize Real-Time Data

Section 6 : DAX – Data Analysis Expressions

6.1 : Introduction to DAX (Data Analysis Expressions)



- Overview of DAX and its role in Power BI, Power Pivot
- Purpose of DAX for creating custom calculations, aggregations, and enhancing data models.

6.2 : DAX Syntax and Functions

- Structure and syntax of DAX formulas.
- Commonly used DAX functions and operators.

6.3 : Creating Calculated Columns and Measures

- Differences between Calculated Columns and Measures.
- How to create Calculated Columns and Measures in Power BI.

6.4 : Performing Basic Calculations with DAX

- Basic arithmetic operations and common aggregation functions: SUM, AVERAGE, MIN, MAX.
- Calculating totals and averages using DAX.

6.5 : Measures vs. Calculated Columns: Key Differences

- Static calculations in Calculated Columns vs. dynamic, context-based calculations in Measures.
- When to use one over the other.

6.6 : Aggregation Functions in DAX

- Key aggregation functions: SUM, COUNT, AVERAGE, DISTINCTCOUNT, COUNTROWS.
- Aggregating data at different levels of detail.

6.7 : Logical Functions in DAX

- Conditional logic with IF, SWITCH.
- Complex logical expressions and handling multiple conditions.

6.8 : Time Intelligence in DAX

- Year-over-Year (YoY) comparisons, running totals, and other date-based calculations.
- Time Intelligence functions: SAMEPERIODLASTYEAR, TOTALYTD, DATESYTD, etc.

6.9 : Advanced DAX Functions

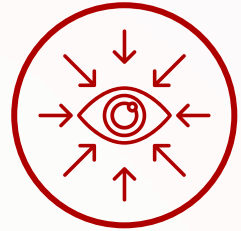
- Year-over-Year (YoY) comparisons, running totals, and other date-based calculations.
- Time Intelligence functions: SAMEPERIODLASTYEAR, TOTALYTD, DATESYTD, etc.

6.10 : Context in DAX

- Row Context: Row-wise calculations and iteration.
- Filter Context: Impact of filters applied in reports on DAX calculations.

6.11 : Iterators in DAX

- functions like SUMX, AVERAGEX, MINX, MAXX for row-wise calculations
- Using iterators to perform calculations across tables.



Section 7 : Visualizations

- Overview of Data Visualization
- Types of Visuals
- Bar Charts: Comparing data across different categories.
- Line Charts: Displaying trends over time.
- Pie Charts: Representing proportions or percentages of a whole.
- Column Charts: Displaying data comparisons across categories (vertical bars).
- Scatter Plots: Showing relationships or correlations between two variables.
- How Power BI Handles Data Visuals
- Formatting Visuals
- On-object Interaction: Using interactive elements like filters and slicers.
- Font and Font Size: Customizing text appearance in visuals for better readability.
- Colors and Stylistic Options: Personalizing visuals through color schemes, themes, and styles to enhance user experience.
- Scatter Charts and Bubble Charts
- Customizing Visuals
- Advanced Filtering
- Hierarchies, Drill-Downs, and Conditional Formatting
- Matrices and Bar Charts
- Tree Maps and Funnel Charts
- Maps and Geo-Data Visualizations
- Key Performance Indicator (KPI) Dashboard
- Drill Through and Drill-Down Visualizations
- Time-Based Visualization
- AI Visuals in Power BI - Decomposition Tree, Key Influencers Visual & Q&A Visual

Section 8 : Interactive Dashboards



- Designing Dashboards
- Creating Interactive Dashboards
- Enhancing User Experience
- To design for Mobile Devices
- Incorporating Visual Interactions – Sync Slicers, Selection Controls

Section 9 : Power BI Service – Publishing and Sharing Reports



- To publish Power BI Service
- Steps to Publish Reports
- Understanding Workspaces and Apps
- Overview of Sharing and Collaborating
- Sharing Reports and Dashboards
- Collaboration Features in Power BI Service
- Exporting Reports
- Embedding Reports
- Exporting Reports to PDF
- Exporting Reports to Excel
- Embedding Power BI Reports in Application

Section 10 : Row-Level Security – RLS



- Introduction to Data Security
- To Implement Row-Level Security in Reports
- What is Role-Based Access Control – RBAC

Section 11 : Real-World Applications



- Industry Use Case
- To Create Dashboards for Business Insights
- Create a Real Time Sales Dashboard
- Capstone Project



SKILLS AND TOOLS

Tools Covered

Live Connection



Power BI Report Server



Power Automate



Desktop



Visual Query



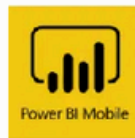
Streaming Data Flow



Power Query Time



Power BI Mobile App



Power Pivot



Manage Permissions



Skills Covered

Report Creation



Data Transformation



Data Connectivity



Custom Visuals



Row Level Security (RLS)



Model



Measure Group



Hierarchy Chart



Embedded Analytics



Data Flow



PLACEMENT SUCCESS STORIES

Designation Company Package



Shashank

Power BI Developer



10.8 LPA



Anuradha

BI Consultant



8.5 LPA



Sandhya

Power Platform Developer



7.8 LPA



Ramesh

Data Analyst



8.6 LPA



Joesph

BI Developer



8.0 LPA



Mohammed

Data Analyst



11.0 LPA

OUR HIRING PARTNERS



Earn your Power BI Course Completion Certificate

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



WHAT OUR **TRAINEE** SAYS?



Santhosh

4.7 ★★★★★

My return for further training on the trending tool Power BI is due to the trainer's extensive knowledge, the admin team's regular updates and support, and their prompt attention to placements.



Fathima Banu

4.2 ★★★★★

I completed powerbi training from credo Systemz, Velachery. The training provided has been good and from a real-time perspective. Trainer explained the concepts very clearly and effectively. Thank you!!



Prakash Jain

5.0 ★★★★★

I completed powerbi training from credo Systemz, Velachery. The training provided has been excellent and from a real-time perspective. I would recommend anyone looking for powerbi training.



Saindhavi

4.9 ★★★★★

Very good institution, I have completed my power Bi course with Credo systemz and our Mentor was extremely good and supportive it was very great session throughout the course!!!



Jesuraj. F

4.0 ★★★★★

I have done powerbi class in credo systems, the classes taken professional and well organized manner. Very good experience



Anjali Ravi

4.5 ★★★★★


Recently I was completed my PowerBI course in credo Systemz via Online. it was good experience and sessions were more practical and easy.



CHENNAI


VELACHERY

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

 +91 98844 12301

OMR

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

 +91 96001 12302

OVERSEAS

USA

Houchin Drive, Franklin, TN -37064. Tennessee

UAE

Sima Electronic Building, LLH Opposite, Electra Street – Abu Dhabi