



**START YOUR  
DATA ANALYTICS  
CAREER TODAY!!**

**CREDO SYSTEMZ**

**Data Analytics with AI  
Program**

**India's 1st AI-Driven IT Training – Credo Systemz**

# Capstone Projects :

Real-Time Business Scenario Using Data Analytics and AI. This project gives you practical experience in solving problems with data and AI.



## **Sales Data Analysis**

Analyze sales data to identify trends, seasonality, and factors affecting revenue.



## **Customer Segmentation**

Use clustering techniques to group customers based on buying behavior or demographics.



## **Marketing Campaign Analysis**

Evaluate the effectiveness of marketing campaigns by analyzing conversion rates and ROI.



## **Social Media Sentiment Analysis**

Analyze social media posts or reviews to determine public sentiment about a brand or product.



## **Financial Data Analysis**

Analyze stock prices, financial statements, or market trends to identify investment opportunities.



## **Website Traffic Analysis**

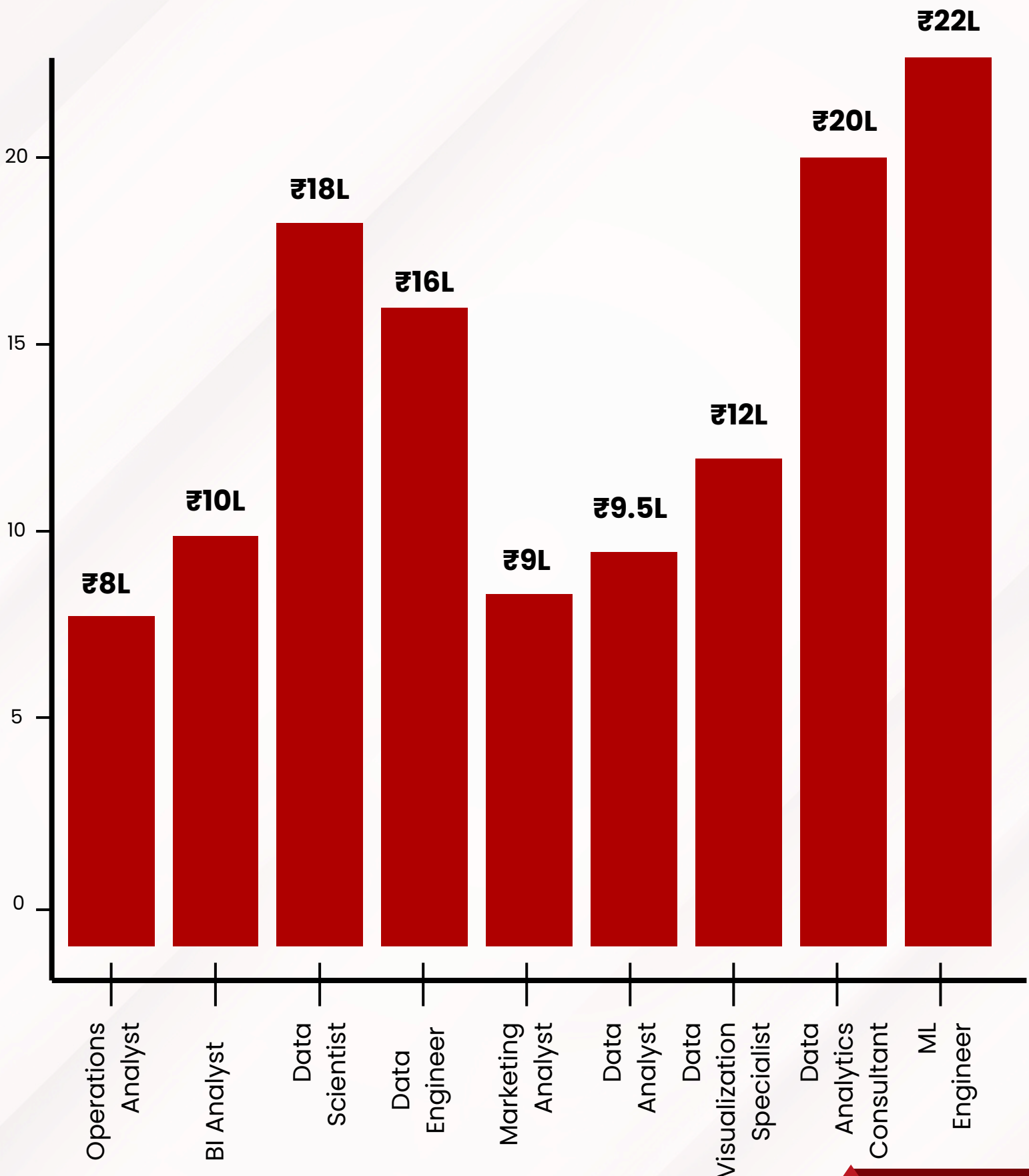
Analyze website visitor data to understand user behavior and improve user experience.





# Data Analytics

## Opportunities & Demand



# DATA ANALYTICS WITH AI

## COURSE SYLLABUS

**Duration : 40 hrs**

### ● **Phase 1:**

## **Data Analytics with AI**

### **Introduction**

- What is Artificial Intelligence (AI)?
- Introduction to AI in Data Analytics
- Evolution of AI in the Analytics Industry
- Real-Life Use Cases
- Benefits of Using AI in Data Analytics
- Understanding Prompts and AI Outputs in Analytics
- How Data Analysts Use AI Tools Today

### **Overview of AI Tools in Data Analytics**

- Copilot for SQL/Python
- ChatGPT for Analytics
- Codeium for Jupyter & Notebooks
- Tabnine
- Power BI with Copilot

### **Setting Up AI Tools for Data Analytics**

- Copilot for VS Code & Jupyter Notebooks
- ChatGPT Setup for Analysts
- Power BI Copilot Activation
- AI Access in Browser-based Tools
- Basic Prompt Engineering Tips



## ● Phase 2:

### **Excel – Basics to Advanced**

- Introduction to Excel
- Understanding Cell Referencing
- Basic Arithmetic and Logical Operations
- Data Cleaning and Formatting
- Data Validation & Drop-downs
- Flash Fill and AutoFill
- Functions and Formulas
- Array Formulas & Dynamic Arrays (FILTER, SORT, UNIQUE)
- Pivot Tables and Charts
- Slicers and Timelines for Interactive Filtering
- Conditional Formatting
- Dynamic Formatting Based on Cell Value or Date
- Dashboard Creation
- Combining Charts, KPIs, and Sparklines
- Linking Pivot Tables with Slicers
- Introduction to Macros and VBA
- Workbook Protection and Data Security

#### **AI in Action:**

- Use Copilot or ChatGPT to create formulas and charts.
- AI suggests formatting and cleaning steps.
- Automate tasks with AI-generated macros.

## ● Hands-on Practical Exercises

- Clean and Analyze Raw Sales Data
- Create Interactive Employee Dashboard
- Monthly Report Automation using Formulas and Pivot Tables
- KPI Dashboard for Marketing Metrics

## ● Phase 3:

### **SQL**

- Introduction to oracle database

- Introduction to RDBMS (MySQL, PostgreSQL, SQL Server)
- Understanding Tables, Rows, Columns
- SQL Syntax, Case Sensitivity, Comments
- SQL Commands
- Using Aliases
- Filtering and Logic
- Aggregations & Grouping
- Difference between WHERE vs HAVING
- Joins – Inner Join, Left Join, Right Join, Full Outer Join, Self Join, Cross Join
- Subqueries & Nested Queries
- Window (Analytic) Functions
- Data Manipulation Language – DML ➤ Data Definition Language – DDL
- Time Series Analysis
- Revenue Analysis with Filters and Joins
- Customer Segmentation using SQL

#### **AI in Action:**

- Write SQL using plain English with AI tools.
- Get instant query fixes and JOIN suggestions.
- Use AI for quick data segmentation and ranking.

### ● **Hands-on Practical Exercises**

- Create & Query a Sales Database
- Build a Regional Revenue Report
- Customer Insights
- Employee Performance Ranking

### ● **Phase 4: Statistics**

- Importance of Statistics in Data Analytics
- Descriptive Statistics: – Mean, Median, Mode, Range, Variance, Std. Deviation Data Summarization
- Data Visualization
- Using Visualizations for Outlier Detection
- Probability Concepts
- Types of Events

- Addition & Multiplication Rules
- Conditional Probability
- Probability Distributions
- Central Limit Theorem
- Inferential Statistics
- Hypothesis Testing
- Correlation and Regression
- Exploratory Data Analysis with Statistics

### **AI in Action:**

- Summarize data with AI tools.
- Detect outliers and trends easily.
- Use AI for EDA and visual reports.

## **Hands-on Practical Exercises**

- Customer Satisfaction Analysis
- Ad Spend vs Sales
- Product Quality Check
- Delivery Time Comparison

## **Phase 5:**

### **Power BI**

- Introduction to Power BI
- Installing Power BI Desktop
- Power BI Interface
- Data Loading
- Importing Data from Various Sources
- Understanding Power BI File Types
- Power Query – Data Transformation
- Cleaning and Shaping Data
- Filtering and Sorting Data
- Unpivoting and Pivoting Data
- Data Modeling
- Creating Date Table & Time Intelligence
- DAX
- Basic DAX Functions: – SUM, COUNT, DISTINCT, AVERAGE



- Logical Functions
- Aggregation and Filter Functions
- Data Visualization
- Creating Basic Charts: Bar, Column, Line, Pie, Donut
- Advanced Charts: TreeMap, Funnel, Waterfall, Gauge, KPI
- Slicers and Filters
- Dashboard and Report Design
- Power BI Service
- Row-Level Security

### **AI in Action:**

- Use Copilot to create visuals and DAX with text prompts.
- AI visuals: Key Influencers, Q&A, Decomposition Tree.
- Auto-suggest layouts and filters with AI.

## **Hands-on Practical Exercises**

- Customer Segmentation Report
- E-commerce Product Performance
- Marketing Campaign Analysis
- Sales Dashboard

## **Phase 6:**

### **Python**

- Introduction to Python
- Why Python for Data Analytics?
- Python Syntax and Code Structure
- Arithmetic & Logical Operators
- Conditional Statements
- Loops & Functions
- Error Handling
- Data Structures in Python
- NumPy – Numerical Python
- NumPy Arrays vs Lists
- Statistical Functions: mean(), std(), sum()
- Pandas – Data Handling Library
- Visual EDA with Pandas

- Indexing, Filtering, and Slicing
- GroupBy and Aggregations
- Sorting, Renaming Columns
- Data Cleaning and Preparation
- Data Visualization with Python
- Statistical Analysis with Python

### **AI in Action:**

- Generate Python code using plain instructions.
- Clean and analyze data with AI help in Pandas/Numpy.
- Integrate OpenAI or Azure ML for smart analytics.

## ● **Hands-on Practical Exercises**

- Analyze sales data to find top-performing products
- Clean messy customer data and find duplicates
- Segment customers by spending habits using Pandas
- Automate data reports using Python scripting



# SKILLS AND TOOLS

## Tools Covered

Tableau



SQL



Power BI



Python



Excel



Jupyter Notebook



Google Analytics



ChatGPT



GitHub Copilot



Trifacta



## Skills Covered

Data Cleaning & Preprocessing



Exploratory Data Analysis (EDA)



Data Visualization & Dashboard Creation



Statistical Analysis & Insights Derivation



Business Intelligence Reporting





# PLACEMENT SUCCESS STORIES

Designation                      Company                      Package  
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Harini. S

**Data Analyst**

**Tech  
Mahindra**

**5.2 LPA**



Kanagavali

**Data Engineer**



**9.5 LPA**



Sadasivam

**Data Visualization  
Specialist**



**10.8 LPA**



Prakash

**Marketing Analyst**



**12.8 LPA**



Ausgustin

**Data Scientist**



**8.2 LPA**



Maheema

**Machine Learning  
Engineer**



**6.2 LPA**



# OUR HIRING PARTNERS



# Earn your Data Analytics with AI Course Completion Certificate

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





# WHAT OUR **TRAINEE** SAYS?



**Sai Shankar**

**4.2** ★★★★★

I have done my Data analytics with python course at Credo Systemz OMR. As a fresher, i have learned a data analytics from scratch. Now i got job as a data analyst in chennai. I highly recommend!



**Feroz Khan**

**5.0** ★★★★★

The Data Analytics with AI training at Credo Systemz was comprehensive and hands-on. After the course, I was able to secure a job as a Data Analyst within 2 months!



**Abhinaya. S**

**4.1** ★★★★★

Credo Systemz offers an excellent curriculum that covers all key tools. The supportive environment and doubt clearing sessions made learning very effective.



**Malathi. S**

**4.9** ★★★★★

The instructors at Credo Systemz are very knowledgeable and approachable. Placement assistance was a great bonus that helped me land interviews with top companies.



**Jayashree**

**4.8** ★★★★★

I liked the practical approach at Credo Systemz Data Analytics training. The trainers also shared insights on interview preparation which boosted my confidence.



**Joseph. S**

**4.5** ★★★★★


The Data Science with AI course at Credo Systemz was excellent! Great support and real-time projects made the learning experience valuable. Highly recommend!



# 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.

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# OVERSEAS

## USA

Houchin Drive, Franklin, TN -37064. Tennessee

## UAE

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

**India's 1st AI-Driven IT Training**  
**Credo Systemz**