



**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.



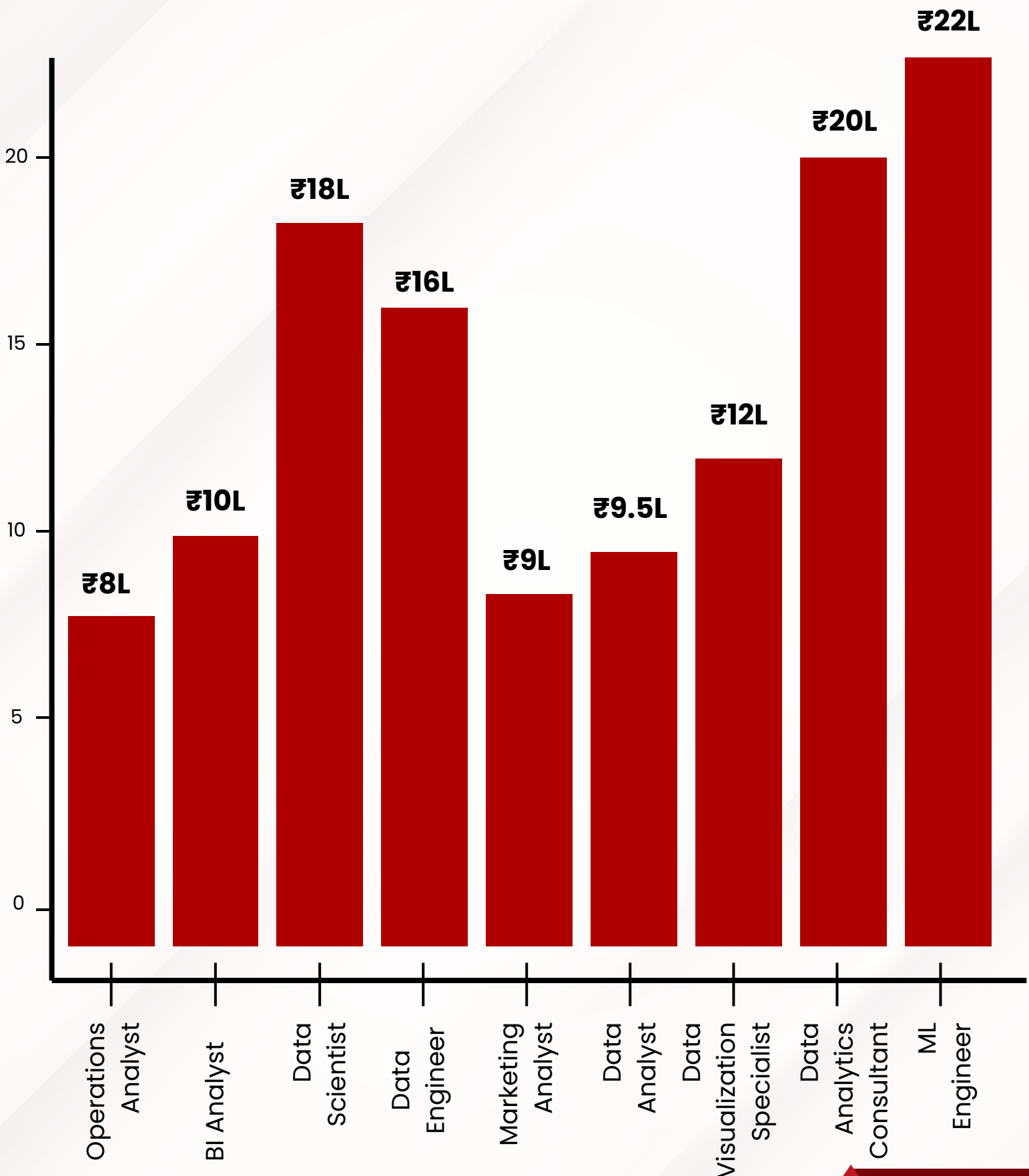
Website Traffic Analysis

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



Data Analytics

Opportunities & Demand



DATA ANALYTICS WITH AI

COURSE SYLLABUS

Duration : 60 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
.....



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



Augustin

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

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