

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

Capstone Projects:

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



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.

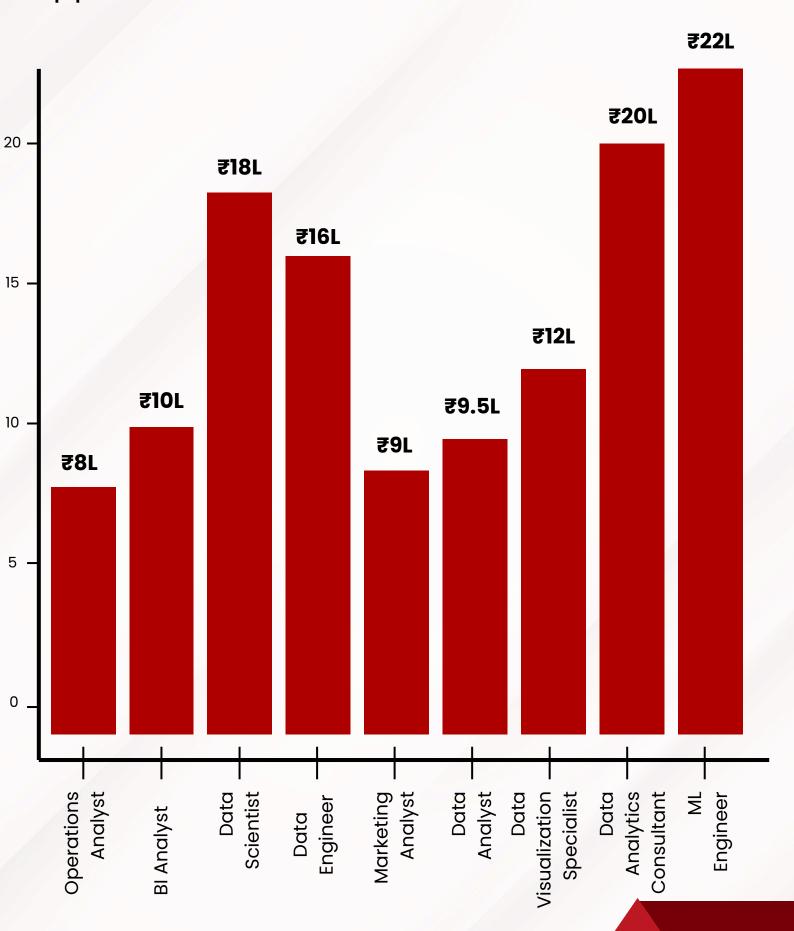


Website Traffic Analysis

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

Data Analytics

Opportunities & Demand



DATA ANALYTICS COURSE SYLLABUS

Duration: 60 hrs

Section 1: Introduction to Data Analytics

- What is Data Analytics?
- Types of Data Analytics
- The Data Analytics Process
- Importance of Data Analytics in **Business**
- Tools and Technologies in Data **Analytics**
- Real-World Examples
- Career scope and job roles in **Data Analytics**

Section 2. Excel for Data **Analytics**

- 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

→ 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

Section 3: SQL for Data Analytics

- 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

Hands-on Practical Exercises

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

♦ Section 4. Data Analysis with 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**

Hands-on Practical **Exercises**

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

Section 5. Power bi for Data **Analytics**

- 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

Hands-on Practical **Exercises**

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

◆ Section 6. Data Analytics with 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

⊦Hands-on Practical **Exercises**

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

Section 7. Data Cleaning & Exploratory Data Analysis (EDA)

- Handling Missing Data: Imputation, Deletion
- Data Normalization and Standardization
- Detecting and Handling Outliers
- Feature Engineering
- EDA: Distribution Analysis,
 Correlation, Feature Selection

→ Hands-on Practical Exercises

- Clean and prepare a messy dataset for analysis.
- Perform a thorough EDA, identifying key trends and insights.

◆ Section 8. Al in Data Analytics

- Al for Data Analytics: Automated Insights, Predictive Analytics
- Using AI tools like ChatGPT for Data Analysis
- Al-Powered Data Wrangling
- Predictive Models: Introduction to Basic Machine Learning Algorithms

→ Hands-on Practical Exercises

- Use AI tools to automate data cleaning or feature engineering on a dataset.
- Build a simple predictive model using an AI tool.

SKILLS AND TOOLS

Tools Covered

Tableau



Jupyter Notebook



SQL

Google

Analytics





ChatGPT



Python



GitHub Copilot



Excel



Trifacta



Skills Covered

Data Cleaning & Preprocessing



Exploratory Data Analysis (EDA)



Data Visualization & **Dashboard Creation**



Statistical Analysis & **Insights Derivation**



Business Intelligence Reporting



PLACEMENT SUCCESS STORIES

Harini. S

Designation

Company

Package



Tech Mahindra

5.2 LPA



Data Engineer





Data Visualization Specialist



10.8 LPA



Marketing Analyst



LATESHIPMENT.COM 12.8 LPA



Data Scientist



8.2 LPA



Machine Learning Engineer



6.2 LPA

OUR HIRING PARTNERS











































Earn your Data Analytics with Al **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



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



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



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



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

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