

Business Analytics Training Program

Duration: 3 Months

Fees: ₹25,000 Mode: Online

Certification: Certified Business Analytics Professional

Program Overview

The Business Analytics Training Program is designed to equip students with essential skills in data analysis, visualization, predictive modeling, and big data applications. This comprehensive course offers hands-on experience with real-world datasets, industry-relevant tools, and case studies to prepare students for data-driven decision-making roles.

Curriculum Overview

Module 1: Introduction to Business Analytics

Objective:

To introduce students to the fundamental concepts of business analytics, its role in decision-making, and various data types and tools used in analytics.

Topics Covered:

Role of Analytics in Business

- o Importance of data-driven decision-making
- Applications of analytics in finance, marketing, HR, healthcare, etc.
- Evolution of business intelligence and data science

Understanding Data Types and Sources

- Structured vs. unstructured data
- o Internal vs. external data sources
- Data collection methods (surveys, web scraping, IoT, etc.)

Overview of Analytical Tools

- Introduction to Excel, SQL, Python, and R
- o Business Intelligence (BI) tools: Tableau, Power BI
- Cloud-based analytics tools: Google Analytics, AWS, Azure

Assessments:

- Case study on the impact of analytics on business decision-making
- Hands-on project: Collect and clean a dataset using SQL

Presentation on different business analytics tools

Module 2: Data Visualization and Reporting

Objective:

To teach students how to represent data effectively using visualization techniques, build dashboards, and create meaningful business reports.

Topics Covered:

Visualization Techniques

- Types of charts and graphs (bar charts, histograms, scatter plots, heatmaps)
- Best practices for data storytelling
- o Importance of color, labeling, and scaling in visualization

Dashboard Creation

- Designing interactive dashboards using Tableau and Power BI
- Connecting data sources and performing transformations
- Hands-on project: Building a sales performance dashboard

Reporting Standards and Best Practices

- How to create executive reports
- KPI tracking and benchmarking
- Automating reports with Google Data Studio and Excel Macros

Assessments:

- Dashboard creation project using real-world business data
- Hands-on exercise: Automate monthly financial reporting in Excel
- Case study on effective data visualization for decision-making

Module 3: Predictive Analytics

Objective:

To introduce students to predictive modeling techniques, statistical analysis, and machine learning basics to forecast business trends.

Topics Covered:

Statistical Modeling and Hypothesis Testing

- Basics of probability and statistics for analytics
- Linear and logistic regression models
- Hypothesis testing and A/B testing for decision-making

Forecasting Methods

- Time series analysis (ARIMA, exponential smoothing)
- Demand forecasting for businesses
- Sentiment analysis in business decision-making

Machine Learning Basics for Analytics

- Supervised vs. unsupervised learning
- Classification and clustering techniques
- Introduction to Python for machine learning (scikit-learn, TensorFlow basics)

Assessments:

- Hands-on project: Build a predictive model for customer churn analysis
- Statistical analysis report on market trends
- Forecasting project using real-world sales data

Module 4: Big Data Applications

Objective:

To introduce students to big data technologies, data mining techniques, and real-world applications of big data in business.

Topics Covered:

• Introduction to Big Data Technologies

- Overview of Hadoop, Spark, and NoSQL databases
- Cloud-based big data solutions (AWS, Google Cloud, Microsoft Azure)
- Real-world examples of big data in industries

Data Mining Techniques

- Classification, clustering, and association rules
- Text mining and sentiment analysis
- Customer segmentation using big data

Case Studies in Big Data Analytics

- Retail: How Amazon and Walmart use big data
- o Healthcare: Predictive analytics for disease detection
- Finance: Fraud detection using Al-powered analytics

Assessments:

- Case study report on the role of big data in e-commerce
- Hands-on project: Analyze a large dataset using Hadoop/Spark
- Presentation on emerging trends in big data and AI

Program Benefits

- ✓ **Global Industry Alignment** Training aligned with industry standards in data science and analytics
- **✓ Hands-on Learning** Work on real-world business problems and datasets
- ✓ Practical Skills Gain proficiency in Excel, SQL, Python, Tableau, Power BI, and cloud-based analytics tools
- ✓ Placement Assistance Dedicated support for careers in business analytics, data science, and decision-making roles
- ✓ Industry Certification Earn the Mackinlay Learning Hub's Business Analytics Certification for career enhancement

Placement Assistance Provided

We are committed to supporting students in securing roles in business analytics, data science, and related fields by offering career guidance, resume building, interview preparation, and job referrals.

Take the next step in your career with our Business Analytics Training Program and become a Certified Business Analytics Professional!