



BUSINESS ANALYTICS SYLLABUS COPY

Engineered for skill enhancement.



PROGRAM HIGHLIGHTS

Accredited Certificates :

- ✓ Program approved ISO Certification

Internships :

- ✓ Industry-relevant opportunities provided-

Placement Assistance :

- ✓ Career guidance from industry experts-

Basic to Advanced Level Training :

- ✓ Learn from experienced AI professionals .

Live & Recorded Lectures :

- ✓ Flexible learning at your convenience .

Real-Time Projects :

- ✓ Hands-on minor & major projects



ABOUT US

- **OUR MISSION :**

Nxt Sync is a pioneering EdTech company committed to bridging the gap between theoretical learning and practical application. Our mission is to empower students with cutting-edge AI skills that enhance employability and prepare them for a tech-driven future.

- **OUR VISION--UPSKILL:** Empowering minds for the future.
- **INNOVATE:** Fostering creativity and breakthroughs .
- **EXCEL:** Preparing industry-ready professionals.



WHY BUSINESS ANALYTICS?

- High Demand Across All Business Sectors
- Data-Driven Decision Making
- Career Growth in Analytics, Consulting & Data Science
- Insight Generation Using Big Data & Predictive Models
- Essential for E-Commerce, Finance, Marketing & HR
- Foundation for AI, Machine Learning & Data Engineering



LEARNING PATH

- Introduction to Business Analytics
- Statistics & Data Visualization
- Excel for Analytics
- SQL for Data Management
- Python for Data Analysis
- Business Intelligence Tools (Power BI, Tableau)
- Predictive Analytics & Machine Learning
- Domain-Based Applications
- Capstone Projects & Industry Case Studies



DETAILED MODULE BREAKDOWN

Module 1: Introduction to Business Analytics

- Overview of Business Analytics
- Types: Descriptive, Diagnostic, Predictive & Prescriptive
- Role of Analytics in Decision-Making
- Industry Trends & Career Paths

Module 2: Statistics & Data Visualization

- Descriptive & Inferential Statistics
- Probability, Distributions & Hypothesis Testing
- Data Visualization Techniques
- Tools: Excel, Tableau, Power BI



Module 3: Excel for Business Analytics

- Advanced Excel Functions & Pivot Tables
- Data Cleaning & Transformation
- What-if Analysis & Scenario Planning
- Dashboard Development

Module 4: SQL for Data Management

- SQL Basics & Queries
- Data Filtering, Joins & Aggregation
- Subqueries & Views
- Data Warehousing Concepts

Module 5: Python for Data Analysis

- Introduction to Python for Analytics
- Libraries: Pandas, NumPy, Matplotlib, Seaborn
- Data Wrangling & Exploratory Data Analysis
- Regression & Classification Models



Module 6: Business Intelligence Tools

- Introduction to Power BI & Tableau
- Data Importing & Cleaning
- Interactive Dashboard Creation
- KPI & Metrics Visualization

Module 7: Predictive Analytics & Machine Learning

- Regression, Classification, Clustering
- Time Series Forecasting
- Model Evaluation & Tuning
- Use Cases in Marketing, Sales & Finance

Module 8: Domain-Based Applications

- Analytics in Marketing & Customer Insights
- Financial Analytics & Risk Modeling
- HR Analytics & Employee Performance
- Supply Chain & Operations Analytics



Module 9: Capstone Projects & Industry Research

- Real-World Analytics Projects
- Industry Collaboration & Mentorship
- Research-Based Business Problem Solving
- Portfolio & Presentation Development



ASSIGNMENT'S & ASSESSMENTS

- Weekly practical assignments
- Mid-term case-based analytics projects
- Final industry-focused capstone project
- Interactive sessions & live presentations



TOOLS & FRAMEWORKS USED

Data Handling & Programming:

Python, SQL, Excel, Jupyter Notebooks

Visualization & BI Tools:

Power BI, Tableau, Matplotlib, Seaborn

Statistical & Predictive Tools:

R (optional), Scikit-learn, StatsModels

Business Intelligence & Dashboarding:

Power Query, DAX, Tableau Public

Data Management & Integration:

MySQL, Google BigQuery, Snowflake



RECOMMENDED READING

Business Analytics:

- *Competing on Analytics* – Thomas H. Davenport
- *Data Science for Business* – Foster Provost & Tom Fawcett
- *Storytelling with Data* – Cole Nussbaumer Knaflic
- *Naked Statistics* – Charles Wheelan



WHY CHOOSE NXTSYNC?

- Industry-Relevant Business Analytics Curriculum
- Hands-on Projects with Real-World Data
- Expert Mentorship & Career Guidance
- Flexible & Interactive Learning Approach
- ISO-Certified Business Analytics Program

Start Your Human Resources Journey with NxtSync Today!



THANK YOU

