



DATA 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 DATA ANALYTICS?

- High Demand Across Industries
- Data-Driven Decision Making
- Enhanced Career Prospects in AI, ML, and BI
- Predictive Analysis for Business Growth
- Versatility in E-Commerce, Finance, Health & More
- Integration with Cloud, AI & Automation



LEARNING PATH

- Introduction to Data Analytics
- Excel for Data Analysis
- SQL for Data Retrieval
- Data Visualization with Power BI & Tableau
- Python for Data Analytics
- Statistics for Data Science
- Exploratory Data Analysis (EDA)
- Machine Learning Basics
- Real-Time Case Studies & Capstone Projects



DETAILED MODULE BREAKDOWN

Module 1: Introduction to Data Analytics

- What is Data Analytics?
- Types: Descriptive, Diagnostic, Predictive, Prescriptive
- Analytics Lifecycle & Career Paths

Module 2: Excel for Data Analysis

- Data Cleaning, Sorting & Filtering
- Formulas, Pivot Tables, Charts
- Data Validation & Dashboarding



Module 3: SQL for Data Retrieval

- Relational Databases & SQL Basics
- Joins, Aggregations, Subqueries
- Data Extraction & Reporting

Module 4: Data Visualization with Power BI & Tableau

- Building Dashboards
- Visual Storytelling
- Real-Time Reports & Interactive Charts

Module 5: Python for Data Analytics

- Python Basics & Libraries (Pandas, NumPy)
- Data Cleaning & Manipulation
- Introduction to Jupyter Notebooks



Module 6: Statistics for Data Science

- Descriptive & Inferential Statistics
- Probability Distributions
- Hypothesis Testing & Correlation

Module 7: Exploratory Data Analysis (EDA)

- Data Profiling & Exploration
- Outlier Detection & Treatment
- Feature Engineering

Module 8: Basics of Machine Learning

- Supervised & Unsupervised Learning
- Regression, Classification Techniques
- Model Evaluation Metrics



Module 9: Domain Applications & Case Studies

- Data Analytics in Finance, Retail, Healthcare
- Risk Analysis, Forecasting
- Case Studies of Global Companies

Module 10: Capstone Projects & Research

- Real-Time Data Analytics Projects
- Industry Collaboration & Research-Based Projects
- Portfolio Development & Business Presentation



ASSIGNMENT'S & ASSESSMENTS

- Weekly practical assignments
- Mid-term data analytics mini-projects
- Final capstone analytics project
- Live project reviews & discussions



TOOLS & FRAMEWORKS USED

Data Analysis & Visualization:

Excel, Power BI, Tableau, Google Sheets

Programming & Data Tools:

Python, Jupyter Notebook, Pandas, NumPy, Matplotlib,
Seaborn

Databases & Querying:

MySQL, PostgreSQL, SQLite, BigQuery

Statistical Tools:

Scikit-learn, SciPy, Statsmodels

Project & Workflow Tools:

Git, GitHub, Google Colab, Kaggle



RECOMMENDED READING

Data Analytics:

- “*Data Science for Business*” – Foster Provost & Tom Fawcett
- “*Naked Statistics*” – Charles Wheelan
- “*Python for Data Analysis*” – Wes McKinney
- “*Storytelling with Data*” – Cole Nussbaumer Knaflic



WHY CHOOSE NXTSYNC?

- Industry-Aligned Data Analytics Curriculum
- Hands-on Real-World Projects
- Expert Mentorship & Career Guidance
- Flexible Learning Schedule
- ISO-Certified Data Analytics Training Program

Start Your Digital Marketing Journey with NxtSync Today!



THANK YOU

