

# **DATA ANALYTICS SYLLABUS COPY**

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**Engineered for skill enhancement.**



# PROGRAM HIGHLIGHTS

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## **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

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- **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?

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- 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

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- 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

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## **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

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





# TOOLS & FRAMEWORKS USED

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## **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

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### **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 Knafl





## WHY CHOOSE NXTSYNC?

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- ☑ 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

