





**Online Self-Paced Course** 

# PYTHON FOR DATA ANALYTICS & REPORTING THEMED TRACK

(with R, Tableau & Power BI)



### **Duration of 140 Hours**

access anytime and anywhere



### 1-Year of Access

Get LMS access for one year





### **Completion Certificate**

Jointly issued by NSE Academy & Grant Thornton Bharat

**Enroll Now!** 





# Business Intelligence (Power BI & Tableau)

**Module 1: Introduction** 

**Module 2: Power BI** 

**Module 3: Tableau** 

**Module 4: Software Support** 

- a. Support Material
- b. Final Assessment
- c. Power BI and Tableau Instructions
- d. Software Download Instructions





# **Data Analytics using R**

#### **Module 1: Introduction and Programming**

- 1. Introduction to Data Analytics
- 2. Introduction to R
  - a. R programming
  - b. R programming Case Study
  - c. Customer Churn

#### **Module 2: Statistics and Visualization**

- 1. Data Visualization: Various graphs, charts
- 2. Data Visualization: Advance
- 3. Descriptive Statistics: Basic statistical techniques including data properties: Hypothesis testing DPLYR package.
- 4. Linear Regression Model
- 5. Multinomial Linear Regression Case Study
- 6. Logistic Regression
- 7. Multinomial Logistic Regression
  - a. Multinomial Logistic Regression Case Study

#### **Module 3: Advance Methods**

- 1. Introduction to Artificial intelligence, ML and Deep learning
- 2. Neural Networks
- 3. Support Vector Machines (SVM)
- 4. Support Vector Machines (SVM) Case Study
- 5. Decision Tree
- 6. Random Forest
- 7. K-nearest Neighbors
- 8. K-nearest Neighbors Case Study
- 9. Clustering (K Means)
- 10. Principle Component Analysis
- 11. Principle Component Analysis Case Study





# Microsoft 365 Excel

#### **Module 1: MS Excel Essentials: Functions and Tools**

- 1. Data management and formatting
- 2. Referencing in Excel
- 3. Data split
- 4. Data validation
- 5. Adding hyperlinks
- 6. Logical functions
- 7. Lookup functions
- 8. Conditional functions
- 9. SUMPRODUCT function
- 10. Large and small values
- 11.Data concatenation
- 12. Working with dates and time
- 13. Financial functions
- 14. Text-oriented functions
- 15. Aggregate function
- 16. OFFSET function
- 17. INDIRECT function
- 18. Formula auditing
- 19. Statistical functions
- 20. Using Range Names
- 21. Excel Table
- 22. What If Analysis
- 23. Protecting Worksheet and Workbook
- 24. Dashboards and Data Summarization

#### Module 2: Microsoft 365 Excel

- 1. MS-365 Excel overview
- 2. Create dynamic sequence
- 3. Unique, sort and filter
- 4. New age lookup
- 5. Text-oriented functions
- 6. New data types
- 7. Create customized functions in Excel
- 8. Other functions
- 9. Assessment and study material





# **Data Analytics using Python**

#### **Module 1: Basic Python**

- 1. Getting started with Python
- 2. Data and information management with Python Containers in Python
- 3. Conditional statements and control structures
- 4. Functions in programming
- 5. Functional programming in Python
- 6. Exceptions handling in Python
- 7. Python advanced topics
- 8. Python projects to check the knowledge
- 9. File handling and other OS interactions

#### **Module 2: Python for Data Science**

- 1. Lecture on introduction to Vectors, Matrices, and NumPy
- 2. Lecture on introduction to Data Frame manipulation series
- 3. Introduction to Data Frame manipulation
- 4. Data Frame manipulation
- 5. Date and time data frame manipulation
- 6. Lecture on Pandas internal commands
- 7. Lecture on visualization in Python
- 8. Lecture on visualization in Python part 2
- 9. Lecture on understanding Seaborn from scratch
- 10. Lecture on exploratory data analytics case study Chipotle

#### **Module 3: Stats for Python**

- 1. Basic statistics
- 2. Basic statistics
- 3. Probability theory







# ADVANCED E-LEARNING COURSES

CO-CERTIFIED BY
GRANT THORNTON & NSE ACADEMY



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The organization serves India region with 13 offices in all major cities with more than 15,000 people.

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+ GST

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