



Roadmap to Data Analyst



Google Sheets

Module 1. Basics

- Basics
- Preparation
- Formatting
- Calculation
- Automate

Module 2. Functions

- VLOOKUP
- COUNTIF
- COUNTIES
- SUMIF
- SUMIFS

Module 3. Pivot tables dashboards

- Intro to Pivot
- Tables
- Analyzing data
- Using pivot table
- Putting it all together



SQL

Module 1: Operators, Queries

- Intro to SQL
- Basics and operators
- Strings & datetime
- Basics to advanced mastery

Module 2: Advanced Queries

- Aggregate functions
- SOL Joins
- HAVING dause
- Sub Queries

Module 3: Advanced functions

- Windows
- Functions
- CONTROL F
- FUNCTIONS
- HANDLING NULL
- VALUES
- DATABASE & NORMALIZATION



Statistics

Module 1. Basics Intro to Statistics

- Central Tendency, Variance
- Inferential Statistics
- Types of Probability Distribution

Module 2. Data & Hypothesis

- Exploratory Data Analysis
- Data Preprocessing
- Hypothesis Testing (Parametric Tests)
- Chi Square Test & 1 Way ANOVA



Python

Module 1: Operators & Functions

- Introduction & Installation
- Basic Operations
- Brief on Jupyter Notebook
- Data types, Variables & Numbers
- Strings, if/else & Looping
- Conditional Statements & Functions

Module 2: Arrays Intro on Numpy

- Creating & Indexing Arrays
- Array Transposition & Shape Manipulation
- Conditional Selection
- Array Operations Broadcasting



Module 1: Setup & Dashboards

- Intro to BI
- Connecting to Data Sources and Creating Basic Charts and Visuals
- Cleansing Data with Query Editor
- Creating Reports by Combining All Visuals
- Types of Visuals in Power BI
- Addition to New Columns Using Power Query
- Transforming Columns in Query Editor

Module 2: Modeling & Optimization

- Modeling and Optimization
- Customization
- Interaction
- Intro to DAX

Module 3: DataSets & DataFrames

- Intro to Pandas
- Reading Local Data Set
- How to Read Data Files from Pandas
- How to Write Data Using Pandas
- Creating DataFrame
- Playing With Row and Columns of DataFrame
- Handling Missing Values using Pandas
- Aggregate Data in Pandas
- Merge Operation on Data Frames Module

Module 4: Plots & Charts

- Intro to Matplotlib
- Basics of Matplotlib Figure
- Creating Line Plots
- Adding Texts to Plots
- Adding Legends
- Adding Labels
- Applying Different Styles
- Subplots
- Scatter Plot
- Bar Chart
- Pie Chart
- Histogram
- Heatmap
- Plotting Curves
- Brief on Visualization Python Libraries