



# Data Analyst (Data Analytics)

# Course 1: Introduction to Data Analysis

- Introduction to Data Analysis (data analyst)
- Agenda and Principles of Process Management
- The Voice of the Process
- Working as One Team for Improvement
- Exercise: The Voice of the Customer
- Tools for Data Analysis
- The Pareto Chart
- The Histogram
- The Run Chart
- Exercise: Presenting Performance Data
- Understanding Variation
- The Control Chart
- Control Chart Example
- Control Chart Special Cases
- Interpreting the Control Chart
- Control Chart Exercise
- Strategies to Deal with Variation
- Using Data to Drive Improvement
- A Structure for Performance Measurement
- Data Analysis (data analyst) Exercise
- Course Project
- Test your Understanding

# Course 2: Python for Data Analysis

- Welcome, Course Introduction & overview, and Environment set-up
- Python Essentials
- Python for Data Analysis (Data Analyst) using NumPy
- Python for Data Analysis (Data Analyst) using Pandas
- Python for Data Visualization using matplotlib
- Python for Data Visualization using Seaborn
- Python for Data Visualization using pandas
- Python for interactive & geographical plotting using Plotly and Cufflinks
- Capstone Project - Python for Data Analysis & Visualization
- Python for Machine Learning (ML) - sci-kit-learn - Linear Regression Model
- Python for Machine Learning - scikit-learn - Logistic Regression Model
- Python for Machine Learning - scikit-learn - K Nearest Neighbors
- Python for Machine Learning - scikit-learn - Decision Tree and Random Forests
- Python for Machine Learning - scikit-learn - Support Vector Machines (SVMs)
- Python for Machine Learning - scikit-learn - K Means Clustering
- Python for Machine Learning - scikit-learn - Principal Component Analysis (PCA)
- Recommender Systems with Python - (Additional Topic)
- Python for Natural Language Processing (NLP) - NLTK - (Additional Topic)

# Course 3: SQL Programming Masterclass

- Introduction
- Setting up Course Tools
- Browsing & Filtering Data
- Filter Data with AND, OR, NOT Operators
- Math Operations
- String Concatenation
- Tidy Up Your Results: Sorting, Alias Names, Limit Records
- NULL, DISTINCT & CASE Statements
- Functions in SQL: Multiple-Row Functions
- Functions in SQL: Single-Row Functions
- Nested Queries
- Casting & Data Conversion
- Combination Relationships
- Joins in SQL
- Data Manipulation (DML)
- SQL Data Definition Language (DDL)

# Course 4: Data Science & Machine Learning with R

- Data Science and Machine Learning Course Intro
- Data Types and Structures in R
- Data Types and Structures in R
- Intermediate R
- Data Manipulation in R
- Data Visualization in R
- Creating Reports with R Markdown
- Building Webapps with R Shiny
- Introduction to Machine Learning
- Starting A Career in Data Science

# Course 5: Data Analytics with Tableau

- Introduction to the Course
- Project 1: Discount Mart (Sales and Profit Analytics)
- Project 2: Green Destinations (HR Analytics)
- Project 3: Superstore (Sales Agent Tracker)
- Northwind Trade (Shipping Analytics)
- Project 5: Tesla (Stock Price Analytics)
- Bonus: Introduction to Database Concepts
- Tableau Stories

# Course 6: Basic Google Data Studio

- Introduction to GDS
- Data Visualization
- Geo-visualization
- A Socio-Economic Case Study

# Course 7: Business Intelligence and Data Mining Masterclass

- What is Business Intelligence?
- Starting Case in understanding BI needs in diff phase of business
- Decision-Making Process and Need of IT systems
- Problem Structure and Decision Support System
- Introduction to BI Applications
- Dashboard presentation systems
- Different Types of Charts used in 131 Dashboards
- Good Dashboard and BSC
- Examples of Bad Dashboards
- Process of KPI Development
- Overview of Data warehouse
- More explaining of data warehouse and steps in processing
- Data Warehouse Architecture –Tiers
- Data Warehouse – components
- Approach to develop data structure and Models of database
- Basics of Data Mining – Meaning
- Basics of Data Mining – Stages of DM
- Data Mining Technique – Classification
- Data mining – Clustering
- Data Mining – Association Rules
- Data Mining Applications – Banking
- Data Mining Applications – CRM
- Data Mining Applications – other industries



# Course 8: Business Analysis Level 3

- Introduction to Business Analysis
- Business Processes
- Business Analysis Planning and Monitoring
- Strategic Analysis and Product Scope
- Solution Evaluation
- Investigation Techniques
- Ratio Analysis
- Stakeholder Analysis & Management
- Process Improvement with Gap Analysis
- Documenting & Managing Requirements
- Career Prospect as a Business Analyst in the UK

# Course 9: Microsoft Excel: Automated Dashboard Using Advanced Formula, VBA, Power Query

- Introduction
- Prepaid Expenses Models: Resources Download
- Accounting for Prepaid Expenses
- Excel Formulas Detailed: Introduction to three Excel Models
- Formula Based Prepaid Expenses Model
- Calculate Prepaid Expenses Amortisation from Exact Start Date
- Prepaid Expenses Summary with Power Query & Pivot Table
- Advanced VBA Prepaid Expenses Amortisation Model
- BONUS: Dynamic Dashboard for Divisional Profit & Loss statements: Easy Way
- Power Query & Pivot Tables based Dashboard without any Formulas, Fully Dynamic
- Thankyou

# Course 10: Cloud Computing / CompTIA Cloud+ (CV0-002)

- What You Need to Know
- Introducing the Cloud
- System Requirements for Cloud Deployments
- Cloud Storage
- Cloud Compute
- Cloud Networking
- Cloud Security
- Migrating to the Cloud
- Maintaining Cloud Solutions
- Troubleshooting Cloud Solutions

# Course 11: GDPR Data Protection Level 5

- GDPR Basics
- GDPR Explained
- Lawful Basis for Preparation
- Rights and Breaches
- Responsibilities and Obligations



Thank You