





The Data Analytics course is a comprehensive program designed to equip learners with the necessary skills and knowledge required to effectively analyze and interpret data. The course covers a range of topics including programming languages such as Python and R, as well as databases such as MS SQL. Students will also learn about data visualization tools such as PowerBI and Tableau, which enable them to create impactful and visually appealing reports and dashboards. Additionally, the course includes instruction on Visual Basic Editor, an essential tool for automating data tasks and streamlining workflows. Overall, this course is an excellent choice for anyone seeking to develop a solid foundation in data analytics and to gain practical experience using some of the most widely used tools in the

Career Opportunities: Career opportunities with this skillset, you can work as Data Analyst, Business Intelligence Analyst, Data Scientist, Business Analyst, or Data Engineer Data Analysts, are in high demand.

# **Program Contents**

# Python

Basic Python Syntax
Data Types & Operators
Decision Making & Looping
List, Tuples, Dictionary
Functions & Modules
Files Input & Output
Exceptional Handling
Class & Object
GUI Programming
Database Access

### MS-SQL

Introduction to SQL Server Databases and types Using DDL / DML Simple Queries Sub-Queries Queries using Joins
Using Aggregate Functions
Constraints
Working with Views
Stored Procedures
Triggers
Import / Export

industry.

# Power BI

Introducing PowerPivot
Working with Data
Enhancing the Data Model
Analysing Data
Data Analysis Expressions (DAX)
Publishing and Managing PowerPivot Models
Importing Data with Power Query
Analysing Data with Power View and Power Map

# TABLEAU

Working with Tableau
Deep diving with Data and Connections
Creating Charts
Calculations in your workbook
Data Mapping in Tableau
Dashboards
Visualizations

#### VBA

Working with VBE (Visual Basic Editor)
Introduction to Excel Object Model
Sub and Function Procedures
Understating of II, Select Case, With End
with Statements
Looping with VBA
User Defined Function
Some Commonly Used Macro Examples

Error Handling
Object / Events
User Form Controls
ActiveX Controls
Communicating Database through ADO
Exporting/Importing Data

# Rlanguage

RFactors

Fundamentals of R
Control Statements
Arrays / Functions in R
Data Visualization in R
STRINGR Package
Matrices
Strings
Data Frames in R
Vectors