

DATA ANALYST COURSE CONTENT

Faculty: -

Fee:-

Duration:-

Demo Time:-

Batch Time:-

POWER BI

- Power BI Desktop
- Power BI Desktop report server
- Power BI Service, Web, Online, Cloud
- Power BI Gateways
- Power BI Mobile
- Power BI Admin
- Power BI Report Builder
- Power BI Report Server
- Power Apps
- Power Automate
- Power BI Embedded
- Power BI Virtual agent
- Power Rest API

Power BI Desktop

- ✓ Installing Power BI desktop
- ✓ Import data from different sources
- ✓ Creating Reports and Dashboards
- ✓ Adding Charts and Visualizations
- ✓ Importing excel and power view items
- ✓ *Discovering and loading data with Power BI Desktop*
- ✓ Data sources
 - File sources
 - Databases
 - SQL Server and other sources

- ✓ Loading data
 - Web pages
 - CSV files
 - XML files
 - Excel
- ✓ Relational databases
 - Loading related tables
 - Database options

Transforming datasets

- ✓ Power BI desktop queries
 - Editing data after data load
 - Transforming data
- ✓ Query editor and ribbons
- ✓ Dataset shaping
- ✓ Filtering data

Data cleansing

- ✓ Changing data type
- ✓ Replacing values
- ✓ Transforming column contents
- ✓ Grouping records
- ✓ Pivot
- ✓ Un pivot
- ✓ Extending data
 - Duplicating columns
 - Splitting columns
 - Merging columns
 - Custom columns
 - Merging data
- ✓ Appending data
 - Adding contents of one query to another
 - Pivoting and un pivoting tables
 - Transposing rows and columns
- ✓ Managing queries
 - Grouping queries
 - Duplicating queries

Creating a data model

- ✓ Data modeling in Power BI desktop environment

- ✓ Data modeling ribbon
- ✓ Manipulating tables and columns
- ✓ Sorting data
- ✓ Designing a data model
 - Creating relationships
 - Creating relationships manually/automatically
 - Deleting relationships

Text based visualizations

- ✓ Switching to report view

Creating and modifications Charts in Power BI Desktop

- ✓ Column charts
- ✓ Line charts
- ✓ Pie charts
- ✓ Donut charts
- ✓ Funnel charts
- ✓ Water fall charts

Other types of visuals

- ✓ Maps
- ✓ Filled maps
- ✓ Tree maps
- ✓ Gauges
- ✓ Matrix table

Market place & From file visualizations

Advanced analytics visualizations

Gauges

Filtering data

- ✓ Visual level filters
- ✓ Page level filters
- ✓ Drill through filters
- ✓ Report level filters

Using slicers

- ✓ Slicers
- ✓ Sync slicer
- ✓ Edit interactions
- ✓ Selection pane

Enhancing dashboards

- ✓ Text boxes
- ✓ Modifying Page background
- ✓ Images
- ✓ Adding shapes
- ✓ Organizing visuals on the page
- ✓ Exporting data from a visualization
- ✓ Creating Bins
- ✓ Field formatting
- ✓ Conditional formatting
- ✓ Tool tips
- ✓ Import custom visuals from market place

Security for roles, columns and pages

Creating reports and check data

Data analysis expressions (DAX)

- ✓ New columns
- ✓ New measures
- ✓ New quick measures

2 POWER BI SERVICE/WEB/ONLINE/CLOUD

- ✓ Get data
- ✓ Import data to dataset
- ✓ Upload data to workbook
- ✓ Get app for developing reports and dashboards
- ✓ My Workspace
- ✓ APPs Workspace
- ✓ Datasets
- ✓ Reports
- ✓ Dashboards
- ✓ Workbook
- ✓ Q&A
- ✓ Insights
- ✓ Pin Dashboards
- ✓ Dashboards theme
- ✓ Dashboards settings
- ✓ Export to excel
- ✓ Row level security
- ✓ Embed codes
- ✓ Alerts

- ✓ Notifications
- ✓ Subscriptions
- ✓ Create reports
- ✓ Add title and image
- ✓ High contrast colors
- ✓ Generate QR Code
- ✓ Share
- ✓ Favorites
- ✓ Export to PPT
- ✓ Analyze in excel
- ✓ View related
- ✓ Manage permissions

3 Power BI Mobile

4 Power BI Admin

- ✓ Admin portal
- ✓ Usage metrics
- ✓ Users
- ✓ Audit logs
- ✓ Tenant settings
- ✓ Capacity setting
- ✓ Embedded code
- ✓ Organization visuals
- ✓ Data flow settings
- ✓ Workspace
- ✓ Custom branding
- ✓ Protection metrics
- ✓ Featured content

5 Power BI Gateways

6 Power bi report builder

7 Power bi report server

8 Power apps

9 Power automate

10 Power virtual agent

11 Power BI Embedded

12 Power Rest API

TABLEAU

- Tableau Desktop
- Tableau Online
- Tableau Server
- Tableau Mobile
- Tableau Reader
- Tableau Public
- Tableau Prep
- Tableau Bridge
- Tableau Admin

TABLEAU DESKTOP

- ✓ Tableau Introduction
- ✓ Tableau history
- ✓ Data source and data connections types

Field Types and Visual Cues

- ✓ Tableau Desktop
- ✓ Data Source Page
- ✓ Tableau Workspace
- ✓ Files and Folders
- ✓ Getting Started with Tableau
- ✓ View Terminology and Definitions
- ✓ View Sections
- ✓ Data Terminology and Definitions
- ✓ Data Types
- ✓ Data Roles: Dimension vs. Measure
- ✓ Data Roles: Continuous vs. Discrete
- ✓ Changing Data Roles
- ✓ Visual Cues for Fields in the Data Pane
- ✓ Visual Cues for Fields in the Rows or Column Shelves

Data Connection in Tableau Interface

- ✓ Data Connections in the Tableau
- ✓ Connecting to Tableau Data Server
- ✓ What is a Join and Types
- ✓ What is Data Blending
- ✓ Joining vs. Blending

- ✓ Writing Custom SQL
- ✓ Prepare your Data for Analysis

Organizing and Simplifying Data

- ✓ Objectives
- ✓ Filtering Data
- ✓ Filtering on Dimensions
- ✓ Aggregating Measures
- ✓ Filtering on Measures
- ✓ Filtering on Dates
- ✓ Quick Filters
- ✓ Combined Fields
- ✓ What is a Group
- ✓ What are Aliases
- ✓ Defining an Alias
- ✓ Sets
- ✓ Drill to Other Levels in a Hierarchy
- ✓ Grand totals and Subtotals
- ✓ Adding Totals
- ✓ Bins

Formatting and Annotations

- ✓ Formatting and Annotations
- ✓ Custom Geo-coding
- ✓ Adding Caption to Views
- ✓ Using Titles Captions and Tool tips
- ✓ Adding Tooltips to Views
- ✓ Using Title Caption and Tooltip
- ✓ Formatting the Axes
- ✓ Edit Axis Option
- ✓ Format Window
- ✓ Format Mark Labels
- ✓ Annotations
- ✓ Format Manipulations

Special Field Types

- ✓ Special Field Types
- ✓ Date Hierarchies
- ✓ Drilling in the Time Hierarchy
- ✓ Using Continuous Dates
- ✓ Using Discrete Dates
- ✓ Working with Discrete and Continuous dates
- ✓ What are Custom Dates
- ✓ Creating and Using Custom Dates
- ✓ Define a Date Field on a Fiscal Year
- ✓ Relative Date Filters

Tableau Generated Fields

- ✓ Tableau Generated Fields
- ✓ Using Measure Values and Measure Names
- ✓ Using Multiple Measures in a View
- ✓ Using the Number of Records Measure
- ✓ Using Latitude and Longitude Fields

Chart Types

- ✓ Chart Types
- ✓ Working with Combined Axis
- ✓ Working with Combination Charts
- ✓ Combined Axis Graph and Scatter Plot
- ✓ Describe text and highlight tables
- ✓ Work with Pages Shelf and Create Motion Charts
- ✓ Heat Maps
- ✓ Using Bins and Histograms
- ✓ Using Histograms
- ✓ Using Pie Charts
- ✓ Compare Measures Using Bullet Charts
- ✓ Using Bar in Bar Charts
- ✓ Define Advanced Chart Types
- ✓ Using Waterfall Charts
- ✓ Using Gantt Charts
- ✓ Working with box plots

Creating and using Parameters

- ✓ Creating and using Parameters
- ✓ Objectives
- ✓ What is a Parameter
- ✓ Creating a Parameter
- ✓ Exploring Parameter Controls
- ✓ Work with Parameters

Mapping

- ✓ Define Mapping
- ✓ Modifying Locations within Tableau
- ✓ Importing and Modifying Custom Geocoding
- ✓ Working with Symbol Map and Filled Map
- ✓ Using Background Image
- ✓ Exploring Geographic Search
- ✓ Perform Pan Zoom Lasso and Radial Selection

Data presentation and Data analysis

- ✓ Define Forecasting, Trend lines, Reference lines
- ✓ Define Drop lines and Annotations

Actions & Calculated fields

- ✓ Explain actions
- ✓ Actions using like Filters, Highlights, Go to sheet and URL
- ✓ Define calculated fields

Dashboards

- ✓ Creating Dashboards
- ✓ Dashboards formatting
- ✓ Actions in dashboards
- ✓ Perform navigation in dashboards
- ✓ Publishing and sharing

TABLEAU ONLINE

- ✓ Define Tableau online
- ✓ Projects
- ✓ Get data
- ✓ Create reports
- ✓ Scheduling
- ✓ Grouping users
- ✓ Subscribe
- ✓ Share
- ✓ Edit reports
- ✓ Generate URL on reports
- ✓ Notifications
- ✓ Favorites

Tableau server

- ✓ Define Tableau online
- ✓ Projects
- ✓ Get data
- ✓ Create reports
- ✓ Scheduling
- ✓ Grouping users
- ✓ Subscribe
- ✓ Share
- ✓ Edit reports
- ✓ Generate URL on reports
- ✓ Notifications
- ✓ Favorites

Tableau mobile

Tableau reader

Tableau public

Tableau prep

- ✓ Aggregate
- ✓ Pivot
- ✓ Join
- ✓ Union
- ✓ Sort
- ✓ Filter
- ✓ Group
- ✓ Bins

- ✓ Split values
- ✓ Data types
- ✓ Calculated fields
- ✓ Output

Tableau Admin

- ✓ Giving access to users
- ✓ Provide permissions to users
- ✓ Creating groups to users
- ✓ Creating projects to users
- ✓ Other settings

Tableau bridge

SQL

- What is SQL Server
- SQL Server History
- SQL Server desktop parts
- Commands
- Data types
- Date functions
- Default databases
- Tables
- Joins
- Synonym
- Clauses
- Operates
- Temporary table
- Union & Union all
- Rank & Dense rank
- Primary key & Foreign key
- Views
- Highest salary
- Group by
- Execution plan & show plan
- Pivot table & Unpivot table
- Running total
- Sequence
- Sub queries
- Triggers

Advanced Excel

- Creating Workbooks, The Anatomy of a Spreadsheet / Spreadsheet Terminology
- Entering Cell Values and Data in Excel
- Formulas
- Functions: SUM, AVERAGE, MAX, MIN, COUNT
- Formatting Numbers, Text, Cells, Rows, and Columns
- Creating and Editing Charts
- Sorting Data
- Filtering Data
- Print Options and Publishing Options
- Ribbons, Tabs and Menus
- Workbooks and Worksheets
- Saving Workbooks
- Entering and Editing Data
- Navigating and Selecting Cells, Rows and Columns
- Formulas and Functions
- SORT and SORTBY Functions

Python

- Introduction
- What You Can Do With Python
- Your First Python Program
- Variables
- Receiving Input
- Type Conversion
- Strings
- Arithmetic Operators
- Operator Precedence
- Comparison Operators
- Logical Operators
- If Statements
- Exercise