

MS Excel Outline

Excel Fundamentals

- Basics
- Create & Close Files
- Tabs & Groups
- Editing Data and Formatting
- Characteristics of Cell & Cell Reference
- Speak Cells
- Text to Columns
- Comments
- Copying and Filling
- Advanced Fill
- Fill Series & Flash Fill
- Viewing Worksheets & Custom View
- Worksheets

Excel Functions

- Logical Test
- IF Function & Nested IF Function
- AND Function
- Not and If Error
- Text Functions & Date Functions
- Name Range
- Basic Formulas
- Count Functions & Statistical Functions
- Maths & Trigonometry
- Index Function & Match Function
- V-Lookup & H-Lookup

Excel Editing

- Protect Cells, Sheets, Workbook & Files
- Hyperlink to Sheet, File, Webpage & Update
- Print Page Setup
- Header & Footer

Data Sorting & Formatting

- Advanced Filters & Filtering Data
- Basic Tables & Advanced Tables
- Subtotal

Charts & Dashboards

- Column Chart, Pie Chart, Bar Chart & Line Chart
- XY Scatter Chart & Spark Line Chart
- Pivot Table
- Consolidation
- Conditional Formatting

Data Validation

- Data Validation Error Alert
- Dependent Dropdown List
- Import Live Data from Web to Excel
- Insert Objects & Create Objects

SQL Outline

Database Fundamentals

- Database – Definition, Meaning, Types, Example
- SQL – SQL Basics, SQL Full Form & How to Use
- MySQL Workbench Tutorial for Beginners

Database Concepts

- Data Warehouse
- Metadata
- Schema – Star Schema, Snowflake Schema, and Galaxy Schema
- OLAP and OLTP
- ETL and ELT Process
- ER Diagram
- Data Architecture
- Data Modelling
- Normalization

SQL Basics

- Create Table
- SELECT Statement
- WHERE Clause – AND, OR, IN, NOT IN Functions
- INSERT INTO Query
- DELETE Query
- UPDATE Query
- ALTER, DROP, RENAME, MODIFY
- LIMIT & OFFSET
- IS NULL & IS NOT NULL
- Primary Key and Foreign Key
- Unique Key, Index Key

Data Sorting

- ORDER BY in MySQL – DESC & ASC
- GROUP BY and HAVING Clause
- Wildcards Tutorial – Like, NOT Like, Escape, (%), (_)

Functions

- Functions – String, Numeric, User-Defined, Stored
- Aggregate Functions – SUM, AVG, MAX, MIN, COUNT, DISTINCT

Important topics

- JOINS Tutorial – INNER, OUTER, LEFT, RIGHT, CROSS, Self
- UNION
- Views – How to Create View from Tables
- Index – Create, Add & Drop

Additional topics

- AUTO_INCREMENT
- SubQuery Tutorial
- Triggers
- Stored Procedures

Tableau Outline

Understanding Data

- What is data?
- Where to find data?
- Data Visualizations

Creating Your First visualization

- Getting started with Tableau Software
- Using Data file formats
- Connecting your Data to Tableau
- Creating basic charts (Line, Bar Charts, Treemaps)
- Using the Show Me panel

Tableau Calculations

- Overview of SUM, AVR, and Aggregate features
- Creating Custom Calculations and Fields
- Applying new Data Calculations to your Visualization

Formatting Visualizations

- Formatting Tools and Menus
- Formatting specific parts of the view
- Editing and Formatting Axes

Manipulating Data in Tableau

- Cleaning-up the data with the Data Interpreter
- Structuring your data
- Sorting and Filtering Tableau data
- Pivoting Tableau data

Advanced Visualization Tools

- Using Filters
- Using the Detail panel
- Using the Size panels
- Customizing Filters
- Using and Customizing Tooltips
- Formatting your data with Colours

Creating Dashboards & Stories

- Using Storytelling
- Creating your first dashboard and Story
- Design for different displays
- Adding interactivity to your Dashboard

Distributing & Publishing Your Visualization

- Tableau file types
- Publishing to Tableau Online
- Sharing your Visualization
- Printing and Exporting

Project Management Outline

SDLC – Software Development Life Cycle

Agile Methodology

Project Management

- Scrum Concept
- Kanban Concept
- Jira – PM Tool