Excel

Introduction

- MS Office Versions (similarities and differences)
- Interface (latest available version)
- Row and columns
- Keyboard shortcuts for easy navigation
- Data entry (fill series)
- Find and select
- Clear options
- Ctrl+enter
- Formatting options - Font, Alignment, Clipboard (copy, paste special)

Lab: Data entry, Fill series options, Copy Paste Special

Referencing, Named ranges, Uses, Arithmetic Functions

- Mathematical calculations with cell referencing (Absolute, Relative, Mixed)
- Functions with name range
- Arithmetic functions (SUM, SUMIF, SUMIFS, COUNT, COUNTA, COUNTIFS, AVERAGE, AVERAGEIFS, MAX, MAXIFS, MIN, MINIFS)

Lab: Arithmetic and statistical functions

Logical functions

- IF
- AND
- OR
- NESTED IFS
- NOT
- IFERROR
- Usage of mathematical and logical functions nested together

Lab: Logical functions

Referring data from different tables: Various types of Lookup, Nested IF

- LOOKUP
- VLOOKUP
- NESTED VLOOKUP
- HLOOKUP
- INDEX
- INDEX WITH MATCH FUNCTION
- INDIRECT
- OFFSET

Lab: Lookup and reference functions

Advanced functions

- Combination of arithmetic, logical, lookup functions
- Data validation (With dependent drop down)

Lab: Advanced functions

Date and Text Functions

- Date functions: DATE, DAY, MONTH, YEAR, YEARFRAC, DATEDIFF, EOMONTH
- Text functions:TEXT, UPPER, LOWER, PROPER, LEFT, RIGHT, SEARCH, FIND, MID, TTC, Flash fill

Lab: Date and text functions

Data Handling: Data cleaning, Data type identification, Remove Duplicates, Formatting and Filtering

- Number formatting (with shortcuts)
- CTRL+T (converting into an excel table)
- Formatting table
- Remove duplicate
- SORT
- Advanced sort
- FILTER
- Advanced Filter

Lab: Data cleaning, remove duplicates, formatting And filtering

Data Visualization: Conditional formatting, Charts

- Conditional formatting (Icon sets/Highlighted colour sets/Data bars/custom formatting)
- Charts: Bar, column, lines, scatter, combo, Gantt, waterfall, pie

Lab: Data Visualization: Conditional formatting

Data Summarization: Pivot Report and Charts

- Pivot Reports: Insert, Interface, Crosstable Reports, Filter, Pivot Charts
- Slicers: Add, Connect to multiple reports and charts
- Calculated field
- Calculated item

Lab: Data Visualization: Conditional formatting

Data Summarization: Dashboard Creation, Tips and Tricks

- Dashboard: Types, getting reports and charts together, use of slicers
- Design and placement: Formatting of tables, charts, sheets, proper use of colours and shapes

Lab: Data Summarization: Dashboard creation

Connecting to Data: Power query, pivot, power pivot within Excel

- Power Query: Interface, Tabs
- Connecting to data from other excel files, text files, other sources
- Data cleaning
- Transforming
- Loading data into Excel query
- Using loaded queries
- Merge and append
- Insert power pivot
- Similarities and differences in pivot and power pivot reporting
- Getting data from databases, workbooks, webpages

Lab: Connecting to data: Power query
Getting data from databases, workbooks, webpage queries, merge, pivoting
Getting data from databases, workbooks, append

VBA and Macros

- View tab, add developer tab
- Record macro: Name, storage
- Record macro to format table (Absolute Ref)
- Format table of any size (Relative ref)
- Play macro by button, shape, as command (in new tab)
- Editing macros
- VBA: Introduction to the basics of working with VBA for Excel: Subs, ranges, sheets
- Comparing values and conditions, if statements and select cases.
- Repeat processes with For loops and Do While or Do Until loops
- Communicate with the end-user with message boxes and take user input with input boxes, user form

Lab: Record macro
Interface, Sub-end sub,variable, objects
Message boxes, user form