

Module 1- Statistics – 8 Hours

Why Statistics?

Population & Sample

Statistics Workflow

Understanding Data with Descriptive Statistics?

Descriptive Statistics Basics

Types Of Variables

Types Of Descriptive Statistics

Categorical Frequency Distribution

Numerical Frequency Distribution

Histogram

Mean, Median & Mode

Left & Right Skew

Min, Max & Range

Interquartile Range

Box & Whisker Plot

Variance & Standard Deviation

Co-efficient Of Variance

Modelling Data with Probability Distribution

Probability Distribution Basics

Types Of Probability Distribution

The Normal Distribution

Z Score

Empirical Rule

Excel's Normal Distribution Function

Calculating Probability With Normal Distribution

Norm.Dist Function

Norm.S.Dist Function

Plotting Normal Curve

Estimating X or Z Value With Normal Distribution

Central Limit Theorem

The Central Limit theorem

The Standard Error

Implication Of Central Limit Theorem

Application Of Central Limit Theorem

Making Estimate With Confidence Intervals

Confidence Interval Basics

Confidence Level

Margin Of Error

Calculating Confidence Interval

The Confidence.Norm Function

Types Of Confidence Interval

T Distribution

Excel's T Distribution Function

Confidence Interval With T Distribution

Confidence Interval For Proportion

Confidence Interval For Two Populations

Dependant Samples

Independent Samples

Difference Between Proportions

Drawing Conclusion With Hypothesis Analysis

Hypothesis Test Basics

Null & Alternative Hypothesis

Significance Level

Test Statistic (T – Score)

P-Value

Drawing Conclusion From Hypothesis Test

Relationship Between Confidence Intervals & Hypothesis test

Type I And Type II Errors

One Tails & Two Tails Hypothesis Test

Hypothesis Test For Proportion

Hypothesis Test For Dependant Samples

Hypothesis Test For Independent Samples

Making Prediction With Regression Analysis

Linear Relationships

Correlation (R)

Linear Regression And Least Squared Error

Excel's Linear Regression Function

Simple Linear regression

Determination(R-Squared)

Standard Error

Homoskedasticity & Heteroskedasticity

Hypothesis Testing With Regression Analysis

Excel's Regression Tool (Analysis Tool Pak)

Multiple Linear Analysis

Project 1: Pizza Shop

Project 2: Medical Centre

Project 3: Pharmacy

Project 4: Safety Council

Project 5: Airlines

Module 2 - Ms Excel -16 Hours

Introduction

Course Intro

Excel 2021 vs Excel 365

Launching Excel

The Start Screen

Exploring the Interface

Ribbons, Tabs and Menus

Backstage Area

Quick Access Toolbar

Useful Keyboard Shortcuts

Getting Help

Exercise 01

Working with Templates

Workbooks and Worksheets

Saving Workbooks

Entering and Editing Data

Navigating and Selecting Cells, Rows and Columns

Exercise 02

Formulas and Functions Explained

SUM Function

COUNT Function

AVERAGE Function

MIN and MAX Function

Handling Errors in Calculations

Absolute vs Relative Referencing

Auto sum and Autofill Options

Flash Fill

Exercise 03

What are Named Ranges

Managing Named Ranges

Using Named Ranges

Exercise 04

Applying Number Formats

Applying Date and Time Formats

Formatting Cells, Rows and Columns

Format Painter

Exercise 05

Intermediate Course Introduction

Improve Readability with Cell Styles

Controlling Data Input

Adding Navigation Buttons

Logical Functions

The IF Function

Nested IFs

The IFs Function

Conditional IFs

Multiple Criteria

Error Handling

Exercise 01

VLookup (Exact Match)

VLookup (Approximate Match)

HLookup

INDEX and MATCH

XLookup and XMatch

OFFSET Function

INDIRECT Function

Exercise 02

Sorting on Multiple Columns

Sorting Using a Custom List

SORT and SORTBY Functions

Advanced Filter

UNIQUE Function

FILTER Function

Exercise 03

How Date and Times are Stored

Custom Data and Time Formats

Time and Date Functions

WORKDAY and WORKDAY.INTL Functions

NETWORKDAYS and NETWORKDAYS.INTL Functions

DATEDIF

EDATE and EOMONTH

Advanced Course Introduction

Exercise 01

Dynamic Arrays

Spill and Arrays

Extract and Count Unique Entries

Unique vs. Distinct

Unique with Multiple Criteria

Unique Values by Column

SORT Function

Horizontal Sort

SORTBY Function

Horizontal SORTBY

Sequence and Unstacking Records

Filter Function

Using Filter with Logic Plus Operator

Using Filter with Logic Asterisk Operator

Using Filter with Logic Equals Operator

Using Filter with Logic Minus Operator

RANDARRAY and RANDBETWEEN

XLookUp

XMatch

Exercise 02

Two-way Lookups

CHOOSE Function

SWITCH Function

Exercise 03

Median and Mode

Using LARGE and SMALL

Ranking Data

COUNTBLANK Function

Exercise 04

Rounding Values

Specialized Rounding

Aggregate Function

Exercise 05

Advance Pivot Table

Getting to Grips with Pivot Tables in Excel

Advanced Pivot Tables in Excel

Using the Data Model to Create a Pivot Table

Charts and Dashboards in Excel

Module 3 – My SQL – 20 Hours

Introduction and 5 Minutes of SQL
Getting Started Overview and Installation
Creating Databases and Tables
Inserting Data and a couple other things
CRUD commands
CRUD Challenge Section
The World Of String Functions
Refining Our Selections
The Magic of Aggregate Functions
Revisiting Data Types
The Power of Logical Operators
One To Many
Many To Many
Instagram Database Clone
Working With Lots Of Instagram Data
Introducing Node
Building Our Web App
Database Triggers

Module 4 – Power BI – 17 Hours + Advance DAX 5 Hours

Chapter 1 - Course Welcome
Understanding Power BI
Installing Power BI Desktop

Connecting Power BI To Data Sources

Creating Initial Visualizations

Comparison With Excel

Chapter 2: Power BI Desktop Fundamentals: Building Your Project

Introduction To Power BI Desktop Fundamentals

Exploring The Power BI Desktop Workflow

Navigating The Interface

Setting Up Project Templates And Preferences

Chapter 3: Data Preparation In Power Query Editor

Introduction To data Data Preparation

Connecting Data Sources In Power Query Editor

Basic Data Transformation Operations

Advanced Data Cleaning Techniques

Append And Transpose Operations

Handling Date Formats And Errors

Pivoting And Unpivoting Data

Introduction To Grouping data

Structuring The Project Data

Chapter 4- Data Transformation In Power Query Editor

Introduction To Data Transformation

Understanding Data Warehouses And Models

Applying The Start Schema To Project Data

Utilizing References and Merge Operations

Creating Custom Tables And Columns

Handling Merge Errors And Data Types

Applying Mathematical Operations

Enabling Data Load

Chapter 5: relationship And DAX : Mastering Power BI

Introduction To Relationships And DAX

Understanding Dta Models And Relationships

Creating Relationships And Models

Different Types Of Relationships

Utilizing M-Language and DAX

Introduction To DAX Functions And Syntax

Creating Custom Measures And Columns

Working With Filter And Calculate Functions

Understanding Data Categories

Chapter 6- Crafting Visuals In Report View

Introduction To Report Visualization

Creating And Organizing Report Pages

Building Various Visualizations

Understanding Interactions And Hierarchies

Formatting Visual Elements

Working With Slicers And Filters

Creating Tables And Cards

Incorporating Advanced Chart Types

Importing and Customizing Visuals

Chapter 7: Getting To Know Power BI Pro

Introduction To Power BI Pro

Exploring Power BI Pro Interface

Publishing And Sharing Reports

Understanding Dashboards and Workspaces

Configuring Data Refresh And Gateways

Collaborating And Sharing Data

Working With Power BI Mobile

Chapter 8: Exploring Other Data Sources

Introduction To Other Data Sources

Importing JSON And Rest API Data

Connecting MYSQL and SQL Server

Chapter 9: Advance DAX Calculations – 5 Hours

Module 5 Tableau – 20 Hours

1 Section: Tableau Basics

2 Section: Tableau Products

3 Section: Tableau Architecture

4 Section: Prepare the Environment

5 Section: Combining Data

6 Section: Tableau Metadata

7 Section: Renaming & Aliases

8 Section: Organizing Data

9 Section: Filtering & Sorting Data

10 Section: Tableau Parameters

11 Section: Tableau Actions

12 Section: Tableau Calculations

13 Section: Tableau Charts

14 Section: Tableau Dashboards

15 Section: Tableau Project

Module 6 : Python – 20 Hours

1 Section: Introduction To Python

2 Section: Introduction To Variables And Assignments In Python

3 Section: Introduction To For Loop In Python

4 Section: Getting Started With Function With Python

5 Section: Introducing Data Type In Python

6 Section: Exploring Conditionals In Python

7 Section: Exploring While Loop In Python With Break And Continue

8 Section: String In Python

9 Section: Introduction To Object Oriented Programming In Python

10 Section: Getting Started With Data Structures- List In Python

11 Section: Data Structures- 2D List In Python

12 Section: Advanced Object-Oriented Programming In Python

13 Section: Slicing, Sorting, Looping & Reversing

14 Section: Data Structures – Implementing Stack & Queue

15 Section: List Comprehension In Python

16 Section: Exploring Time Complexity & Recursion With Searching Algorithms In Python

17 Section: Introduction To Exception Handling In Python

18 Section: Getting Started With GETS in Python Programming

19 Section: Getting Started With DICTIONARY in Python Programming

20 Section: Getting Started With TUPPLES In Python Programming

Module 7 – JIRA TOOL- 2 Hours

What is Jira?

Basics of Agile Methodology

Key Agile Terms You'll Find in Jira

Jira Terms You Need to Know

Getting Familiar with Jira's Interface

Team-Managed Projects vs Company-Managed Projects

Creating a Team-Managed Project

Navigating Team-Managed Projects

Creating Issues in Team-Managed Projects

Customizing Team-Managed Projects

Creating a Company-Managed Project

Navigating Company-Managed Projects

Creating a New Scrum Board

Scrum Agile Board Overview

Customizing Scrum Boards

Module 8 – QLIK Sense – 3.5 Hours

What is Qlik Sense

Qlik Sense vs. Qlik View

Versions of Qlik Sense

Exploring Qlik Sense Interface

Loading Data Part 1

Loading Data Part 2

Creating Your First Chart

Adding Your First Chart

Editing Your Visualization

Publishing and Sharing Apps

Data Assets Visualization Part 1

Data Assets Visualization Part 2

Introduction to Qlik Sense Advanced

Introduction to Variables

Uses of Variables

Dynamic Loading Part 1

Dynamic Loading Part 2

Script Files & Sub-routines

Advanced Script Functions

Module 9 – Alteryx – 3 Hours

Introduction to Alteryx

Alteryx Essentials

Data Types 101

Components of Alteryx Workflow

Formatting Data

Basic Workflow Example

Filtering Data in Alteryx

Join Tool

Grouping Data

Introduction to Basic Functions - Part 1

Introduction to Basic Functions - Part 2

Introduction to Basic Functions - Part 3

Basic Parsing Methods

Basic Parsing Methods w/ Dynamic Renaming

Basic Vlookup and Append

Working on Multiple Fields in Alteryx

Build an Alteryx workflow

Basic Tips and Tricks to Make Alteryx Easier

Module 10 – Chat GPT – 1 Hour

Module 11- Git Gub

Module 12 - Interview Preparation

Module 13 – Resume Building & PortFolio Projects

Module 14 - Job Application