**0. Introduction**

·         What is Power BI?

·         Introduction

·         Overview of Power BI

·         Connecting to Software as Services

·         Power BI Community

·         Summary

**1. Power BI Desktop Data Transformations**

Transforming Data using Power BI Desktop

·         Introduction to Power BI Desktop

·         Changing Locale

·         Connecting to a Database

·         Basic Transformations

·         Managing Query Groups

·         Splitting Columns

·         Changing Data Types

·         Working with Dates

·         Removing and Reordering Columns

·         Conditional Columns

·         Connecting to Files in a Folder

·         Merge Queries

·         Query Dependency View

·         Transforming Less Structured Data

·         Enter Data

·         Query Parameters

·         Summary

·         Knowledge Checks

Lab 1

Lab Overview

·         Exercise 1: Import Data from Access Database

·         Exercise 2: Import Data from a Folder Containing CSV Files

·         Exercise 3: Import a Less Structured Data from an Excel File

**2. Power BI Desktop Modelling**

Data Modelling in Power BI Desktop

·         Introduction

·         Managing Data Relationships

·         Creating Calculated Columns

·         Optimizing Models for Reporting

·         Creating Calculated Measures

·         Creating and Managing Hierarchies

·         Using Calculated Tables

·         Time Intelligence

·         Manually Typing in a Data Table

·         Include / Exclude

·         Grouping / Binning

·         Summary

·         Knowledge Checks

Lab 2

Lab Overview

·         Exercise 1: Manage Table Relationships

·         Exercise 2: Last Year Comparison

·         Exercise 3: Year to Date

·         Exercise 4: Market Share

·         Exercise 5: Optimize the Data Model

**3. Power BI Desktop Visualization**

Visualizing Your Data

·         Introduction

·         Pie and Treemap

·         Hierarchical Axis and Concatenating

·         Filter (Including TopN)

·         Bar Chart with Line (Combo Chart)

·         Analytics Pane

·         Clustering (and Machine Learning)

·         Slicer

·         Focus Mode and See Data

·         Map Visualizations

·         ESRI Map

·         Table and Matrix

·         Table Styles

·         Scatter Chart

·         Waterfall

·         Gauge, Card, and KPI

·         Coloring Charts

·         Shapes, Textboxes, and Images

·         Gridlines and Snap to Grid

·         Knowledge Checks

·         Working with Multiple Visualizations

·         Page Layout and Formatting

·         Visual Relationship

·         Duplicate Page

·         Categories with No Data

·         Default Summarization and Categorization

·         Positioning, Aligning, and Sorting Visuals

·         Custom Hierarchies

·         R - Visual Integration

·         Summary

·         Knowledge Checks

·         Lab 3

lab Overview

·         Exercise 1: Cross-Tabular Report

·         Exercise 2: Part-to-Whole Report

·         Exercise 3: Relationship Report

·         Exercise 4: Trend Report

·         Exercise 5: Rank Report

**4. Power BI Service**

Working with Power BI Service

·         Introduction

·         Overview of Dashboards and Service

Should be simple and have objectivesк

·         Uploading to Power BI Service

·         Quick Insights

·         Configuring a Dashboard

·         Adding Textbox, Image Widgets

·         Featured and Favorite Dashboard

·         Filtering Dashboard

·         Dashboard Settings

·         Natural Language Queries

·         Featured Questions

·         Sharing a Dashboard

·         In-Focus Mode

·         Pinning a Live Page

·         Custom URL and Title

·         TV Mode and Collapse Navigation

·         Printing Dashboard and Exporting Data

·         Export to CSV and Excel

·         Power BI Notifications

·         Alerts in the Power BI Service

·         Personal Gateway

·         Publishing to Web

·         Admin Portal

·         Knowledge Checks

·         Viewing Power BI Dashboard

·         Viewing in Windows App

·         Viewing in Android App

·         Viewing in Ipad

·         Viewing in iPhone

·         Summary

Lab 4

Lab Overview

·         Exercise 1: Upload PBI Report and Pin Visualizations

·         Exercise 2: Share Dashboard and Update Report

·         Exercise 3: Schedule Data Refresh

**5. Working with Excel**

Connecting and Collaborating with Excel

·         Introduction

·         Importing Excel Data using Simple Table

·         Excel Workbook with Excel Data Model

·         Connecting to Excel Workbook on OneDrive for Business

·         Pinning Excel Tables or Visuals

·         Analyzing Data in Excel

·         Summary

·         Knowledge Checks

Lab 5

Lab Overview

·         Exercise 1: Upload Excel File with an Excel Table

·         Exercise 2: Upload an Excel File with a Data Model

**6. Organization Packs, Security and Groups**

Working with Others

·         Introduction

·         Creating a Group

·         Creating a Content Pack

·         Using a Content Pack

·         Editing a Content Pack

·         OneDrive for Business Integration

·         Row Level Security

·         Data Classification

·         Summary

·         Knowledge Checks

Lab 6

Lab Overview

·         Exercise: Create, Edit, and Share Content Pack

**7. Direct Connectivity**

Direct Connectivity

·         Introduction

·         Direct Connectivity to SQL Azure

·         Direct Connectivity to SQL Database

·         Direct Connectivity to SSAS

·         Using SSAS Connector

·         SSAS Multi Dimensional Preview

·         SAP HANA

·         Summary

·         Knowledge Checks

Lab 7

Lab Overview

·         Exercise 1: Direct Connectivity From Power BI Desktop

·         Exercise 2: Direct Connectivity From Power BI Service

**8. Developer API**

Developer API

·         Introduction

·         Interactive API Console

·         Registering a Client App and Embedding a Tile

·         Using PubNub to Push Data to a Tile

·         Creating Custom Visuals

·         Using Custom Visuals

·         Power BI Embedded

·         Summary

·         Knowledge Checks

Lab 8

·         Lab Overview

·         Exercise: Use Custom Visuals

**9. Mobile App**

Mobile App

·         Introduction

·         Report Gallery and Search

·         Mobile Dashboard Layout

·         Sharing and Annotating in Power BI Mobile

·         Taking Your Mobile Content Offline

·         Platform Specific Features

·         Search and Recent

·         Limiting Access to Mobile + MAM