INDEX - Course Lecture Out-Line

Chapter: 1 Introduction to Data Analytics. Page No. 3 - 17

- Course Introduction
- Data Analytics Overview
- Dealing with Different Types of Data
- Data Visualization for Decision making
- Data Science, Data Analytics, and Machine Learning
- Data Science Methodology
- Data Analytics in Different Sectors
- Analytics Framework and Latest trends

Chapter: 2 Data Ingestion Page No. 18 - 56

- Power BI Data Ingestion and Modelling
- Reading from MySQL
- Reading from HDF5
- Reading from The Web
- Reading from APIs
- ETC
- Reading from Other Sources
- Summary and close

Chapter: 3 Data Cleansing Page No. 57 - 100

- we look at finding data and reading different file types.
- Getting and Cleaning Data! The primary goal is to introduce you to the most common data storage systems and the appropriate tools to extract data from web or from databases like MySQL.
- Introduction to Data Wrangling and Shaping
- Advanced Shaping
- Beyond Initial Shaping
- Advanced DAX
- Publishing and Testing Your Dataset
- Summarizing Data
- Creating New Variables

Chapter: 4 Data Modelling Page No. 101 - 141

- What is Data Modelling?
- Data Modelling sometimes needs Data Analysis
- Star Schema
- Snowflake Schema
- Create a Relationship
- One to many, many to many relationships

Chapter: 5 Data Visualization Page No. 142 - 204

- Overview of Power BI
- Advantages of using Power BI
- Chart Selection
- Getting Started
- Transforming Data
- Report Creation
- Different types of visualization charts
- Area Charts
- Line Charts
- Bar Charts
- Column Charts
- Combo Charts

Chapter: 6 Data Regression Page No. 205 - 244

- Types of Regression Models
- Simple Linear Regression Model
- Simple Linear Regression Equation
- Equation for the best straight line
- Graph of the best straight line
- Interpreting the Results
- Measures of Variation

Course Assignment Page No. 245 - 264

Assignment on Power BI report creation with Solution

CHAPTER 7 : INTRODUCTION Page No: 265-274

CHAPTER 8 : DATABASE Page No: 275-305

CHAPTER 9 : DATA ENGINEERING SERVICES Page No: 306-329

CHAPTER 10 : S3 or STORAGE SERVICES Page No: 330-343

CHAPTER 11 : DMS (Ingestion) Page No: 344-363

CHAPTER 12 : REDSHIFT or CLOUD BASE DATA WAREHOUSE Page No: 364-390

CHAPTER 13 : GLUE or DATA PIPELINING Page No: 391-396

CHAPTER 14 : EMR PROCESSING Page No: 397-404

CHAPTER 15 : SCHEDULING & MONITORING Page No: 405-412

Table of Content of AI with Power BI

Subject	Module	Topics	Subtopics	Hours
Use AI Insights in Power BI Desktop	Use Text Analytics and Vision	Enable Text Analytics and Vision on Premium capacities	Detect language	3
			Extract key phrases	
			Score sentiment	
			Tag images	
			Invoke Text Analytics or Vision functions in Power Query	
			Publish a report with Text Analytics or Vision functions	
		Manage impact on a Premium capacity	Select a capacity	3
			Monitor with the Capacity Metrics app	
			Compare Power Query and Power Query Online	
			Considerations and limitations of Text Analytics	
	AI in Power BI	Cognitive Services in Power BI	Enable AI features	3
			Detect Language	
			Extract Key Phrases	
			Score Sentiment	
			Tag images	
TOTAL DURATION				9