

END TO END DATA ANALYST

Core Course	Course content
Fundamentals of Data Analyst	<ol style="list-style-type: none"> 1. What is Data Science 2. Need for Data Scientists 3. Foundation 4. Business Intelligence 5. Data Analysis 6. Data Mining 7. Machine Learning 8. Analytics 9. Data Science 10. Types of Analytics 11. DS across industries 12. DS across functions 13. Analytics Project Lifecycle 14. Data 15. Basis of Data Categorization 16. Types of Data 17. Data Collection
Excel	<ol style="list-style-type: none"> 1. Introduction to Excel 2. Columns & Rows 3. Functionality Using Ranges. 4. Excel Basic & Advanced Formulae's 5. Data Analysis Using Excel 6. Pivot & Power Pivot 7. Spreadsheet Tools 8. Data Cleaning 9. Data Validation 10. Data Visualization Using Excel
	Introduction to RDBMS

DATA BASE	<p>Sub Language Commands</p> <ul style="list-style-type: none"> • Data Definition Language (DDL) • Data Retrieval Language (DRL) • Data Manipulation Language (DML) • Transaction Control Language (TCL) • Database Security and Privileges (DCL) <p>Introduction to SQL Database Object</p> <ul style="list-style-type: none"> • Oracle Pre Defined Datatypes • DDL Commands • Create, Alter (add, modify, rename, drop)Columns, Rename, truncate, drop • DML-Insert, update, delete • DQL-SELECT Statements using WHERE clause • Comparison and Conditional Operators • Arithmetic and Logical Operators • Set Operators (UNION, UNION ALL, INTERSECT, MINUS) • Special Operators – IN (NOT IN), BETWEEN (NOT BETWEEN), LIKE (NOT LIKE), IS NULL (IS NOT NULL)
Statistical	<p>Descriptive & Inferential Statistics</p> <ol style="list-style-type: none"> 1. Turning Data into Information 2. Probability Distributions 3. Sampling Distributions 4. Confidence Intervals 5. Hypothesis Testing 6. Comparing Two Groups 7. Analysis of Variance (ANOVA) <p>Prediction Analytics</p> <ol style="list-style-type: none"> 1. Simple Linear Regression 2. Multiple Linear Regression 3. Model Adequacy Checking 4. Transformations 5. Diagnostics for Leverage and influence 7. Polynomial Regression 8. Dummy Variables 9. Variables Selection and Model Building 10. Generalized Linear Models Autocorrelation <p>Applied Multivariate Analysis</p> <ol style="list-style-type: none"> 1. Measures of Central Tendency, Dispersion and Association

	<ol style="list-style-type: none"> 2. Multivariate Normal Distribution 3. Sample Mean Vector and Sample Correlation 4. Principal Components Analysis(PCA) 5. Factor Analysis 6. Discriminant Analysis 7. MANOVA
R Programming	<ol style="list-style-type: none"> 1. R Programming <ol style="list-style-type: none"> 1. R Basics 2. Numbers, Attributes 3. Creating Vector 4. Mixing Objects 5. Explicit Coercion 6. Formatting Data Values 7. Matrices, List, Factors, Data Frames, 8. Missing Values, Names 9. Reading and Writing Data 10. Using Dput/DDump 11. Interface to the Outside world 12. Sub setting R objects 13. Vectorized Operations 14. Dates and Times 15. Managing Data Frames with the DPLYR 16. package 17. Control Structures 18. Functions 19. Lexical /Dynamic Scoping 20. Loop Functions 21. Debugging Data Visualization in R <ol style="list-style-type: none"> 1. Storytelling with Data 2. Principle tenets 3. Elements of Data Visualization 4. Infographics vs Data Visualization 5. Data Visualization & Graphical functions in R 6. Plotting Graphs 7. Customizing Graphical Parameters to improvise the plots 8. Various GUIs 9. Spatial Analysis 10. Other Visualization concepts

<p>Python</p>	<ol style="list-style-type: none"> 1. Python Overview 2. About Interpreted Languages 3. Advantages/Disadvantages of Python pydoc 4. Starting Python 5. Interpreter PATH 6. Using the Interpreter 7. Running a Python Script 8. Python Scripts on UNIX/Windows, Editors and IDEs 9. Using Variables 10. Keywords 11. Built-in Functions 12. StringsDifferent Literals 13. Math Operators and Expressions 14. Writing to the Screen 15. String Formatting 16. Command Line Parameters and Flow Control <p>Sequences and File Operations</p> <ol style="list-style-type: none"> 1. Lists 2. Tuples 3. Indexing and Slicing 4. Iterating through a Sequence 5. Functions for all Sequences 6. Using Enumerate() 7. Operators and Keywords for Sequences 8. The xrange() function 9. List Comprehensions 10. Generator Expressions 11. Dictionaries and Sets
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**Machine
Learning
Introduction**

1. ML Fundamentals
2. ML Common Use Cases
3. Understanding Supervised and Unsupervised Learning Techniques
4. Clustering
5. Similarity Metrics
6. Distance Measure Types: Euclidean, Cosine Measures
7. Creating predictive models
8. Understanding K-Means Clustering
9. Understanding TF-IDF, Cosine Similarity and their application to Vector Space Model
10. Case study
11. Implementing Association rule mining
12. Case study
13. Understanding Process flow of Supervised Learning Techniques
14. Decision Tree Classifier
15. How to build Decision trees
16. Case study
17. Random Forest Classifier
18. What is Random Forests
19. Features of Random Forest
20. Out of Box Error Estimate and Variable Importance
21. Case study
22. Naive Bayes Classifier
23. Case study
24. Project Discussion
25. Problem Statement and Analysis
26. Various approaches to solving a Data Science Problem
27. Pros and Cons of different approaches and algorithms
28. Linear Regression
29. Case study
30. Logistic Regression
31. Case study
32. Text Mining
33. Case study
34. Sentimental Analysis
35. Case study

Power BI Or Tableau

Power BI Introduction

Data Visualization, Reporting

Business Intelligence (BI), Traditional BI, Self-Serviced BI

Cloud Based BI, On Premise BI

Power BI Products

Power BI Desktop (Power Query, Power Pivot, Power View)

Flow of Work in Power BI Desktop

Power BI Report Server, Power BI Service, Power BI Mobile Flow

Power Query

Data Transformation, Benefits of Data Transformation

Shape or Transform Data using Power Query

Overview of Power Query / Query Editor, Query Editor User Interface The

Ribbon (Home, Transform, Add Column, View Tabs)

The Queries Pane, The Data View / Results Pane, The Query

Settings Pane, FormulaBar

Saving the Work

Datatypes, Changing the Datatype of a Column Filter in Power Query

Auto Filter / Basic Filtering

Filter a Column using Text Filters

Filter a Column using Number Filters

Filter a Column using Date Filters

Filter Multiple Columns

Remove Columns / Remove Other Columns

Name / Rename a Column

Reorder Columns or Sort Columns

Add Column / Custom Column Split

Columns

Merge Columns

PIVOT, UNPIVOT Columns

Transpose Columns

Header Row or Use First Row as Headers

Keep Top Rows, Keep Bottom Rows Keep

Range of Rows

Keep Duplicates, Keep Errors

Remove Top Rows, Remove Bottom Rows, Remove Alternative Rows

Remove Duplicates, Remove Blank Rows, Remove Errors

Group Rows / Group By

Data Modeling

Data Modeling Introduction

Relationship, Need of Relationship

Relationship Types / Cardinality in General

One-to-One, One-to-Many (or Many-to-One), Many-to-Many

AutoDetect the relationship, Create a new relationship, Edit existing relationships

Make Relationship Active or Inactive

Delete a relationship

DAX

What is DAX, Calculated Column, Measures

DAX Table and Column Name Syntax

Creating Calculated Columns, Creating Measures Calculated

Columns Vs Measures

DAX Syntax & Operators

DAX Operators

Types of Operators

Arithmetic Operators, Comparison Operators, Text Concatenation

Operator, Logical

Operators

DAX Functions Types

Date and Time Functions

Text Functions

Logical Functions

Math & Statistical Functions

Filter Functions

Time Intelligence Functions

Date and Time Functions

YEAR, MONTH, DAY

WEEKDAY, WEEKNUM

FORMAT (Text Function) à Month Name, Weekday Name

DATE, TODAY, NOW

HOUR, MINUTE, SECOND, TIME

DATEDIFF, CALENDAR

Creating Date Dimension Table

Text Functions

LEN, CONCATENATE (&)

LEFT, RIGHT, MID UPPER, LOWER

TRIM, SUBSTITUTE, BLANK

Logical Functions

IF
TRUE, FALSE NOT, OR, IN, AND
IFERROR SWITCH
Math & Statistical Functions
INT
ROUND, ROUNDUP, ROUNDDOWN
DIVIDE
EVEN, ODD
POWER, SIGN
SQRT, FACT
SUM, SUMX
MIN, MINX
MAX, MAXX
COUNT, COUNTX
AVERAGE, AVERAGEX
COUNTROWS, COUNTBLANK

Filter Functions

CALCULATE
ALL
RELATED
Report View
Report View User Interface
Fields Pane, Visualizations pane, Ribbon, Views, Pages Tab,
Canvas Visual

Interactions

Interaction Type (Filter, Highlight, None)
Visual Interactions Default Behavior, Changing the Interaction
Grouping and Binning Introduction
Using grouping, Creating Groups on Text Columns
Using binning, Creating Bins on Number Column and Date
Columns
Sorting Data in Visuals
Changing the Sort Column, Changing the Sort Order
Sort using column that is not used in the Visualization
Sort using the Sort by Column button
Hierarchy Introduction, Default Date Hierarchy
Creating Hierarchy, Creating Custom Date Hierarchy
Change Hierarchy Levels
Drill-Up and Drill-Down Reports
Data Actions, Drill Down, Drill Up, Show Next Level

Visualizations

Visualizing Data, Why Visualizations
Visualization types, Create and Format Bar and Column Charts

	<p>Create and Format Stacked Bar Chart Stacked Column Chart Create and Format Clustered Bar Chart, Clustered Column Chart Create and Format 100% Stacked Bar Chart, 100% Stacked Column Chart CreateandFormat Pie and Donut Charts Create and Format Scatter Charts Create and Format Table Visual, Matrix Visualization Line and Area Charts Create and Format Line Chart, Area Chart, Stacked Area Chart Combo Charts Create and Format Line and Stacked Column Chart, Line and Clustered ColumnChart Create and Format Ribbon Chart, Waterfall Chart, Funnel Chart Power BI Service Power BI Service Introduction, Power BI Cloud Architecture Creating Power BI Service Account, SIGN IN to Power BI Service Account Publishing Reports to the Power BI service, Import / Getting the Report to PBI ServiceMy Workspace / App Workspaces Tabs DATASETS, WORKBOOKS, REPORTS, DASHBOARDS Working with Datasets, Creating Reports in Cloud using Published Datasets</p>
Projects(Elective 1 only)	<p>Facial Recognition Social Media Analytics Facial Detection Data Acquisition and Productization Object Detection Handwriting Recognition Sales Prediction Stock Market Prediction Data Security</p>

Courses Offerings

- Amazon Web Services
- Android
- Azure , Azure Devops , Azure Data Bricks , Azure Data Factory, Data Engineer
- Business Analyst
- CA Siteminder
- Cognos 10 BI & Tm1
- Crystal Reports
- Data Stage
- Data Engineer -- Hadoop , Azure , AWS , Google
- Dell Bhoomi
- Dev Ops – Aws , Azure
- Dot Net
- Data Science
- Full Stack Developer
- ForgeRock
- Go Programming
- GCP Data Engineer
- Hadoop / Bigdata
- IBM App Connect Enterprise
- IBM Integration BUS (IIB)
- Informatica
- I Phone , Swift Language
- Java/J2EE
- JAVA UI
- JIRA Tools, Administration
- Mango DB
- MicroSoft .NET Technologies (VB.NET, C#, ASP.NET, Wcf ,Wpf ,Mvc)
- Microstrategy
- MS Power BI
- MuleSoft
- OBIEE 11 g , 12c
- ODI (Oracle Data Integrator)
- OKTA
- Openstack
- Oracle FUSION APPS SCm / HCM / Financial
- Oracle APPS – HRMS, SCM, Manufacturing , Technical , ASCP .Dmantra
- Oracle APPS – Project Accounting
- OAF
- Oracle DBA 11g , 12c, 19c
- Oracle RAC , Data Guard , Performance Tuning,
- Oracle Fusion SOA
- Oracle SQL , PL SQL
- Prompt Engineering Chat GPT
- PowerApps
- PostgreSQL Development and DBA
- Python
- Robotics Automation Process , UI Path , AA
- SAP Simple Finance

- SAS Clinical , Finance
- Sales Force CRM Development , Administration and Lightning
- SQL Server DBA
- Springs and Hibernate , Spring Boot , MicroServices
- Tableau
- Tera Data
- Testing Tools - QTP, QC, Load Runner, Selenium, ISTQB, Jmeter, Appium
- Tivoli Access Manager & Tivoli Storage Manager

<http://www.futurepointtech.com/data-analytics-training-course.html>

Drop a mail info@futurepointtech.com we will get in touch with u