#### Welcome to ineuron.ai



Full Stack Data Analytics Tech Neuron

# **Description:**

Data analytics is the process of gathering, transforming, and organizing information in order to draw conclusions, make predictions, and make better decisions. The full stack data analytics course is meant to assist you in becoming a skilled data analyst. Learn how to deal with SQL databases, develop data visualizations, and apply predictive analytics and statistics in a corporate environment using the best analytics tools and methodologies.

**Start Date:** 

**Doubt Clear Time:** 08:00 PM to 10:00 PM (IST) Wednesday

Course Time: 08:00 PM to 10:00 PM (IST) Saturday & Sunday

Features:

# Course material

# Course resources

# On demand recorded videos
# Practical exercises
# Quizzes
# Assignments
# Course completion certificate
What we learn:
# Statistics
# Basic Charts in Power BI
# Working with Maps
# Slicers in Power BI
# Cards and Filters
# Power Query
# M Language
# Tableau
# SQL
# Python
# Excel
Requirements:
# System with Internet Connection
# Interest to learn
# Dedication
Instructor:
>Statistics:

- >>Introduction
- >>Different types of Statistics
- >>Population vs Sample
- >>Mean, Median and Mode
- >>Variance, Standard Deviation
- >>Sample Variance why n-1
- >>Standard Deviation
- >>Variables
- >>Random Variables
- >>Percentiles & quartiles
- >>5 number summary
- >>Histograms
- >>Gaussian Normal distribution
- >>Standard Normal distribution
- >>Application Of Zscore
- >>Basics Of Probability
- >>Addition Rule In Probability
- >>Multiplication rule in probability
- >>Permutation
- >>Combination
- >>Log Normal Distribution
- >>Central Limit theorem
- >>Statistics Left Skewed And Right Skewed Distribution And Relation With Mean, Med
- >>Covariance

- >>Pearson And Spearman Rank Correlation
- >>What is P Value
- >>What is Confidence Intervals
- >>How To Perform Hypothesis Testing Confidence IntervalZ Test Statistics Derive Confidence IntervalZ Test St
- >>Hypothesis testing part 2
- >>Hypothesis testing part 3
- >>Finalizing statistics

#### >Basic Charts in Power BI:

- >>2.0 Basic Charts in Power BI Desktop
- >>2.1 Column Chart in Power BI
- >>2.2 Stacked Column Chart in Power BI
- >>2.3 Pie Chart in Power BI
- >>2.4 Donut Chart in Power BI
- >>2.5 Funnel Chart in Power BI
- >>2.6 Ribbon Chart
- >>2.7 Include and Exclude
- >>2.8 Export data from Visual

# >Working with Maps:

- >>3.1 Creating a Map in Power BI
- >>3.2 Filled Map
- >>3.3 Map with Pie Chart
- >>3.4 Formatting in Map

- >>3.5 Change Background in Map
- >>3.6 Map of India in Power BI
- >>3.7 Map of Australia in Power BI

#### >Tables and Matrix in Power BI:

- >>4.0 Table and Matrix in Power BI
- >>4.1 Creating a Table in Power BI
- >>4.2 Formatting a Table
- >>4.3 Conditional Formatting in Table
- >>4.4 Aggregation in Table
- >>4.5 Matrix in Power BI
- >>4.6 Conditional Formatting in Matrix
- >>4.7 Hirearchies in Matrix
- >>4.8 Sub-Total and Total in Matrix
- >>4.9 Number Formatting in Table

# >Other Charts in Power BI:

- >>5.0 Other Charts in Power BI
- >>5.1 Line Chart in Power BI
- >>5.2 Drill Down in Line Chart
- >>5.3 Area Chart in Power BI
- >>5.4 Line vs Column Chart in Power BI
- >>5.5 Scatter Plot in Power BI
- >>5.6 Waterfall Chart in Power BI

- >>6.7 TreeMap in Power BI
- >>5.8 Guage Chart in Power BI

#### >Cards and Filters:

- >>6.0 Cards and Filters in Power BI
- >>6.1 Number Card
- >>6.2 Text Card
- >>6.2.1 Formatting of Text Card
- >>6.3 Date Card
- >>6.3.1 Date Card (Relative Filtering)
- >>6.4 Multi-Row Card
- >>6.5 Filter on Visual
- >>6.6 Filter on This PAge
- >>6.7 Filter on All Pages
- >>6.8 Drillthrough in Power BI

# >Slicers in Power BI:

- >>7.0 Slicers in Power BI
- >>7.1 Text Slicers in Power BI
- >>7.2 Formatting a Text Slicer
- >>7.3 Date Slicers in Power BI
- >>7.4 Formatting a Date Slicer
- >>7.5 Number Slicers in Power BI

# >Advanced Charts in Power BI:

- >>8.0 Advanced Charts in Power BI
- >>8.1 Animated Bar Chart Race
- >>8.2 Drill down donut Chart
- >>8.3 Drill down Column chart
- >>8.4 Word Cloud in Power BI
- >>8.5 Sankey Chart in Power BI
- >>8.6 Infographic in Power BI
- >>8.7 Play Axis in Power BI
- >>8.8 Scroller in Power BI
- >>8.9 Sunburst Chart in Power BI
- >>8.10 Histogram in Power BI

# >Objects in Power BI:

- >>9.1 Insert Image in Power BI
- >>9.2 Insert Text in Power BI
- >>9.3 Insert Shapes in Power BI
- >>9.4 Insert Buttons in Power BI
- >>9.5 Web URL Action in Power BI
- >>9.6 Page Navigation Action in Power BI
- >>9.7 Bookmark Action in Power BI
- >>9.8 Drillthrough Action in Power BI

# >Power BI Service Introduction:

- >>10.1 Create a Superstore Report in Power BI
- >>10.2 Create an Account on Power BI Service
- >>10.3 Publish Report to Power BI Service Account
- >>10.4 Export Power BI Report to PPT, PDF or PBIX
- >>10.5 Comment, Share and Subscribe to Power BI Report
- >>10.6 Create a Dashboard in Power BI Service
- >>10.7 Problem in Power BI Dashboard and its solution
- >>10.8 Automatic Refresh in Power BI using Gateway

# >Power Query - Text Functions:

- >>11.0 Text Functions in Power Query (Power BI)
- >>11.1 Merge Columns in Power Query (Power BI)
- >>11.2 Split and Trim in Power Query (Power BI)
- >>11.3 Upper,Lower and ProperCase in Power Query (Power BI)
- >>11.4 Prefix and Suffix in Power Query (Power BI)
- >>11.5 Left,Right and Mid Functions in Power Query (Power BI)
- >>11.6 Extract Text with Delimiters

# >Power Query - Date Functions:

- >>12.0 Date Functions in Power Query(Power BI)
- >>12.1 Year, Quarter, Month and Day Functions in Power Query (Power BI)
- >>12.2 Find Difference between Dates in Power Query(Power BI)
- >>12.3 Month and Day Name in Power Query (Power BI)
- >>12.4 Day, Week of Month, Year in Power Query (Power BI)

- >>12.5 Extract Date, Time in Power Query (Power BI)
- >>12.6 Calculate Age in Power Query (Power BI)
- >>12.7 Day of Year, Quarter, Month in Power Query (Power BI)

# >Power Query - Number

#### **Functions:**

- >>13.0 Number Functions in Power Query (Power BI)
- >>13.1 Basic Number Functions in Power Query (Power BI)
- >>13.2 Percentage, Percent Of, Module in Power Query (Power BI)
- >>13.3 Round Functions in Power Query (Power BI)
- >>13.4 IsEven,IsODD, Sign in Power Query (Power BI)

# >Power Query - Append Files:

- >>14.1 Append multiple CSV files in a folder in Power Query (Power BI)
- >>14.2 Append multiple excel sheets, Tables in Power Query (Power BI)
- >>14.3 Append Excel sheets or Tables with different columns in Power BI
- >>14.4 Append multiple Excel files from a folder in Power BI
- >>14.5 Append different data sources in Power BI

# >Power Query - Merge Files:

- >>15.0 Merge Files and Tables in Power BI
- >>15.1 Merge Sheets or Tables in Power Query (Power BI)
- >>15.2 Merge Data from multiple Excel files or Workbooks in Power BI
- >>15.3 Merge data from different data sources in Power Query (Power BI)

>>15.4 Merge data having multiple criteria in Power BI

# >Power Query - Conditional

#### **Columns:**

- >>16.0 Conditional Column and Column from example in Power BI
- >>16.1 Column from examples in Power BI Split Text
- >>16.2 Column from examples in Power BI Merge Columns
- >>16.3 Column from Examples in Power BI Date
- >>16.4 Column from Examples in Power BI Alphanumeric
- >>16.5 Conditional Column in Power BI One Column
- >>16.6 Conditional Column in Power BI two columns
- >>16.7 Conditional Column in Power BI Compare two columns
- >>16.8 Conditional Column in Power BI on Dates

# >Power Query - - Important

# **Topics:**

- >>17.0 Very Important Topics in Power Query (Power BI)
- >>17.1 Fill Down in Power BI
- >>17.2 Grouping in Power Query (Power BI)
- >>17.3 Transpose in Power Query (Power BI)
- >>17.4 Unpivot In Power Query (Power BI)
- >>17.5 Data Types in Power Query (Power BI)
- >>17.6 Replace Errors and Values in Power Query (Power BI)
- >>17.7 Keep and Remove Rows in Power Query (Power BI)

>>17.8 Add, Remove and Goto Columns in Power Query (Power BI)

# >M Language Introduction:

- >>18.0 M Language in Power Query
- >>18.1 Introduction to M Language
- >>18.2 IsIn Date Functions in M Language Power BI
- >>18.3 Add and Subtract Date M Functions in Power BI
- >>18.4 Basic Date M Functions in Power BI
- >>18.5 Basic Text M Functions in Power BI
- >>18.6 Simple M Code in Power BI
- >>18.7 Trick to get all 900+ M Functions in Power BI

#### >Introduction to tableau:

- >>Tableau Introduction
- >>Download and Install Tableau
- >>Tableau Vs Excel

# >Charts - 1:

- >>Column Chart
- >>Horizontal Bar Chart
- >>Stacked Column Chart
- >>Stacked Bar Chart
- >>Keep Only,Exclude
- >>Keep Only,Exclude2\_Normal

# >>Publish to Tableau Public >Charts - 2: >>Pie Chart >>Multiple Pie Chart >>TreeMap\_Editing >>Packed Bubble Chart >>Word Cloud OR Word Map >>Formatting payal >Charts - 3: >>Data Types in Tableau >>Filled Map >>Symbol Maps >>India Map >>Histogram >Charts - 4: >>Text Table >>Text Table with Multiple Measures >>Measure Names and Measure Values >>Line Chart >>Line Chart with Multiple Measures >>Discrete Vs Continous Line Chart

>>Discrete Vs Continuous
>Charts - 5:
>>Lollipop Chart
>>Line Vs Column Chart
>>Dual Axis Chart
>>Column vs Shapes
>>Bar in Bar Chart
>Charts - 6:
>>Calculated fields
>>Conditional Column Chart
>>Column chart with Shapes based on condition
>>Conditional Maps
>Charts - 7:
>>Map with Pie Chart
>>Map with WMS
>Charts - 8:
>>Funnel Chart
>>Advanced Funnel Chart
>>Calendar
>>Dumbell Chart

>>Donut Chart >>Multiple Donut Chart >Charts - 9: >>Bullet Chart 1 >>Bullet Chart 2 >>Table Calculations Part 1 >>Table Calculations - Compute Using - Part 2 >>Table Calculations - Relative - Part 3 >>Bump Chart >>Bump Chart with Circle >>100 Percent Stacked Column Chart >Charts - 10: >>Scatter Plot >>Scatter Plot with Images OR Shapes >>Bubble Chart >>Animation - Column Chart >>Animation - Line Chart >>Animation - Column vs Line Chart >Charts - 11:

>>Heat Maps

>>Heat Map with Shapes

- >>Heat Map with Conditional Formatting
- >>Pareto Chart
- >>Rounded Bar Chart

# >Introduction and installation of

# MySQL:

- >>Introduction to section 1
- >>MySQL introduction 5 points to know
- >>MYsql Installation MAC

# >Basics of MySQL:

- >>Introduction to section 2
- >>Creating and dropping database Startup
- >>Resolving the issue for future
- >>Creating your first table
- >>Adding values to canon table
- >>Answering customer question

# >Playing with data:

- >>Introduction to section 3
- >>Primary key, default and NULL
- >>Table with primary key and default values
- >>Testing the new table
- >>Adding new values and answering questions

- >>Update in customers table
- >>Delete from the customers table

#### >More on functions:

- >>Introduction to section 4
- >>Understand the new Ico user DB
- >>Task for CONCAT
- >>Task for REPLACE
- >>task for SUBSTRING
- >>Task for reverse and CHAR\_LENGTH
- >>Task for case conversion and DOCS

# >Answering some DB

# questions:

- >>Introduction to section 5
- >>A task on DISTINCT
- >>A task for ORDER BY
- >>A task on LIMIT
- >>Match the pattern
- >>A task on COUNT
- >>SQL MODES and GROUP BY
- >>MIN MAX and SUBQUERIES
- >>GROUP BY with MAX and MIN
- >>SUM and AVERAGE with GROUP BY

- >>A task on AND OR
- >>A task in RANGE based selection
- >>CASE THEN multiple range selection

# >A pinch of theory:

- >>Introduction to section 6
- >>Data type for INTEGER and STRING
- >>Data type for DATE, DATETIME and JSON
- >>DATE TIME code Example
- >>Get the date and time
- >>Lets join tom and jerry tables
- >>Types of JOIN

### >FOREIGN KEY and JOINS:

- >>Introduction to section 7
- >>Code talk over FOREIGN keys
- >>Understand a new database
- >>A task on INNER join
- >>ONE to MANY and MANY TO MANY
- >>Join more 3 or more tables
- >>A task on LEFT JOIN
- >>A task on RIGHT JOIN
- >>FULL OUTER join and UNION tasks

# >A pinch of more theory:

- >>Introduction to section 8
- >>Database engines INNODB and more
- >>ACID in database

# >A 30 Task assignment for movie DB:

- >>Introduction to section 9
- >>How practice database works FILM

# >Final exam - single attempt:

>>MYSQL Outro and some free resources

# >Python Basics:

- >>Python Introduction, Installation and Setup
- >>Python Basics & Conditionals
- >>Conditionals & Loops
- >>Working with Loops
- >>Working with Strings & Lists
- >>List manipulation
- >>Tuple, Set & Dictionary
- >>Working with Functions

# >Microsoft Excel Fundamentals:

- >>Launching Excel
- >>Microsoft Excel Startup Screen
- >>Introduction to the Excel Interface
- >>Customizing the Excel Quick Access Toolbar
- >>More on the Excel Interface
- >>Understanding the Structure of an Excel Workbook
- >>Saving an Excel Document
- >>Opening an Existing Excel Document
- >>Common Excel Shortcut Keys
- >Entering and editing text and formulas:
- >>Entering Text to Create Spreadsheet Titles
- >>Working with Numeric Data in Excel
- >>Entering Date Values in Excel
- >>Working with Cell References
- >>Creating Basic Formulas in Excel
- >>Relative Versus Absolute Cell References in Formulas
- >>Understanding the Order of Operation
- >Working with basic excel functions:
- >>The structure of an Excel Function
- >>Working with the SUM() Function

- >>Working with the MIN() and MAX() Functions
- >>Working with the AVERAGE() Function
- >>Working with the COUNT() Function
- >>Adjacent Cells Error in Excel Calculations
- >>Using the AutoSum Command
- >>Excel's AutoSum Shortcut Key
- >>Using the AutoFill Command to Copy Formulas

# >Modifying an excel worksheet:

- >>Moving and Copying Data in an Excel Worksheet
- >>Inserting and Deleting Rows and Columns
- >>Changing the Width and Height of Cells
- >>Hiding and Unhiding Excel Rows and Columns
- >>Renaming an Excel Worksheet
- >>Deleting an Excel Worksheet
- >>Moving and Copying an Excel Worksheet

# >Formatting data in an excel worksheet:

- >>Working with Font Formatting Commands
- >>Changing the Background Color of a Cell
- >>Adding Borders to Cells
- >>Excel Cell Borders Continued
- >>Formatting Data as Currency Values

- >>Formatting Percentages
- >>Using Excel's Format Painter
- >>Creating Styles to Format Data
- >>Merging and Centering Cells
- >>Using Conditional Formatting
- >>Editing Excel Conditional Formatting