



LEARN, THINK, INNOVATE



Why Data Science

Statistics

Algorithms

Scientific Methods

Data Science

Models

Known as the Career of the future?

Overview

Join **eMexo Technologies' Best Data Science Master Program Training in Electronic City Bangalore**, where you'll go from **Data Science fundamentals** to advanced concepts and become an expert in real-time **Apache Spark** applications. The syllabus includes: **Introduction to Data Science, Python Basics, Python Packages, Importing Data, Data Manipulation, Statistics, Error Metrics, Machine Learning, Supervised & Unsupervised Learning, SVM & Kernels, Artificial Intelligence (AI), Deep Learning, NLP Basics, Text to Features, NLP Tasks, Real Projects, Power BI, Data Visualization, Excel, Advanced Excel, Reports in Tableau, Charts in Tableau, Tableau Filters & Calculations, Dashboards in Tableau, Tableau Server, Oracle Database, SQL Basics, SELECT Queries, Sorting Data, Single-Row Functions, Conversion & Conditional Logic, Group Functions, Table Joins, Subqueries, Set Operators, Data Manipulation, Table Creation via DDL, Schema Control, Access Permissions, Data Processing, Handling Time Zones, Subqueries, and Regex.**

Each module includes **practical sessions** and **live examples** in our **Data Science Master Program Course in Electronic City Bangalore**. Hands-on training is our core focus. Our trainers are working professionals with deep industry experience in cutting-edge technologies like **Machine Learning, Deep Learning, AI, Power BI, Excel, SQL, and Tableau**. We hire only top industry experts for our **Data Science Master Program Certification Training in Electronic City Bangalore**, ensuring high-quality education that prepares you for real-world challenges.

Searching for the **Best Data Science Master Program Certification Course in Electronic City Bangalore**? Your search ends here. **eMexo Technologies** is the most trusted and recommended **Data Science Master Program Training Institute in Electronic City Bangalore**. Attend a **free demo session**—see our quality before enrolling. Let our expert give you a complete walkthrough of the training program and help you confidently step into the world of **Data Science**.

Training Features

Real-life Case Studies

Do a real-life case study to understand the usage in real-world scenarios.

Assignments

Each class will be followed by a practical assignment which can be completed before the next class.

Preparation for interview

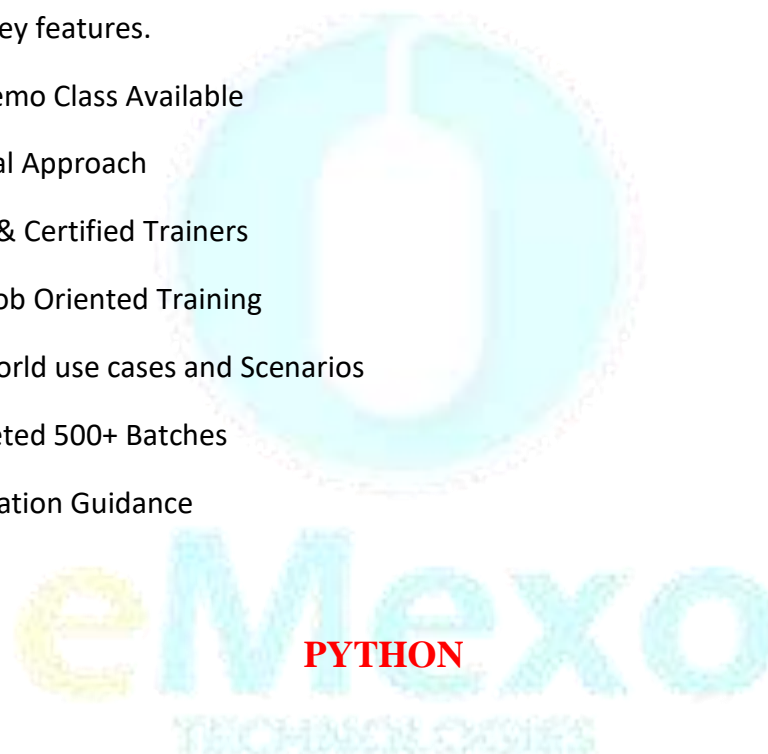
Our trainers are professionals working in multinational corporations. They are experts in their field and know exactly what the interviewer will look for in the candidate. Experienced trainers not only share interview questions but also conduct mock interviews to help prepare for the actual interview.

Key Features

eMexo Technologies offers the **Best Data Science Master Program Training Course in Electronic City Bangalore** with the TOP industry expert trainers.

Here are the key features.

- ★ Free Demo Class Available
- ★ Practical Approach
- ★ Expert & Certified Trainers
- ★ 100% Job Oriented Training
- ★ Real World use cases and Scenarios
- ★ Completed 500+ Batches
- ★ Certification Guidance



Unit 1: Introduction to Python

- Python programming history & features
- Python compiler and IDE installation
- Virtual Environment
- Pip – Package Manager
- Hands-on

Unit 2: Basics of Python

- Python Syntax Overview, Indentation, comments
- Variable declaration
- Datatypes and data structure
- Primitive
- Non-primitive
- Operators in python
- Hands-on

Unit 3: Program flow/ Data flow of Python

- Conditional Statements
- if statement
- if ... else statement
- if ... elif... else statement
- Looping
- for loop
- for with else statement
- while loop
- while with else statement
- Control Statements
- break
- Continue
- pass
- Assert Statement
- Hands-on

Unit 4: Function in Python

- Syntax of Function
- Function with *args & **kwargs
- Scope of variables
- Lambda function with map, filter, reduce method
- DocString
- Modules and standard Modul

Unit 5: File Handling in Python

- File Opening modes
- Context Manager in python
- File Operations
- Open
- Create
- Read
- Write
- Update
- Delete
- Hands-on

Unit 6: Exception Handling in Python

- Types of Errors in python
- Exception handling with
- try ... except
- try ... except... finally
- try ... except... else
- Multiple Exception
- Raising Exception
- User-defined Exception
- Hands-on

Unit 7: Oops in Python

- Oops Concepts with programming syntax
- Class
- Object
- Polymorphism
- Encapsulation
- Inheritance
- Types of Methods in python
- Hands-on

Unit 8: Core Concepts in Python

- Iterator
- Generator
- Decorator
- Hands-on

Unit 9: Comprehension in Python

- Comprehensions
- List
- Nested List
- if statement
- if ... else statement
- Nested if ... else statement
- Dictionary
- Sorting
- List
- Dictionary
- Hands-on

Unit 10: Thread and DateTime in Python

- Terms in threading
- process
- thread
- multithreading
- Time complexity
- Thread Life cycle
- Programming with Threading & Multithreading
- Synchronization



- Sleep and execution time of code
- DateTime module
- Hands-on

Unit 11: Advanced data Structure/ collections in Python

- Deque
- namedtuple
- ChainMap
- Counter
- Ordered Dictionary
- Default Dictionary
- Hands-on

Unit 12: MySQL with Python

- SQL statements & Operations
- Create
- Read
- Update
- Delete
- Python – SQL connector package installation
- Python with CRUD Operations
- Commit & Rollback
- SQL Related Exception Handling
- Hands-on

Unit 13: Network programming with Python

- Terms and Basics of network programming
- The architecture of data transmission between sender and receiver using python
- Getting data from the remote server
- Client & Server-side programming
- Hands-on

Unit 14: Regular Expression with Python

- Regex Syntax
- Quantifiers
- Metacharacters
- Special Sequences
- Sets
- Python re module
- Methods with regex usage
- Hands-on

Unit 15 : GUI programming with Python

- Introduction
- Components and Events
- An Example GUI
- Widgets
- Layout Management
- Signals & Slots
- QMessageBox, QDialog
- Database Handling
- Hands-on

Unit 16 : API access with Python

- Google Text to Speech
- Google Speech to Text
- OpenWeatherMap
- Hands-on

Unit 17 : DataScience with Python

- Pandas – Series and Dataframe
- Numpy
- Matplotlib
- Hands-on

Unit 18 : The project with Python

- Creating own application with any one of the frameworks
- Django App
- PyQt5 App
- Console oriented Core app

Machine Learning

Unit 19 : Supervised Learning

- Linear Regression
 - Linear Equation
 - Slope
 - Intercept
 - R square value
- Logistic regression
 - ODDS ratio
 - Probability of success
 - Probability of failure Bias Variance Tradeoff
 - ROC curve
 - Bias Variance Tradeoff
- Hands-on: we've reviewed the main ways to approach the problem of modeling data using simple and definite

Unit 20: Unsupervised Learning

- K-Means
- K-Means ++
- Hierarchical Clustering

Unit 21: SVM

- Support Vectors
- Hyperplanes
- 2-D Case
- Linear Hyperplane

Unit 22: SVM Kernal

- Linear
- Radial
- Polynomial

Unit 23: Other Machine Learning algorithms

- K – Nearest Neighbour
- Naïve Bayes Classifier
- Decision Tree – CART
- Decision Tree – C50
- Random Forest
- Hands-on: We have covered the simplest but still very practical machine learning models in an eminently practical way to get us started on the complexity
- Hands-on: where we will cover several regression techniques, it will be time to go and solve a new type of problem that we have not worked on, even if it's possible to solve the problem with clustering methods (regression), using new mathematical tools for approximating unknown values.
- Hands-on: In it, we will model past data using mathematical functions, and try to model new output based on those modeling.

Deep Learning

Unit 24: Deep Learning Algorithms

- CNN – Convolutional Neural Network
- RNN – Recurrent Neural Network
- ANN – Artificial Neural Network
- Hands-on: We took a very important step toward solving complex problems together by means of implementing our first neural
- Hands-on: Now, the following architectures will have familiar elements, and we will be able to extrapolate the knowledge acquired in this chapter, into novel

Unit 25: Introduction to NLP

- Text Pre-processing
- Noise Removal
- Lexicon Normalization
- Lemmatization
- Stemming
- Object Standardization

Unit 26: Text to Features (Feature Engineering)

- Syntactical Parsing
- Dependency Grammar
- Part of Speech Tagging
- Entity Parsing
- Named Entity Recognition
- Topic Modelling
- N-Grams
- TF – IDF
- Frequency / Density Features
- Word Embedding's

Unit 27: Tasks of NLP

- Text Classification
- Text Matching
- Levenshtein Distance
- Phonetic Matching
- Flexible String Matching
- Hands-on: provided, you will even be able to create new customized
- Hands-on: As our models won't be enough to solve very complex problems, in the following chapter, our scope will expand even more, adding the important dimension of time to the set of elements included in our generalization.

Artificial Intelligence

Unit 28: AI Introduction

- Perceptron
- Multi-Layer Perceptron
- Markov Decision Process
- Logical Agent & First Order Logic
- AI Applications

Power BI

Unit 29: Introduction to Power BI

- Get Started with Power BI
- Overview: Power BI concepts
- Sign up for Power BI
- Overview: Power BI data sources
- Connect to a SaaS solution
- Upload a local CSV file
- Connect to Excel data that can be refreshed
- Connect to a sample
- Create a Report with Visualizations
- Explore the Power BI portal
- Hands-On

Unit 30: Viz and Tiles

- Overview: Visualizations
- Using visualizations
- Create a new report
- Create and arrange visualizations
- Format a visualization
- Create chart visualizations
- Use text, map, and gauge visualizations and save a report
- Use a slicer to filter visualizations
- Sort, copy, and paste visualizations
- Download and use a custom visual from the gallery
- Hands-On

Unit 31: Reports and Dashboards

- Modify and Print a Report
- Rename and delete report pages
- Add a filter to a page or report
- Set visualization interactions
- Print a report page
- Send a report to PowerPoint
- Create a Dashboard
- Create and manage dashboards
- Pin a report tile to a dashboard
- Pin a live report page to a dashboard

- Pin a tile from another dashboard
- Pin an Excel element to dashboard
- Manage pinned elements in Excel
- Add a tile to a dashboard
- Build a dashboard with Quick Insights
- Set a Featured (default) dashboard
- Ask Questions about Your Data
- Ask a question with Power BI Q&A
- Tweak your dataset for Q&A
- Enable Cortana for Power BI
- Hands-On

Unit 32: Publishing Workbooks and Workspace

- Share Data with Colleagues and Others
- Publish a report to the web
- Manage published reports
- Share a dashboard
- Create an app workspace and add users
- Use an app workspace
- Publish an app
- Create a QR code to share a tile
- Embed a report in SharePoint Online
- Hands-On

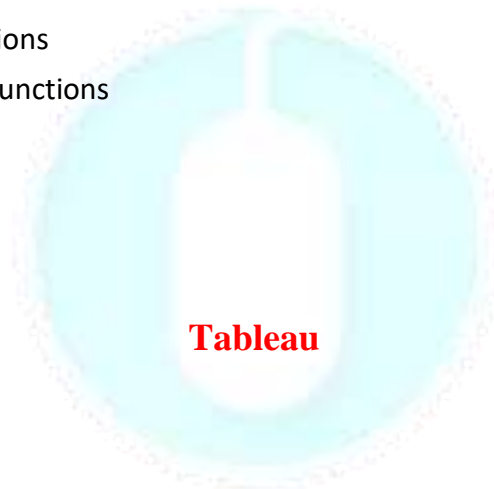
Unit 33: Other Power BI Components and Table Relationship

- Use Power BI Mobile Apps
- Get Power BI for mobile
- View reports and dashboards in the iPad app
- Use workspaces in the mobile app
- Sharing from Power BI Mobile
- Use Power BI Desktop
- Install and launch Power BI Desktop
- Get data
- Reduce data
- Transform data
- Relate tables

- Get Power BI Desktop data with the Power BI service
- Export a report from Power BI service to Desktop
- Hands-On

Unit 34: DAX functions

- New Dax functions
- Date and time functions
- Time intelligence functions
- Filter functions
- Information functions
- Logical functions
- Math & trig functions
- Parent and child functions
- Text functions
- Hands-On



Tableau

- Start Page
- Show Me
- Connecting to Excel Files
- Connecting to Text Files
- Connect to Microsoft SQL Server
- Connecting to Microsoft Analysis Services
- Creating and Removing Hierarchies
- Bins
- Joining Tables
- Data Blending

Unit 35: Learn Tableau Basic Reports

- parameters
- Grouping Example 1
- Grouping Example 2
- Edit Groups
- Set
- Combined Sets
- Creating a First Report
- Data Labels
- Create Folders

- Sorting Data
- Add Totals, Subtotals, and Grand Totals to Report
- Hands-on: Install Tableau Desktop
- Hands-on: Connect Tableau to various Datasets: Excel and CSV files

Unit 36: Learn Tableau Charts

- Area Chart
- Bar Chart
- Box Plot
- Bubble Chart
- Bump Chart
- Bullet Graph
- Circle Views
- Dual Combination Chart
- Dual Lines Chart
- Funnel Chart
- Traditional Funnel Charts
- Gantt Chart
- Grouped Bar or Side by Side Bars Chart
- Heatmap
- Highlight Table
- Histogram
- Cumulative Histogram
- Line Chart
- Lollipop Chart
- Pareto Chart
- Pie Chart
- Scatter Plot
- Stacked Bar Chart
- Text Label
- Tree Map
- Word Cloud
- Waterfall Chart
- Hands-on: Create and use Static Sets
- Hands-on: Create and use Dynamic Sets
- Hands-on: Combine Sets into more Sets
- Hands-on: Use Sets as filters
- Hands-on: Create Sets via Formulas
- Hands-on: Control Sets with Parameters
- Hands-on: Control Reference Lines with Parameters

Unit 37: Learn Tableau Advanced Reports

- Dual Axis Reports
- Blended Axis
- Individual Axis

- Add Reference Lines
- Reference Bands
- Reference Distributions
- Basic Maps
- Symbol Map
- Use Google Maps
- Mapbox Maps as a Background Map
- WMS Server Map as a Background Map
- Hands-on: Create Barcharts
- Hands-on: Create Area Charts
- Hands-on: Create Maps
- Hands-on: Create Interactive Dashboards
- Hands-on: Create Storylines
- Hands-on: Understand Types of Joins and how they work
- Hands-on: Work with Data Blending in Tableau
- Hands-on: Create Table Calculations
- Hands-on: Work with Parameters
- Hands-on: Create Dual Axis Charts
- Hands-on: Create Calculated Fields

Unit 38: Learn Tableau Calculations & Filters

- Calculated Fields
- Basic Approach to Calculate Rank
- Advanced Approach to Calculate Ra
- Calculating Running Total
- Filters Introduction
- Quick Filters
- Filters on Dimensions
- Conditional Filters
- Top and Bottom Filters
- Filters on Measures
- Context Filters
- Slicing Filters
- Data Source Filters
- Extract Filters
- Hands-on: Creating Data Extracts in Tableau
- Hands-on: Understand Aggregation, Granularity, and Level of Detail
- Hands-on: Adding Filters and Quick Filters

Unit 39: Learn Tableau Dashboards

- Create a Dashboard
- Format Dashboard Layout
- Create a Device Preview of a Dashboard

- Create Filters on the Dashboard
- Dashboard Objects
- Create a Story

Unit 40: Server

- Tableau online.
- Overview of Tableau
- Publishing Tableau objects and scheduling/subscription.
- Hands-on: Create Data Hierarchies
- Hands-on: Adding Actions to Dashboards (filters & highlighting)
- Hands-on: Assigning Geographical Roles to Data Elements
- Hands-on: Advanced-Data Preparation

Excel

Unit 41: Excel: Basics to Advanced

- Excel tutorial
- Text to Columns
- Concatenate
- The Concatenate Function
- The Right Function with Concatenation
- Absolute Cell References
- Data Validation
- Time and Date Calculations
- Conditional Formatting
- Exploring Styles and Clearing Formatting
- Using Conditional Formatting to Hide Cells
- Using the IF Function
- Changing the “Value if false” Condition to Text
- Pivot Tables
- Creating a Pivot Table
- Specifying PivotTable Data
- Changing a PivotTables Calculation
- Filtering and Sorting a PivotTable
- Creating a PivotChart
- Grouping Items
- Updating a PivotTable

- Formatting a PivotTable
- Using Slicers
- Charts
- Creating a Simple Chart
- Charting Non-Adjacent Cells
- Creating a Chart Using the Chart Wizard
- Modifying Charts
- Moving an Embedded Chart
- Sizing an Embedded Chart
- Changing the Chart Type
- Chart Types
- Changing the Way Data is Displayed
- Moving the Legend
- Formatting Charts
- Adding Chart Items
- Formatting All Text
- Formatting and Aligning Numbers
- Formatting the Plot Area
- Formatting Data Markers
- Pie Charts
- Creating a Pie Chart
- Moving the Pie Chart to its Own Sheet
- Adding Data Labels
- Exploding a Slice of a Pie Chart
- Data Analysis – Overview
- types of Data Analysis
- Data Analysis Process
- Working with Range Names
- Copying Name using Formula Autocomplete
- Range Name Syntax Rules
- Creating Range Names
- Creating Names for Constants
- Managing Names
- Scope of a Name
- Editing Names
- Applying Names

- Using Names in a Formula
- Viewing Names in a Workbook
- Copying Formulas with Names
- Difference between Tables and Ranges
- Create Table
- Table Name
- Managing Names in a Table
- Table Headers replacing Column Letters
- Propagation of a Formula in a Table
- Resize Table
- Remove Duplicates
- Convert to Range
- Table Style Options
- Table Styles
- Cleaning Data with Text Functions
- Removing Unwanted Characters from Text
- Extracting Data Values from Text
- Formatting Data with Text Functions
- Date Formats
- Conditional Formatting
- Sorting
- Filtering
- Lookup Functions
- Pivoting
- Hands-On



Statistical Analysis

Unit 1: Introduction to Statistical Analysis

- Introduction to Probability
- Probability Addition Rule
- Probability Multiplication Rule
- Distributions
- Correlation
- Regression
- Hypothesis Testing
- ANOVA and Chi-Square Tests
- Data Cleaning
- Imputation Techniques
- Measure Of central tendency, Measures of Dispersion
- Graphical Techniques, Skewness & Kurtosis, Box Plot
- Descriptive Stats
- Central Limit Theorem, Confidence interval
- Hands-On

Unit 2: Introduction to Data Analytics

- Data Analytics Overview
- Importance of Data Analytics
- Types of Data Analytics
- Descriptive Analytics
- Diagnostic Analytics
- Predictive Analytics
- Prescriptive Analytics
- Benefits of Data Analytics
- Data Visualization for Decision Making
- Hands-On

SQL

Unit 42: SQL

- Fundamentals of SQL Syntax and Statements
- Data Filtering and Sorting Techniques
- Utilization of Single-Row Functions
- Aggregate and Group Functions
- Analytical (Window) Functions
- Data Definition Language (DDL) – Creating and Managing Schema Objects
- Data Manipulation Language (DML) – Inserting, Updating, and Deleting Data
- Implementation of Data Constraints
- Set Operations – UNION, INTERSECT, and MINUS
- Sub queries and Nested Queries
- Joins and Multi-Table Queries
- Transaction Control Language (TCL) – COMMIT, ROLLBACK, SAVEPOINT
- Data Control Language (DCL) – GRANT and REVOKE Permission

FAQs

1. How is the training organized? How much percentage is theoretical and how much is practical hands-on?

We at eMexo believe nothing beats hands-on practice when it comes to learning a concept. Our teaching methodology is 100% practical and hands-on-oriented. You learn a concept, you practice it then and there with the trainer. We also give you assignments for each topic which you can practice at home and any doubts regarding the topic can be cleared with the trainer the next day.

2. What is the course duration? How and when do you plan to complete the course?

We generally cover our courses in 60 hours, however, we are aware that we can't put a hard-stop to learning with a number. Our trainer will make sure that you have learned everything that is part of the curriculum. This could mean 48 hours or 60 hours, doesn't matter.

3. What is the material provided in the training?

We have industry standard course material which is used by our trainers to train you. At the end of the training apart from the notes which you have taken during the course, we will also provide you with the training material which was used. This training material includes the training content, interview questions, etc.

4. Do you help in preparing for the interview?

Our trainers are working professionals who work in MNCs. They are experts in their domain and know exactly what an interviewer looks into a candidate. Our expert trainers apart from sharing the interview questions will also conduct mock interviews to help you prepare for the real interview.

5. Who are your trainers?

Our trainers are industry experts who work in their respective technologies day in and day out.

They work in MNCs and are technology experts within their organizations.

6. What is the total batch size per course?

We maintain a strict batch size of a maximum of 5 students. We also provide exclusive one-to-one training as well. Talk to our training partner to get more details.

7. Do you provide certification for the course?

Yes, at the end of the training, we provide a certification of completion.

8. Will I be joining a new batch or being merged with another batch?

You will be added to a new batch.

9. Is fast-track training available?

Yes, we also provide fast-track training for those who want to complete the course faster. The curriculum and the total hours required to complete the course will remain the same. However, the trainer will be spending more hours with you to complete the course.

10. Do you assist in job placement?

Our trainers are expert professionals in their organizations and they often act as the interviewer to hire new candidates. Our trainers will help you prepare your resume with industry standards. After all, they know exactly what to look for in a resume.

11. Timings for training - Regular training/weekend training

We provide both regular and weekend training. Talk to our training partner to learn more about the timings.

12. Will you be working on a live project during training?

Yes, apart from doing the hands-on practice our trainer will also be taking a real-world project and working with you on the implementation.

13. What happens if I miss a class?

If you miss a class the content of that class will be taught to you again. With us, you might miss a class but not the content.

14. Can I attend a demo before the actual class?

Yes, absolutely! Talk to our training counsellor on phone at +91-9513216462 or email us at info@emexotechnologies.com to arrange a free demo. You can also fill in the contact us form below and we will call you to discuss your training requirements.

