VIDYA MENTORS

Data Scientist
The Sexiest Job of the 21st Century – HBR, Harvard Business Review

Data is at the core of every aspect of the world today and Data Scientist is one of the hottest professions. Accelerate your career with the Data Scientist Program. Experience world-class training by industry leaders on Data Science and Machine learning skills. Gain hands-on exposure to key technologies including R, Python, Tableau, Hadoop and Spark.
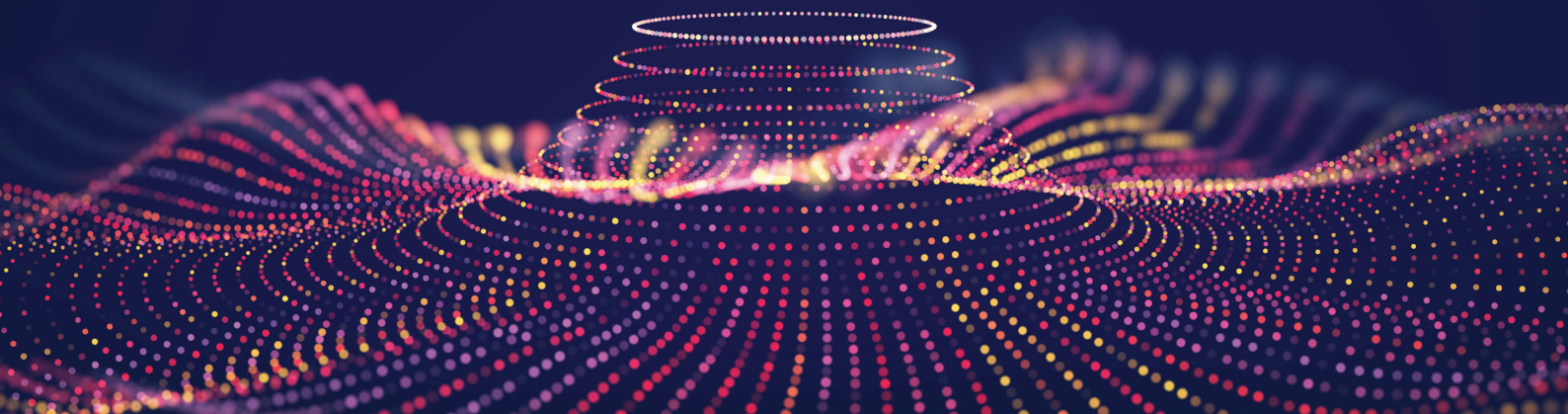
Key highlights

1 Industry recognized trainers

2 One-on-one discussion and feedback sessions

3 Hands-on learning and Hackathons

4 Edge-of-your-seat online learning

5 Global peer collaboration and networking

6 Capstone Project and Live Projects

7 Live sessions by experts on various industry topics

8 Real-world, case-based learning

9 Job assistance, Placement drives

Courses Offered

Basics of Data Science	Statistics, Probability distribution, Normal distribution, Poisson's distribution, Bayes' theorem, Central limit theorem, Hypothesis testing, One Sample T-Test, Anova and Chi-Square, Introduction to data science, Types of Business Analytics, Applications of Business Analytics
SQL Programming	DBMS, Schemas, ER diagram, Normalization Joins, Sorting, Set operations, Sub-queries, Grouping
R Programming	Data types, Operators, Conditional statements, Loops, Functions, Arrays, Lists and Dataframes, Objects and Classes, Files, Importing data, String operations, Data visualization using R (ggplot2), Word Clouds, Radar Charts, Waffle Charts, Box Plots, Word Cloud, Radar Charts, Waffle Charts, Box Plots, Regression and Factor analysis
Python Programming	Data types, Operators, Conditional statements, Loops, Functions, Lists, Tuples, Sets, Dictionaries, Objects, Classes, Files, NumPy, Scipy, Data Manipulation with Pandas, Data Visualization in Python using matplotlib

Courses Offered

Python Programming	Linear Regression, Logistic Regression, Support Vector Machine, **Unsupervised learning:** Clustering - K-Means & Hierarchical Distance methods - Euclidean, Manhattan, Cosine, Mahalanobis, Features of a Cluster - Labels, Centroids, Inertia, Eigen vectors and Eigen values, Principal component analysis **Supervised learning:** CART, KNN (classifier, distance metrics, KNN regression), Decision Trees (hyper parameter, depth, number of leaves), Naive Bayes
ML Applications	**Time Series** - Trend and seasonality, Decomposition, Smoothing (moving average), SES, Holt & Holt-Winter Model, AR, Lag Series, ACF, PACF, ADF, Random walk and Auto Arima **Text Mining** - Text cleaning, regular expressions, Stemming, Lemmatization, Word cloud, Principal Component Analysis, Bigrams & Trigrams, Web scrapping, Text summarization, Lex Rank algorithm, Latent Dirichlet Allocation (LDA) Technique, Word2vec Architecture (Skip Grams vs CBOW), Text classification, Document vectors, Text classification using Doc2vec
Tableau traning	Preparing and analyzing data, Joins, Unions & Data Blending, Combined vs. Dual Axis Bar Chart, Stacked Bar Chart, Histogram & Bins, Trend Lines, Building Dashboards
Big Data Hadoop and Spark	Big Data Storage and Processing Framework – Hadoop, Ingestion and Processing, Apache Spark
Deep Learning and Neural Networks	Convultional Neural Networks, Industry Applications, Recurrent Neural Networks
Capstone Project	4 week continuous project
Live Projects	As per the requirements from industry

Why Data Scientist ?

A Data scientist is the top ranking professional in any analytics organization. Glassdoor ranks Data Scientists first in the 25 Best Jobs. In today's market, Data Scientists are scarce and in demand. As a Data Scientist, you are required to understand the business problem, design a data analysis strategy, collect and format the required data, apply algorithms or techniques using the correct tools, and make recommendations backed by data.

Program Objectives

The courses will make students industry-ready for Machine Learning and Data Science job roles. IBM predicts the demand for Data Scientists will rise by 28% by 2020. Data science is a multidisciplinary field that utilizes data inference, algorithm development, as well as technology, in order to allow professionals to be able to solve complex analytical issues. This program teaches candidates how to dive into data on a granular level, after which they can mine, study, and understand complex behaviors, inferences, and trends. This brings to the surface any hidden insights that can help a company in making smarter business decisions.

Program Structure

Data Science Program uses a combination of learning methods that include classroom teaching, Video based training, hands-on exercises, and sessions with industry experts.

• Classroom training • Video-led training • Lab sessions • Capstone project

4-weeks Hands-on project

• Candidates take up a 4-week application based hands-on project
• Initiate your analytics career with a real-life industry project
• Apply the learning to real-life business problems
• Gain perspective from mentors on the approach to solve the problem

Jobs and Profiles related to Data scientist

• Data Analyst
• Analytics Manager
• Machine Learning Engineer
• Data Engineers

• Data Scientists
• Big Data Engineers
• Data Architects
• Data Visualization Developers

• Business Analytics Specialists
• BI Solutions Architects
• Business Intelligence (BI) Engineers
• Statisticians

Tools Covered

• Apache Flume, Spark, Hbase
• NumPy, SciPy, Pandas
• Hive, Pig, Sqoop
• Hadoop HDFS, MapReduce
• R, Python, Scala, SAS

What is Job Assistance?

• Resume Building Assistance
• Career Mentoring
• Interview Preparation

46%
Almost 46% analytics professional in India have a work experience less than 5 years

61%
Around 61% of jobs are open for candidates with 0.5 years experience

2.7 MILLION
The 2020 global estimate call for 2.7 million job posting for analytics and sata science rols

5 LAC
5,00,000 projected job openings for Data Scientist in 2018

2020
India to become ine of the top three markets in Big Data by 2020