

DATA ANALYTICS

Regular | Weekend | Online | Fast Track - Batches

A robust course for I.T professionals with sufficient depth in a specific area of **Data Science & Analytics** to solve complex real world business problem and to understand business trade-off and contribute effectively in multi disciplinary project with informed decision making.



SMARTBRAINS ENGINEERS & TECHNOLOGIST PVT. LTD.

Data Science is the scientific process of transforming data into insights for making better decisions and offering new opportunities for a competitive advantage. In an increasingly digital world, Data Science plays a very important role in driving decisions, innovation and productivity in large multinationals, non-profits and governments. It is being used to analyze social media trends to formulate election strategy, evaluate meteorological data to predict the weather or even to analyze retail data to drive more sales.



Why Data Science?

Data Science helps organizations harness their data and use it to identify new opportunities, leading to smarter business moves, more efficient operations, higher profits and happier customers.

\$ 411 Billion

is estimated size of the Data Science by 2020*

83%

is the estimated size of India's Booming Data Science Market by 2020*

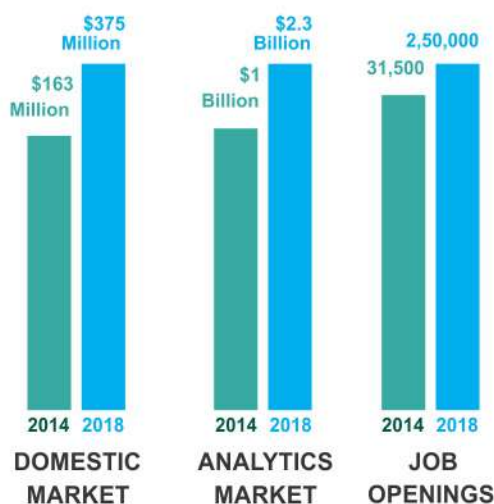
81%

of companies have a multi science strategy today*

\$ 4.1 Billion

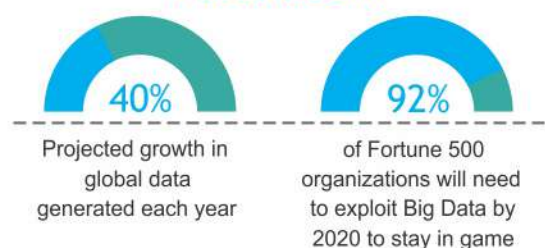
of Enterprise Workload will be on the Data Science by 2020*

Projected Demand for Analytics Professionals in India



- Analytics Consultant
- Manager – Analytics
- Data Analyst
- Junior Data Scientist
- Data Engineer
- Business analyst

THE SKILL GAP



3

Training Methodology?

SmartBrains Engineers Technologist Pvt. Ltd. uses mixes of techniques aligned to a unique pedagogy which is Goal-Centric & Action Oriented. Demonstrates Case Studies using the statistical tools, exercises & brainstorming using Adaptive Probing Methodology along with classroom theories and live Project exposure. Delivered by Senior Industry Professionals having extensive experience in their core domain.



**Classroom
Training**



**Online
Training**



**Internship
Program**

A gateway to a world of new opportunities



Telecom



HR



**Banking &
Finance**



Retail



Healthcare



IoT



Social Media



E-Commerce

5

SmartBrains Affiliation and Accreditation

SmartBrains engineers and technologist Pvt. Ltd. has received recognition, endorsement and affiliation from National Skill Development Corporation of India (NSDC), a Public Private Partnership (PPP), Under the Ministry of Skill Development and Entrepreneurship (Govt. of India) and various Skill Sector Councils as an authorized training partner under various trades. SmartBrains is authorized to provide skill based training for engineering/non-engineering candidates as per their interest. SmartBrains as a training institute will provide complete practical knowledge based skill training to the candidates and NSDC/Skill Councils will be responsible for providing recognition & certification to the candidates.

The National Skill Development Corporation (NSDC) is one of its kind, Public Private Partnership Under the Ministry of Skill Development and Entrepreneurship (Govt. of India) aims to promote skill development by catalyzing creation of large, quality and for-profit vocational institutions. Further, the organisation provides funding to build scalable and profitable vocational training initiatives. Its mandate is also to enable support system which focuses on quality assurance, information systems and train the trainer academies either directly or through partnerships. NSDC acts as a catalyst in skill development by providing funding to enterprises, companies and organizations that provide skill training. It also develops appropriate models to enhance, support and coordinate private sector initiatives. The differentiated focus on 21 sectors under NSDC's purview and its understanding of their viability will make every sector attractive to private investment.

4

Learning Objective

SmartBrains Data Science Program will help you master skills and tools like Statistics, Hypothesis testing, Clustering, Decision trees, Linear and Logistic regression, R Studio, Data Visualization, Regression models, Hadoop, Spark, PROC SQL, Statistical procedures, tools and analytics, and many more. The courseware also covers a capstone project which encompasses all the key aspects from data extraction, cleaning, visualization to model building and tuning. These skills will help you prepare for the role of a Data Scientist.

The program provides access to high-quality eLearning content, simulation exams, a community moderated by experts, and other resources that ensure you follow the optimal path to your dream role of data scientist.



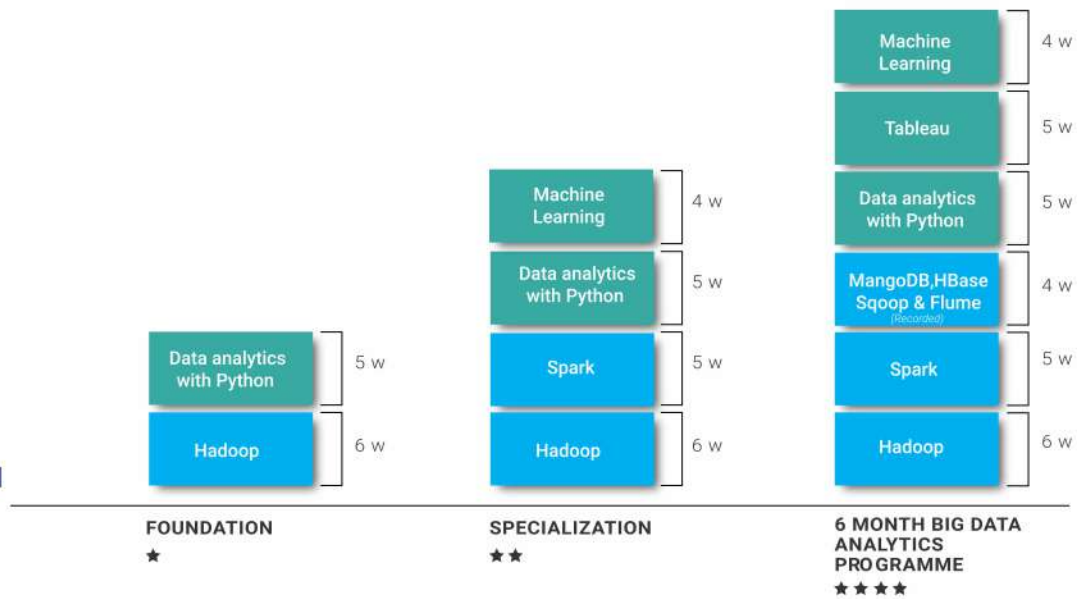
Transforming the skill landscape



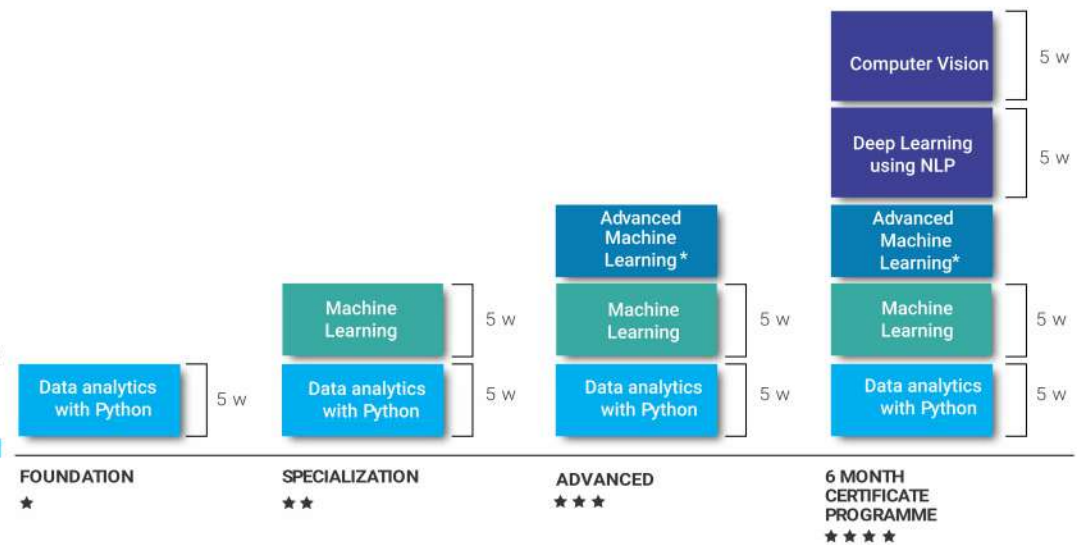
Skill India
सक्षमता - नवोद्यम - नवतंत्रता



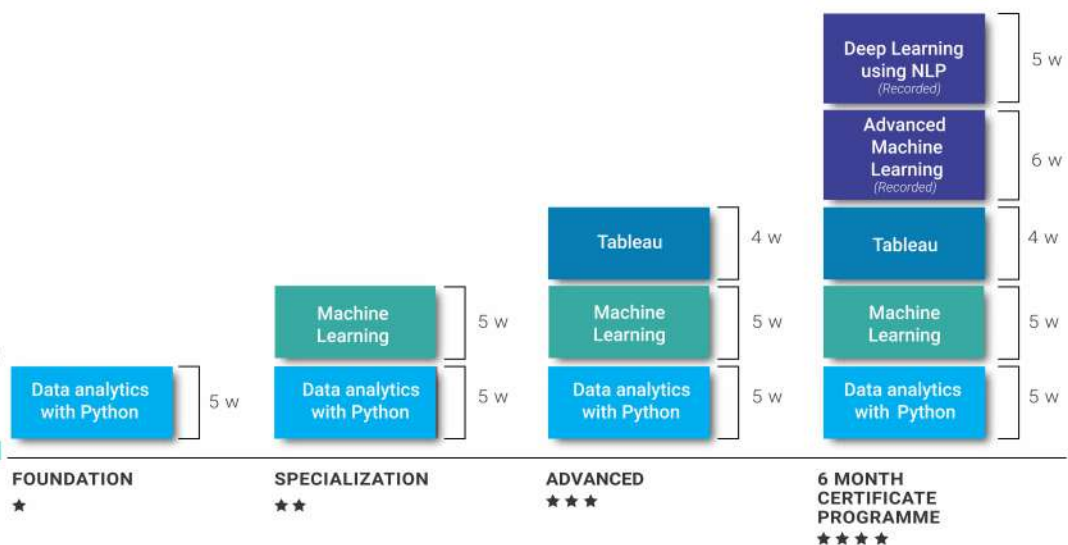
Big Data Analytics Program



Artificial Intelligence Program



Data Science Program





Big Data Analytics Program

1. Hadoop

- Module 1: Introduction to Big Data
- Module 2: Java Essentials - I
- Module 3: Java Essentials - II
- Module 4: Introduction to Hadoop
- Module 5: Hadoop Architecture & Ecosystem
- Module 6: Hadoop Distributed File System
- Module 7: Introduction to Map Reduce
- Module 8: MapReduce Programming
- Module 9: Apache Pig - on
- Module 10: Apache Hive - on

2. Spark

- Module 1: Programming with Scala-I
- Module 2: Programming with Scala-II
- Module 3: Introduction to Apache Spark architecture
- Module 4: RDD, transformations and actions
- Module 5: Spark Programming
- Module 6: Spark SQL
- Module 7: Spark Streaming - I
- Module 8: Spark Streaming - II
- Module 9: Machine Learning with Spark Mllib
- Module 10: Live Practice session

3. MongoDB, Hbase, Sqoop & Flume

- Module 1: Introduction to NoSQL
- Module 2: Getting started with MongoDB
- Module 3: MongoDB Essentials - I
- Module 4: MongoDB Essentials - II
- Module 5: Hands-on MongoDB
- Module 6: Hbase
- Module 7: SQOOP
- Module 8: FLUME
- Module 9: Project



Online Application



Counseling & Course Overview



Enrollment & Batch Allotment



Execution, Certification & Career Support



Artificial Intelligence Track

- Module 1: Data Science - Use Cases
- Module 2: Python Basics: Basic Syntax, Data Structure
- Module 3: Python Basics: Loops, If-elif statements, Functions, Exception Handling
- Module 4: Statistics 1: Measures of central tendency, Population, Sample, Probability Distribution
- Module 5: Statistics 1: Normal and Binomial Distribution, Random Variable, Pictorial Representations
- Module 6: Python Advance: Numpy, Pandas
- Module 7: Python Advance: Data Manipulation, Matplotlib
- Module 8: Exploratory Data Analysis: Data Cleaning, Data Wrangling
- Module 9: Exploratory Data Analysis: Data Visualisation
- Module 10: Exploratory Data Analysis: Case Study
- Module 11: ML Introduction & Use Cases
- Module 12: Statistical 2 - Inferential Statistics
- Module 13: Linear Regression
- Module 14: Logistic Regression
- Module 15: Decision Tree, Random Forest
- Module 16: Modelling Techniques (PCA, Feature Engineering)
- Module 17: KNN, Naive Bayes
- Module 18: Support Vector Machines (SVM)
- Module 19: Clustering, K-means
- Module 20: Time Series Modelling
- Module 21: Market Basket Analysis & Algorithm
- Module 22: Recommendation System & Mini Project
- Module 23: Dimensionality Reduction (LDA, Matrix optimisation)
- Module 24: Anomaly Detection
- Module 25: XG Boost



- Module 26: Gradient Boosting Machine (GBM)
- Module 27: Stochastic Gradient Descent (SGD)
- Module 28: Ensemble Learning
- Module 29: Introduction to Neural Networks
- Module 30: NLP & Deep Learning
- Module 31: Word Embeddings
- Module 32: Word window classification
- Module 33: Introduction to Artificial Neural Networks
- Module 34: Introduction to Tensorflow
- Module 35: Recurrent Neural Networks for Languages modelling
- Module 36: Gated Recurrent Units (GRUs), LSTMs
- Module 37: Recursive Neural Networks
- Module 38: Convolutional Neural Networks for sentence classification
- Module 39: Dynamics Memory Networks
- Module 40: Image Processing Fundamentals
- Module 41: Convolutional Neural Networks
- Module 42: Popular CNN architectures and transfer learning
- Module 43: Object Localization
- Module 44: Object Detection
- Module 45: Tensorflow object detection API
- Module 46: Image Segmentation
- Module 47: Generative Adversarial Nets



Data Analytics with Python

- Module 1: Data Science Introduction & Use Cases
- Module 2: Python Basics: Basic Syntax, Data Structures
- Module 3: Python Basics: Loops, If-elif Functions, Exception Handling
- Module 4: Statistics 1: Measures of central tendency, Population, Sample, Probability Distribution

- Module 6: Python Advanced: Numpy, Pandas
- Module 5: Decision Trees, Random Forest
- Module 6: Modeling Techniques (PCA, Feature Engineering)
- Module 7: Python Advanced: Data Manipulation, Matplotlib
- Module 8: Exploratory Data Analysis: Data Cleaning, Data Wrangling
- Module 9: Exploratory Data Analysis: Data Visualization
- Module 10: Exploratory Data Analysis: Case Study

Machine Learning

- Module 1: ML Introduction & Use Cases
- Module 2: Statistics 2 - Inferential Statistics
- Module 3: Linear Regression
- Module 4: Logistic Regression
- Module 5: Decision Trees, Random Forest
- Module 6: Modeling Techniques (PCA, Feature Engineering)
- Module 7: KNN, Naive Bayes
- Module 8: Support Vector Machines(SVM)
- Module 9: Clustering, K-means
- Module 10: Time Series Modeling

Data Visualization with Tableau

- Module 1: ML Introduction & Use Cases
- Module 2: Statistics 2 - Inferential Statistics
- Module 3: Linear Regression
- Module 4: Logistic Regression
- Module 7: KNN, Naive Bayes
- Module 8: Support Vector Machines(SVM)
- Module 9: Clustering, K-means
- Module 10: Time Series Modeling
- Module 11: Introduction to Tableau
- Module 12: Data visualisation
- Module 13: Analytics concepts with Statistics - I
- Module 14: Analytics concepts with Statistics - II
- Module 15: Analytics concepts calculated fields
- Module 16: Analytics concepts for integrating dashboards
- Module 17: Visual Analytics
- Module 18: Integration of Tableau with Python

Introduction to Deep Learning with NLP

- Module 1: NLP & Deep Learning
- Module 2: Word Embedding
- Module 3: Word window classification
- Module 4: Artificial Neural Networks
- Module 5: Introduction to Tensorflow
- Module 6: Recurrent Neural Networks for Language
- Module 7: Gated Recurrent Units(GRUs), LSTMs
- Module 8: Recursive Neural network



Prospect Recruiters

Microsoft



Google

ebay

facebook



Symantec



unicef

citibank

HubSpot



LinkedIn

vodafone

accenture

Certificates

Upon successful completion of this training program, you'll get a certificate from **SmartBrains Engineering Pvt. Ltd.** SmartBrains Engineering Pvt. Ltd. has consistently been ranked within the best Institutes in the country for courses related to Core Engineering, Oil and Gas Industry, Information Technologies, Industrial Automation and many more domains.



Program Highlights



Assessment



Byte Size Learning



Assignments



Projects



Industry Interaction



360° Career Support



Case Study



Discussion Forum



SmartBrains is knowledge based multi-disciplinary organization with the work scope of whole life cycle for Engineering Consulting, Technology Services, Human resource outsourcing, Skill Development and Vocational Training Company, committed towards bringing an entire range of services for various sectors into most of business functions. Organization founded in 1998, combine deep industry experience, technical expertise and a global delivery model to create value-based solutions to fulfill industries requirements, success has been built upon the unstinted support and relationships with its partners and the patronage of its clients from across the Globe. SmartBrains has received recognition, endorsement and affiliation from National Skill Development Corporation of India (NSDC), a Public Private Partnership (PPP) , Under the Ministry of Skill Development and Entrepreneurship (Govt. of India Enterprises) & various Skill Sector Councils as an authorized training partner under various trades.

SmartBrains is the global market leader in providing high-level training services to the Oil and Gas sector, Petrochemical, Refinery, LNG, Power Plants, Fiscal, Contracts, Strategy, Process Engineering, Piping Engineering, Electrical Engineering, Instrumentation Design, Plant Equipments, Civil and Structural Engineering, HVAC, Project Management, HSE, Financial and Risk Management. Operating nation wise over the last 8 years, our courses are widely acknowledged within the energy community for quality and up-to-date information. Our success and distinguished reputation is down to our commitment to the industry, a high-level of expertise, sector knowledge, cultural diversity and experience that comes from organizing many courses.

Our other I.T Courses

Big Data Technologies
Machine Learning
Digital Marketing
Data Science

Full Stack Web Development
JAVA Technologies
ASP.NET with C#
PHP with MySQL

Internet of Things
Software Testing
Networking
Python

R Programming
WordPress
Android
DBMS

For Corporate queries

A-25, Sector - 59,
Noida (UP), INDIA
Pin Code - 201301

Connect with Program Advisor

training@smartbrains.com
+91 89555 60560 | +91 98911 08700
www.smartbrains.com

Nodal Centers

Hyderabad, Dehradun,
Guwahati, Vadodara,
Pune

Affiliation and Accrediation

