



BADATYA

Join The Crowd to Standout!!!



DATA SCIENCE

"Information is
the oil of the 21st Century,
and analytics is
the combustion engine."

- Peter Sondergaard



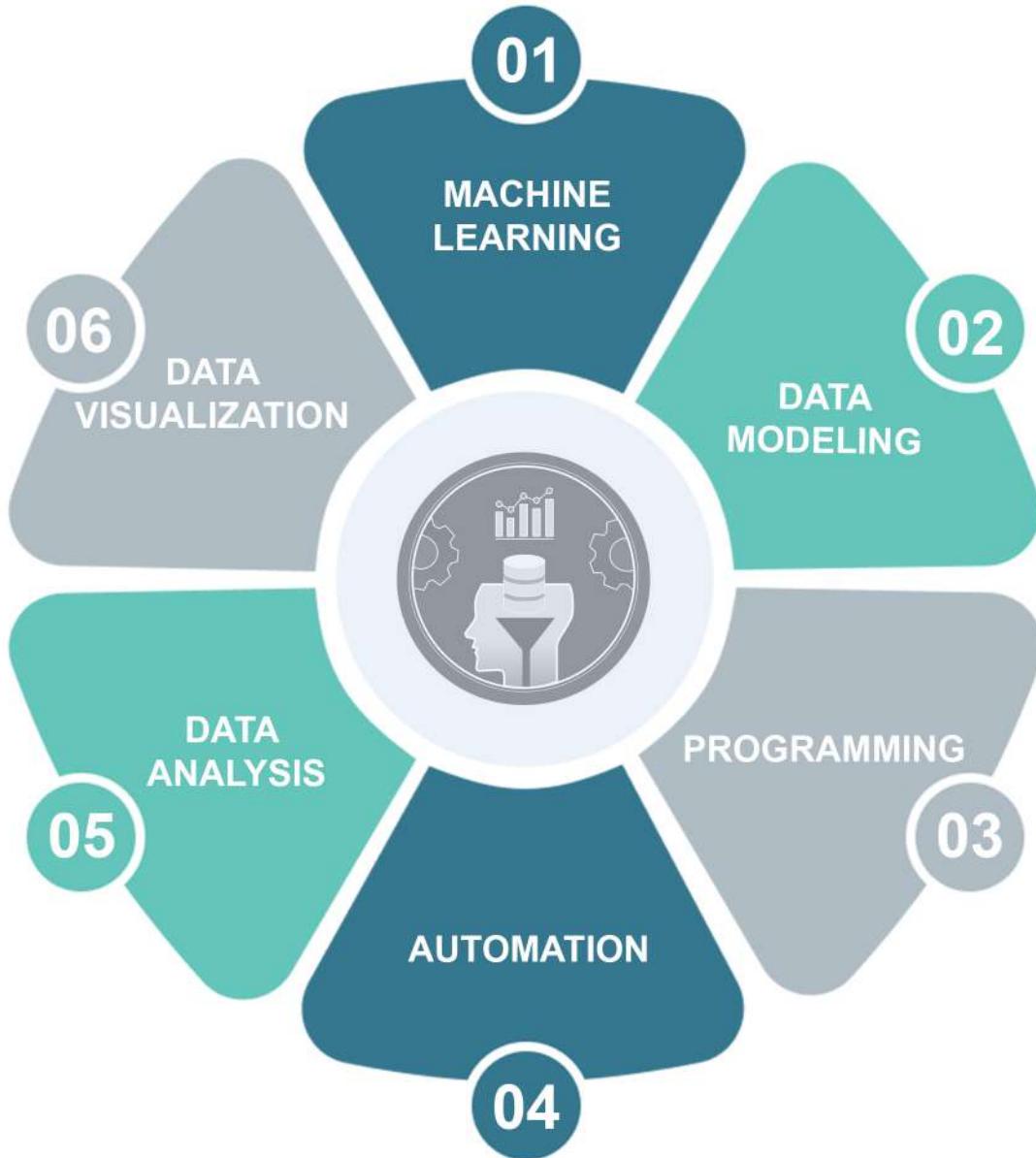
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DATA SCIENCE

Are you interested in predictions or want to discover about different things through their data?

Data Science is one of the most flourishing digital technologies today! Companies are on a look out for skilled data scientists who can leverage data-driven decisions and contribute to digital transformation.

DATA SCIENCE comprises of:



JOB PROFILES for Data Science graduates include:

- Data Scientist
- Data Analyst
- Big Data Analyst
- MIS Analyst
- Business Analyst
- Data Analytics Consultant
- Data & Analytics Manager
- Data Administration

DATA SCIENCE

TOOLS:

Advance Excel

SQL

R- Programming

Python

VBA

Tableau

Power BI

AWS

Azure

VSCode

Google Sheets

Orange

Salary:

The average salary for a Data Scientist in India is Rs. 824,241.



Courses:



Level 1:
Python, 8 lib, SQL, Power BI, Excel, Google Sheet



Level 2 :
(Level 1) + 10 lib, VBA, AWS/Azure

DATA SCIENCE

Popular Skills and Market Demand

DATA SCIENTIST

DATA ANALYST

MIS ANALYST



BIG DATA ANALYST

BUSINESS ANALYST

DATA ADMINISTRATION



Why choose Data Science?

- Today, data is the most valuable commodity for any organisation!
- Job of a Data Scientist is constantly evolving and growth opportunities in the field are limitless.
- There are more job opportunities than competent Data Scientists in the field today!
- Data scientists can work in different types of companies and a wide variety in job profiles are available.

DATA SCIENCE

WHY CHOOSE BADATYA?

Meticulously designed industry - oriented course curriculum.



Industry experienced and qualified trainers.



Theoretic and practical training,
50+ case studies.



100% Placement Assurance



Help with Interview Preparation and Profile Building



Flexible class schedules and customisable courses



FAQ's

Does Data Science have remote job opportunities?

Data Science may sound like an occupation that can be accomplished remotely, and for certain positions this is accurate. Remote job traditions have grown into more regulated and recruiting employees from an entirely dissimilar state is no longer an exception.

What Will I Receive Post Completion Of My Course at Badatya ?

After completing the course, the individual shall receive a Course Completion Certificate by Badatya to vouch for the skills and knowledge the student has gained in the course term.

DATA SCIENCE - CURRICULUM

Module 01 – Data Science Foundation

- Data Science – Introduction
- Descriptive Statistics
- Introduction to Probability
- Probability Distributors
- Hypothesis Testing and Estimation
- Goodness of Fit

Module 02 – Introduction to Data Science Techniques

- Advance Statistics
- Data Mining
- Predictive Modelling
- Time Series Forecasting
- Correlation
- Forecasting
- Auto-regression models
- Machine Learning
- Optimisation Techniques

Module 03 –Introduction to Python

- Python Basics
- Python Data Structures
- Python Programming Fundamentals
- Working with Data in Python
- Working with Numpy Arrays

Module 04 – Data Science with Python

- Data Science Overview
- Data Analysis Overview
- Statistical Analysis
- Business Applications
- Python Environment setup
- Python Environment Essentials
- Mathematical Computing with Python (NumPy)
- Scientific Computing with Python (Scipy)
- Data Manipulation with Pandas
- Machine Learning with Scikit Learn
- Natural Language Processing with Scikit Learn
- Data Visualization in Python using matplotlib
- Web Scraping with BeautifulSoup
- Python integration with Hadoop
- Python integration with MapReduce
- Python integration with Spark

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Module 05 – Machine Learning

- Introduction to Machine Learning
- Learning Objectives
- Relationship between Ai and Data Science
- Relationship between Machine Learning and Data Science
- Definition of Machine Learning
- Features of Machine Learning
- Machine Learning Approaches
- Machine Learning Techniques
- Applications of Machine Learning
- Handling Unstructured Data
- Machine Learning Algorithms
- Bias Variance Trade-off
- Handling Unbalanced Data
- Boosting
- Model Validation
- Data Pre-processing ..
 - Learning Objectives
 - Data Exploration: Loading Files
 - Importing and Storing
 - Automobile Data Exploration
 - Data Exploration Techniques
 - Data Wrangling
 - Outlier and Missing Values in a Dataset
 - Data Manipulation
 - Functionalities of Data Object in Python
 - Different Types of Joins
 - Typecasting
 - Labour Hours Comparison
- Supervised Learning ..
 - Learning Objectives
 - Supervised Learning
 - Supervised Learning- Real-Life Scenario
 - Understanding the Algorithm
 - Supervised Learning Flow
 - Classifications of Supervised Learning
 - Types of Classification Algorithms
 - Types of Regression Algorithms: Part A
 - Regression Use Case
 - Accuracy Metrics
 - Cost Function
 - Evaluating Coefficients

DATA SCIENCE - CURRICULUM

- Types of Regression Algorithms Part B
- Logistic Regression
- Sigmoid Probability
- Accuracy Matrix
- Feature Engineering

 - Learning Objectives
 - Feature Selection
 - Regression
 - Factor Analysis
 - Principal Component Analysis (PCA).....
 - First Principal Component
 - Eigenvalues and PCA
 - Feature Reduction
 - PCA Transformation
 - Linear Discriminant Analysis
 - Maximum Separable Line
 - LDA Transformation

- Supervised Learning: Classification

 - Learning Objectives
 - Classification: A Supervised Learning Algorithm
 - Use Cases
 - Classification Algorithms
 - Decision Tree
 - Choosing the Classifier
 - Random Forest Classifier- Bagging and Bootstrapping
 - Decision Tree and Random Forest Classifier
 - Performance Measures: Confusion and Cost Matrix
 - Naive Bayes Classifier
 - Steps to Calculate Posterior Probability
 - Support Vector Machines
 - Linear SVM: Mathematical Representation
 - Non-linear SVMs
 - The Kernel Trick
 - Demo: Voice Classification
 - Practice: College Classification

- Unsupervised learning

 - Learning Objectives
 - Example and Applications of Unsupervised Learning
 - Clustering

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- Hierarchical Clustering
- K-means Clustering
- Optimal Number of Clusters
- Time Series Modelling

 - Learning Objectives
 - Time Series Pattern Types
 - White Noise
 - Stationarity
 - Removal of Non-Stationarity
 - Time Series Models

- Ensemble Learning

 - Learning Objectives
 - Ensemble Learning Methods
 - AdaBoost Working, Algorithm and Flowchart
 - Gradient Boosting
 - XGBoost
 - Model Selection
 - Common Splitting Strategies

- Recommender Systems

 - Learning Objectives
 - Introduction
 - Purposes and Paradigms of Recommender Systems
 - Collaborative Filtering
 - Association Rule Mining: Market Basket Analysis
 - Association Rule Generation: Apriori Algorithm
 - Apriori Algorithm: Rule Selection

- Text Mining
 - Learning Objectives
 - Significance and Applications
 - Natural Language Toolkit Library
 - Text Extraction and Pre-processing: Tokenization, N-grams, Stop Word, Lemmatization, POS Tagging, Named Entity Recognition
 - NLP Process Workflow
 - Structuring Sentences: Syntax, Chunking and Chunk Parsing, Chinking
 - Rendering Syntax Trees
 - NP and VP Chunk and Parser
 - Context-Free Grammar (CFG)

DATA ANALYSIS- CURRICULUM

Module 06 – Data Visualization using Tableau

- Introduction to Data Visualization
- Introduction to Tableau
- Core Tableau in Topics
- Introduction to Charts and Dashboards
- Creating Charts in Tableau
- Working with Metadata
- Filters in Tableau
- Applying Analytics to the worksheet
- Dashboard in Tableau
- Dashboard Designs and Principles
- Advanced design components/ principles : Enhancing the power of dashboards
- Special chart types
- Descriptive statistics, Dimensions and Measures
- Visual Analytics – Story telling through Data
- Modifications to Data Connections
- Introduction to Level of Details in Tableau (LODS).....
- Case Study: Hands on using Tableau
- Integrate Tableau with Google Sheets

Module 07: Data Visualization using Power BI

- Introduction to Business Intelligence (BI)
- Introduction to Power BI
- Power BI Components
- Power BI vs Tableau
- Data Extraction
- Using files from 99+ data sources
- Using SaaS connectors
- Extracting data from folders and databases
- Visualization Charts in Power BI
- Types of Charts
- Matrixes and Tables
- Slicers and Map Visualizations
- Gauges and Single Number Cards
- KPI Visuals
- Z-order
- Grouping and Binning
- Exploring Live Connections to Data Sources
- Connecting Directly to SQL Server
- Import Power View and Power Pivot
- Data Gateways
- Direct Query vs. Import Connectivity modes

DATA SCIENCE - CURRICULUM

- Connecting Power BI with SQL Server Database
- Power BI Report Server
- Power BI Report Server vs. Power BI Service
- Web Portal
- Paginated Reports
- Row Level Security
- R & PYTHON in Power BI
- Create R Scripts for BI
- Python Scripts in BI
- Python integration with Power BI
- Connecting R and Python in Power BI
- Using R and Python for data analysis
- Advance Analytics in POWER BI
- Power BI Service
- Publish BI Reports

Module 08: SQL training

- Fundamental SQL Statements
- Restore and Back-up
- Selection Commands: Filtering
- Selection Commands: Ordering
- Alias
- Aggregate Commands
- Group By Commands
- Conditional Statement
- Joins
- Subqueries
- Views
- Index
- String Functions
- Mathematical Functions
- Date - Time Functions
- Pattern (String) Matching
- User Access Control Functions

Module 09: Data Science with R

- Introduction to Business Analytics
- Introduction to R Programming
- Data Structures
- Data Visualization
- Statistics for Data Science
- Regression Analysis

DATA SCIENCE - CURRICULUM

- Classification, Clustering, Association

Module 10: Deep Learning

- Deep Learning
- Artificial Neural Network
- Deep Neural Network and Tools
- Deep Neural Net Optimization
- Deep Neural Net Tuning
- Deep Neural Net Interpretability
- Convolutional Neural Net (CNN)
- Recurrent Neural Networks
- Auto-encoders

Module 11 – Analysis with Excel

- Introduction to Ms Excel
- 70 Functions and Formulas
- Data Validation
- Data Analysis using Formulas
- Conditional Formatting
- Analysing Data with Pivot Tables
- Charts & Dashboard
- Business Analytics with Excel
- Data Analysis Using Goal Seek, Scenario Manager & Statistics
- Macro & VBA introduction

Module 12 - Introduction to VBA Programming (optional)

- Understanding Data Types & Variables
- For Loop, Do loop, Do until, do while
- IF & Case Statement
- Error Handling
- User Defined Functions (UDF)
- Inputbox, Application Inputbox
- Array, Userforms
- Report Automation using VBA Progammimg
- Mailing Automation

Module 13 – Data Science Capstone

The Data Science Capstone project gives you an opportunity to revise and implement all the skills that you have learnt throughout this course. You will learn how to solve real-world, industry aligned data science problems with dedicated mentoring sessions.

ABOUT BADATYA



1st Rank Institute
in Delhi NCR



59,000+ Students



90% Students Enrol
from references



Certified Industry
Experts



500+ Training
Partners



300+ Recruiting
Partners

Year wise Placement



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