DIGI SAMURAI

POST GRADUATION CERTIFICATE IN DATA SCIENCE

Explore the Fascinating World of Data Science and Transform Your Career

1. Learn from Leading Industry Experts about Data Science
2. Get Assured Paid Internship and Job Opportunities

Visit Our Website:
https://digisamurai.co.in/

15 Months Course with Live Project

Embarking on a journey in Data Science holds paramount significance for several compelling

- Limitless opportunities in the field of DATA SCIENCE
- Fulfillment of prior knowledge
- Flavor of different Data Analytics oriented roles
- Challenging and Dynamic Work
- Salary and Career Advancement
- Acquire domain specific knowledge and enhance engagement in data community

Embarking on a Data Science journey brings forth myriad advantages, from meeting the rising demand and addressing skill gaps to navigating diverse roles, facing intellectually stimulating challenges, and contributing to a digitally innovative world. Choosing a path in Data Science not only promises career satisfaction but also empowers individuals to make a positive impact in today's data-driven and interconnected society.

OUR OFFERINGS

- Live Sessions from Industry Experts
- Earn Exposure to Live Projects
- Groom from Professionals to Ace in Interview
- Get Paid Internship & Job Assistance
- Life-time Access to Study Materials
- Learn with 90% Practical Hand-on Sessions

Contact Us:

+91 8910632224
+91 7595887833

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connect@digisamurai.co.in

COURSE OVERVIEW

Module 1: Python Programming

1. Python Keywords and identifiers
2. Variables and data types in Python
3. Standard Input and Output
4. Operators
5. Control flow: if else elif, while loop, for loop
6. Python Data Structures: String, Lists, Tuples, Set, Dictionary
7. Python Functions: Built-in Functions, User-defined Functions, Recursion Functions, Lambda Functions.
8. Object Oriented Programming
9. Python File Handling
10. Python Exception Handling

Module 2: Python for Data Science

1. Numpy: Fundamentals to Advance with operations
2. Pandas: DataFrame and Series
3. Python Data Visualization: Matplotlib, Seaborn and Plotly library
4. Exploratory Data Analysis using Python
5. Web Scrapping using Beautiful Soap

Module 3: Database Management System (DBMS) and SQL

1. Get Started with database and SQL
2. SQL Server languages
3. SQL DDL commands
4. SQL DML commands (INSERT, SELECT, UPDATE, DELETE, Functions in SQL) Web Application Penetration Testing
5. Data Aggregation and Grouping (Sorting Data, ORDER BY, GROUP BY, HAVING clause)
6. SQL joins (Inner, Left, Right and Outer joins)
7. Sub Queries/Nested Queries/Inner Queries
8. SQL Function and Stored Procedures
9. SQL Window Function
10. CTE In SQL
11. Normalization In SQL
12. Project Using SQL

Module 4: Excel for Data Science

1. Introduction to Excel
2. Data Preprocessing and Manipulating
3. Data Visualization
4. Logical Functions and Lookup Functions
5. Advanced data analysis tools
6. Automation and VBA
7. Data Protection and Security
8. Building Professional Dashboard

Module 5: Statistics

1. Introduction to Statistics
2. Types of Data, Measurements, and representation of Data
3. Descriptive Statistics
4. Probability Distribution
5. Sampling techniques and Central limit theorem
6. Inferential Statistics
7. Confidence Interval
8. Hypothesis Testing (Z test, t- test, Chi-Square test)
9. Analysis of Variance (ANOVA)
10. Correlation and Covariance

Module 6: R Programming

1. Introduction to R
2. Data types, variables, and comments
3. Operators
4. Control Statements
5. Functions
6. Data Structures (list, vector, array, matrix)
7. Data Frames and Tables
8. Statistics using R
9. Visualization using R

Module 7: Feature Engineering

1. Feature Selection
2. Handling missing values

3. Handling imbalanced data
4. Encoding
5. Feature Scaling

Module 8: Cloud Computing

1. Introduction
2. Cloud Architecture
3. Advance Cloud
4. Cloud Security
5. Cloud Simulator

Module 9: Mathematics for Data Science

1. Probability Theory
2. Linear Algebra
3. Calculus and Optimization

Module 10: Machine Learning

1. Introduction to Machine Learning
2. Types of Machine Learning
3. Supervised, Unsupervised and Semi-supervised and Reinforcement learning
4. Supervised Learning
    - Linear Regression
    - End To End Project
    - K-Nearest Neighbors (KNN)
    - Logistic Regression
    - End To End Project
    - Support Vector Machines
    - Naive Bayes
    - End To End Project
    - Decision Tree
    - Concepts of Ensemble Learning
    - Gradient Boosting
    - Xgboost
    - End To End Project
5. Unsupervised Learning
    - K-Means Clustering
    - Hierarchical Clustering
    - DBscan Clustering

- Dimensionality reduction-PCA
- Performance Metrics in Clustering

Module 11: Deep Learning

1. Introduction to Deep Learning
2. Concepts of Neural Network
3. Artificial Neural Network (ANN)
4. Tensorflow 2.0
5. Convolutional Neural Network (CNN)
6. Recurrent Neural Network (RNN)
7. End to End Project using Deep Learning

Module 12: Time Series Analysis and Forecasting

1. Introduction to Time Series
2. Decomposition of Time Series
3. ACF and PACF
4. Autoregressive (AR), Moving Average (MA), ARMA models
5. Forecasting using ARIMA and SARIMA
6. Practical project on Time Series

Module 13: Natural Language Processing (NLP)

1. Introduction to NLP
2. Basic Text Processing
3. Smoothing and Sequential Tagging
4. Parsing
5. Lexical Semantics
6. Advance NLP

Module 14: Computer Vision

1. Basic concepts of CV
2. Image Processing

Module 15: Big Data Technology

1. Introduction to Big Data
2. Hadoop
3. Big Data using Spark
4. NoSQL and MongoDB

Module 16: Data Analytics using BI Tools

1. Power BI
2. Tableau
3. Projects and Reports using Power BI and Tableau

Final Capstone Project with Deployment

Empower Your Future with Data Science Mastery

Welcome to Digi Samurai, where we are committed to providing basic to cutting-edge education in Data Science. Our Data Science course is designed to equip students with the knowledge and skills necessary to thrive in today's data-driven world. The field of data science lies at the intersection of statistics, computer science, and domain-specific knowledge, offering powerful tools and techniques to extract insights from data and drive informed decision-making.

Course Pre-requisite

No prior knowledge of magic or data science is required, but a basic understanding of statistics and the ability to wield a wand, or rather a programming language, will be advantageous.

Course Duration

15 Months to Master Data Science

Job Opportunities

DATA SCIENTIST	STATISTICIAN
DATA ANALYST	DATA ARCHITECT
DATA ENGINEER	AI RESEARCH SCIENTIST
MACHINE LEARNING ENGINEER	DATA PRODUCT MANAGER
BUSINESS INTELLIGENCE (BI) DEVELOPER	DATABASE ADMINISTRATOR (DBA)

Unleash Your Data Superpower

Explore a thrilling DATA SCIENCE course unlocking limitless opportunities in our data-centric world of decision making

CONTACT US

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