

100,000+ Students have been Trained

since 1997

**ARTIFICIAL INTELLIGENCE Get International Jobs** 

## Who can do?

- The candidate who have done Basic to intermediate diploma and like to pursue their career in the field of Data Scientist, Big Data Analytics with Al
- Intermediate, University students and professionals Candidates
- Those who would like to enhanced their skills in the field of Data Science/Big-Data with Al
- Professional can also Join
- People who are working in the same domain, they would also be joined for further knowledge and enhancement.

Senior Managers, Programmers, Analyst and professionals, who would like to enhanced their skills.

Invest in People the only Asset that Appreciates Program is offered by



 www.3dedudcators.com info@3deducators.com



# **Table of Content**

Inauguration

**Program Structure** 

Other Learning Activities

**Program Topics & Time Allocation** 

About the Program & Instructor

**Syllabus** 

Assessment

Recommended Text and Reference

**Materials** 

Certification and Accreditation



## **About the Program**

Data Science is the study of the generalizable extraction of knowledge from data. Being a data scientist requires an integrated skill set spanning mathematics, statistics, machine learning. databases and other branches of computer science along with a good understanding of the craft of problem formulation to engineer effective solutions. This course will introduce students to this rapidly growing field and equip them with some of its basic principles and tools as well as its general mindset. Students will learn concepts, techniques and tools they need to deal with various facets of data science practice. including data collection and integration, exploratory data analysis, predictive modeling, descriptive modeling, data product creation, evaluation, and effective communication. The focus in the treatment of these topics will be on breadth, rather than depth, and emphasis will be placed on the integration and synthesis of concepts and their application to solving problems. To make the learning contextual, real datasets from a variety of disciplines will be used.

## **Inauguration**

The Training Program shall be inaugurated by a senior member of 3DEducators and President of 3D Group.

## **Program Structure**

No of classes per week **02 – Class**Duration of each class **02 – Hour** 

# Other Learning Activities For Each Module

Classroom Assignments	10
Presentations by Trainees	02
Case Studies	06
Project	01



#### LEARNING OUTCOMES.

At the conclusion of the course, students should be able to:

- Describe what Data Science is and the skill sets needed to be a data scientist.
- Explain in basic terms what Statistical Inference means. Identify probability distributions commonly used as foundations for statistical modeling. Fit a model to data.
- Use python to carry out basic statistical modeling and analysis. ☐ Explain the significance of exploratory data analysis (EDA) in data science. Apply basic tools (plots, graphs, summary statistics) to carry out EDA. ☐ Describe the Data Science Process and how its components interact. ☐ Use APIs and other tools to scrape the Web and collect data.
- Apply EDA and the Data Science process in a case study.
- Understanding and models of ANN Artificial Neural Networks
- Identify common approaches used for Feature Generation. Identify basic Feature Selection algorithms (Filters, Wrappers, Decision Trees, and Random Forests) and use in applications.



- Create effective visualization of given data (to communicate or persuade).
- Work effectively (and synergic) in teams on data science projects.
- Reason around ethical and privacy issues in data science conduct and apply ethical practices.



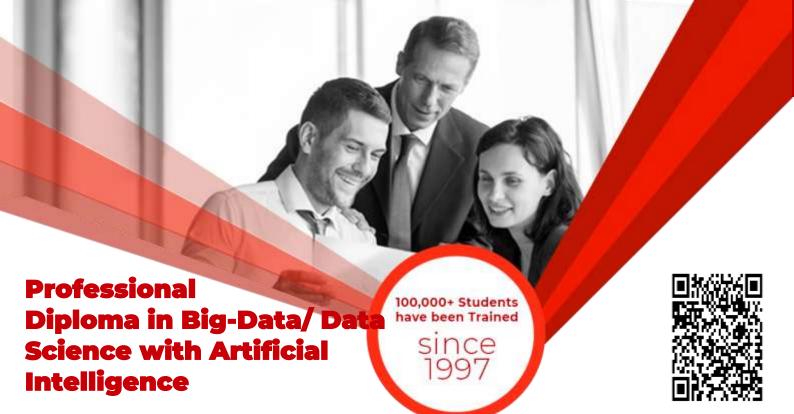
## **Program Syllabus**

The world is changing and due to this phenomenon the technology is emerging with new and dynamic dimensions; Data Sciences/Big-data with AI is one it, where you can understand that what the data is talking about and what sort of data can help you to get the right directions & decisions.

Today's World in now <u>Data World</u>, once you have the sufficient & reliable data with you, you can be No. 1 or you will grab all the market and find actual opportunities & gaps by the implementation of Data Sciences/big Data techniques and algorithms.

This training will equipped you in all areas of Data Science/Big-Data with AI, our PhD and Certified trainers will provide every aspect of data sciences and make you enable for the existing and upcoming world. In minimum time, how you can understand Data Sciences/Big Data with AI and its techniques.

Get onboard with 3deducators.com to make a place for yourself on this platform and world of data sciences/Big Data with AI.



# Advanced Machine Learning & Deep Learning towards Data Science

Reinforcement Learning: Introduction to reinforcement learning, practice the different several aspects of reinforcement machine learning with deep learning techniques, such as selecting the optimal feature subset, regularization to avoid model over-fitting, featured engineering, and ensemble models. Regression, regularization, avoiding over-fitting. Classification model features, logistic regression baseline classifier, ensemble methods, bootstrap aggregation, boosting, XG Boosting.

Selection of activation function and loss function and matrices:

Learn the deep learning techniques through activation function, loss function and complex matrices algorithm with real time examples and techniques.

- Understand the definition of a range of neural network models.
- Panda's Library by using python
- Have an understanding of how to choose a model to describe a particular type of data.
- Advanced mathematics necessary for constructing novel machine learning solutions.
- Be able to implement and evaluate common neural network models for language.
- Predictive Analysis



## **Advanced NoSQL for Large Size of Data**

MongoDB is a tool to explore data structured as you see fit. As a NoSQL database, it doesn't follow the strict relational format imposed by SQL. By providing capabilities that typically require adding layers to SQL, it collapses complexity. With the dynamic schema, you can handle vastly different data together and consolidate analytics. The flexibility of MongoDB empowers you to keep improving and fix issues as your requirements evolve. In this course, you will learn the MongoDB language and apply it to search and analytics. Case Study: "How NoSQL databases are Solving Major Big Data Management Problems of Different Industries?"



## **Real-time Application of Data Science**

This area is mandatory, the candidate must have to complete the project after completion of above areas and must be submit to the management of 3D EDUCATORS through faculty for final awarding or marks-statement or Certification.

Duration : 3 Months

Classes Per Week : 02

Duration of Class : 02 Hours

Non Guided Hours : 16 hours

Guided Hours : 32 hours

Project non guided hours : 48 Hours



### **TERMS & CONDITIONS**

#### WITHDRAWAL FROM THE CERTIFICATION OR DIPLOMA

Students are not allowed to withdraw from the CERTIFICATION/DIPLOMA. If a student cannot continue the CERTIFICATION his/her fee will be forfeited.

#### **CONDUCT AND DISCIPLINE**

A disciplinary action, leading to rustication, will be taken against students whose conduct is found objectionable at any time during the course of study. Reference will be made to 3D Educators code of conduct.

#### **EVALUATION AND GRADING**

The performance of students is evaluated through continuous observation of a student's performance in the CERTIFICATION/DIPLOMA – class participation, submission of assignments, guizzes and exercises.

The student will be examined through three hourly exams conducted at the midterm and a final exam at the end of the program. Total marks for passing the CERTIFICATION/DIPLOMA will be 70 out of a total of 100.

Students who do not meet the attendance or any other eligibility criteria will not be allowed to appear in the final examination.

The following grading plan will be applicable for the CERTIFICATION/DIPLOMA:

Α	B+	В	C+	С	F
87-100	81-86	72-80	66-71	60-65	Below 60

Students who are unable to appear for the final exam are required to submit a written application stating the reason for not appearing for the exam. 3D Educators reserves the right to approve or deny such applications. If approved, the student will be allowed to sit for the exam within one month. Failure to do so, the student will be resubmit the examination fee and sit the future schedule exam. Without passing of the exams no certification will be awarded.



## **ONLINE LIVE CLASSES FACILITY AVAILABLE**

- Instructor Led Training
- Real Time Presentations
- Interactive Classes
- Complete Notes and Other Stuff shall be provided through our Secure Student Login Member's Area
- For Online Live Classes, you may please download the Admission Form through our website http://www.3deducators.com. Fill it properly and attached the required document along with Picture and send back to info@3deducators.com with scanned fee submitted voucher in the bank.
- For Pakistan you may submit the fee at any MCB Branch with the title of "3D EDUCATORS-TRAINERS & CONSULTANTS".
- If you are outside Pakistan then you may transfer via Bank to Bank or any western union, Fast Track, Money Gram or else International Transfer Body.
- After Admission, if you don't have GMAIL Account then you are requested to kindly make one GMAIL Account and shared it info@3deducators.com. Then further correspondence shall be made by our institute official.
- Extra Bandwidth Charges shall be incurred.

## **DISTANCE NOT MATTER**

You can join in the live classes Sessions of 3D EDUCATORS – TRAINERS & CONSULTANTS from anywhere of the world.



## **PRECAUTIONARY MEASURES**

- During Classes, you are requested to make sure that you are in isolated room, where no noise should be there except your voice.
- Kindly Switch Off your Cell Phone during the class, because it will disturb the quorum of class.
- If you have taken the admission in the course online lonely, then ethically it is recommended and suggested that you alone in the class.
- Recording of Lectures are not allowed at your end.

This world is emerging and growing in the 21st Century very rapidly because of latest and remarkable technologies and its advancement. Due to advancement of technology, we 3D EDUCATORS offer Live Interactive class sessions

3D EDUCATORS believe on Information Technology and its systems. Now you can also avail this facility at your home.

## **CONTACT US**

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http://www.3deducators.com

Get the Admission Form



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