

Data Science e-Learning

Data Science e-Learning platform owned by **GVR DATA SOLUTIONS (OPC) PVT LTD.** is the first and exclusive platform for Telugu students residing overseas to pursue their post-graduation, and for those aspirants seeking sponsorship jobs.

This course does not need any prior knowledge or experience in programming. This course is intended for those who are absolute beginners and have no prior programming experience. Throughout the course, you will learn everything from the fundamentals of programming to advanced topics in Data Science in Telugu. Additionally, we provide an internship for all the students along with sponsorship job assistance.

Course Syllabus

Module 1 – Introduction to the Course

This module includes the introductory lectures and basic installations of the tools that are used during the course.

1.1. Introduction to course

1.2. Introduction to Data Science

Module 2 – Basics of Python

This module introduces the basics of the Python programming language. This module is designed for absolute beginners.

2.1. Software and Tools installation

2.2. Python Introduction

2.3. Data Types

2.4. Control Flow statements

2.5. Loops

2.6. Functions

2.7. Inheritance

Module 3 – Python for Data Science

This module focuses on introducing the Data Science packages to the students. Tools such as NumPy, Pandas, Matplotlib, Seaborn are covered in this module.

3.1. NumPy Library

3.2. Pandas Library

3.3. Matplotlib Library

3.4. Seaborn Library

Module 4 – Data Analysis and Visualization

This module focuses on the understanding of analysing the data using various visualizations. Students will learn to interpret the patterns from the data during this module.

4.1. Data Analysis & Visualization Introduction

4.2. Bar Plots

4.3. Scatter Plots

4.4. Pair Plots

4.5. Probability Density Function

4.6. Box Plots

4.7. Violin Plots

4.8. Correlation and Covariance

4.9. Real-world Data Analysis Example

Module 5 – Dimensionality Reduction

A key concept of Principal Component Analysis is discussed in this module. This module is focused on learning how to handle the data with higher dimensions and how to reduce the dimensions.

5.1. Data Normalization

5.2. Principal Component Analysis

5.3. Implementing PCA

Module 6 – Machine Learning

In this module, we will focus on understanding different machine learning algorithms from a geometric perspective. Along with the theory sessions, a practical approach for implementing the algorithms is explained in this module

6.1. Evaluation Metrics

6.2. K Nearest Neighbours

6.3. Naïve Bayes

6.4. Logistic Regression

6.5. Linear Regression

6.6. Support Vector Machines

6.7. Decision Trees

6.8. Random Forest

6.9. Gradient Boosted Decision Trees

6.10. XG-Boost

6.11. K-Means

6.12. Hierarchical Clustering Technique

6.13. DBSCAN

6.14. Recommender Systems

Module 7 – Natural Language Processing

This module will help students learn how to handle the text data and feed it to the Machine Learning algorithms.

7.1. Bag of Words

7.2. Term Frequency – Inverse Document Frequency

7.3. Word2Vec

Module 8 – Deep Learning

Advanced topics of Deep Learning are covered in this module. Theory sessions followed by practical approaches will be discussed in this module. Tools like Keras and Tensorflow will be taught as part of this module.

8.1. Introduction to Deep Learning

8.2. Multi-Layer Perceptron's

8.3. Convolutional Neural Networks

8.4. Recurrent Neural Networks (LSTM & GRU)

Three Months Internship

It is the major goal of this course to assist participants in developing real-world artificial intelligence solutions utilizing the skills they gain in this course. Rather than an academic or theoretical approach, the emphasis of this course will be on practical expertise. A three-month internship is offered to the participants as part of this course during which we assist you in developing a portfolio of data science projects that will allow you to get practical exposure to industry-based experience. During the internship, the participants will be working on multiple Data Science projects to gain practical expertise. The participants will work on a minimum of 8 projects to a maximum of 15 projects in three months.

Module 9 – Job Interview Training

In this module, we will discuss building your portfolio using GitHub, LinkedIn, CV. Apart from these, we also help you learn the approaches towards handling the non-technical rounds in the interviews.

9.1. Building LinkedIn profile

9.2. GitHub

9.3. CV building

9.4. STAR approach for Interviews

9.5. Application Process overview

9.6. Mock Interviews

9.7. Career Guidance

Followed by completion of all the modules and the internship, the participants will be provided with sponsorship job assistance. As part of our job assistance program, we will support you and guide you through the whole job application process, and we will also forward your CV to our clients in order to increase your chances of landing an interview.

NOTE: This course is exclusive of the Telugu community and the complete course is taught in the Telugu language.