



**06 MONTH COURSE**

# **DATA SCIENCE**

## **Branches**

Sinhgad College Campus, Opposite to  
Pune Institute Of Aviation Technology  
(Ambegaon bk.) MOB -9822370273 /  
9970621087 / 8421721087

Bharati Vidyapeeth Campus , Near PICT  
College, Trimurti Chowk (Dhankawadi)  
Mob- 9822370273 / 7410791788 /  
8208004220



# DATA SCIENCE

## About The Program

Our Data Science program is designed for fresher as well as professionals seeking to advance their careers in the fast-changing field. We emphasize hands-on learning, industry knowledge, and real world examples, encompassing subjects such as Statistics, Programming, Machine learning, Data mining, Deep learning, also enhancing your skills in this cutting-edge field. We also incorporate ethical aspects, providing an advantage to professionals in the job market.

**We exist to provide accessible, reasonable, and industry-relevant education that empowers India's workforce to grow and develop.**



Latest Technology



Several Professionals secured jobs



**10k+**

Trusted Learners





# Program **Highlights**



## **Industry-Relevant & Updated Syllabus**

Learn the industry's latest tools, techniques & trends. Gain hands on experience developing various app's and website & many more..



## **360 Degree Knowledge Building**

Develop practical skills through real-world projects and assignments



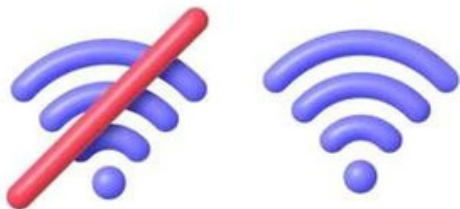
## **Lifetime Placement Assistance**

We helps people find jobs and advance in their careers through out their lives.



## **Multiple Career Opportunities**

Grow your career in data science and AI by targeting roles like data scientist, machine learning engineer, data architect, etc.



## **Online & Offline Batch Flexibility**

Get live training and interaction with trainers through online and offline batch flexibility



# Program **Details**

## **COURSE PREREQUISITE**

Freshers with 12th Pass Background

## **PROGRAM ELIGIBILITY**

- ✓ Both technical and non-technical background with basic Computer Knowledge

## **KEY FEATURES**

- ✓ Domain Electives ( **IT** ) Dedicated Placement Calls
- ✓ 100% Job Assistance

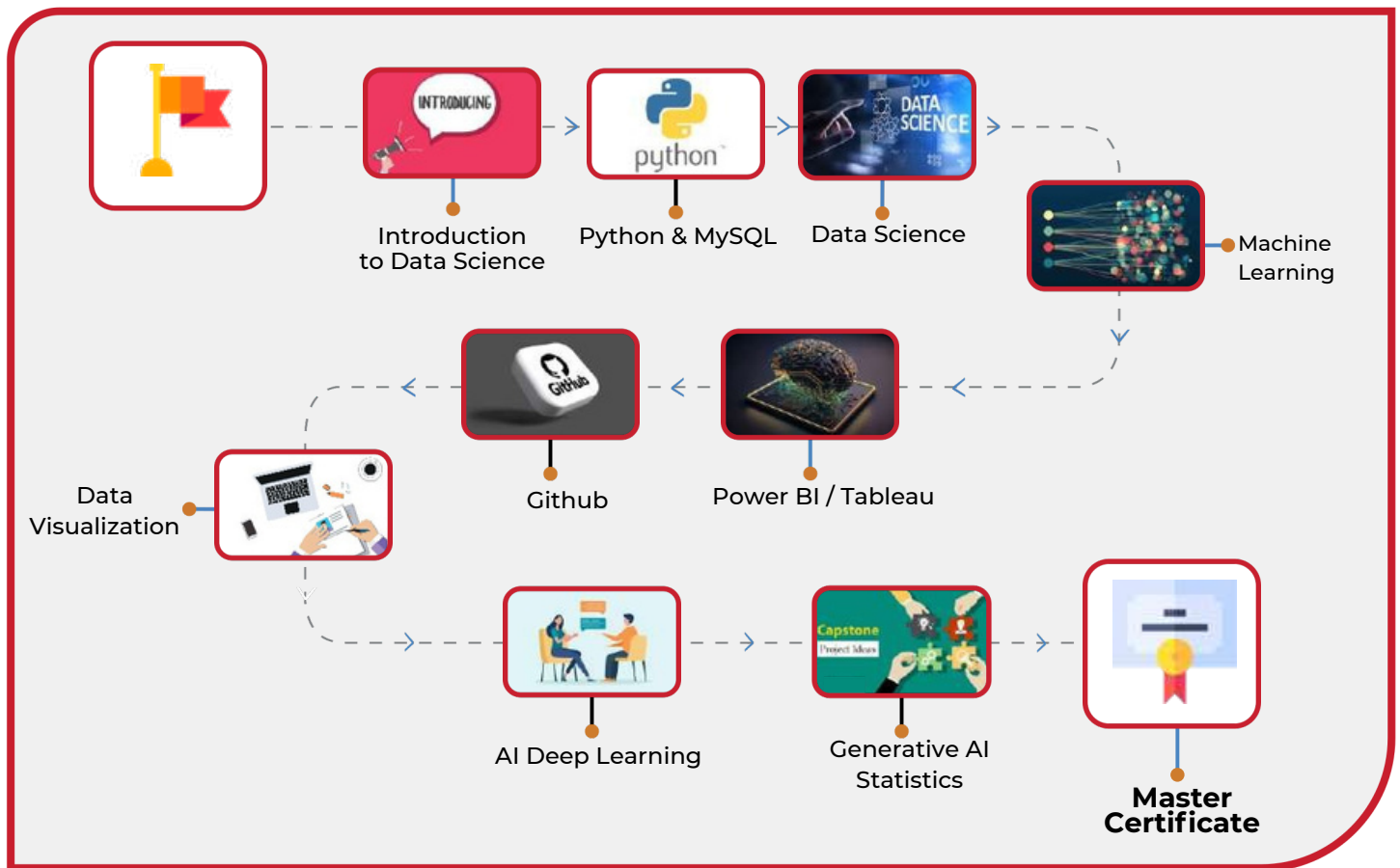
## **JOB ROLES TO TARGET**

Get equipped with the industry relevant skills and aim for job roles like Data Analyst, Data Scientist , Machine Learning Engineer , Research Scientist/Academic Researcher, Bio informatics Specialist , Marketing Analyst, Financial Analyst, Data Engineer (with R integration), etc.





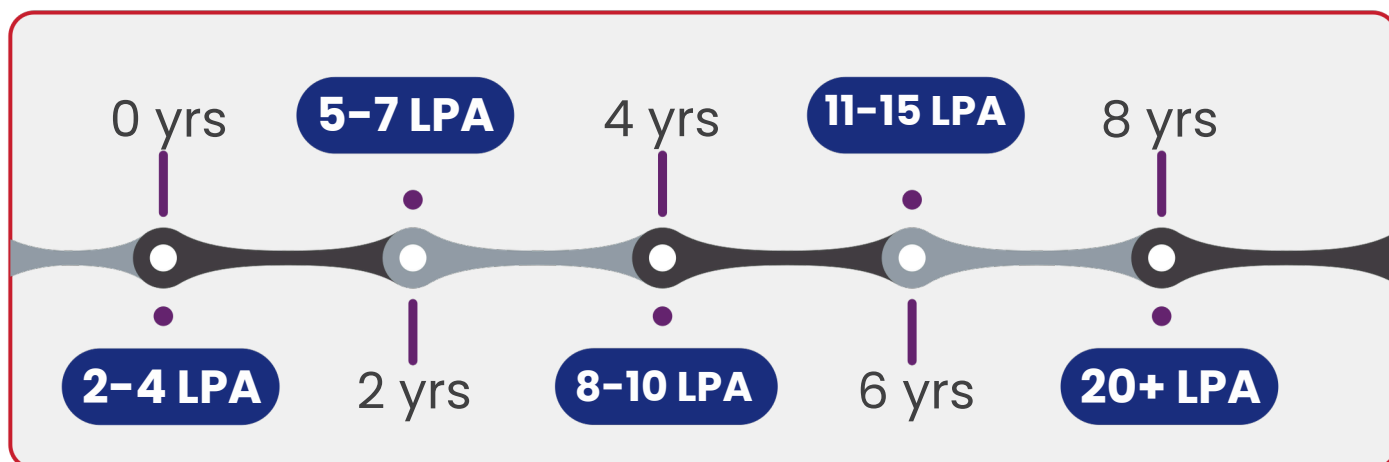
# Learning Curve



- ① Python environment Setup and Essentials
- ② Mathematical Computing with Python (Numpy)
- ③ Introduction to Data Science
- ④ Introduction to Scientific Computing (scipy)
- ⑤ Data Manipulation with Pandas
- ⑥ Data Visualization using Matplotlib
- ⑦ Data Visualization using Seaborn
- ⑧ Machine learning using scikit-learn
- ⑨ Web Scraping in Python
- ⑩ Introduction to Deep learning
- ⑪ Github



# Know your future as a **Data Scientist**



**Data Scientist**

**Machine Learning Engineer**

**Bio informatics Specialist**

**Data Analyst**

**Data Engineer (with R integration)**

**Marketing Analyst**

**Machine Learning Engineer**

**Financial Analyst**





## 01 Python environment Setup and Essentials

 **06 Hours**



- ◆ Introduction to python Software
- ◆ Installation Basic
- ◆ Comments, Variables, Input Operations
- ◆ Tuple, List & Dictionary

## 02 Mathematical Computing with Python (Numpy)

 **08 Hours**

- ◆ Introduction to Numpy
- ◆ Introduction to Numpy arrays
- ◆ How to Access Array Elements?
- ◆ Indexing, Slicing, Iteration, Indexing with Boolean Arrays
- ◆ Dealing with Flat files using Numpy
- ◆ Mathematical functions
- ◆ Statistical functions (mean, median, average, standard deviation)
- ◆ Operations with arrays

## 03 Introduction to Data Science

 **06 Hours**

- ◆ What is Data Science
- ◆ What does data science involves
- ◆ Life cycle of Data Science
- ◆ Tools of Data Science
- ◆ Introduction to Python

**04**

## Introduction to Scientific Computing (scipy)

**06 Hours**

- ◆ Save a search as a report
- ◆ Editing reports
- ◆ Creating reports with visualizations charts and tables

**05**

## Data Manipulation with Pandas

**08 Hours**

- ◆ introduction to Pandas
- ◆ Defining data structures
- ◆ Understanding Dataframes
- ◆ Importing Data from various sources
- ◆ (Csv, txt, excel etc)
- ◆ Missing values
- ◆ Data Operations
- ◆ File read operations
- ◆ Descriptive statistics

**06**

## Data Visualization using Matplotlib

**05 Hours**

- ◆ Create plots like scatter plot,
- ◆ Histogram, bar graph, pie chart using Matplotlib
- ◆ Grids, axes, plots
- ◆ Markers, colour, fonts and styling. Create plots like scatter plot,
- ◆ Histogram, bar graph, pie chart using Matplotlib
- ◆ Grids, axes, plots
- ◆ Markers, colour, fonts and styling.



**07**

## Data Visualization using Seaborn

**05 Hours**

- ◆ Create plots like scatter plot,
- ◆ Histogram, bar graph, pie chart using Seaborn
- ◆ Grids, axes, plots
- ◆ Markers, colour, fonts and styling.

**08**

## Machine learning using scikit-learn

**60 Hours**

- ◆ Machine learning Process Flow
- ◆ Machine learning categories
- ◆ Feature selection and extraction in machine learning
- ◆ Supervised learning algorithms
- ◆ Simple linear Regression
- ◆ Machine learning Process Flow
- ◆ Machine learning categories
- ◆ Feature selection and extraction in machine learning
- ◆ Supervised learning algorithms
- ◆ Regression
- ◆ Classification
- ◆ Logistic Regression
- ◆ Building Logistic Regression Model
- ◆ Understanding standard model metrics  
(Validation of Logistic Regression Models Standard Business Outputs)
- ◆ Multiple linear Regression
- ◆ Decision Tree



- ◆ Random Forest
- ◆ Support Vector Machines K – NN
- ◆ Naive Bayes classifier
- ◆ Model evaluation techniques – concepts of confusion matrix, threshold
- ◆ Evaluation with ROCR
- ◆ Unsupervised machine learning algorithms
- ◆ K-Means Clustering
- ◆ Hierarchical Clustering
- ◆ Aprior Association Algorithm

## 09 Web Scraping in Python

🕒 04 Hours

- ◆ Working with Beautiful Soap
- ◆ Parsing HTML and XML
- ◆ Navigating the document
- ◆ Handling CSV files
- ◆ Parsing JSON into Python

## 10 Introduction to Deep learning

🕒 05 Hours



**11**

## GitHub

 **05 Hours**

- ◆ Creating a Git Account
- ◆ Cloning the repository
- ◆ Adding the file
- ◆ Committing the file
- ◆ Git push
- ◆ Removing the file

### Top Job Roles

- Data Analyst
- Data Scientist
- Business Analyst
- Statistical Analyst
- Market Research Analyst
- Operations Analyst
- Data Visualization Specialist
- Predictive Analyst



## Tools and Technologies Covered

- **Programming Languages:** Python
- **Frameworks:** TensorFlow, PyTorch, Scikit-learn
- **Cloud Platforms:** AWS Deep Learning: TensorFlow, Keras,
- **PyTorch NLP Tools:** NLTK, SpaCy Visualisation: Matplotlib, Seaborn

### TOOLS & TECHNOLOGIES USED





# Projects

## 01

### Image Classification with Neural Networks



Use a deep learning framework (e.g., Keras, TensorFlow) to build a neural network for image classification. Train the model on a dataset like MNIST or CIFAR-10.

## 02

### Sentiment Analysis



The Sentiment Analysis Project involves analyzing a dataset of textual data, such as customer reviews, social media posts, or product feedback, to determine the sentiment behind the text (positive, negative, or neutral). Using machine learning or deep learning models, the project focuses on preprocessing the text, extracting features, and classifying sentiments, helping businesses or researchers gain insights into public opinions or customer satisfaction.



# Pathway to **Sucess**



## Start

### Disturbed

Notable to take career decision

### Searching for Good Institute

We are one of the Best Career Guidance Institute



### Inquiry

Our career Counselling Team is here to give best guidance



### Admission

Your Journey Starts here



### Industry Skill

Phoenix will build your knowledge with the Latest technology from Basic to Advance



### Corporate Skill

Our Skills development Experts will help in grooming your soft skills & personality by 360°



## Profile Building

Let's Build Together a strong  
Resume and Job Portals  
Profiles



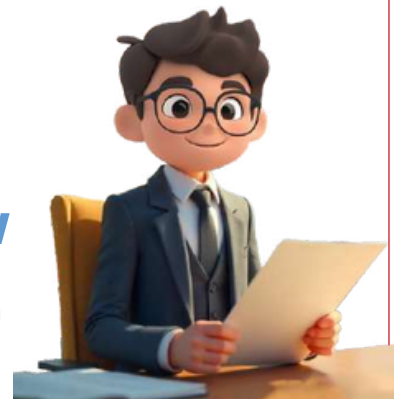
## Projects

Build your Projects by putting in  
all your knowledge and technology  
at one place.



## Ready For Interview

Get Ready to Face the Interview  
Challenges and How to Crack Them



## Get Your Dream Job

Fly high and never forget there  
is no end to knowledge



**SUCCESS**

## Selected





# PHOENIX LEARNING JOURNEY







# GROW WITH **Phoenix**



**Get secured with  
Certificates**



**Industry leading  
course designed by  
experts.  
One on One Doubt  
Solving Sessions**



**Github Project  
Implementations**

**Placement assistance**



**Mock interviews &  
project creation  
included in the  
module**

**Expert faculty  
from IT Industry**





# CARRIER SERVICE

Become a Data Scientist

8 Placement support

7 Project preparation

6 Mock Interviews

5 1:1 Career Mentoring

4 Resume Building

3 Interview Preparation

2 Profile Enhancement

1 Communication Skills



# CERTIFICATION

Upon successfully completing this program, you'll earn a Post graduate Program in Data Science and Analytics certificate. This certification will add considerable value to your professional credentials.



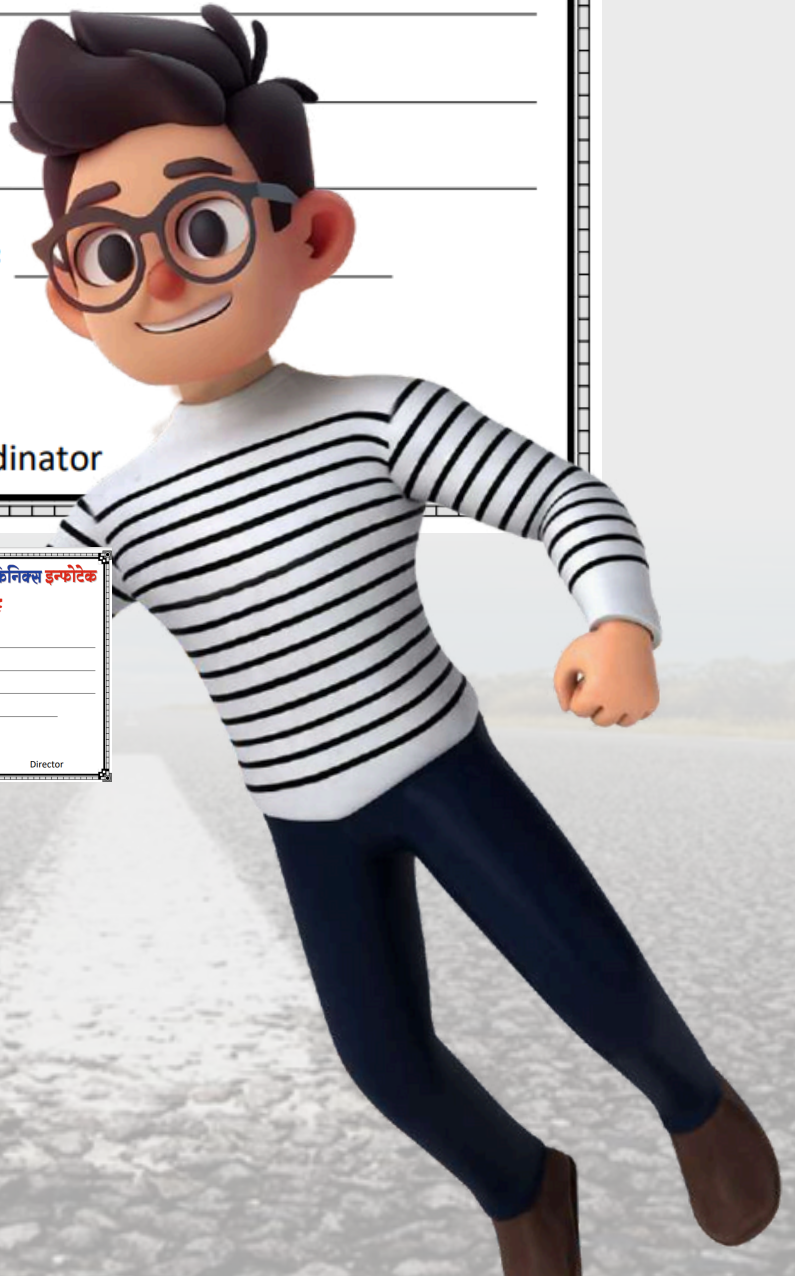
फिनिक्स इन्फोटेक

## CERTIFICATE

*This Certificate is awarded to \_\_\_\_\_*  
*for completion of course \_\_\_\_\_*  
*during the period of \_\_\_\_\_*  
*Securing Grade \_\_\_\_\_*

Date of Issue

Course Coordinator



## WHY JOIN THIS **PROGRAM?**

# 100%

### Job Assistance Program

Our program comes with a 100% job assistance. Prepare to be hired by one of our more than 500 top-tier partner companies that employ data scientists and analysts. Every step of this program is designed to help you land your dream job as a data scientist.





# Our Mission is to Build Nation through **Education & Beyond Limitation**

IT Education Center Private Limited is an education platform providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty, industry & Infrastructure. In the past 5 years we have trained 1850+ candidates and out of which we are able to place 900+ professionals in various industries successfully.



**Connect On Whatsapp**

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**OUR WEBSITE : [WWW.PHOENIXINFOTECH.ORG](http://WWW.PHOENIXINFOTECH.ORG)**