Datatrained पढ़ते रहो, बढ़ते रहो & NASSCOM® | futureskills® prime
A MeitY - NASSCOM Digital Skilling Initiative

Aligned to Competency Standards developed by SSC NASSCOM

**In collaboration with Industry and approved by Government of India**

**Ranked No. 1 by Times of India**

PG Program in

# Data Science, Machine Learning and Neural Networks

In Collaboration with NASSCOM® | futureskills® prime
A MeitY - NASSCOM Digital Skilling Initiative

12 Months Program with 6 Months Internship and Placement Guarantee

## About DataTrained

**DataTrained** is an EdTech initiative that aims to make quality education accessible to all. Our platform strives to bring together emerging technologies such as Data Science, Analytics, AI and others to address the lack of superior edification in the backward areas of India.

DataTrained partners with principal educational institutions to provide tailored course content. At the same time, its established relationships with leading corporations help DataTrained spearhead the careers of its students and offer them competitive jobs in the current climate.

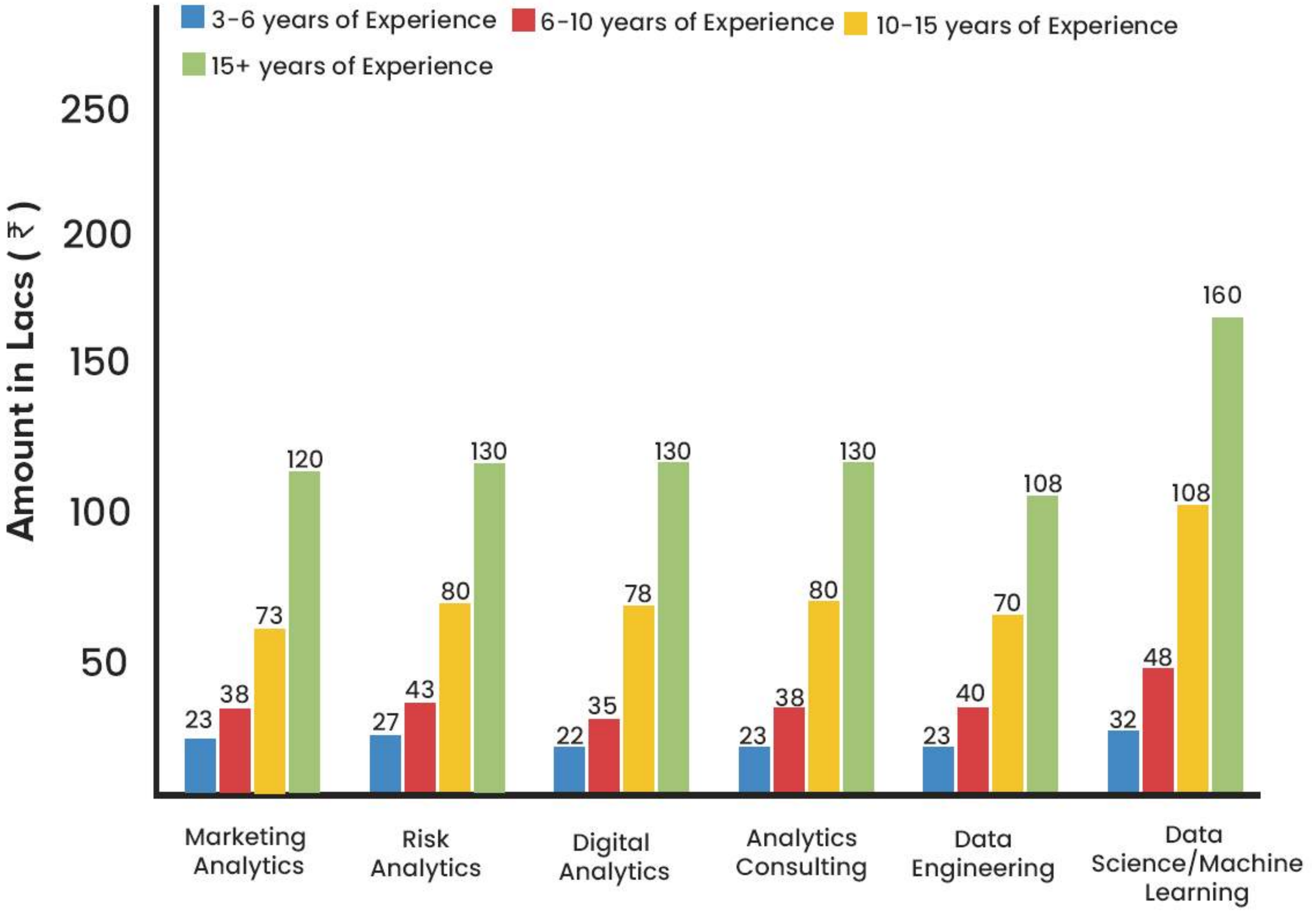
From the ancient gurukuls to the medieval global universities, Indian education has always been held in high esteem. DataTrained wishes to emulate the same path of excellence, only this time resting on the pillars of technology, equality and utility.

**Warm regards,**
**Janardan Tiwari**
**CEO- DataTrained**

# Data Science Landscape!

- India Inc is witnessing the rapid digitization of businesses and services, making it the second-largest hub for data science in the world.
- Analysts predict that the country will have more than 11 million job openings by 2026.
- Since 2019, hiring in the data science industry has increased by 46%.
- Around 93,000 jobs in Data Science were vacant at the end of August 2020 in India. 70% of these vacancies were for positions with less than five years of experience.
- The field of data science and machine learning is quickly becoming one of the most in-demand fields, but there is still a lack of qualified professionals.

# Salary growth rate vis-a-vis work experience



# Why This Program ?

- Ranked **No. 1 Data Science Program** in a survey published by **Times of India.**

Earn **6 months of Work Experience** even before you complete the program.

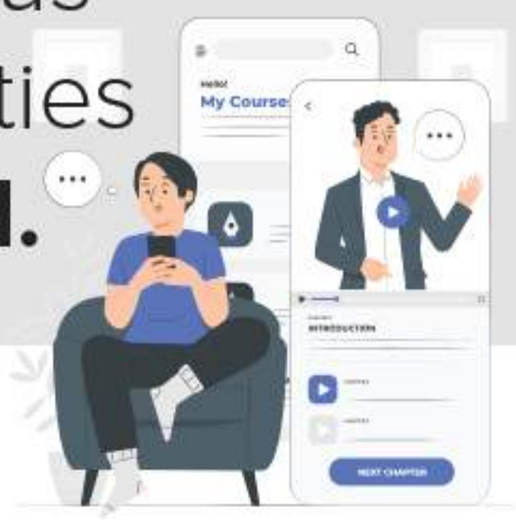
**(100% Placement OR Money Back Challenge)**

- Work on **real-time industry-based problems** with some of the best-in-class product and service-based companies.

Best-in-class content by **leading faculty** and industry leaders in the form of pre-recorded videos,**live sessions**,case studies,projects,assignments, and **industry webinars.**.

# Program Highlights!

**Trainers** are from prestigious organizations and Universities like **IBM, IITs and Stanford.**




## Career Transition Guarantee

**Pre-recorded videos**
**Live sessions**
**Case studies**
**Projects, assignments**
**Industry webinars**

**Average salary - 7.5 LPA**

**Highest salary - 18 LPA**

**12 Months** Program with
**6 Months** Internship and
**Placement Guarantee**

# Our Alumni Work At

DataTrained has proved to be the best in placing its Graduates. We have a network of 400+ companies who hire graduates from our programs. A few of these established companies are:

USEReady
Rolls Royce
McKinsey & Company
Darwin Labs
Daimler
Redington
Seamless Partnerships
enquero
LatentView
Actionable Insights • Accurate Decisions
TATA ELXSI
PHYGITAL INSIGHTS™
iQ media
IMPETUS
apps associates
OPTUM®
HCL
fastlane
SCIENAPTIC
KOGENIX
nielsen
COGNIER
Gainsight
YES BANK
CloudByte
Containerized Enterprise Storage
ValueLabs
CRISP ANALYTICS
elixir
predera
vipany
PipeCandy
cellOS
Allerin
voziq
NUEVORA
A Sutherland Company
amazon
Analytics Insight
joveo
Winjit
Apple Inc.
AUREUS ANALYTICS
Shell India
crediwatch

## ROI

| | Other Data Science Programs | DataTrained Data Science Program |
|---|---|---|
| Delivery | Mainly Pre-recorded | Pre-recorded plus Live session on Weekends |
| Mentors | No Mentorship | Industry Mentors |
| Fee Module | More than 2.5 Lacs | 1.6 Lacs |
| Average Package | 4 Lacs | 7.5 Lacs |
| Work Experience | No | 6 Months of Assured Work Experience by the end of the program |
| Flexible Financial Options | No | Yes |
| Fee Refund if not Placed | No | Yes |

# WEEK IN THE LIFE OF A LEARNER

Digital Learning has taken its own shape over the years. With covid the picture took another shape all together. Considering both past and present, we at DataTrained's have designed a perfect itinerary for our learners. Take a sneak peak to how your week will look like.

10 Hours

## Conceptual Learning (Curriculum)

Learning just for the sake of knowledge is not enough today. Learning to be relevant and Industry ready is the need of the hour. With our live sessions and efficient recorded videos, we cater to the most important topics ensuring maximum retention and output.

03 Hours

## Employability Training

Sitting in front of the recruiter could be one of the most daunting experiences of your lives. To prepare yourself for every aspect of it, is our goal. These sessions include individual and group lead employability activities and events that will help you to be job ready.

03 Hours

## Personality Grooming & Development

The way to talk, walk, dress, sit, stand and more are factors that finally decide our career path and in turn our success. Sessions that target to enhance your communication skills, presentation skills make you a more confident version of yourself are primary areas of our focus.

01 Hour

## Mentorship from Industry Experts

The internet has all the information today. However, insider knowledge and information can only be provided by industry experts who face it on a daily basis. Live Mentorship Sessions with Industry Experts will not just give you learnings about the industry but also boost your confidence to excel in the industry.

04 Hours

## Real Time Projects

Theoretical knowledge is of course a crucial part but learning the same practically is even more important. Through these real time projects, we get to experience the practical approach to your subjects.

03 Hours

## Assignments & Assessment

Finally, knowledge can only be assessed when it is tested. Barring the traditional exams models, DataTrained's assessment will help you quantify your knowledge. Also, practice makes perfect and don't you worry, with our assignments, you will reach just there.

# Program Curriculum

## MODULE-1

- Introduction to Data Science
- Data Science Era
- Data Science involvement in Industries
- Business Intelligence vs Data Science
- Data Science Life Cycle
- Tools of Data Science
- Introduction to Python
- Introduction to Machine Learning

## MODULE-2

- Introduction to Python Programming
- Introduction to Python
- Basic Operations in Python
- Variable Assignment
- Functions: in-built functions, user defined functions
- Condition: if, if-else, nested if-else, else-if
- Pre Reads (Attachment for students)
- Assignment (For student)
- Assignment Solution

# MODULE-3

- Data Structure - Introduction
- List: Different Data Types in a List, List in a List
- Operations on a list: Slicing, Splicing, Subsetting
- Condition(true/false) on a List
- Applying functions on a List
- Dictionary: Index, Value
- Operation on a Dictionary: Slicing, Splicing, Sub-setting
- Condition(true/false) on a Dictionary
- Applying functions on a Dictionary
- Modules and Packages
- Regex operations
- Pre Reads (Attachment for students)
- Assignment (For student)
- Assignment Solution

# MODULE-4

- Introduction to SQL (Structured Query Language)
- Basic SQL statement
- Advanced SQL (Searching, sorting, grouping)
- Accessing databases using python

# MODULE-5

- Data Types in an Array, Dimensions of an Array
- Operations on Array: Indexing, Slicing, Splicing, Sub-setting
- Conditional(T/F) on an Array
- Loops: For, While
- Shorthand for For
- Control statements
- Shape Manipulation
- Linear Algebra

# MODULE-6

- Python Pandas - Home
- Python Pandas - Introduction
- Python Pandas - Environment Setup
- Introduction to Data Structures
- Python Pandas - Series
- Python Pandas - Data Frame
- Python Pandas - Panel
- Python Pandas - Basic Functionality
- Function Application
- Python Pandas - Reindexing
- Python Pandas - Iteration
- Python Pandas - Sorting
- Working with Text Data
- Options & Customization
- Indexing & Selecting Data

# MODULE-6.2

- Python Pandas - Missing Data
- Python Pandas – Group By
- Python Pandas - Merging/Joining
- Python Pandas - Concatenation
- Python Pandas - Date Functionality
- Python Pandas - Categorical Data
- Python Pandas – Visualization
- Pre Reads (Attachment for students)
- Assignment (For student)
- Assignment Solution

# MODULE-7

- Intro to Statistics
- Statistical Inference
- Terminologies of Statistics, Descriptive statistics
- Statistical functions Measures of Centres
- Mean
- Median
- Mode Measures of Spread
- Variance Standard Deviation
- Histogram Probability
- Normal Distribution
- Binary Distribution

- Poisson distribution
- Skewness
- Bell curve
- Hypothesis Building and Testing
- Chi-Square Test
- Correlation Matrix

## MODULE-8

- Scientific computing with Python
- SciPy and its Characteristics
- SciPy sub-packages
- SciPy sub-packages –Integration
- SciPy sub-packages – Optimize
- Linear Algebra
- SciPy sub-packages – Statistics

## MODULE-9

- Data Analysis Pipeline
- What is Data Extraction
- Types of Data (Raw & Processed Data)
- Data Wrangling Exploratory Data Analysis Data Visualization Matplotlib
- Bar Plot
- Histograms Plot
- Box Plot
- Area Plot
- Scatter Plot

- Pie Plot
- Seaborn
- Pre Reads (Attachment for student)
  Assignment (For student)
- Assignment Solution

## MODULE-10

- Introduction to Machine Learning
- Machine Learning Use-Cases
- Machine Learning Process Flow
- Machine Learning Categories

## MODULE-11

- Data Pre-processing
- Data preparation
- Intro to Scikit Learn

## MODULE-12

- Regression
- Types
- Algorithms
- Linear Regression
- RMSE
- R2 score
- Logistic Regression
- Introduction to Dimensionality
- Why Dimensionality Reduction
- PCA
- Factor Analysis
- Scaling dimensional model
- Encoding
- Implementation with Case Studies
- Intro to Kaggle and UCI repository

## MODULE-13

- Classification K-nearest neighbours
- Metrics
- Confusion Matrix
- Classification report
- Support Vector Machines
- Kernel
- Working of SVM
- Naive Bayes
- Hyperparameter Optimization

# MODULE-14

- Unsupervised learning
- Clustering Algorithms
- K-Means Clustering
- Hierarchical Clustering
- Implementation with Case Studies
- Pre Reads (Attachment for students)
- Decision Tree Classifier
- Random Forest Classifier
- Ensemble Techniques and SVM tuning
- Underfitting & Overfitting
- Entropy
- AUC-ROC Curve
- Implementation with Case Studies
- Cross –validation
- Pre Reads (Attachment for students)
- Assignment (For student)
- Assignment Solution

# MODULE-15

- Recommendation Engine
- Collaborative filtering
- The course will be covering 12 + industrial real time case studies

# MODULE-16

Specialization Course: Students can opt any one elective

## Elective-1 : Deep Learning with Computer Vision

- Deep Learning
- Computer Vision

## Elective-2 : Deep Learning with NLP

- Deep Learning
- Deep NLP

## Elective-3 : Business Analytics with R

- Business Analytics with "R" programming and R shiny
- Business Analytics with Advanced Excel

## Elective-4 : Business Analytics with Tableau

- Business Analytics with Tableau
- Business Analytics with Advanced Excel

# MODULE-17

## Pre-placement Activities

- Resume Preparation Sessions
- Analytics Jobs Sign Up Session
- Interview Questions Discussions along with Answers
- Mock HR Interview and Feedback Sessions
- Mock Technical Interview and Feedback Sessions

# Learners Testimonials

**Aruni Khare**

Data Scientist

LAKMÉ

"Datatrained has helped me with the vital knowledge and skills that are needed for a data scientist role. The trainer starts with an example to make us comprehend the concept and then help us build the Algorithms with the real industry datasets.Datatrained brings the power of online learning along with dedicated Mentorship, Counselling, Live Sessions and 6 months Internship."

"I did my research before deciding which course I should register myself for and of all the courses that I have found, the one offered by Datatrained was completely dedicated to analytics, after enrolling for Postgraduate Program for Data Science, I realized Datatrained Data Science course was ideal for me."

**Surbhi Jain**

Sr. Data Specialist

BANK OF AMERICA

**Rakshit Jain**

Data Scientist

OPTUM

"I saw an ad from Datatrained on facebook and I contacted them straight away and enquired about their Data Science online course. Their counselor took me through the complete journey .After few weeks , I was pretty sure about the course and now I knew where I need to invest my money and hard work."

# Learners Testimonials

"Once I Joined Datatrained my learning curve started to grow steeply and as per the mentors I followed the new approach to get Data Science job.If I am successfully placed with one of the biggest data science firm complete credit lies with DATATRAINED and their competent Faculty."

**Vanshika Rathi**

Data Analyst

OLA

**Rupam K. Chaurasia**

Head Sales

Glenmark

The program is a well-balanced mix of pre-recorded classes, live sessions on weekends and printed reading materials they sent to my address. My mentor was Amit Kaushik and he helped me in getting that confidence and completing my assignments on time.I have almost completed the course and have been able to crack Glenmark interview.Thank you so much Datatrained.

## Program Details

| | |
|---|---|
| **Program Fee** | **1,60,000 +GST** |

### Eligibility Criteria

- Graduates from any recognized University from any stream.
- Final Year Graduation students

## Contact Us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