



Certification Program in
**DATA SCIENCE
& ANALYTICS**

Course duration: 6 months



About Us

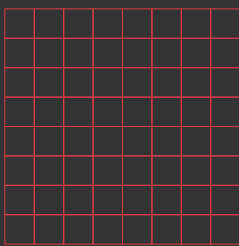
upGrad Campus is a
**video learning platform
for online education,**

with certificate courses specially curated for college students and young adults. As an affiliate of upGrad, India's largest online higher education company, upGrad Campus aims at making every graduate job-ready, with professional skills and practical know-how for the most sought-after fields of work.

“Our aim is simple: We strive to create high-impact, hands-on experiences that prepare learners for meaningful and productive careers.”

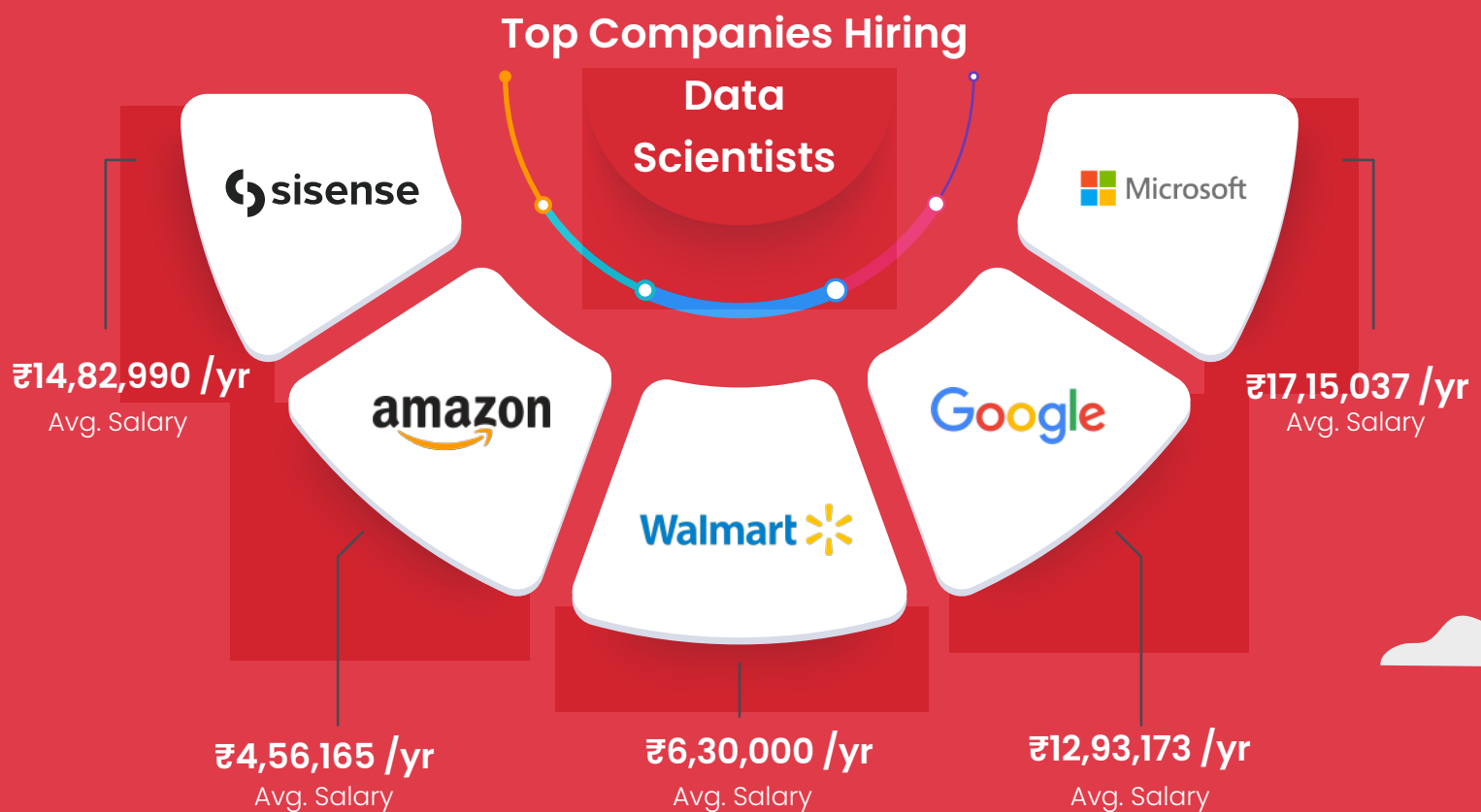
Ronnie Screwvala

Co-founder & Executive
Chairman, upGrad



Data Science and Analytics the most wanted skill today!

By 2025, data from all over the world will increase to 175 Zettabytes - making Data scientists and Analysts vital for every industry! Checkout the places your expertise would be required in:



Source: Glassdoor

Benefits of learning Data Science

- The supply of Data Scientists is too less than its demand, making it the most in-demand skill today
- Data Science finds its application in every industry, making it perhaps the most versatile skill
- This career path has ample growth opportunities and is both financially and professionally rewarding

Roadmap to Mastering Data Science and Analytics with upGrad Campus

Learn the basics of coding

Skills : Python and it's Libraries

1

Understand how data is stored and represented

Skills: SQL (Structured Query Language)

2

Present your data in the form of powerful visualizations

Skills: Tableau and Excel

3

Grasp mathematical concepts used in Machine Learning Algorithms

Skills : Statistics & Linear Algebra

4

Apply Machine Learning techniques to real-world business problems

Skills: Data Storytelling and Business Problem Solving

5

Our students who completed this course applied for jobs as:

Data Scientist | Data Analyst | Associate Analyst Manager

Business Intelligence Developer | Applied Machine Learning Engineer



Data Science and Analytics Certification Course

Best-in-class program by industry experts

Program Eligibility

This program is especially designed to teach Data Science for beginners. It covers everything starting from the very basics, including programming with Python. So a coding background is not compulsory (although knowing a coding language like Java, Python or C/C++ is an added bonus).

Top skills you will learn

Python programming, Machine Learning, Tableau, SQL and Python libraries including NumPy, Pandas, Matplotlib and many more!

Global Standard Curriculum

Our robust and beginner-friendly course will give you

300+ Hours of Learning Content Including

80+ Hours of Live Sessions

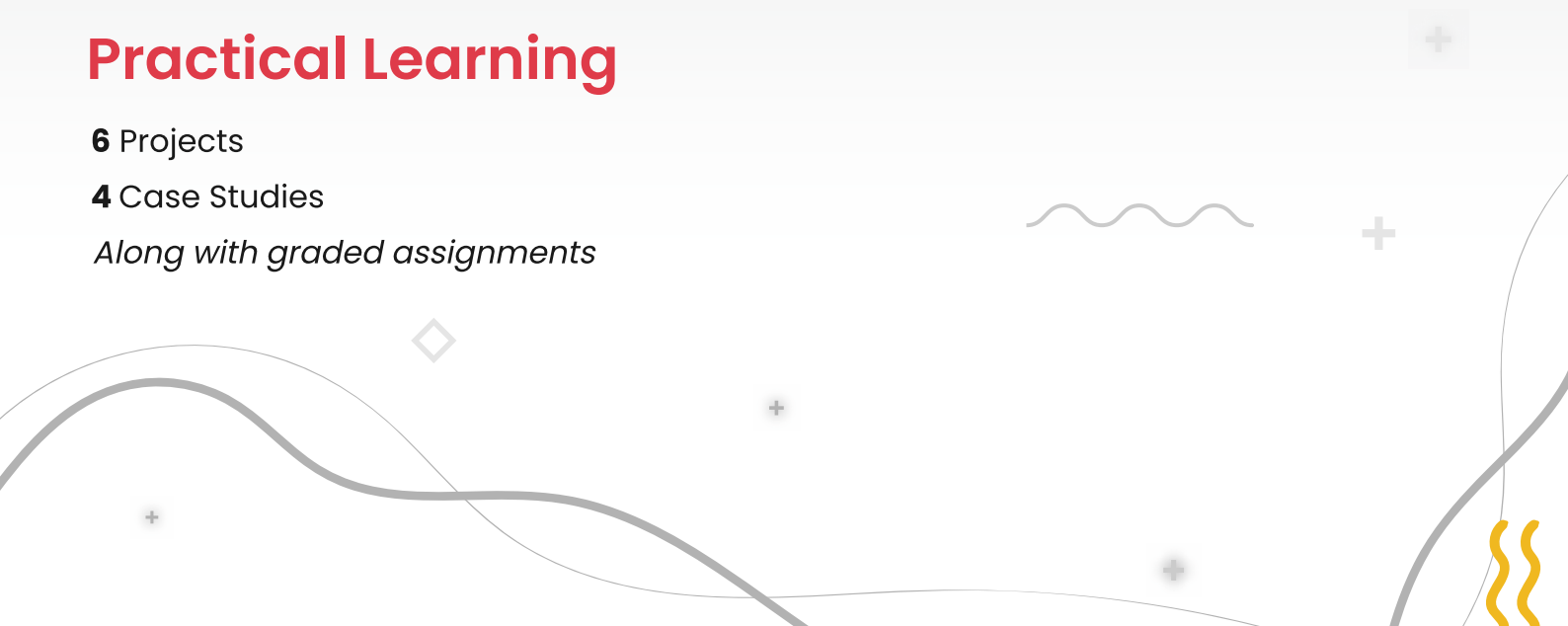
200+ Hours of Recorded Classes

Practical Learning

6 Projects

4 Case Studies

Along with graded assignments



Why Choose to Learn Data Science with upGrad Campus?



**Guaranteed
Certification**
by upGrad Campus



**Beginner Friendly
Course**
that covers all the
fundamentals of DSA



**Distinguished
Faculty**
with years of
industry experience



**Dedicated Student
Support**
from Teaching Assistants
Mentors



Live Classes on Weekends
to interact 1:1 with
industry experts
and TAs



**Job-ready
Projects**
based on real
world experience



Easy Doubt Resolution
through doubt-clearing
sessions and peer
support groups



Recorded Sessions
that you can access
content for up to
3 years



Crack Interviews
and impress
recruiters with your
DSA skills

Tools & Platforms Covered



Python for Machine Learning

Learn Python from scratch and understand its use in linear regression, logistic regression, decision trees and more.



Data Visualisation with Tableau

Use Tableau Dashboard to make charts, treemaps, histograms and other elements for effective data storytelling.



Understanding Database with MySQL

Explore database design, data modelling, SQL querying, joins and set operations with MySQL.



Data Analysis in Excel

Learn how to use Excel interface to build reports, charts and pivot tables, along with complex functions and formulae.



Data Manipulation using Pandas

Make use of Pandas to perform powerful functions like indexing, slicing, grouping and pivoting data.



Learn from Kaggle's community

Collaborate with other members, find and publish datasets, use GPU integrated notebooks, and compete with other data scientists to solve data science challenges.

Course Curriculum

01 Problem Solving Skills

- Introduction to Problem Solving
- Approach to Problem Solving
- Aids to Business Problem Solving

02 Intro to Python Programming

- Data Types and Variables in Python
- Data Structures in Python
- Control Structures and Functions in Python
- Object-Oriented Programming (OOP) in Python
- Problem-Solving in Python

03 Python for Data Science

- Numpy Arrays and Operations
- Data Manipulation with Pandas
- Data Cleaning in Python
- Introduction to Kaggle
- Various Plots in Matplotlib
- Data Visualisation with Seaborn

04 Introduction to SQL

- Database Design and Data Warehouse
- Data Modelling
- SQL Querying
- Joins and Set Operations
- Business Problem-solving using Data Modelling

05 Data Visualisation (Optional)

- Introduction to Data Analysis
- Creating and Formatting Charts
- Creating a Pivot Table
- Analysing Data in a Pivot Table
- Getting Started with Tableau
- Charts, Plots, Hierarchies
- Grouping and Tree-Maps
- Dashboard Creation
- Storytelling



Course Curriculum

06 Exploratory Data Analysis and Statistics

- Inferential Statistics
- Hypothesis testing
- Data Sourcing
- Data Cleaning
- Univariate Analysis
- Bivariate Analysis
- Derived Metrics

07 Machine Learning

- Maths Essentials for ML (Optional)
- Linear Regression
- Logistic Regression
- Decision Trees
- Clustering

08 Business Understanding

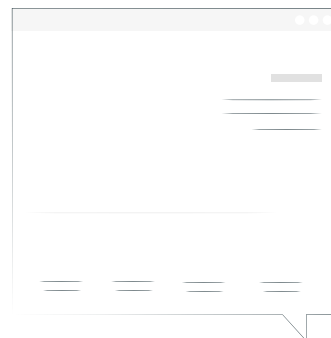
- Data Storytelling and Effective Communication
- Business Problem Solving

09 ChatGPT and Generative AI

- Using ChatGPT for Communication and Research
- Leveraging ChatGPT for Python and SQL
- Other Generative AI Tools
- Introduction to OpenAI APIs
- Whisper API and DALL-E API
- Prompt Engineering Basics

10 Capstone Project

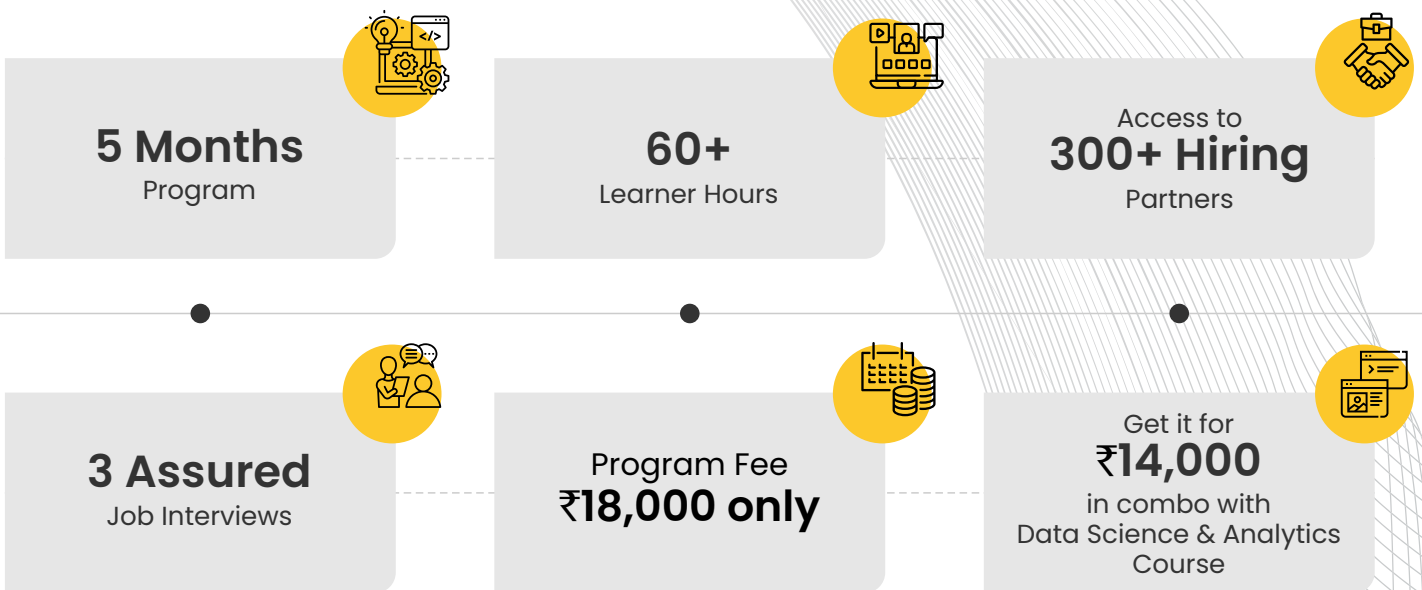
- Build a Machine Learning Model to predict lead conversion success



Get 3 Assured Job Interviews with Placement Plus

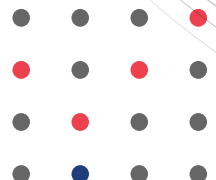
Become 100% Placement-ready with this Add-on Program

Get trained on aptitude and soft skills with Placement Plus – an add-on course designed to help you crack your interview and take you to your dream company.



5 Months of LIVE Training to Land Your Dream Job

- Resume Building
- Problem Solving & Logical Reasoning
- LinkedIn Profile Creation
- Public Speaking & Oral Communication
- Quantitative Training
- Non-verbal Communication
- Mock Interviews
- Group Discussions



Program Details

Course starts

**Please refer to the website
for program start dates**



Fee structure

~~₹ 65,000~~

₹ 47,000 (No additional taxes)

Duration

6 months



Program hours

**300+ Learning Hours
Live Sessions every
weekend**

For admissions, contact

1800 210 7070

admissions.campus@upgrad.com

upGrad
Campus 

