KCA
KEEN CAPTAIN ANALYTICS

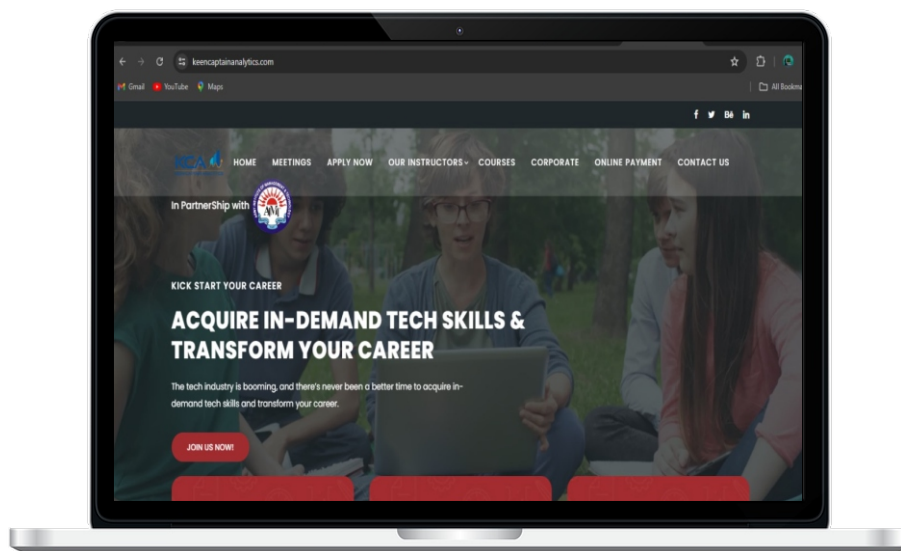# 6 MONTHS EXECUTIVE DATA SCIENCE

PROGRAM

Table of Contents

About Keen Captain Analytics

We at KCA aim to enhance education through technology by improving accessibility, engagement, and personalization of learning experiences. We seek to streamline administrative tasks and foster collaboration among stakeholders. Ultimately, we aim to support lifelong learning by providing continuous skill development opportunities beyond traditional classrooms, and career growth.

Key Features

- ✔ 200+ Hours of Instructor-Led Training

- ✔ Dedicated Career Coach

- ✔ 50+ Hours of Self Paced Training

- ✔ Professional Certification Program

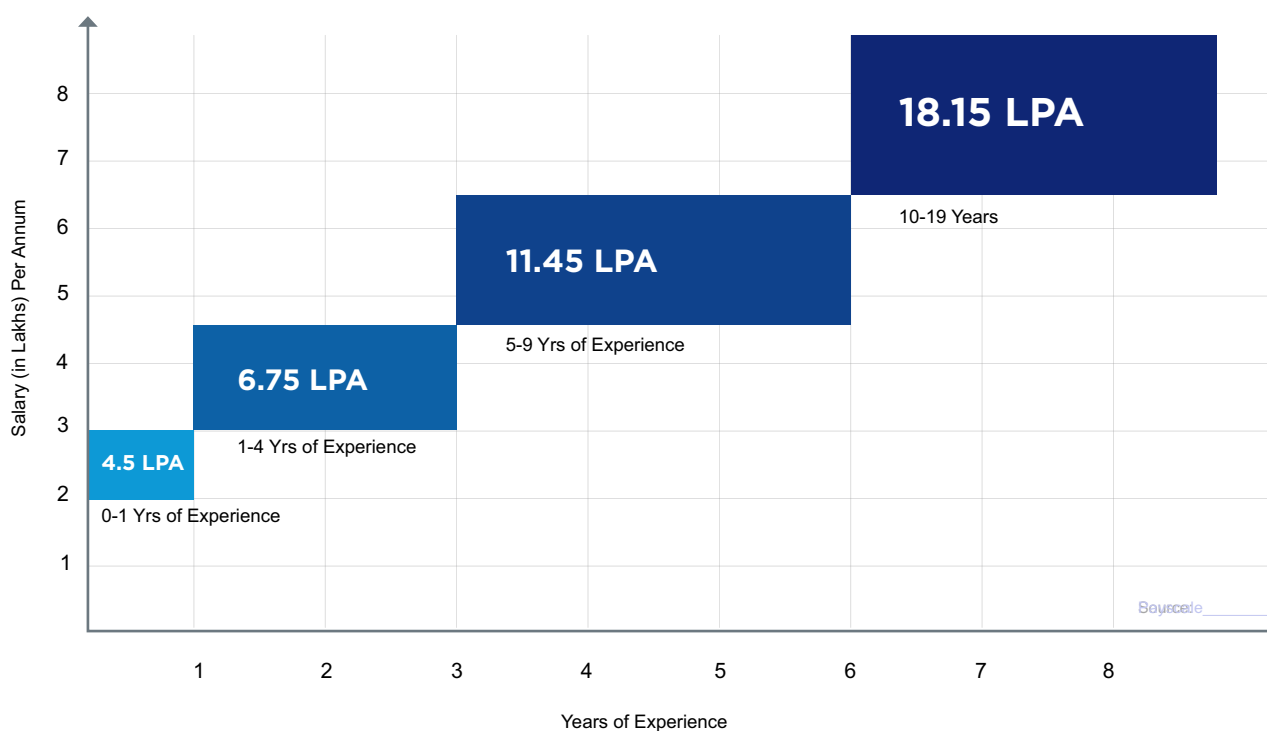- ✔ 150+ Exercises and Assessment

- ✔ 24/7 Support
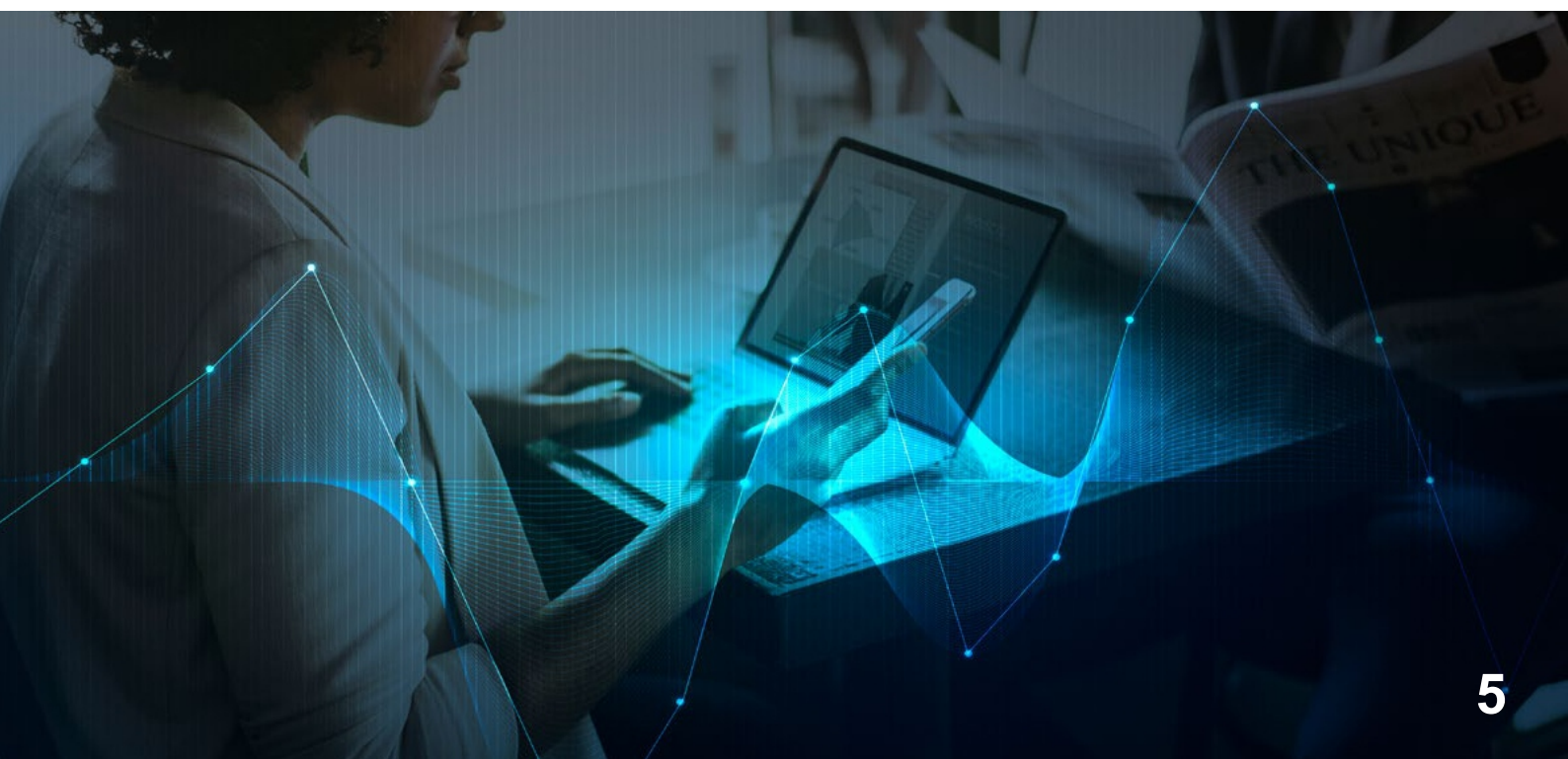
About the course

This Data Science Career Bootcamp offered by KCA is an eight month comprehensive Career Bootcamp focusing on fast-tracking your career in the field of data science. You will be trained by data science experts and will apply learning through industry-relevant projects. You will gain access to resume building, 1:1 mentorship sessions and mock interviews to help you crack your dream job. The program is based on an applied learning approach that uses a combination of self-paced videos, live virtual classes, and hands-on projects.

Careers in Data Science

Salary (in Lakhs) Per Annum

- **4.5 LPA** — 0-1 Yrs of Experience
- **6.75 LPA** — 1-4 Yrs of Experience
- **11.45 LPA** — 5-9 Yrs of Experience
- **18.15 LPA** — 10-19 Years

Source

Years of Experience

Some of the job roles associated with Data Science include Data Analyst, Data Science Generalist, Data Scientist, ML Analyst, ML Engineer, ML Scientist, AI Analyst, AI Engineer, AI/ML Developer, Business Intelligence Analyst, Associate Data Scientist, Data Architect, Business Intelligence Developer, Deep Learning Engineer, Decision Scientist, Data Visualization Specialist, and many others.

KCA advantage

Access to a variety of tools used in data science and hands-on training with many industry-relevant projects

AI-based feedback on resume preparation.

Interview-ready with 1:1 mock interviews and mentorship sessions

Access to the job board curated by KCA where you can apply for job openings

Eligibility criteria and application process

Who can apply?

Anyone with

- ✓ Hold an engineering or statistics degree or any of the MCA/ M.Sc (IT)/ MBA/ BCA/ B.Sc (IT) degrees
- ✓ 0-3 years of work-ex when you graduate from this program; 2020 and onwards graduates

How to Apply? For the application process

1

Submit Application

Submit the application with the required information to check the eligibility.

2

Application Review

Our admission team will review your application & inform you if you can get enrolled for the program

3

Admission Rollout

Secure admission by completing the payment and begin your journey to becoming a data science professional
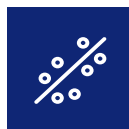
Program Outcome

At the end of this program, you will be able to

Gain an in-depth understanding of data manipulation

Analyze data using linear and non-linear regression models and classification techniques

Understand supervised and unsupervised learning models such as linear regression, logistic regression, clustering, dimensionality reduction

Perform scientific and technical computing using the Pandas, SciPy, and StatsModels

Perform mathematical computing using the NumPy and scikit-learn packages

Analyze data using Tableau and become proficient in building interactive dashboards

Gain practical mastery of the concepts of recommendation engines and time series modeling over principles, algorithms, and applications of machine learning

Become interview ready with our comprehensive career services

Learning Path & Career Services

Induction for Data Science Career Bootcamp

STEP 1

1. Phase 1 - Let's Explore the Foundations of Data Science

2. Career Readiness Phase 1

STEP 2

3. Phase 2 - Python Fundamentals

4. Phase 3 - Data Analysis with SQL

STEP 3

5. Phase 4 - Statistics and Probability

6. Phase 5 - Python for Data Science Visualization

STEP 4

7. Phase 6 - Data Cleaning and Preparation

8. Phase 7 - Machine Learning (scikit)

STEP 5

9. Phase 8 - Tree Based and Boosting Models

10.

11 Soft Skills Program

12 Electives Program

○ Business Intelligence Tool (Power BI / Tableau)

○ Deep Learning with Computer Vision

○ Deep Learning with NLP

Phase 1 - Let's Explore the Foundations of Data Science

This course will equip you with basics of data science skills such as statistics essentials, mathematics. You will learn concept such as skewness, correlation, regression, and distribution, eigenvalues and eigenvector. Programming skills such as data types, variables, strings, loops, and functions such as multithreading and multitasking using Python, Pivots, and lookups in Excel and SQL

Career Readiness Phase 1

In this module, you will get an opportunity to enhance your skills and move one step closer to kickstarting your dream career in data science with below activities:

Course Curriculum

- ✓ Aptitude test
- ✓ Webinar on communication preparation for interviews
- ✓ Webinar on professional networking
- ✓ 1:1 session on career choices - understanding learner interest
- ✓ 1 technical mock interview with feedback

Phase 2 - Python Fundamentals

- ✓ Introduction to Python and Data Science
- ✓ Working with Python Data Structures
- ✓ Control Flow Statements
- ✓ Functions in Python
- ✓ File Handling in Python
- ✓ Regular Expressions

11

- Object Oriented Programming

- Advanced-Data Structures in Python

Phase 3 - Data Analysis with SQL

- Introduction to SQL and MySQL

- Data Creation and Retrieval

- Data Filtering

- Data Analysis using aggregate functions and group by

- Joins and Keys

- MySQL Joins

- Subqueries and Views

- Window/Analytical Functions

- Case Study

Phase 4 - Statistics and Probability

- Introduction to Statistics

- Probability Theory

- Statistical Inference I

- Statistical Inference II

- Regression Analysis I

- Regression Analysis II

Phase 6 - Python for Data Science Visualization

- Extracting and Aggregating Pandas
- Matplotlib and Seaborn
- Plotly and Cuffinks

Phase 7 - Data Cleaning and Preparation

- Introduction to Data Cleaning and Data Types
- Exploring and Visualization the missing values
- Advanced-Data Cleaning Concepts
- Introduction to Feature Engineering
- Feature Extraction and Transformation
- Feature Selection and Dimensionality Reduction

Phase 8 - Machine Learning (scikit)

- Modeling with Linear Regression
- Evaluating Models & Feature selection
- Regularisation Techniques
- Modeling with Logisitc Regression
- Understanding other classification algorithm like KNN & SVM
- Advanced Model Evaluation Techniques
- Introduction to Clustering and K Means
- Advanced Clustering Techniquesl

Phase 9 - Tree Based and Boosting Models

- Introduction to Decision Trees
- Implementation of Decision Trees
- Introduction to the Concept of Bagging
- Introduction to Concept of Random Forest
- Introduction to Boosting
- Introduction to extreme Gradient Boosting
- Introduction to Imbalanced Machine Learning models
- Introduction to Recommendation Engines

Internship Program

- Integration with Python and SQL
- Types ML Model Evaluations
- Web Scrapping
- Introduction to Big Data
- Data Cleaning with Excel and Python
- Big Data Procession with Spark
- Data Visualizing with Python
- Model Deployment in Cloud Service
- Data Visualizing Tools (Power BI)
- Internship Project-2 (Main Project)
- Types of Machine Learning Models
- Submission & Graduation Ceremony
- Machine Learning Model Selections

Soft Skills Program

Technical skillset and your soft skills combine to make you employable. In order to make our learners employable, dedicatedly placement-oriented sessions are conducted while highlighting the use of Github, Linkedin, and other tools during the job search.

- Building A World-Class Resume
- Effective Job Search
- Networking via Linkedin
- Writing Mails and Cover Letters
- Github for Professionals
- Interview Skills

ELECTIVES PROGRAM

Select any one elective from list mention below

Business Intelligence Tool (Power BI / Tableau)

- Data loading and transformation with Power Query.
- Data visualization with charts, including various chart types.
- Tabular visualization with Power Pivot and matrices. Creating interactive dashboards.
- Using conditional formatting for enhanced data analysis.

Deep Learning with Computer Vision

- ✔ Introduction to Deep Learning and Computer Vision.

- ✔ Artificial Neural Network and Convolution Neural Network.

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- ✔ Transfer Learning.

- ✔ Object detection and object localization.

Deep Learning with NLP

- ✔ Introduction to NLP & Text Preprocessing

- ✔ Text Cleaning and Mining.

- ✔ RNN, LSTM, Resnet, GRU.

- ✔ Advance NLP Models Transformer and GPT-3.

STEP 6

Certificates

Upon completion of this Master's Program, you will receive the certificates from KCA in the Data Science courses in the learning path. These certificates will testify to your skills as an expert in Data Scientist. Upon program completion, you will also receive an industry-recognized Master's Certificate from Keen Captain Analytics.
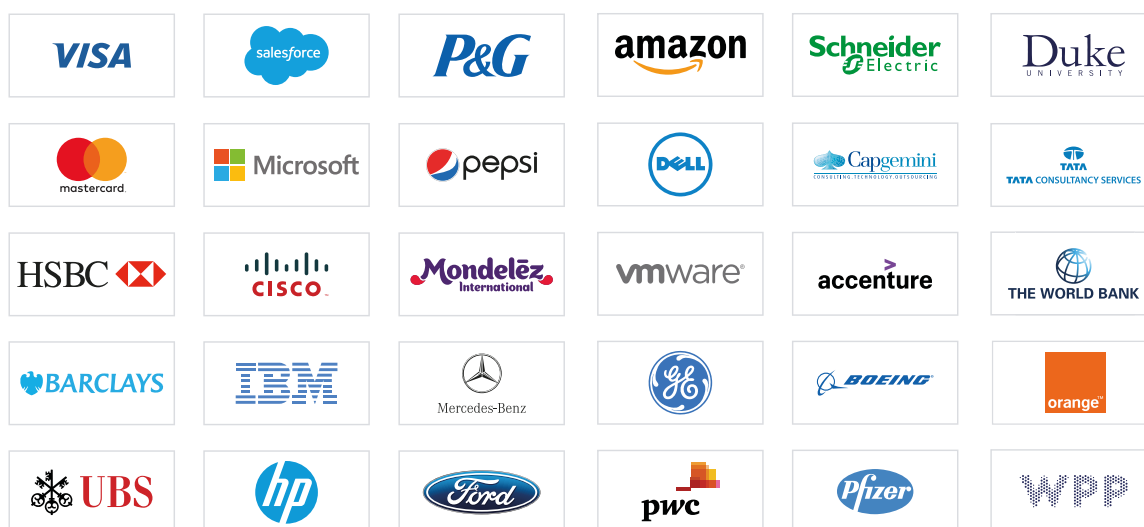
Corporate Training

Top clients we work with:

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HSBC	CISCO	Mondelēz International	vmware	accenture	THE WORLD BANK
BARCLAYS	IBM	Mercedes-Benz	GE	BOEING	orange
UBS	hp	Ford	pwc	Pfizer	WPP

Features of Corporate Training:

Tailored learning solutions

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Enterprise-grade learning management system (LMS)

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