



DATA ENGINEERING

"Transforming Data, Powering Innovation!"



www.sevenmentor.com



020-7117 3143



registration@sevenmentor.com

MEET OUR INSPIRING PILLARS



Pawan Bhosikar
(Chief Executive Officer)



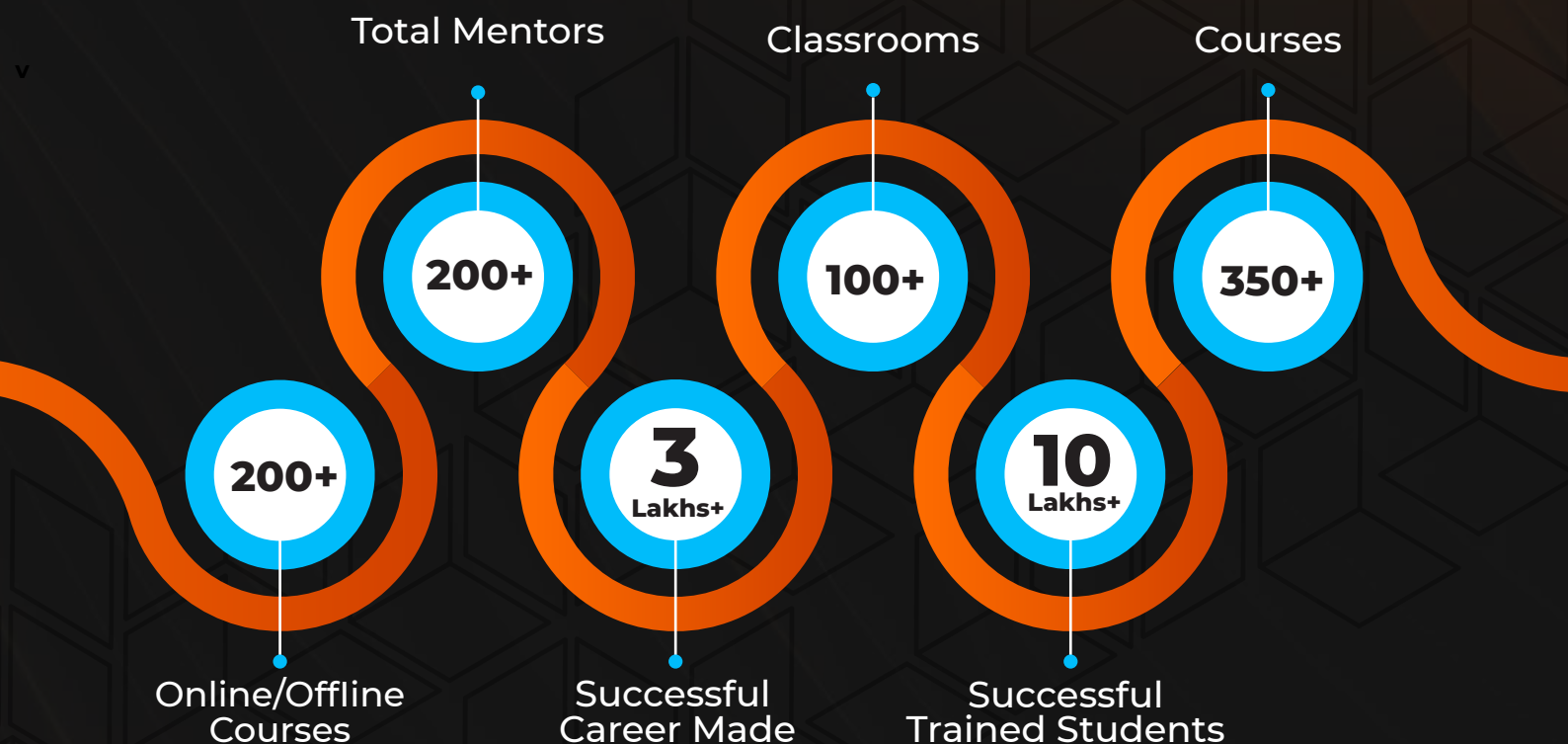
Nisha Mandot
(Chief Financial Officer)

ABOUT US

"SevenMentor" has improvised a tendency to cope with all International Standards within their courses, by engaging both ends of the industry for students, professionals, and individuals to corporate clients. The organization conjointly gives chance within their educational programs to meet the needs with projected desires of quick developing networking trade.

"SevenMentor" education techniques allow honing the abilities of the Networking experts from Industries which allow them to be equipped with the updated technology and standards of their operating environment. The group is a center for technical excellence with the kingdom of the art lab centers & a properly exquisite curriculum which gives them exposure in advance and enables them to be specific inside the certification enterprise.

AT A GLANCE, OUR STATISTICS SPEAK VOLUMES



COURSE HIGHLIGHTS



**ONLINE AND
CLASSROOM MODE**



LIVE PROJECTS



**PROFESSIONAL
CERTIFICATES**



**100% JOB CALLS
ASSISTANCE**



MOCK INTERVIEW



**MULTIPLE CAREER
OPPORTUNITIES**





RESUME
PRESENTATION



INTERVIEW
Q&A



PLACEMENT
TRAINING



ELIGIBILITY
CRITERIA



MOCK
INTERVIEWS



APTITUDE
TEST



SCHEDULING
INTERVIEWS



PLACEMENT AT
YOUR DREAM JOB

CAMPUS DRIVE

SECURE A POSITION IN LEADING COMPANIES



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ROUTE TO SUCCESS

CONFUSED WHAT TO DO IN CAREER..?



1

CHOOSE SEVENMENTOR



2

CAREER COUNSELING WITH EXPERTS



3

ONLINE/CLASSROOM EXPERT TRAINING



4

WHAT WILL YOU GET

- Industry-Based Projects
- Resume Preparation
- Soft Skills Development
- Mock Interview Sessions



5

CHARTING NEW PATHS: CAMPUS DRIVE



6

SECURE YOUR SPOT IN LEADING MNCS



7



TOOLS & TECHNOLOGIES COVERED



SQL



**DATA
WAREHOUSING**



**BIG DATA
PROCESSING**



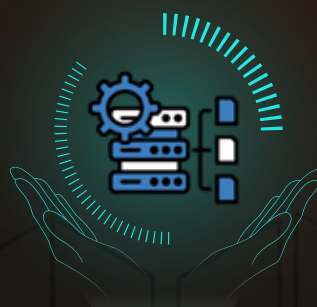
CLOUD PLATFORMS



DATA MODELING



**PROGRAMMING
LANGUAGES**



**DATA PIPELINE
ORCHESTRATION**



DATA GOVERNANCE



**DATABASE
MANAGEMENT**



SCHEMA DESIGN



SECURITY



AWS DATA SERVICES

DATA ENGINEERING COURSE CURRICULUM



SQL

✓ 1. Introduction

- What is SQL?
- Why do we need SQL?
- What is a DataBase Management System? Types of DBMS
- Execution Of SQL query
- Difference Between SQL and MYSQL
- Introduction to MySQL
- Installation of MySQL server
- Download sample database
- Load sample database to work.

✓ 2. Basic SQL Keywords

- Basic SELECT Statement
- Limit/Offset
- OrderBy
- Distinct
- Where
- Comparison Operators
- Null
- Logical Operators
- Aggregate Operators(Count, Max, Min, Avg,Sum)
- Group By
- Having
- Order Of Keywords
- Wildcard Operators

✓ 3. JOINS

- What are Joins?
- Inner Join
- Outer Join
- Left Join
- Right Join
- Self Join
- SubQueries/NestedQueries/Inner Queries
- Stored Procedures +Functions

✓ 4. DML/DDL

- DML:Insert
- DML:Update, Delete DDL:Create Table
- DDL:Alter:Add, Drop, Modify
- DDL:Drop Table, Truncate, Delete
- DCL:Data Control Language: GRANT,REVOKE

PYTHON

✓ Module 1: Introduction to Python

- **What is Python?**
 - History of Python
 - Features of Python
 - Applications of Python
- **Setting Up the Environment**
 - Installing Python
 - Using IDEs (PyCharm, VS Code, Jupyter Notebook)
 - Running Python Scripts
- **Basic Syntax**
 - Python Indentation
 - Comments and Docstrings
 - Variables and Data Types

✓ Module 2: Python Basics

- **Data Types and Variables**
 - Numbers (int, float, complex)
 - Strings (operations, methods, formatting)
 - Booleans
- **Input and Output**
 - input() function
 - print() function
 - Formatting output (f-strings, format())
- **Operators**
 - Arithmetic, Comparison, Logical, Assignment
 - Membership and Identity Operators

✓ Module 3: Control Flow

- **Conditional Statements**
 - if, elif, else
 - Nested Conditions
- **Loops**
 - for loops
 - while loops
 - Loop Control Statements (break, continue, pass)

✓ Module 4: Data Structures

- **Strings (operations, methods, formatting)**
 - String indexing and slicing
 - String methods (lower(), upper(), strip(), split(), join(), etc.)

String formatting (f-strings, format(), % formatting)

- **Lists**

Creating, Accessing, and Modifying Lists

List Methods

List Comprehensions

- **Tuples**

Immutable Nature

Tuple Operations

- **Sets**

Unique Elements

Set Operations

- **Dictionaries**

Key-Value Pairs

Dictionary Methods

Dictionary Comprehensions

✓ Module 5: Functions

- **Defining and Calling Functions**

Function Syntax

Parameters and Arguments

- **Scope and Lifetime of Variables**

Local vs Global Variables

- **Lambda Functions**

Anonymous Functions

- **Recursion**

Recursive Functions

Pros and Cons

✓ Module 6: File Handling

- **Working with Files**

Opening and Closing Files

Reading and Writing Files

- **File Modes**

r, w, a, b, +

- **Exception Handling**

try, except, finally

Custom Exceptions

✓ Module 7: Object-Oriented Programming (OOP)

- **Introduction to OOP**

Classes and Objects

Attributes and Methods

- **Inheritance**

Single and Multiple Inheritance

Method Overriding

- **Encapsulation and Abstraction**

Private and Protected Members

- **Polymorphism**

Method Overloading and Overriding

✓ Module 8: Modules and Packages

- **Importing Modules**

Standard Library Modules

Custom Modules

- **Creating Packages**

Structuring Packages

__init__.py

- **Python Package Index (PyPI)**

Installing Packages with pip

Publishing Packages

✓ Module 9: Advanced Topics

- **Iterators and Generators**

iter() and next()

Generator Functions

- **Decorators**

Function Decorators

Class Decorators

- **Context Managers**

with Statement

- **Regular Expressions**

re Module

Pattern Matching

✓ Module 10: Capstone Project

- **Project Planning**

Problem Statement

Requirements Gathering

- **Implementation**

Writing Code

Debugging and Testing

- **Presentation**

Demonstrating the Project

Code Review

✓ 1. Introduction to PL/SQL

- Informal introduction to PL/SQL
- Advantages of PL/SQL
- Datatypes in PL/SQL
- Program structure of PL/SQL
- Embedding SQL statements

✓ 2. Cursors in PL/SQL

- What is a cursor?
- How to create a cursor?
- How to use implicit cursors?
- How to create explicit cursors?
- Creation of for loop cursor
- Cursor parameters
- Using cursors in PL/SQL
- How to use the "for update" clause?
- What is a ref cursor?

✓ 3. Exception Handling in PL/SQL

- What is an Exception?
- SQLCODE vs SQLERRM
- PRAGMA EXCEPTION_INIT
- Types of exceptions
- Handling system-defined exceptions
- Handling user-defined exceptions

✓ 4. Stored Procedures in PL/SQL

- IN parameter
- OUT parameter
- IN OUT parameter
- Creating procedures in PL/SQL
- Working with procedure parameters
- How procedures return records?
- How to create procedures with cursors?
- What is PRAGMA autonomous transaction?

✓ 5. Functions in PL/SQL

- Importance of functions
- How to create functions?
- Difference between procedures and functions
- How to use inline functions?

✓ 6. Packages in PL/SQL

- What is a Package?
- Package Specification vs Package Body
- Reasons to use Packages
- How to instantiate a Package?
- Package state and initialization

✓ 7. Collections in PL/SQL

- What is a collection?
- Using arrays
- Using nested tables
- Types of collection methods
- How to use index-by-value?

AWS DATA ENGINEERING TOPICS

✓ 1. Introduction to Data Engineering & Data Warehouse

- Why Cloud Computing?
- Use Cases and Applications
- Data Engineer vs Data Scientist
- Data Lakes
- Data Engineering Problems
- Tools of a Data Engineer
- Scheduling Tools
- Different Cloud Providers
- What is Data Engineering?
- Working with Different Databases & Processing Tasks
- What is a Data Warehouse?
- Different Cloud Services

✓ 2. AWS Data Engineering Tools

- **Data Storage Tools**
Amazon S3
- **Data Warehouse Tools**
Amazon Redshift
- **Data Integration Tools**
AWS Glue
- **Data Visualization Tools**
Amazon QuickSight

✓ 3. AWS Data Ingestion Tools

- AWS Snowball
- Amazon Kinesis Firehose
- AWS Storage Gateway

- MongoDB Advanced Indexing
- MongoDB Indexing Limitations
- Aggregation Introduction

MONGODB

✓ 1. Introduction to MongoDB

- What is MongoDB?
- Installation and Configuration
- MongoDB Tools, Collections, and Documents
- NoSQL Architecture with MongoDB
- Advantages of MongoDB

✓ 2. CRUD Operations in MongoDB

- Introduction to CRUD
- Introduction to the MongoDB API
- Creating a Database, Collection, and Documents

✓ 3. Data Modeling & Schema Design

- MongoDB Regular Expressions
- MongoDB Capped Collections
- MongoDB Database References
- Model Tree Structures
- MongoDB Analyzing Queries
- MongoDB Map Reduce
- MongoDB Text Search
- MongoDB Atomic Operations

✓ 4. MongoDB Administration

- MongoDB GridFS
- Trident Spout
- Working with Replica Sets
- MongoDB Sharding
- MongoDB Deployment and Cluster Setup

✓ 5. MongoDB Indexing & Aggregation

- Indexing and Aggregation
- Indexing, Query Profiling, and the Query Optimizer
- GeoSpatial Indexes
- Index Types and Properties

APACHE SPARK

✓ 1. Hadoop Overview

- Introduction to Hadoop
- Overview of MapReduce
- Big Data Concepts and Data Types
- Streaming Data and Different Tools Utilization
- HDFS and Basic Hadoop Commands
- Need for Hadoop Technology
- Hadoop Cluster and Racks in Detail

✓ 2. Scala Programming

- Scala Overview and Environment Setup
- Control Structures and Functions
- OOP Concepts in Scala
- Closures and Collections
- Exception Handling in Scala

✓ 3. Apache Spark Installation

- Installing Scala IDE with Spark
- Downloading and Setting up Spark Release
- Testing with Different OS
- Working with Eclipse

✓ 4. Working with Apache Spark

- Introduction to Spark DataFrame
- Creating Datasets and Basic Operations
- Working with Different File Formats
- Applying Schema to DataFrame
- RDD and its Transformations
- Dataset vs DataFrame Performance

✓ 5. Apache Spark SQL

- Examples with Spark SQL and RDDs
- Spark Built-in Functions and UDFs
- Creating Partitioned Tables with Spark

- Query Push Down to MySQL Database
- Running Spark Jobs in Yarn/Cluster Mode

✓ 6. Spark Streaming

- Introduction to Spark Streaming
- Twitter Data Analysis Use Case
- Working with Data Streams
- Network Stream Example

✓ 7. Apache Kafka with Spark

- Fundamentals of Kafka and Workflow
- Basic Kafka Operations
- Creating Topics, Partitions, and Brokers
- Consumer Group, Leaders, and Followers
- Working with Producer and Consumer Examples

✓ 8. Spark MLlib (Machine Learning Library)

- Classification Algorithms
- Clustering Algorithms

✓ 9. Real-Time Case Studies

- Working on Different Datasets
- End-to-End Data Engineering Project

MASTER IN DATA ENGINEERING



YOUR DREAM
JOB IS AHEAD

COURSE
EXAM

CASE
STUDY

ADVANCE
SKILLS

INDUSTRY
EXPERT TRAINING

PROFILE BUILDING

ENROLL IN
SEVENMENTOR

Finance

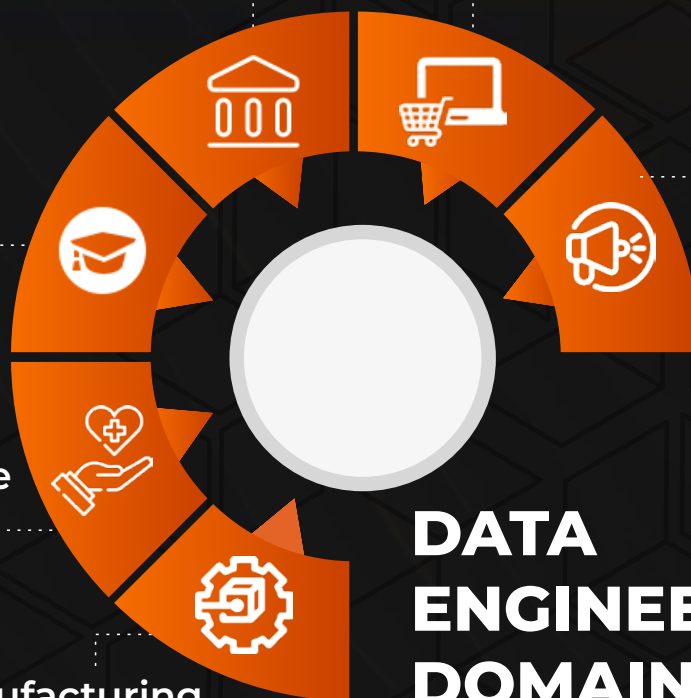
Retail & E-commerce

Education

Marketing &
Advertising

Healthcare

Manufacturing



DATA ENGINEERING DOMAIN KNOWLEDGE

YOUR FUTURE AS A DATA ENGINEERING



SALARY RANGE

3 - 6 LPA

0 Yrs

10 - 15 LPA

4 Yrs

Upto 24 LPA

8 Yrs

2 Yrs

6 - 10 LPA

6 Yrs

15 - 24 LPA

JOB METER

Database Developer

1,22,911 Jobs

DataOps Engineer

1,10,239 Jobs

Big Data Engineer

2,31,300 Jobs

Cloud Data Engineer

2,12,462 Jobs

Data Engineering
Manager

71,499 Jobs

Chief Data Officer
(CDO)

2,18,644 Jobs

Data Warehouse Engineer

59,914 Jobs

Data Platform Engineer

80,039 Jobs

Data Infrastructure
Engineer

1,12,399 Jobs

Data Scientist

40,953 Job

JOB ROLES FOR DATA ENGINEERING

DATA ENGINEER

BIG DATA ENGINEER

CLOUD DATA
ENGINEER

MACHINE LEARNING
ENGINEER

DATA ARCHITECT

ETL DEVELOPER

DATABASE
ADMINISTRATOR

AI DATA ENGINEER

INDUSTRY BASED PROJECT

Hands-on industry-based project by SevenMentor & Training to enhance practical skills and real-world expertise



**DATA PIPELINE FOR SALES
DATA PROCESSING**



**REAL-TIME STOCK PRICE
DATA INGESTION**



CUSTOMER DATA WAREHOUSE



**LOG DATA PROCESSING
SYSTEM**



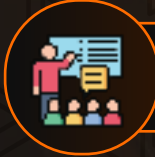
**CLOUD-BASED ETL PIPELINE FOR
E-COMMERCE DATA**

WHY CHOOSE SEVENMENTOR

Empowering Careers with Industry-Ready Skills



Flexible EMI Plans



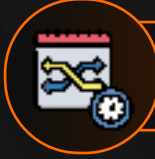
Industry Experienced Trainers



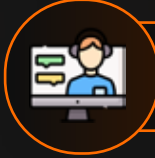
Live Projects With Hands-on Experience



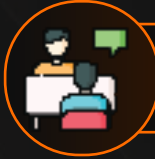
Real World Topics



Flexible Scheduling



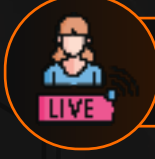
Online, Classroom & Hybrid Batches



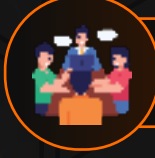
1:1 Mentorship when required



Affordable Programs Tailored to Your Needs



Class Recordings for Missed Classes



Workshops & Seminars with Industry Experts



Adaptive LMS



Free Wifi Facilities



Be Different With Master Certificate



Placement Drives



Interview Calls Assistance & Mock Sessions



Weekday and Weekend Batches



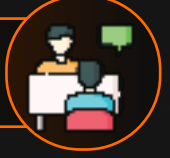
Ongoing Career Support



Latest Market Tech & Practical Training



1 Year FREE Repeat Option



Unlimited Interview Calls

TESTIMONIALS OF OUR STUDENTS



hello, I got a chance to learn "AI with Python" as part of corporate training with placement support also . Apart from his knowledge, the effort and commitment that he puts while teaching is really commendable. I started the course with very little knowledge about machine learning and AI and at the end of the course I am very satisfied with the amount of knowledge I have gained.

Akash Trimbake



So I recently completed various courses from seven mentors. Before starting my masters in data science and big data analytics journey I enrolled myself in this educational institution in which I took python, sql, machine learning and AI. I graduated in computer science so I had knowledge of python and sql. This course encouraged me to brush up my skills and I also got more into ML and AI. After starting my masters I was ahead of almost every student because I had proper knowledge of it which helped me to understand more concepts.

Piyush Borhade



1. Seven Mentor's SQL course gave me the confidence to handle databases on my own. The instructors were always ready to help.
2. I really appreciated the practical approach in Seven Mentor's Data Science course. It made learning much easier.
3. The Django course at Seven Mentor was engaging and thorough. I now have the skills to build my own web apps.
4. Seven Mentor's Power BI training was very well-organized and easy to follow. It's been very helpful for my work.

Curio Cove



It was good experience seven mentor Python classes . Trainer were very good and have very good knowledge of Performance. The course contents was for basic or medium level of proficiency. Good theory and practical sessions. The main advantage is that Seven Mentor will provide placement drives daily. All staffs will clear our doubts and they will motivate us to reach our goal. In Seven Mentor, Opportunity of getting placed is high. I have a gap after Engineering and still got more opportunity for placement and Finally I got placed because of seven mentor with good package. Finally I would like to thanks Seven Mentor training and placement Institute

Nitin Pondhe



I recently completed the Business analyst, and it was an amazing experience! The trainers explained complex concepts in a simple and engaging way, making it easy to understand even for beginners like me. The hands-on labs and real-world case studies helped me gain practical skills, and the support from instructors was excellent.

Saurabh Jadhav



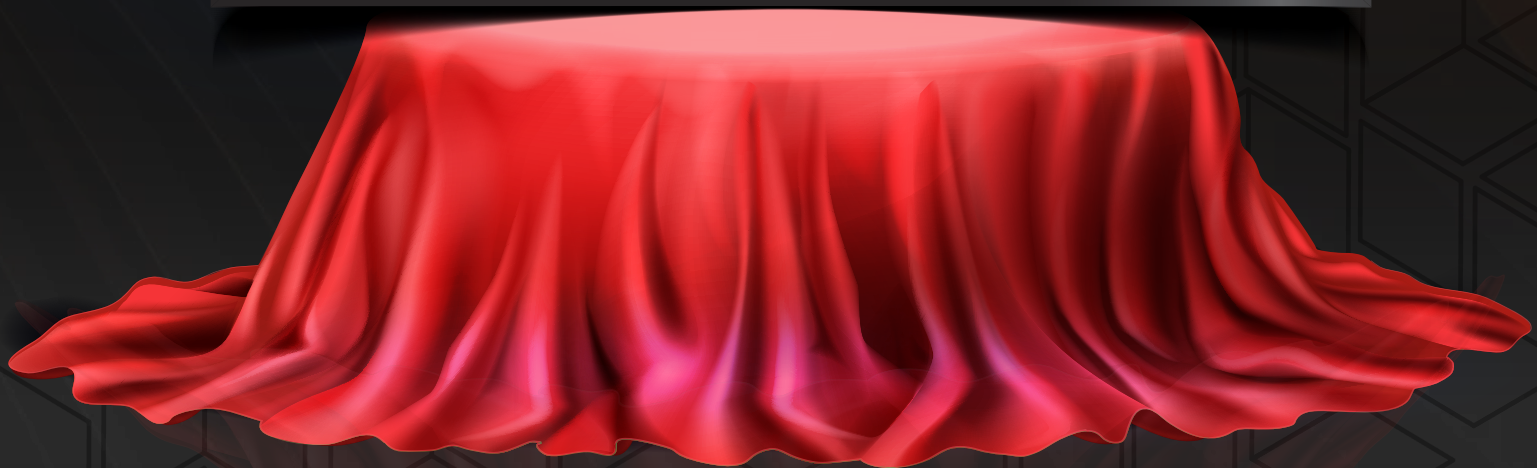
I have enrolled in data analytics with seven mentors. Sevenmentor has highly talented and experienced Python trainers. The instructors are incredibly supportive, providing clear explanations and personalized assistance whenever needed. The Python language details are well elaborated, and the classes are well designed. Thank you for the support.

Hemal Sawdekar

GLOBAL CERTIFICATION FROM SEVENMENTOR



SevenMentor provides globally recognized certification programs designed to help individuals enhance their knowledge, skills, and career prospects. Our certifications validate the competence and expertise in various fields, including IT, business management, digital marketing, and more. Achieving a SevenMentor certification offers a competitive edge and ensures your capability in your chosen domain.



WHY SHOULD YOU JOIN THIS PROGRAM?



Our 100% Job Assurance Program guarantees that you will secure a job as a data scientist. With access to over 500 leading partner companies, we ensure you have ample opportunities to land your ideal role.

The program is structured to provide comprehensive training, equipping you with the technical skills, real-world experience, and industry insights needed to excel in the field of data science. Additionally, you'll receive ongoing support, including job placement assistance and career coaching, to help you navigate the hiring process. With our program, you're fully prepared to succeed in the competitive job market and launch your data science career.



PLACEMENT TEAM

Our placement staff is committed to your IT career success. With strong industry connections, market insights, and specialized assistance, we prepare you for a competitive job market and assist you in achieving your objectives. We offer individual resume development, mock interviews, and hands-on career coaching to help you stand out to top recruiters. Our dedication extends beyond placements; we provide you with the confidence and skills you need to succeed in your chosen field. At SevenMentor, your success is our priority!

CRM TEAM

At SevenMentor, our CRM team is committed to ensuring that every student has a positive and enjoyable experience. We attentively listen to your issues, answer your inquiries quickly, and provide personalized service that is suited to your specific requirements. Our team takes a student-first approach, ensuring that your needs are handled with professionalism, kindness, and attention to detail. Your satisfaction is our first priority, and we commit ourselves to supporting you every step of the way.

GET INFO OF OUR OTHER DOMAINS



020 7117 2515

Networking Department



020 7117 3035

Development Department



020 7117 1500

Data Science
And Ai Department



020 7117 1747

Softskills & Language
Department



020 7117 3116

SAP Department



020 7117 1757

Interior Design & Fashion
Department



020 7117 1727

HR Department



020 4855 6661

Placement Department

LOCATE US:



SHIVAJI NAGAR HEAD BRANCH

09/A Wing, Shreenath Plaza, Dnyaneshwar
Paduka Chowk, F.C Road, Shivaji Nagar, Pune,
Maharashtra - 411005

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Pimpri Chinchwad Branch

Office number 38 wing A and B, 3rd Floor,
KUNAL PLAZA off Mumbai Pune Highway
Chinchwad, Maharashtra 411019

[GET THE DIRECTION](#)



Hadapsar Branch

Manisha Blitz, Office 34-35, 3rd floor, Near Shankarmath, Pune Solapur Hwy, Hadapsar, Pune - 411013

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registration@sevenmentor.com