

TeqCertify

Elevate Your Data Journey



Unlock Your Future with **DATA ENGINEERING**

Transform Your Career with In-Demand Skills

www.teqcertify.com



About Our Program

At TeqCertify , we provide a comprehensive Data Engineering is the process of developing infrastructure and tools to facilitate the collection, storage, transformation, and movement of data within an organization. It involves building scalable systems and pipelines that enable the efficient processing and integration of data from various sources, making it ready for analysis, reporting, and decision-making. Data engineers work with technologies like databases, big data frameworks, and cloud platforms to ensure that data is accessible, reliable, and secure.

Why Choose DATA ENGINEERING ?

Why Should You Invest in the Course?

20%

Market growth
from 2020 to 2030

29,000+

Job Vacancies
in India

8 LPA

Data Engineers
fresher's average
salary

80%

Job Satisfaction

40%

India's share in the
global market



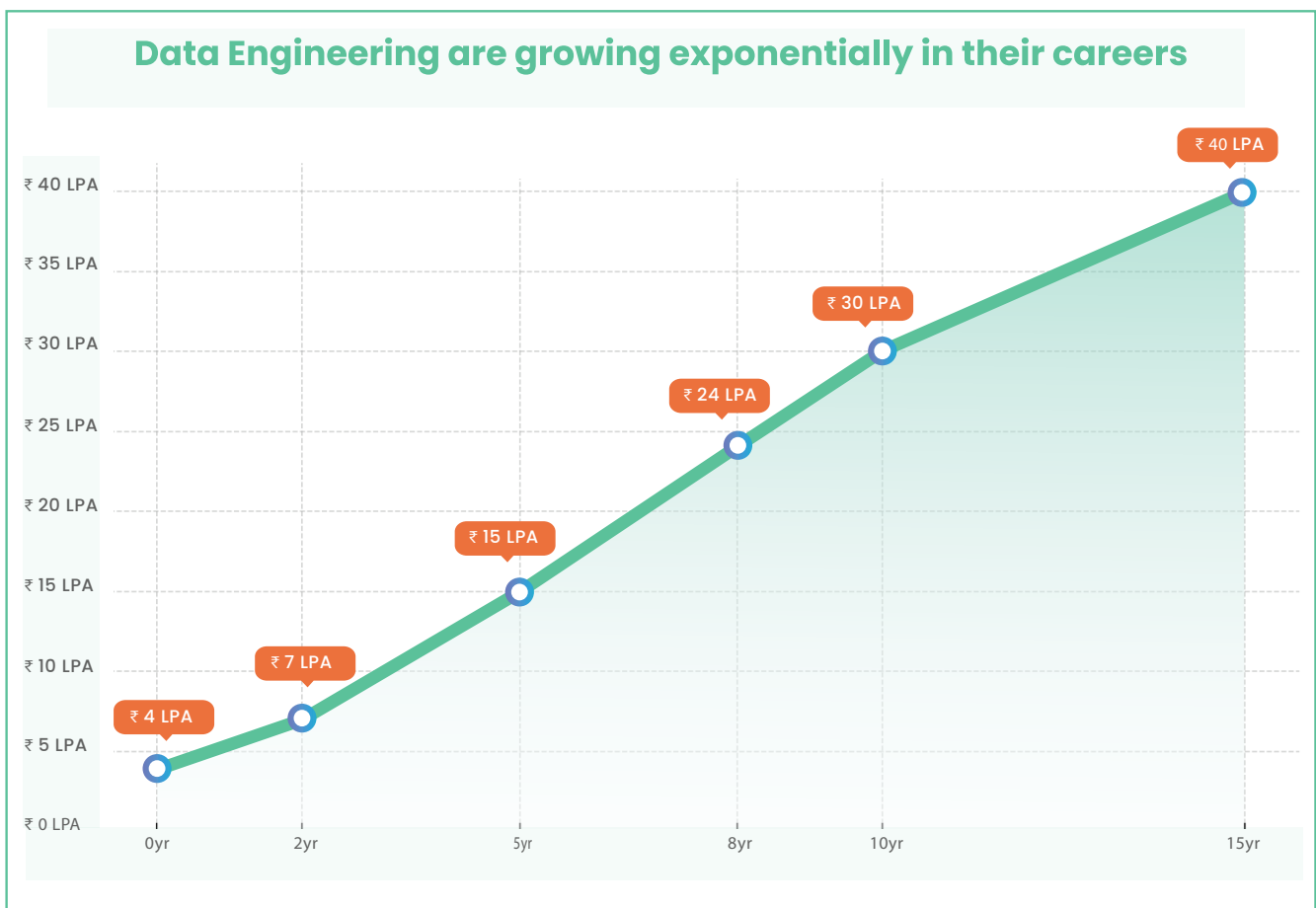
Data Engineering is the backbone of the data-driven world, enabling organizations to make informed decisions. Here's why it's a great choice:

- **High Demand:** Critical role across industries like tech, finance, healthcare, and retail.
- **Lucrative Careers:** Competitive salaries and growth opportunities.
- **Future-Proof Skills:** Expertise in big data, cloud platforms, and automation.
- **Impactful Work:** Transform raw data into valuable insights for businesses.

WHY DATA ENGINEERING Industry Outlook?

The data engineering industry is growing due to increased data, reliance on data-driven decisions, and the rise of cloud computing and big data technologies. Demand for skilled data engineers is rising as businesses embrace digital transformation, AI, and machine learning.

Size of Industry	Job Openings	Growth in openings
USD 108.7 Bn+	7,000+	18% YoY



HOW IT WORKS

Get Upskilled

Curriculum that matches industry trends

- ✓ Material designed by top industry experts from top companies
- ✓ Learn in-demand skills to make strong foundational career
- ✓ Learn from the basics to advanced. Become a pro



Our mentors are the industry's top 1%

- ✓ Learn, ask question, discuss problems with the best experts
- ✓ Meet your mentors in live sessions, address every doubt directly
- ✓ Dedicated mentors will help you to solve every problem



Experience different ways of learning

- ✓ Have a structured learning plan you can fit in your schedule
- ✓ Study through self paced content through the week and engage with mentors in live classes
- ✓ Solve real problems with industry leaders in live sessions



HOW IT WORKS

Get Placed

Make a resume that stands out

- ✓ Learn how to give the best first impression with your resume
- ✓ Get guidance on how make a resume that fits every job description
- ✓ Learn to highlight your career experience, skills, and knowledge in the best way possible



Practice with mock interviews

- ✓ Learn to approach the most frequently answered questions
- ✓ Get personalised actionable feedback from experts
- ✓ Practice and build your interview confidence

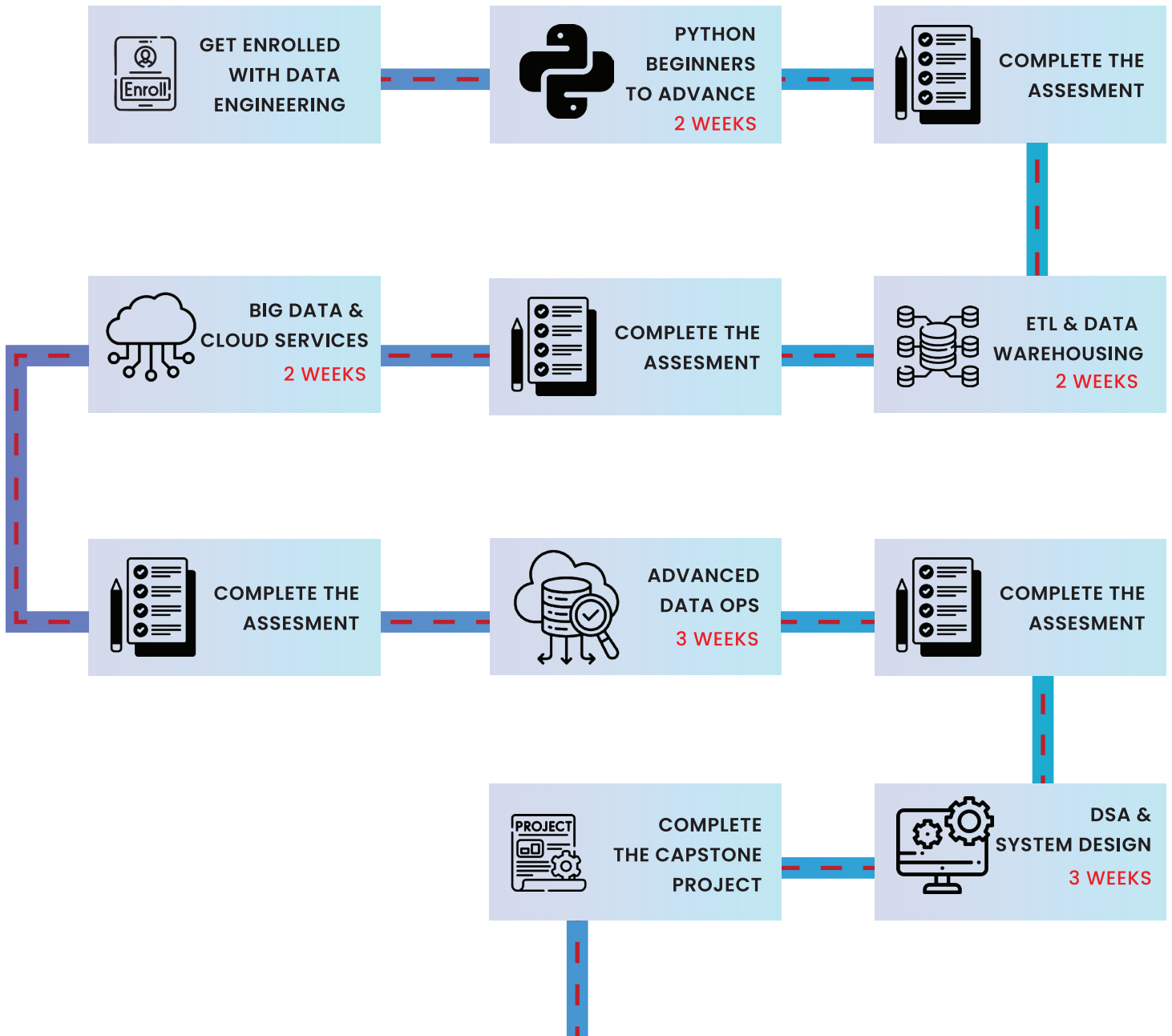


Now, it's time to get your dream job!

- ✓ Extensive job support from shortlisting to interview preparation
- ✓ Get access to opportunities in over 50+ partner companies
- ✓ Work on hands-on projects that will expand your portfolio



JOURNEY WITH TeqCertify



Get Certificate By TeqCertify

Mastering a skill is only half the journey; understanding how to apply it in scenarios is what sets you apart. At TeqCertify, we go beyond teaching—helping you bridge the gap between learning and practical application in the industry.

PLACEMENTS

Path to your Dream Job



Build your portfolio

Build your portfolio with real life case studies and projects to showcase your skills



Create an resume that stands out

Build a resume with which showcases your skills to recruiters. Get shortlisted with ease and stand out from the crowd.



Ace your interview

Prepare for interviews with Mock sessions with hiring experts from across the industries



Get connected with your dream companies

Connect with your dream companies with ease. Skip the queue of generic job portals and stand out with our career partners who believe in the quality of TeqCertify's graduates



Interview tips

Get personalised tips for every interview opportunity. Be the best prepared for every opportunity



Get your dream job

Fast track your career progression and get your dream job



CASE STUDIES

E-Commerce: Data Pipeline for Personalization

The team built a Kafka pipeline to stream user behavior, enabling ML models for predictions and recommendations.



Retail: Supply Chain Optimization

The team built a pipeline to aggregate sales, weather, and event data, delivering real-time insights via a dashboard for supply chain managers.

Banking: Fraud Detection System

The team built a Kafka pipeline for streaming transactions and instant alerts.



Media: Video Streaming Platform Analytics

The team built a pipeline to analyze user interactions and optimize recommendations.



PROGRAM HIGHLIGHTS

Hands-On Learning

Apply your skills through live projects and real-world case studies.



Expert Mentors

Learn from industry experts with years of experience.



Job-Ready Skills

Our curriculum is designed to make you industry-ready with the tools and knowledge that are most sought after by employers.



Capstone Project

A chance to solve real business problems with your newly acquired skills.



PLACEMENT PREPARATION

Personal Development

Landing your dream job requires more than just mastering skills. We help you go beyond, crafting a professional profile that stands out to recruiters and makes you an ideal candidate.

Resume Crafting

Create a resume that stands out in the crowd. Master the art of tailoring your resume to each job description, increasing your chances of getting shortlisted effortlessly.

Mock Interviews

Practice for your big day with experts and mentors. Get the feedback to be ready to perform when you get the chance.



MODULE - 1

CORE DATA FOUNDATIONS



DURATION : 2 WEEKS

Build a strong foundation in Python and SQL to tackle data manipulation, complex algorithms, and database design. From relational databases to NoSQL, this module equips you with essential data engineering skills through hands-on coding and problem-solving.

TOPICS COVERED:

1. PYTHON

- Flowcharts, Data Types, Operations
- Conditional Statements & Loops
- Strings
- In-build Data Structures – List, Tuples, Dictionary, Set, Matrix Algebra, Number Systems
- Python Refresher
- Basics of Time & Space Complexity
- OOPS
- Functional Programming
- Exception Handling & Modules



MODULE - 1

CORE DATA FOUNDATIONS



DURATION : 2 WEEKS

2. SQL

- Introduction to Databases & BigQuery Setup
- Extracting data using SQL
- Functions, Filtering & Subqueries
- Joins
- GROUP BY & Aggregation
- Window Functions
- Date and Time Functions & CTES
- Indexes & Partitioning
- Introduction to NoSQL: MongoDB



MODULE - 2

ETL & DATA WAREHOUSING



DURATION : 2 WEEKS

Learn to design and manage ETL pipelines and data warehouses using tools like Apache NiFi, AWS Glue, and cloud platforms. Develop scalable, efficient systems with real-world case studies, focusing on key architectures like star and snowflake schemas.

TOPICS COVERED:

1. ETL PIPELINES

- ETL concepts: Extract, Transform, Load
- Data ingestion and transformation
- Tools: Apache NiFi, AWS Glue

2. DATA WAREHOUSING

- Star schema
- Snowflake schema
- Introduction to cloud data warehouses: Redshift, BigQuery
- OLAP vs OLTP



MODULE - 3

BIG DATA & CLOUD SERVICES



DURATION : 2 WEEKS

Explore Big Data technologies like Hadoop and Spark to process large datasets. Learn distributed computing, real-time data processing with Apache Kafka, and advanced cloud services like AWS Glue, preparing you for complex data pipelines.

TOPICS COVERED:

1. BIG DATA FRAMEWORKS

(1) Introduction to Hadoop

- HDFS (Hadoop Distributed File System)
- YARN (Yet Another Resource Negotiator)
- MapReduce

(2) Apache Spark

- Spark core concepts: RDDs, DataFrames, and SparkSQL
- Parallel processing and distributed computing with Spark
- Spark for data transformation, aggregation, and analytics



MODULE - 3

BIG DATA & CLOUD SERVICES



DURATION : 2 WEEKS

(3) Distributed Databases

- CAP Theorem, consistency, availability, partition tolerance
- Cassandra, HBase: Columnar data stores for large- scale datasets

(4) Real-World Big Data Pipeline

- Design and implement a basic pipeline using Hadoop or Spark
- Data storage, transformations, and querying

2. DATA STREAMING

- Introduction to streaming data
- Apache Kafka: Basics
- Stream processing with Spark Streaming

3. ADVANCED CLOUD SERVICES

- AWS Glue: Managed ETL
- Cloud data solutions



MODULE - 4

ADVANCED DATA OPS



DURATION : 3 WEEKS

Master advanced data engineering with fault-tolerant system designs, CI/CD pipelines, and containerization using Jenkins, Docker, and Kubernetes. Learn to secure data with encryption and role-based access control.

TOPICS COVERED:

1. ADVANCED-DATA ENGINEERING

- High-availability and fault-tolerant designs
- Scalability strategies

2. DEVOPS FOR DATA ENGINEERING

- CI/CD pipelines, Jenkins, Gitlab
- Infrastructure as Code: Terraform
- Containerization: Docker, Kubernetes

3. DATA SECURITY

- Data encryption
- Authentication and RBAC



MODULE - 5

DSA & SYSTEM DESIGN



DURATION : 3 WEEKS

Strengthen your skills in Data Structures, Algorithms, and System Design. Learn to design scalable, fault-tolerant systems and solve real-world data challenges using event-driven architectures and efficient processing pipelines.

TOPICS COVERED:

1. DSA

- Arrays, hashmaps
- Stacks, queues
- Trees (binary trees, heaps)
- Graphs, sorting (QuickSort, MergeSort)
- Time and space complexity

2. SYSTEM DESIGN

Scalable and fault-tolerant systems

- Data warehousing design
- Event-driven architecture





THANKYOU

Contact Us



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