



DATA ENGINEERING BROCHURE

Train to be a skilled Data Engineer



PROGRAM OVERVIEW

➔ **Saturday Live Classes
for 2 months**

➔ **1-month internship**

➔ **LinkedIn
Optimization**

➔ **CV Review**

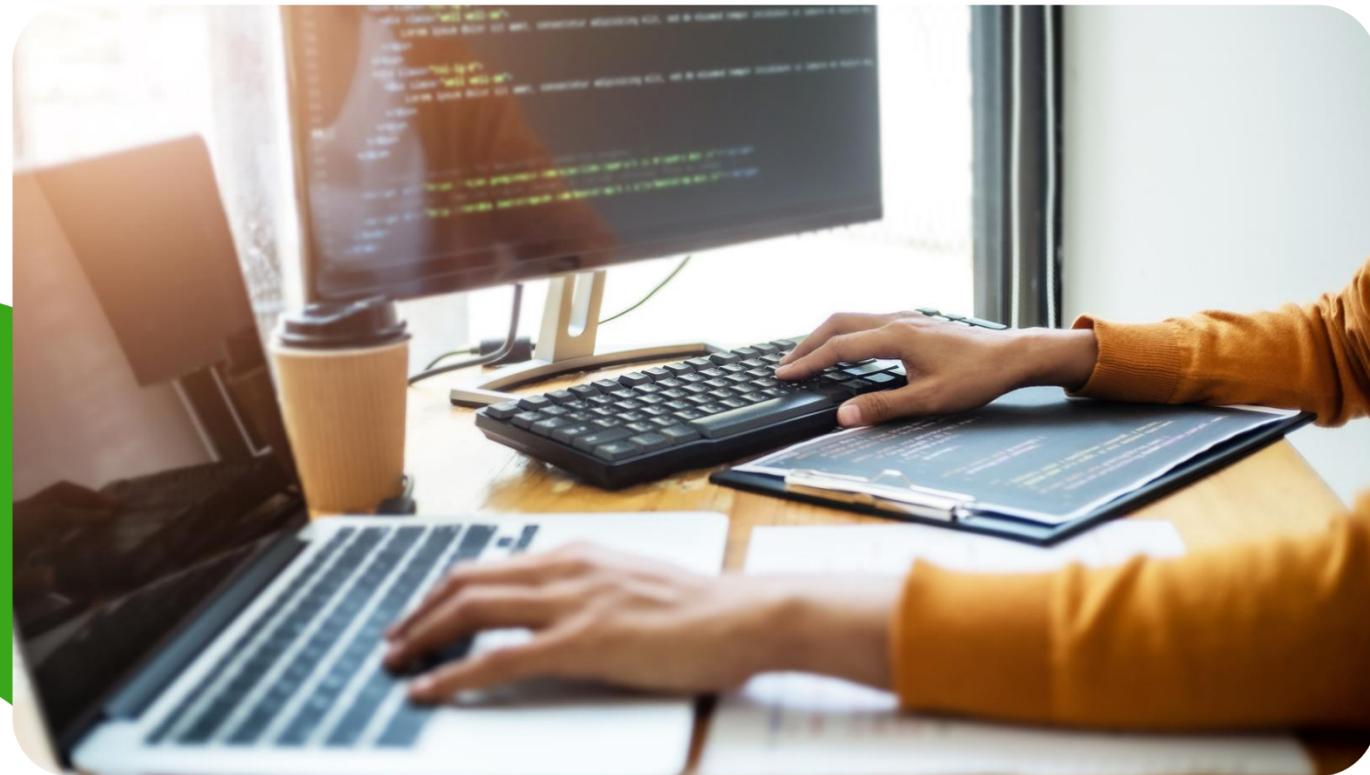
➔ **Post-Training
Support**

➔ **Mentorship
Sessions**

➔ **Career pathway
guidance**



WHY DATA ENGINEERING?



Data Engineering gives you the ability to transform raw, fragmented data into reliable, scalable systems that power analytics, AI, and business decision-making. In today's economy, organizations no longer just collect data; they need robust data infrastructures that can ingest, process, and deliver high-quality data in real time. This shift has made Data Engineering one of the most critical and high-leverage capabilities in modern organizations.

Learning Data Engineering equips you with the technical mastery to design, build, and maintain data pipelines and architectures. You move beyond basic data handling to engineering systems that integrate multiple data sources, ensure data quality, and enable seamless access for analytics and machine learning. By bridging the gap between raw data and usable insights, you turn complex data flows into dependable foundations for innovation.

Beyond strong career opportunities, Data Engineering empowers you to solve data-driven challenges at scale. It is a future-ready discipline that keeps you at the forefront of digital transformation, giving you the power not just to support data initiatives, but to architect the backbone of modern, intelligent organizations.

REQUIREMENTS

01 

Duration
2 months

02 

Internship
4 Weeks

03 

Skill Level
Beginner to
Master

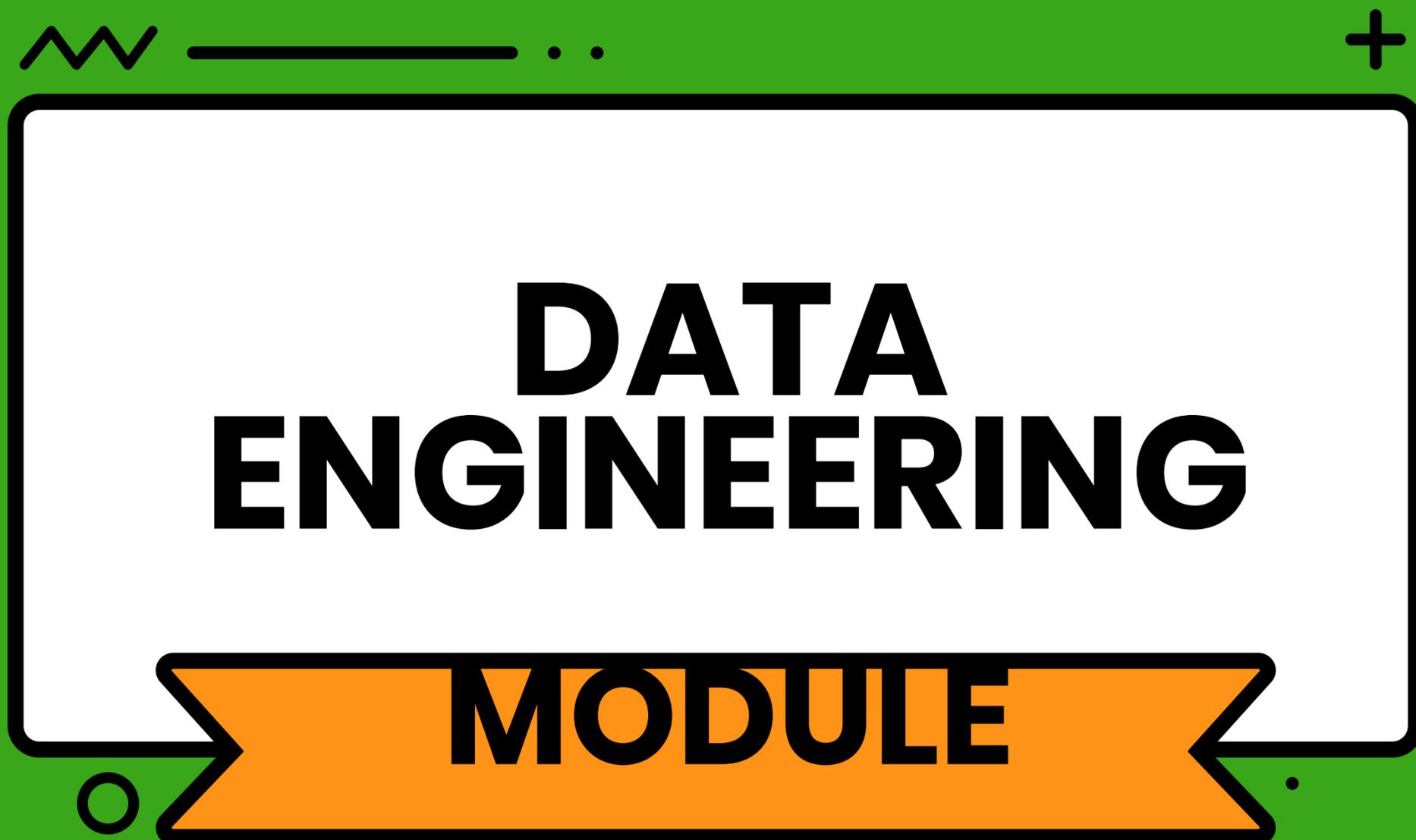


Your career will only grow to the level of the skills, discipline, and mindset you commit to building.



OUR CURRICULUM



A large white rectangular box with a thick black border, centered on a green background. The box contains the text 'DATA ENGINEERING' in large, bold, black, sans-serif capital letters. Below the text is an orange banner with a black border and a ribbon-like shape, containing the word 'MODULE' in bold, black, sans-serif capital letters. The box is surrounded by various decorative icons: a wavy line, a horizontal line with three dots, and a plus sign at the top; a square on the right; and three 'x' marks on both the left and right sides. A vertical line is on the left side, and a small circle is at the bottom left corner of the box.

DATA ENGINEERING

MODULE

DATA ENGINEERING

Module 1

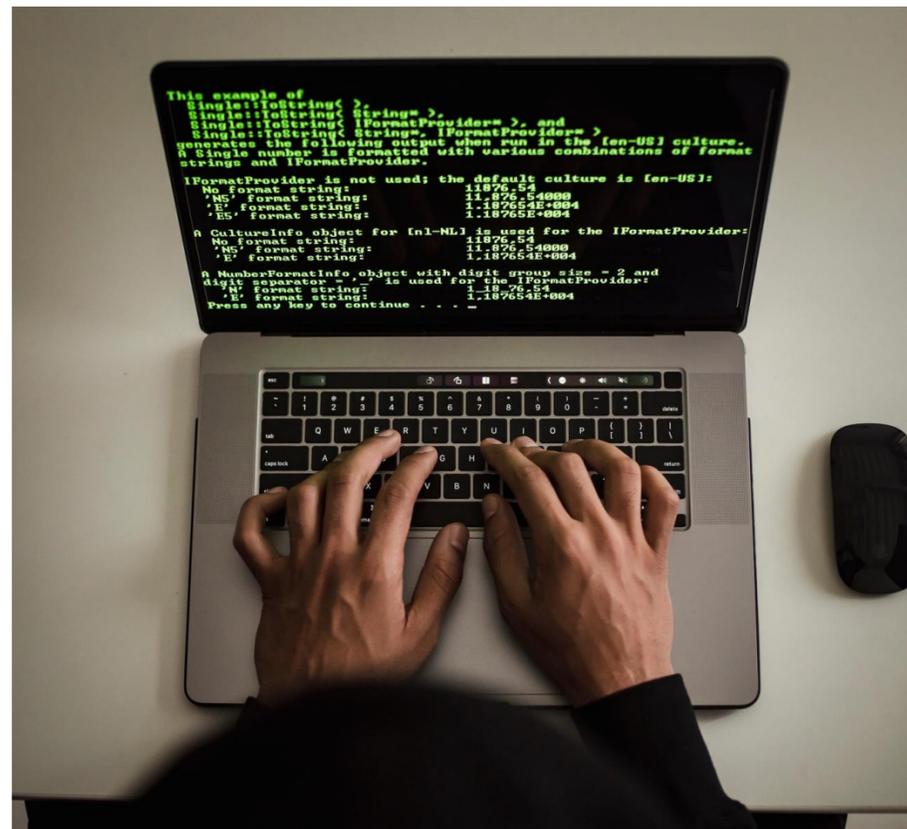
INTRODUCTION TO DATA ENGINEERING

- Who is a Data Engineer?
- Data Engineering vs Data Science vs Machine Learning
- Modern Data Stack
- Data Engineering Career Paths
- Key Tools & Technologies
- Data Lifecycle & Data Architecture
- Databases vs Data Warehouses vs Data Lakes

Hands-On

- Set up environment: Python, VS Code, Git, GitHub
- Explore sample datasets

Create your first data pipeline workflow manually



DATA ENGINEERING

Module 2

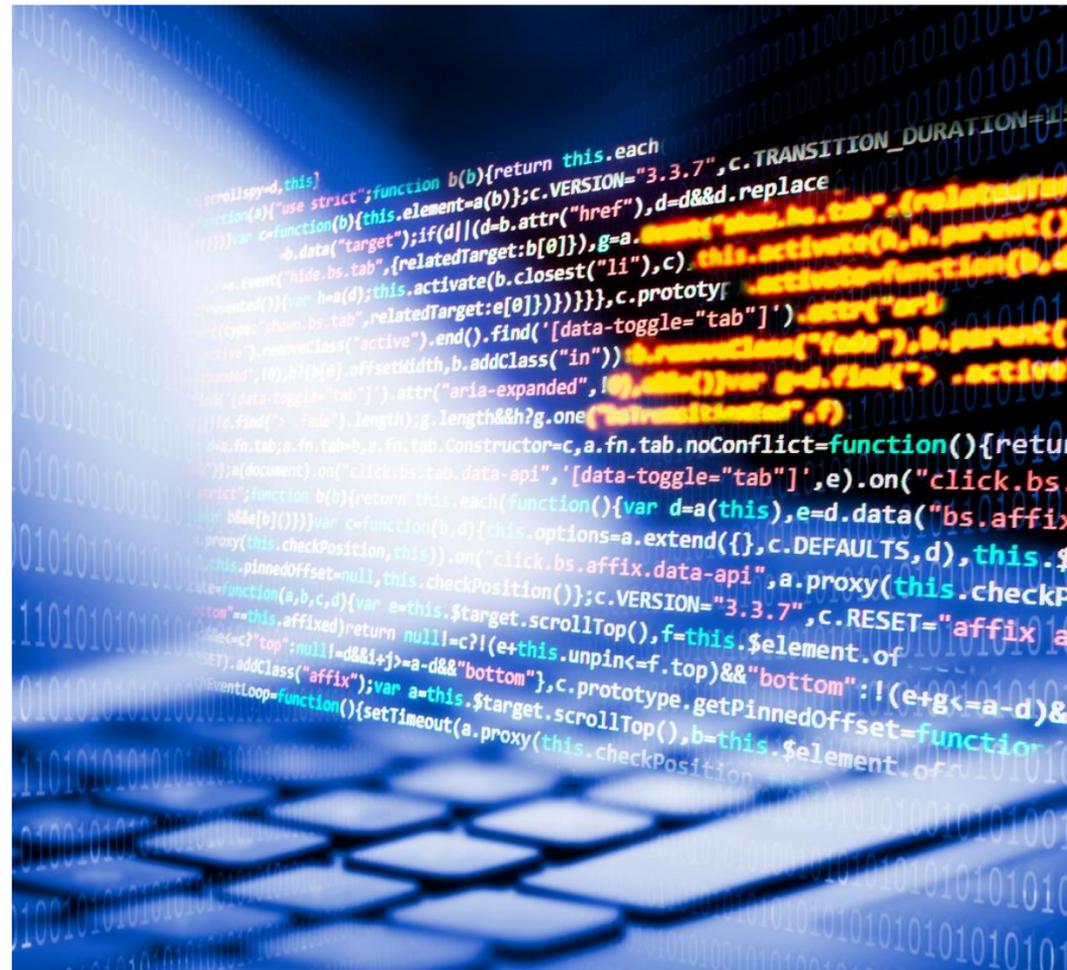
PROGRAMMING FOR DATA ENGINEERS — PYTHON

- Python basics for data engineering
- Working with files: CSV, JSON, XML, Parquet
- Error handling, logging, virtual environments
- Data manipulation with Pandas
- Introduction to OOP
- Writing production-level Python scripts
- Understanding APIs (REST, SOAP)

Hands-On

- Build ETL scripts using Python
- Consume public APIs and save data
- Clean large datasets with Pandas

Create scheduled scripts



DATA ENGINEERING

Module 3

DATA BASES & SQL

- relational Database Concepts
- SQL (Beginner to Advanced)
- Joins, Window Functions, CTEs, Views
- Indexing & Query Optimization
- PostgreSQL / MySQL
- NoSQL Databases: MongoDB, Cassandra
- Data Modeling for OLTP & OLAP
- Star & Snowflake Schema

Hands-On

- Design a data model for an E-commerce system
- Optimize slow SQL queries
- Create OLAP star schema
- Build a mini data warehouse in PostgreSQL



DATA ENGINEERING

Module 4

DATA WAREHOUSING & ETL/ELT

- Data Warehouse Architecture
- ETL vs ELT frameworks
- Dimensional Modeling
- Slowly Changing Dimensions
- Fact & Dimension Tables
- Partitioning & Clustering
- Cloud Data Warehouse: Snowflake / BigQuery / Redshift

Hands-On

- Build a full ETL pipeline using Python
- Load data into a cloud data warehouse
- Build SCD Type 1 & 2 transformations



DATA ENGINEERING

Module 5

CLOUD COMPUTING FOR DATA ENGINEERING

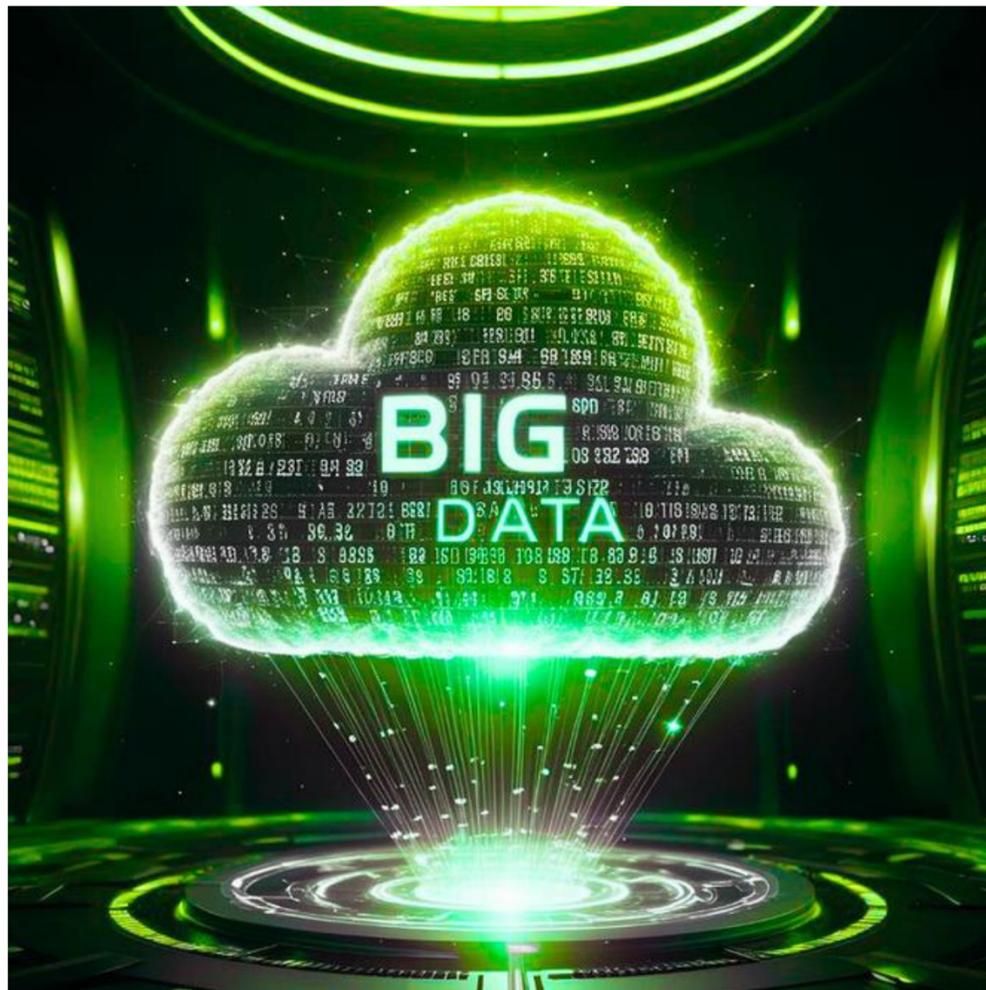
- AWS IAM
- S3 (object storage)
- EC2
- RDS
- Lambda Functions
- Glue
- Athena
- Cloud security basics

Hands-On

- Build a pipeline that extracts data → stores on S3 → loads to Redshift
- Trigger ETL with AWS Lambda
- Create automated Glue jobs



DATA ENGINEERING



Module 6

BIG DATA ENGINEERING

- Introduction to Big Data
- Hadoop Ecosystem
- HDFS
- MapReduce
- Spark Architecture
- PySpark
- Spark SQL
- Spark Optimization

Hands-On

- Process 5–10GB datasets with Spark
- Build and optimize Spark ETL pipelines

Run Spark jobs on AWS EMR

Industries That Employ Data Engineering

Technology and Software Companies

Finance and Banking

Healthcare and Pharmaceuticals

E-commerce and Retail

Telecommunications

Manufacturing and Production

Energy and Utilities

Government and Public Sector

Education and EdTech

Media & Entertainment



WHY TRAIN WITH US?



**Practical, Job
Ready Training**



**Industry-
Standard Tools
& Technologies**



**Expert
Instructors With
Real Experience**



**Personalized
Mentorship &
Support**



**Flexible and
Beginner-Friendly**



**Certification
That Boosts
Your CV**



**Career
Guidance &
Portfolio
Development**



**Supportive
Community**

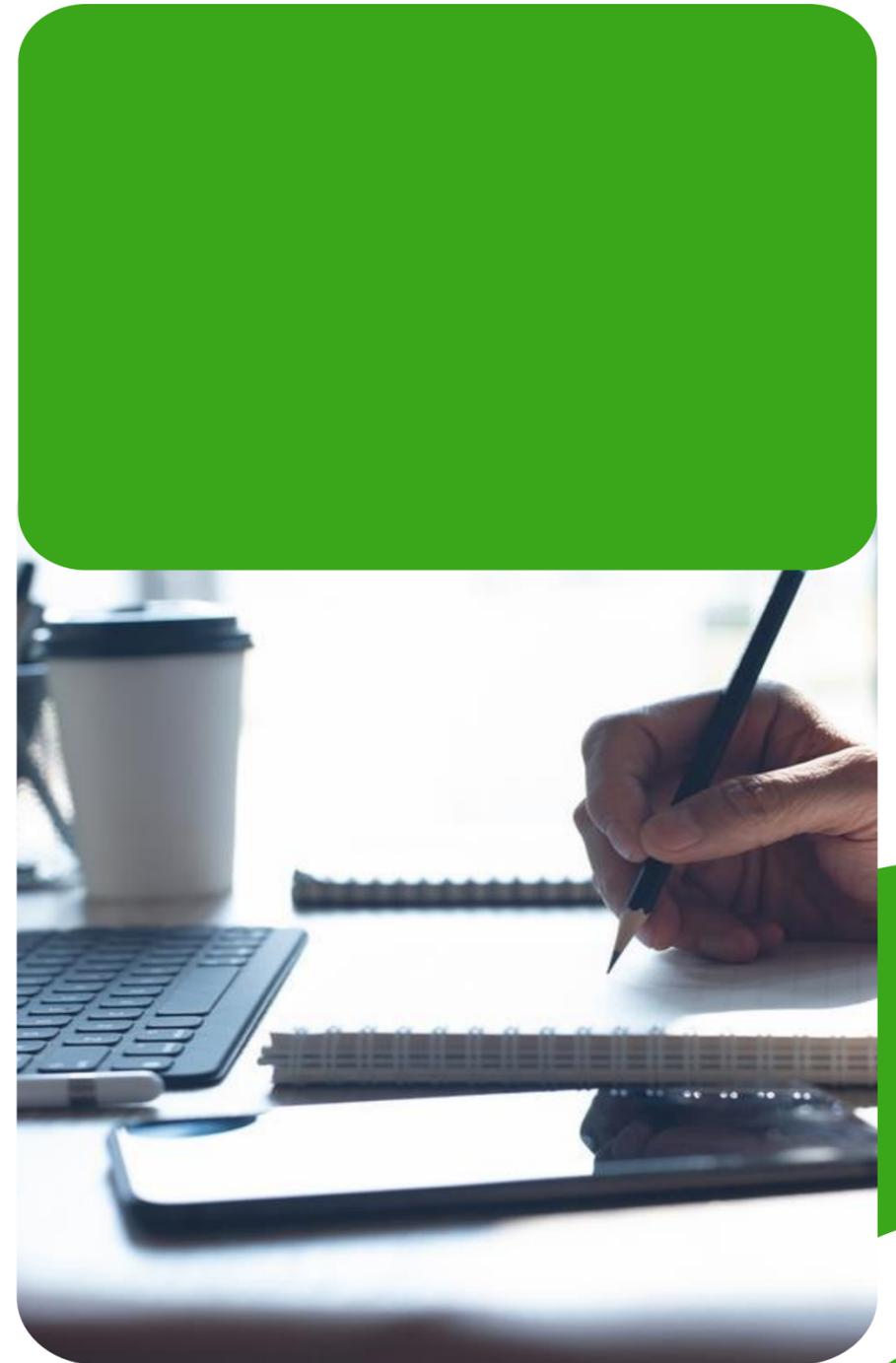


**Proven Success
Stories**



**Affordable
Quality Training**

Real world case studies



GROWTH INTERNSHIP PROGRAM





JOIN OUR NEXT COHORT



2026 TRAINING CALENDER



January

10
Saturday

February

14
Saturday

March

14
Saturday

April

11
Saturday

May

09
Saturday

June

13
Saturday

July

11
Saturday

August

08
Saturday

September

12
Saturday

October

10
Saturday

November

14
Saturday

December

12
Saturday

PROGRAM FEES

Testimonial

The following are genuine testimonials that we have received from our past students who have proven the benefits of the services we have provided to them.



Sodiq



I've attended other online classes before, but Amdor Analytics stands out for me. The facilitator is engaging, the sessions are practical, and the support team is responsive. I feel like I'm part of a real community that wants me to succeed. I'm happy I made this choice



Chinasa Fabian-Ijeruh



Before joining Amdor Analytics, I had no prior tech background. Now, I can confidently analyze data and build reports. The facilitator is very supportive and always encourages us to practice. The training has made me believe that anyone can learn tech if they're in the right environment.



Chidimma Uzochukwu



It's been an eye-opening experience learning at Amdor Analytics. The way the facilitator breaks down each lesson into relatable examples makes learning easy. Even though the pace is fast sometimes, the explanations are clear, and the resources provided are excellent. I'm really grateful for this opportunity.

Testimonial

The following are genuine testimonials that we have received from our past students who have proven the benefits of the services we have provided to them.



Testimonial

The following are genuine testimonials that we have received from our past students who have proven the benefits of the services we have provided to them.





CONTACT US



+234 811 408 7403



@amdoranalytics



www.amdoranalytics.io