

# Data Engineering Program

Pipeline. Process. Power. Master the full curriculum. Build verified projects. Get hired.

3

DURATION TRACKS

4

PROJECTS

2

BATCH MODES

20

STUDENTS/BATCH

## HYBRID MODEL

2 Solo + 1 Pair + 1 Group Capstone

## Triple Track

8W Standard + 4W Fast + 2W Capstone

## Mentor Verified

Every project reviewed

## PAT Certified

Score visible to all HRs

# 8-Week Standard Syllabus

**Weekday Batch:** Mon–Fri | 3 Hrs/Day | 40 Sessions | 120 Contact Hours

**Weekend Batch:** Sat–Sun | 6 Hrs/Day | 16 Sessions | 96 Contact Hours

Same curriculum also available as a 4-Week Fast Track and a 2-Week Capstone Track — see following pages.

|    |                                                                         |                   |
|----|-------------------------------------------------------------------------|-------------------|
| 01 | <b>SQL &amp; Data Modeling</b>                                          | SOLO 1 START      |
|    | CTEs, window functions, normalisation, dimensional modeling, PostgreSQL |                   |
| 02 | <b>Python for DE</b>                                                    | SOLO 1 DELIVERY   |
|    | OOP, Parquet/Avro, APIs, web scraping, Pandas, pytest, CLI tools        |                   |
| 03 | <b>ETL &amp; Orchestration</b>                                          | SOLO 2 START      |
|    | ETL vs ELT, Airflow DAGs, Great Expectations, CDC, idempotency          |                   |
| 04 | <b>Big Data &amp; Spark</b>                                             | SOLO 2 DELIVERY   |
|    | Spark RDDs, DataFrames, SparkSQL, PySpark, partitioning, optimisation   |                   |
| 05 | <b>Streaming &amp; Real-Time</b>                                        | PAIR START        |
|    | Kafka producers/consumers, Connect, Schema Registry, Spark Streaming    |                   |
| 06 | <b>Warehousing &amp; dbt</b>                                            | PAIR DELIVERY     |
|    | Kimball vs Inmon, dbt transformations, incremental models, BI           |                   |
| 07 | <b>Cloud Data Platforms</b>                                             | CAPSTONE START    |
|    | AWS S3/Glue/Redshift/Athena, GCP BigQuery, Delta Lake, governance       |                   |
| 08 | <b>Capstone &amp; Demo</b>                                              | CAPSTONE DELIVERY |
|    | E2E assembly, monitoring, data lineage, tuning, architecture review     |                   |

## WEEKDAY SESSION — 3 HOURS

40 sessions, Mon–Fri

|            |             |              |              |               |
|------------|-------------|--------------|--------------|---------------|
| 0:00–10:00 | 10:00–40:00 | 40:00–90:00  | 90:00–110:00 | 110:00–120:00 |
| Recap      | Concept     | Build Sprint | Standup      | Wrap          |

## WEEKEND SESSION — 6 HOURS

16 sessions, Sat–Sun

|           |            |              |             |             |
|-----------|------------|--------------|-------------|-------------|
| 0:00–8:00 | 8:00–32:00 | 32:00–72:00  | 72:00–88:00 | 88:00–96:00 |
| Recap     | Concept    | Build Sprint | Standup     | Wrap        |

# 4-Week Fast Track Syllabus

**Weekday Batch:** Mon–Fri | 3 Hrs/Day | 20 Sessions | 60 Contact Hours

**Weekend Batch:** Sat–Sun | 6 Hrs/Day | 8 Sessions | 48 Contact Hours

Same 4 project phases as the Standard track, condensed into a single week each for an accelerated pace.

|    |                                                                  |          |
|----|------------------------------------------------------------------|----------|
| 01 | <b>SQL, Python &amp; Modeling</b>                                | SOLO 1   |
|    | Advanced SQL, dimensional modeling, PostgreSQL, Pandas, pytest   |          |
| 02 | <b>ETL &amp; Spark</b>                                           | SOLO 2   |
|    | Airflow DAGs, Great Expectations, Spark DataFrames, optimisation |          |
| 03 | <b>Streaming, dbt &amp; Warehouse</b>                            | PAIR     |
|    | Kafka, stream processing, warehouse design, dbt, BI              |          |
| 04 | <b>Cloud, Monitor &amp; Ship</b>                                 | CAPSTONE |
|    | AWS/GCP stack, data lake, monitoring, governance, cost opt, demo |          |

## WEEKDAY SESSION — 3 HOURS

20 sessions, Mon–Fri

|           |            |              |             |             |
|-----------|------------|--------------|-------------|-------------|
| 0:00–5:00 | 5:00–20:00 | 20:00–45:00  | 45:00–55:00 | 55:00–60:00 |
| Recap     | Concept    | Build Sprint | Standup     | Wrap        |

## WEEKEND SESSION — 6 HOURS

8 sessions, Sat–Sun

|           |            |              |             |             |
|-----------|------------|--------------|-------------|-------------|
| 0:00–4:00 | 4:00–16:00 | 16:00–36:00  | 36:00–44:00 | 44:00–48:00 |
| Recap     | Concept    | Build Sprint | Standup     | Wrap        |

# 2-Week Capstone Track Syllabus

**Weekday Batch:** Mon–Fri | 3 Hrs/Day | 10 Sessions | 30 Contact Hours

**Weekend Batch:** Sat–Sun | 6 Hrs/Day | 4 Sessions | 24 Contact Hours

Our most intensive track — the full curriculum compressed into 2 weeks, ending in a live capstone build and demo.

|    |                                                                                                                                |                   |
|----|--------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 01 | <b>SQL, Python &amp; Pipelines</b><br>Advanced SQL, dimensional modeling, Pandas; Airflow DAGs, Spark DataFrames, optimisation | FOUNDATION SPRINT |
| 02 | <b>Streaming, Cloud &amp; Capstone Ship</b><br>Kafka, dbt, warehouse design; AWS/GCP data lake, monitoring, live demo          | CAPSTONE SPRINT   |

## WEEKDAY SESSION — 3 HOURS

10 sessions, Mon–Fri

|           |            |              |             |             |
|-----------|------------|--------------|-------------|-------------|
| 0:00–2:30 | 2:30–10:00 | 10:00–22:30  | 22:30–27:30 | 27:30–30:00 |
| Recap     | Concept    | Build Sprint | Standup     | Wrap        |

## WEEKEND SESSION — 6 HOURS

4 sessions, Sat–Sun

|           |           |              |             |             |
|-----------|-----------|--------------|-------------|-------------|
| 0:00–2:00 | 2:00–8:00 | 8:00–18:00   | 18:00–22:00 | 22:00–24:00 |
| Recap     | Concept   | Build Sprint | Standup     | Wrap        |

## Two Career Pathways

Both available simultaneously — not mutually exclusive

### Employment Track

1. Complete 4 verified projects
2. Take PAT certification exam
3. Portfolio published to HR Portal
4. HRs discover and shortlist you
5. Interview scheduled via platform
6. Offer extended — placement tracked

### Startup Track

1. Build investor-grade capstone
2. Mentor verifies for Investor Portal
3. List project with pitch deck & demo
4. Investors discover your project
5. Pitch invitation and presentation
6. Startup mentorship and funding

### Project Assessment Test (PAT)

Your certification score — visible to every HR on the platform

MCQs 20% | Coding 25% | Architecture 20% | Viva Defense 25% | Peer Review 10%

#### 90–100 Elite

Top 5% — senior roles, startup founding

#### 75–89 Pro

Job-ready with solid fundamentals

#### 60–74 Certified

Entry-level — core concepts proven

### Mentor Verification — The Trust Engine

No project reaches the HR or Investor portal without rigorous mentor review.

Code Quality 25% | Functionality 25% | Architecture 20% | Docs 15% | Deployment 15%

## Ready to Build Your Future?

4 verified projects | PAT certification | Two career pathways

[ENROLL NOW](#)[DOWNLOAD SYLLABUS](#)