Foundations of Data Engineering

01

- SQL
- PySpark
- Airflow
- ElasticSearch

Containerization and Microservices

02

- Docker
- Kubernetes
- Flask/FastAPI
- Django

2024

- Bash
- PowerShell
- Linux Administration

03

Scripting and system administration

- Database (DB) design
- DB Management
- DB Administration
- MongoDB

04

Database Management and administration

Advanced Big Data Technologies

01

- Scala
- Spark
- Hadoop
- Kafka

Advanced Sofware Development

02

- C for systems
- C++
- Qt
- Python

2025

- DevOps
- CI/CD
- Terraform
- Jenkins

04

System level programming and DevOps

- Java
- C#
- Design pattern

03

Software development and Design Patterns

Cloud Platforms and Services

01

- AWS
- Azure
- GCP
- Cloud architecture

Integration Projects and Real-World Applications

02

- Full-stack integration projects
- advanced use cases

2026

- Final projects
- Certifications
- Review

04

Capstone Projects and Certification Preparation

- Revisiting challenging topics
- advanced project

03

Advanced Topics and Refinement