

Northcoders



Upskill in

Cloud Engineering and DevOps

Curriculum & Prerequisites



What's Covered

Explore how to deploy data applications on AWS, the market-leading cloud platform, while mastering key DevOps skills including infrastructure-as-code (IaC) and continuous integration/deployment (CI/CD).

You'll learn industry-standard practices for ETL, orchestration, data modelling, and building scalable data analytics solutions.

Key Topics:

- Cloud Compute (EC2, Lambda)
- Cloud Storage (S3 and RDS)
- Infrastructure as Code with Terraform
- Continuous Integration/Deployment (CI/CD)
- Data Warehousing
- Data Ingestion
- Extract, Transform, Load (ETL)
- Orchestration
- Data Modelling for Analytics and Business Intelligence



Prerequisite Skills ✓

This course is designed to build on existing knowledge.

To join, you'll need to know:

1. Programming & Scripting

- Proficiency in Python
- Understanding of basic scripting and automation concepts
- Familiarity with SQL for database querying
- General knowledge of data storage formats (CSV, JSON)
- Familiarity with HTTP and web APIs

2. Linux/Command Line

- Comfort working in a terminal/command line environment
- Basic understanding of Linux/Unix commands and file systems



3. Networking Fundamentals

- Basic exposure to concepts like IP addresses, ports, and protocols (HTTP/HTTPS, TCP/IP)
- Basic knowledge of how the internet works (DNS, routing)
- Familiarity with APIs and REST principles

4. Version Control

- Experience with Git for version control
- Understanding of collaborative workflows
- Familiarity with platforms like GitHub

5. Database Concepts

- Understanding of relational databases and basic database design
- Knowledge of data types, schemas, and table relationships
- Experience writing SQL queries (SELECT, JOIN, WHERE clauses)



6. General Technical Knowledge

- Basic knowledge of how web applications work
- Familiarity with configuration files (YAML, JSON)

