

FULL CURRICULUM • 2026

Terraform

Build entire cloud systems with code, not clicks.

Every module, every lesson — the complete syllabus, end to end.

21

MODULES

153

LESSONS

3

MONTHS

₹16,500

FULL PROGRAMME

What this course covers

1

Level 1 • Beginner

Course Introduction • Introduction to Terraform and IaC • Tools Download and Installations

1 month • 6 modules • 40 lessons • ₹4,000

2

Level 2 • Intermediate

Data Sources • Input variables, locals and outputs • Expressions and Functions

1 month • 7 modules • 59 lessons • ₹5,500

3

Level 3 • Advanced

Terraform Lifecycle Validations • Terraform Workspace • Terraform State Management

1 month • 8 modules • 54 lessons • ₹7,000

The whole journey

This is the complete syllabus for Terraform — 21 modules and 153 lessons, in the order you will learn them. The level markers show how far each stage carries you, but the curriculum runs as one continuous path from the first lesson to the last.

1

LEVEL 1

Beginner

Course Introduction · Introduction to Terraform and IaC · Tools Download and Installations

1 month · 6 modules · 40 lessons · ₹4,000



1. Course Introduction

1 lessons

- Course Introduction



2. Introduction to Terraform and IaC

6 lessons

- Terraform and IaC Overview
- Stages of infrastructure provisioning
- Introduction to IAC
- Core concepts of IAC
- What is terraform?
- Terraform best practices



3. Tools Download and Installations

3 lessons

- Installing Vs Code
- Making an AWS account
- Creating EC2 instance and Installing Terraform



4. Deeper Dive into Terraform

10 lessons

- Deeper Dive into Terraform Overview
- What is HCL?
- Running terraform cli for the first time
- Terraform workflow
- Creating a simple S3 bucket using terraform
- Terraform State
- Hands On - Terraform State
- Backends in Terraform
- Terraform Providers
- Creating versioned and locked infra



5. Understanding Resources

16 lessons

- Understanding Resources Overview
- AWS overview - what is AWS
- AWS overview - EC2
- AWS overview - S3
- AWS overview - VPC
- AWS overview - Lambda
- AWS overview - Databases
- AWS overview - ECS & EKS
- AWS key takeaways
- What is a terraform resource?
- Resources components
- Project [VPC ARCHITECTURE] - overview
- Project [VPC ARCHITECTURE] - setting up tools (part-1)
- Project [VPC ARCHITECTURE] - variables .tf (part-2)
- Project [VPC ARCHITECTURE] - main.tf (part-3)
- Project [VPC ARCHITECTURE] - Terraform init, vald, plan & apply (part-4)



6. [PROJECT]: - Hosting S3 static website using terraform

4 lessons

- Project Overview
- Hands On - 1
- Hands On - 2
- What we learnt?

2

LEVEL 2

Intermediate

Data Sources · Input variables, locals and outputs · Expressions and Functions

1 month · 7 modules · 59 lessons · ₹5,500



7. Data Sources

7 lessons

- Data Sources Overview
- Data sources in terraform
- Hands On - Fetching AMI data
- Hands On - Fetching account info and region
- Hands On - Fetching VPC data
- Hands On - Fetching availability zones
- Hands On - Creating IAM policies



8. Input variables, locals and outputs

10 lessons

- Input variables, locals and outputs Overview
- Input and Output variables in Terraform
- Hands On - Types of variables - 1
- Hands On - Types of variables - 2
- Working with .tfvars
- Hands On - .tfvars
- Working with locals
- Hands On - locals
- Working with outputs.tf
- Hands On - outputs.tf

9. Expressions and Functions

16 lessons

- Expressions and Functions Overview
- Operators in terraform
- Variables and arithmetic operators
- Comparison operators
- Logical operators
- Conditional operators
- String operators
- Collection operators
- Operators real world examples
- Expressions and Transformations (Basic Lists)
- Expressions and Transformations (Basic Maps)
- Basic Transformations using lists
- Key Transformations
- String Functions
- Number Functions
- Collection Functions

10. Multi Resource Creation

9 lessons

- Multi Resource Creation Overview
- Creating VPC Architecture using Terraform
- [PART-1] Creating VPC infrastructure
- [PART-2] Deploying EC2 servers on created VPC infra
- [PART-3] Deploying a web interface on created infrastructure
- [PROJECT] - SNS notification application
- [PROJECT] - SNS app - Creating file structure
- [PROJECT] - SNS app - Building ".tf" files
- [PROJECT] - SNS app - Deploying App

11. IAM through Terraform

9 lessons

- IAM through Terraform Overview
- Creating users and Roles
- Deploying IAM users
- Hands On: Code iam user -1
- Hands On: code iam user -2
- Hands On: code iam user -3
- Hands On: code iam role -1
- Hands On: code iam role -2
- Hands On: code iam role -3

12. [PROJECT]: - Managing users and roles through terraform

4 lessons

- Theory - Smart User Role Management
- Hands On - Understanding code
- Hands On - Understanding code (users and outputs)
- Hands On - Project deployment (testing users)

13. Terraform Modules

4 lessons

- Terraform Modules
- Hands On - Hello world module & common error fixing
- Hands On - Creating secure s3 bucket called 3 times using modules
- Hands On - Implementing modules that generate app config files

Advanced

Terraform Lifecycle Validations · Terraform Workspace · Terraform State Management

1 month · 8 modules · 54 lessons · ₹7,000

- **14. Terraform Lifecycle Validations** 7 lessons
 - Terraform Lifecycle Validations Overview
 - Understanding lifecycle validations
 - Hands On - Preconditions
 - Hands On - Preconditions [more examples]
 - Hands On - Postconditions
 - Hands On - Check Blocks
 - Miniproject - Implementing lifecycle validation on real infrastructure
- **15. Terraform Workspace** 4 lessons
 - Terraform Workspace Overview
 - Terraform Cloud
 - Terraform Workspaces
 - Hands On: - Creating and Managing Workspaces
- **16. Terraform State Management** 3 lessons
 - Terraform State Management Overview
 - State Manipulation
 - Hands On - State Manipulation
- **17. Rise of OpenTofu** 2 lessons
 - Rise of OpenToFu
 - Implementing OpenToFU
- **18. [PROJECT]: - Constructing a Highly Available & Scalable Infrastructure** 3 lessons
 - Understanding the Project
 - Understanding IaC files
 - Project Deployment
- **19. [PROJECT]: - 3-Tier Web Infrastructure with Terraform** 14 lessons
 - What is a 3-Tier Web Architecture?
 - Project Theory
 - Main.tf
 - Variables.tf
 - VPC.tf
 - SG.tf
 - ALB.tf
 - IAM.tf
 - S3.tf
 - Database.tf
 - asg_backend.tf
 - asg_frontend.tf
 - outputs.tf & tfvars
 - Project Deployment & Testing

○ 20. Interview & Exam preparation

8 lessons

- Resume Workshop
- Easy question set
- Medium question set (part-1)
- Medium question set (part-2)
- Medium question set (part-3)
- Medium question set (part-4)
- Medium question set (part -5)
- Advanced question set (part-1)

○ 21. Future Enhancements

13 lessons

- Future Enhancements Overview
- OpenToFu ecosystem
- AI & Intelligent Automation
- Improved State Management
- Enhanced Testing Framework
- Modules & Reusability
- Performance & Reusability
- Drift Detection & Remediation
- Multi Cloud & Hybrid Improvements
- Security Enhancements
- Developer Experience
- Terraform Stacks
- Cloud Cost Integration

Certificates & what comes next

You receive a certificate at the end of every level you finish. Join for a single level or the full programme — the choice is yours. Learners who stand out may be invited to work on live client projects as interns; these places are merit-based, limited, and depend on projects being available.