# Comprehensive

# Two-Week NestJS Training Plan

Comprehensive learning roadmap for mastering NestJS.

## Week 1 — Core Framework and Foundations

### Day 1: Introduction & Setup

Overview of NestJS architecture, Node.js refresher, environment setup, and understanding project structure.

### Day 2: Controllers & Routing

Learn how to handle incoming requests and responses using controllers, decorators, and routing techniques.

### Day 3: Dependency Injection & Providers

Understand Nest’s IoC container, create and use providers for business logic and service abstraction.

### Day 4: Modules, Middleware & Pipes

Structure your application using modules, handle requests with middleware, and use pipes for validation and transformation.

### Day 5: Exception Filters, Validation & Logging

Implement global and custom exception filters, integrate class-validator, and use built-in logging and configuration modules.

## Week 2 — Advanced Topics and Implementation

### Day 6: Database Integration with TypeORM/Prisma

Integrate relational or NoSQL databases, define entities, and manage repositories using TypeORM or Prisma.

### Day 7: Authentication & Authorization

Implement JWT-based authentication, role-based access control, and secure routes using Nest guards.

### Day 8: Interceptors, Microservices & Event-Driven Architecture

Implement interceptors for request/response transformation, and build microservices using TCP or RabbitMQ transporters.

### Day 9: Advanced Architecture, GraphQL & Real-Time APIs

Learn modular monolith vs microservices, create GraphQL resolvers, and build WebSocket-based real-time APIs.

### Day 10: Deployment, CI/CD, Monitoring & Final Project

Automate deployment with Docker and CI/CD pipelines, monitor app health, and present a final mini-project.