

Backend Engineering Bootcamp – Private Edition

This program also includes training on how to use AI tools effectively during coding.

Instructor: Eng. Ahmed Hatem Elraei

Month 1 — JavaScript + Node.js Core + TypeScript

- Week 1: JavaScript Basics, Functions, Scope
- Week 2: ES6, Async JS, Event Loop
- Week 3: Node Core, Non-blocking IO, Modules
- Week 4: TypeScript Fundamentals & Advanced TS

Month 2 — PostgreSQL + TypeORM + NestJS Core

- Week 5: SQL Fundamentals, Joins, Relationships
- Week 6: NestJS Core + CRUD
- Week 7: Services, Filters, Middleware, Interceptors
- Week 8: Authentication, JWT, Roles, Permissions

Month 3 — Advanced NestJS + Architecture + Patterns + Performance

- Week 9: REST Best Practices, Pagination, Error Handling
- Week 10: Security & Performance Optimization
- Week 11: Clean Architecture, Repository Pattern
- Week 12: SOLID Principles + Real-World Design Patterns

Month 4 — DevOps + Final Project + Career Preparation

- Week 13: Git, Versioning, Project Structure
- Week 14: Docker, CI/CD, Deployment
- Week 15: Final Project (Architecture, Auth, DB)
- Week 16: Final Delivery, CV, GitHub, LinkedIn, Mentorship Plan