

About the Company

We aim to bridge the gap between academic learning and industry expectations through practical, industry-oriented education. We are building a community of industry professionals passionate about sharing their expertise and making high-quality, industry-relevant education accessible to aspiring professionals.

Benefits of Completing the Course

- **Production-Ready Portfolio:** Build and deploy complex full-stack applications and scalable microservices hosted live on GitHub.
- **Modern Tech Stack Mastery:** Gain hands-on operational experience with React, Tailwind CSS, Python, FastAPI, Django, PostgreSQL, Redis, Docker, and Kubernetes.
- **Real-World Engineering:** Solve enterprise challenges involving real-time WebSockets, secure authentication, background worker queues, and cloud-native monitoring.
- **Career Acceleration:** Position yourself strongly for high-demand roles such as Full Stack Engineer, Python Backend Developer, and Software Engineer.

Month-by-Month Course Overview

Month 1: Modern Frontend Foundations & UI Architecture

- **Module 1: Web Foundations & Modern Styling:** HTML5 standards and accessibility (a11y); CSS3 Grid and Flexbox layout mastery; Mobile-first responsive web design; Rapid styling using Tailwind CSS.
- **Module 2: Modern JavaScript (ES6+) & DOM Manipulation:** ES6+ syntax (Destructuring, Spread/Rest, Arrow functions); DOM event delegation and manipulation; Asynchronous JavaScript (Event Loop, Promises, Async/Await); Functional array methods and Vite build configuration.
- **Module 3: React.js Core Foundations:** Functional component architecture and JSX syntax; Unidirectional data flow via Props and State (useState); Lifecycle management and side effects (useEffect); Controlled form inputs and event handling.
- **Module 4: Advanced React & Frontend State Management:** Single Page Applications using React Router v6; Global state sharing via Context API; Form validation schemas with Zod and React Hook Form; HTTP client integration via Axios interceptors and Shadcn UI.

Month 2: Python Backend Development & Database Architecture

- **Module 1: Python Core for Web Engineers:** Advanced OOP (Inheritance, Polymorphism, Magic/Dunder methods); Pythonic constructs (Decorators, Generators, Context Managers); Type hinting and memory-efficient data structures; Package management and virtual environments with Poetry.
- **Module 2: Relational Databases & SQL Architecture:** Relational design principles and normalization (1NF to 3NF); Advanced SQL queries (Complex JOINS, Window functions, Aggregations); ACID properties and transaction isolation levels; Indexing strategies in PostgreSQL.
- **Module 3: High-Performance APIs with FastAPI:** REST architectural constraints and routing; FastAPI dependency injection and auto-generated Swagger documentation; Pydantic schema validation and request/response models; SQLAlchemy ORM integration and Alembic database migrations.
- **Module 4: Enterprise Web Backend with Django:** Django Model-View-Template (MVT) architecture; Advanced ORM optimization (select_related, prefetch_related); Building REST endpoints using Django REST Framework (DRF); Django Admin panel customization and file management.

Month 3: Core Security, Caching & First Milestone Project

- **Module 1: Web Security & Authentication Engineering:** Token-based authentication workflows (JWT access and refresh tokens); OAuth2 third-party integration (Google and GitHub sign-in); Password hashing standards (Bcrypt/Argon2) and XSS/CSRF defense; Role-Based Access Control (RBAC) permissions.
- **Module 2: Asynchronous Task Processing & Caching:** Redis session stores and response caching layers; Asynchronous background job processing with Celery; Periodic cron scheduling via Celery Beat; Third-party integrations (Stripe checkout and SendGrid emails).
- **Module 3: Core DevOps & Containerization:** Multi-stage Dockerfile creation for React and Python backends; Docker Compose configuration for multi-container local stacks; Nginx reverse proxy configuration and SSL provisioning.
- **Module 4: Milestone Project 1 (Full Stack Core Application):** Building, containerizing, and deploying a fully integrated CRUD application; Connecting React frontend to FastAPI/Django backend, PostgreSQL, and Redis.

Month 4: Enterprise Architecture, Testing & Advanced Backend

- **Module 1: Advanced Django Patterns & Enterprise Architecture:** Custom user models, custom managers, and middleware pipelines; Django signals for asynchronous side effects; Managing multi-tenant database layouts.
- **Module 2: Advanced API Design & Gateways:** Designing extensible GraphQL APIs using Strawberry/Ariadne; API versioning frameworks and rate-limiting strategies; Throttling policies for high-traffic environments.
- **Module 3: Advanced Frontend State Management & Architecture:** Enterprise global state management using Zustand or Redux Toolkit; Custom hooks design patterns and React Error Boundaries; Performance optimization through memoization and code splitting.
- **Module 4: Frontend Testing & Quality Assurance:** Unit and component testing with Vitest and React Testing Library; Building end-to-end user journey tests using Playwright.

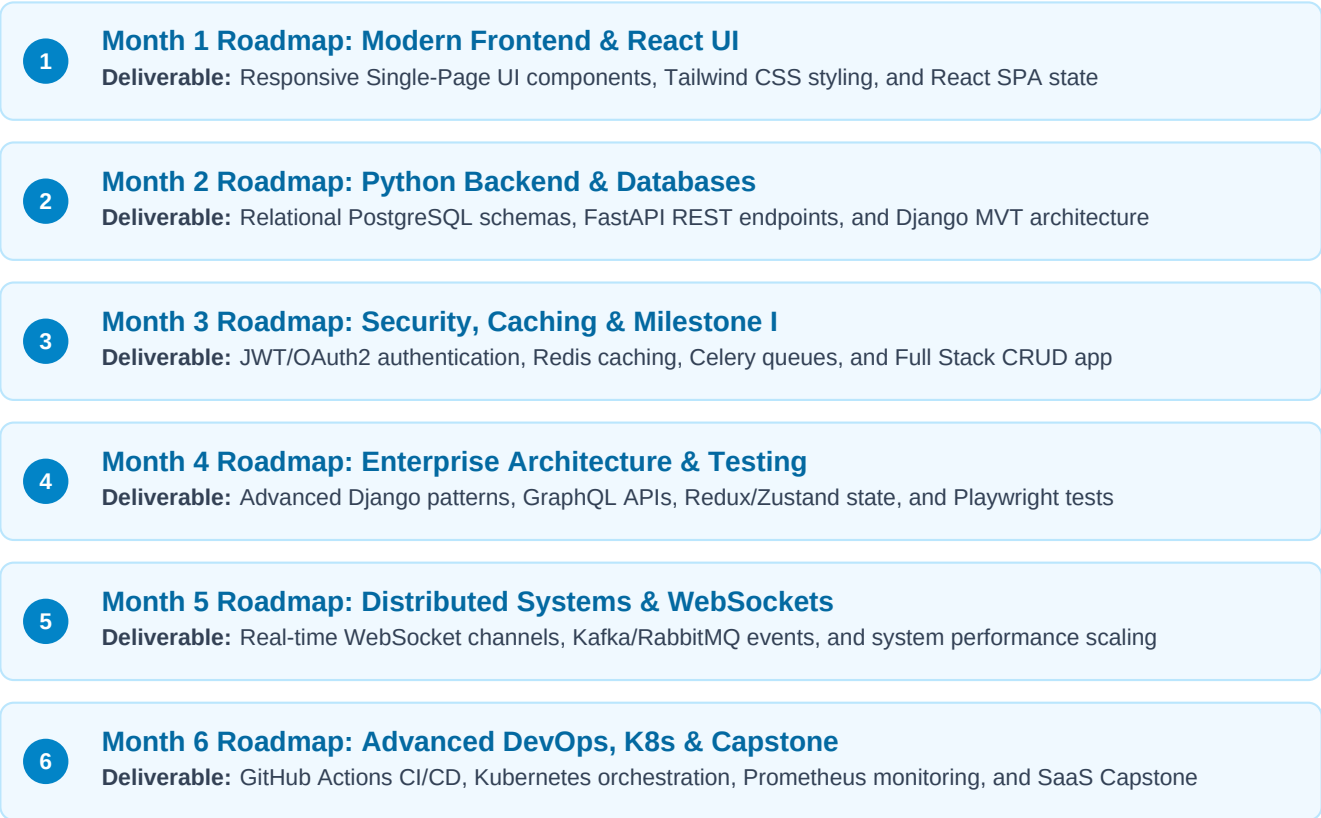
Month 5: Distributed Systems, Real-Time WebSockets & Performance Scaling

- **Module 1: Real-Time Web Communications & WebSockets:** Low-latency bidirectional communication using WebSockets; FastAPI WebSockets and Django Channels implementation; Redis Pub/Sub channels for live chat and notifications.
- **Module 2: Distributed Systems & Event-Driven Architecture:** Introduction to message brokers (RabbitMQ / Apache Kafka); Publishing and consuming background events; Designing decoupled microservice communication boundaries.
- **Module 3: System Design & Database Performance Tuning:** Profiling and optimizing slow SQL queries; Database sharding and table partitioning strategies; High-throughput caching topologies and traffic spike handling.
- **Module 4: Advanced Security, Compliance & Auditing:** OWASP Top 10 threat mitigation in production systems; Secure API request signing and automated vulnerability scanning; Centralized secrets management using HashiCorp Vault or AWS SSM.

Month 6: Advanced DevOps, Kubernetes & Final Enterprise Capstone

- **Module 1: Advanced DevOps, CI/CD & Infrastructure as Code:** Advanced GitHub Actions workflows with automated testing matrices; Container registry publishing and deployment automation; Introduction to Terraform for cloud infrastructure provisioning.
- **Module 2: Container Orchestration with Kubernetes (K8s):** Kubernetes fundamentals (Pods, Deployments, Services, ConfigMaps, Secrets); Ingress controllers for traffic routing; Packaging Python and React clusters using Helm charts.
- **Module 3: Cloud-Native Observability & Monitoring:** Setting up Prometheus metrics collection and Grafana dashboards; Centralized log aggregation pipelines (Loki/ELK stack); Production error tracking with Sentry.
- **Module 4: Milestone Project 2 (Final Enterprise Capstone):** Designing, scaling, and deploying a production-grade SaaS platform; Microservices architecture with Kubernetes orchestration and CI/CD pipelines.

Learning Journey Visual Roadmap (Step-by-Step Process Flow Layout)



Course Pricing & Investment

Course Name	Original Price	Discount	Price After Discount
First 3 Months (Core Full Stack)	₹50,000	30%	₹35,000
Next 3 Months (Advanced Full Stack)	₹50,000	30%	₹35,000
6-Month Course (Full Course)	₹70,000	30%	₹49,000