

Restful API Development Course

Course Duration : 40 Hours

Course code : API-REST-101

1. Course Overview

The Restful API Development Course is designed to help learners understand how to design, build, and deploy scalable APIs using REST architecture. This course focuses on creating efficient and secure APIs that enable communication between web applications, mobile apps, and backend systems.

2. What you'll learn?

- REST architecture principles
- HTTP methods and status codes
- API design best practices
- Authentication and authorization
- Error handling and validation
- API testing and deployment

3. Target Audience

- Backend developers and software engineers
- Full-stack developers
- Web developers
- Students and beginners in development
- IT professionals interested in APIs

4. Pre-Requisites

- Basic knowledge of JavaScript
- Understanding of web development concepts
- Familiarity with APIs (recommended)
- Basic programming experience

5. Course Content (Modules)

Module 1: Introduction to REST APIs

- What is REST?
- REST principles and constraints
- API architecture overview

Module 2: Building APIs with Node.js & Express

- Setting up server
- Routing and middleware
- CRUD operations

Module 3: API Design & Data Handling

- Structuring endpoints
- Working with databases
- Data validation

Module 4: Security & Authentication

- JWT authentication
- Authorization techniques
- Securing APIs

Module 5: Testing, Deployment & Best Practices

- API testing tools
- Deployment strategies
- Performance optimization

