

## API Design and Management using Postman and Swagger

*Paris (France)*

*15 - 19 February 2027*

UK Training

# PARTNER



## API Design and Management using Postman and Swagger

Code: IT32 From: 15 - 19 February 2027 City: Paris (France) Fees: 5900 Pound

### Introduction

In today's interconnected digital world, Application Programming Interfaces APIs form the backbone of modern software ecosystems. They enable seamless communication between systems, facilitate data exchange, and support agile development across platforms.

Effective API design and management ensure not only functional interoperability but also scalability, performance, and security.

The API Design and Management using Postman and Swagger course equips participants with the practical skills and technical insights needed to design, test, document, and manage APIs professionally.

Through real-world examples and hands-on practice, participants learn how to build efficient RESTful APIs, apply industry best practices, and use leading tools such as Postman and Swagger to streamline development and collaboration.

### Course Objectives

By the end of this course, participants will be able to:

- Understand the architecture and lifecycle of modern APIs.
- Design RESTful APIs that are scalable, efficient, and secure.
- Use Postman to test APIs and automate validation workflows.
- Document APIs accurately and interactively using Swagger OpenAPI.
- Apply authentication, authorization, and encryption methods.
- Manage API versioning, performance, and integration.
- Build collaboration between development and QA teams through API testing.
- Implement continuous improvement and monitoring practices for APIs.

### Course Outlines

#### Day 1: Introduction to API Architecture and RESTful Design

- Understanding the role of APIs in digital ecosystems.
- REST principles and HTTP operations GET, POST, PUT, DELETE.
- Structuring endpoints and naming conventions.
- Data representation using JSON and XML.
- Status codes and error handling best practices.
- Practical exercise: Designing your first RESTful API.

#### Day 2: API Testing and Validation with Postman



- Overview of Postman and its user interface.
- Creating API requests and managing collections.
- Using environments and variables for testing.
- Automating tests using scripts in Postman.
- Analyzing responses and debugging errors.
- Hands-on session: Building automated API test suites.

### Day 3: API Documentation with Swagger and OpenAPI

- Introduction to Swagger and OpenAPI standards.
- Creating interactive API documentation.
- Writing and structuring OpenAPI YAML/JSON files.
- Integrating Swagger UI for developer-friendly interfaces.
- Generating and sharing API documentation automatically.
- Workshop: Building and publishing live API documentation.

### Day 4: API Security and Authentication

- Understanding key API security principles.
- Implementing OAuth 2.0, API keys, and token-based authentication.
- Managing encryption and secure data transmission.
- Preventing common vulnerabilities e.g., injection, replay attacks.
- Monitoring and auditing API activity.
- Exercise: Securing a RESTful API using authentication layers.

### Day 5: API Lifecycle Management and Governance

- Managing the API development lifecycle from design to deployment.
- Versioning strategies and backward compatibility.
- Performance optimization and scalability techniques.
- Setting up API analytics and monitoring tools.
- Governance, documentation maintenance, and deprecation planning.
- Final project: Designing and managing a complete API workflow.

### Why Attend this Course: Wins & Losses!

- Gain a comprehensive understanding of API design and lifecycle management.
- Develop hands-on experience with Postman and Swagger.
- Improve collaboration and communication within development teams.
- Learn to implement secure and reliable API authentication mechanisms.
- Automate testing and validation processes to reduce development time.
- Enhance the quality and consistency of API documentation.
- Strengthen integration capabilities across enterprise systems.
- Acquire practical skills highly demanded in the IT and software industry.

### Conclusion





APIs are at the heart of digital transformation, enabling innovation, automation, and integration across diverse systems.

The API Design and Management using Postman and Swagger course empowers participants to master the complete API lifecycle – from design to testing, documentation, and governance.

Through structured learning and practical application, participants gain the skills to create robust, secure, and scalable APIs that drive organizational efficiency and technical excellence.

Mastering API management is no longer optional; it's essential for every modern IT professional striving to lead in a connected digital environment.



## Blackbird Training Clients



MANNAI Trading  
Company WLL,  
Qatar



Alumina Corporation  
Guinea



Booking.com  
Netherlands



Oxfam GB International  
Organization,  
Yemen



Capital Markets  
Authority,  
Kuwait



Waltersmith Petroman Oil Limited  
Nigeria



Qatar National Bank  
(QNB),  
Qatar



Qatar Foundation,  
Qatar



AFRICAN UNION ADVISORY  
BOARD ON CORRUPTION,  
Tanzania



KFAS  
Kuwait



Reserve Bank of  
Malawi,  
Malawi



Central Bank of Nigeria  
Nigeria



Ministry of Interior  
Kingdom of Saudi Arabia  
KSA



Mabruk Oil Company  
Libya



Saudi Electricity  
Company,  
KSA



BADAN PENGELOLA  
KEUANGAN Haji,  
Indonesia



NATO  
Italy



ENI CORPORATE  
UNIVERSITY,  
Italy



Gulf Bank  
Kuwait



المؤسسة العامة للتأمينات الاجتماعية  
General Organization for  
Social Insurance  
KSA



Defence Space Administration  
Nigeria



National Industries  
Group (Holding),  
Kuwait



Hamad Medical  
Corporation,  
Qatar



USAID  
Pakistan



STC Solutions,  
KSA



North Oil company,



EKO Electricity



Oman Broadband



UNITED NATIONS  
UN.



هيئة تنظيم الكهرباء - عمان  
Authority for  
Electricity Regulation, Oman

UK Training  
**PARTNER**



## Blackbird Training Categories

### Management & Admin

Entertainment & Leisure  
Professional Skills  
Finance, Accounting, Budgeting  
Media & Public Relations  
Project Management  
Human Resources  
Audit & Quality Assurance  
Marketing, Sales, Customer Service  
Secretary & Admin  
Supply Chain & Logistics  
Management & Leadership  
Agile and Elevation

### Technical Courses

Artificial Intelligence (AI)  
Sustainability, ESG & Corporate Responsibility  
Advanced Courses  
Hospital Management  
Public Sector  
Special Workshops  
Oil & Gas Engineering  
Telecom Engineering  
IT & IT Engineering  
Health & Safety  
Law and Contract Management  
Customs & Safety  
Aviation  
C-Suite Training

