



Postman API Testing

(Manual and Automation Testing)

Training Curriculum

STRUCTURE



Postman API Testing (Manual and Automated) Training Curriculum

“Become a certified Postman API Testing (Manual and Automated) professional by joining our comprehensive Training Program at Croma Campus”.

About Croma Campus:

Croma Campus Training & Development Private Limited is an education platform since 2010 providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty and industry.

- Hands-On Live Projects
- Simulation Test Papers
- Industry Cases Studies
- 61,640+ Satisfied Learners
- 140+ Training Courses
- 100% Certification Passing Rate
- Live Instructor Classroom / Online Training
- 100% Placement Assistance

Course Objectives:

- Create GET, POST, PUT, DELETE request
- Understand GET vs POST request method
- Work with real-world APIs (Git hub API, Trello API)
- JavaScript basics for tests
- Write API tests in Postman
- Use data from Excel files (CSV) or JSON
- Use Postman variables to create workflows and scenarios
- Run API tests with Newman in Jenkins, Git Lab CI or TeamCity
- Use OAuth2, API keys, tokens, JWT, basic Auth.
- Test file uploads
- Use mock servers
- Collaborate using Team Workspaces.

Course Description:

RESTful APIs (or simply REST API) are everywhere nowadays but at the same time they are getting more complex to get started with: different HTTP methods, headers, cookies, dealing with file uploads or authentication with API keys, tokens, OAuth and so much more.

But before you start investing time writing code to retrieve the data the API is offering, why not test the request first to make sure everything is working as expected?

This is where the Postman App comes in! Postman allows you very quickly create a request with the required HTTP method and parameters, submit the request and easily inspect the results.

Postman can help if you are developing APIs as well! I have created this course for testing engineers and well as for software developers. Postman can help you during the development of your API as well as after the API is completed, by running tests that make sure your API is still working as intended.

In this course, you will explore the features of Postman and continue by writing API tests with the intention of integrating them in a CI server where the tests will run on a current basis.

Croma Campus Training Program Deliverables:

- **Session Recordings** - Original Class Room Voice & Video Recording
- **Training Material** - Soft Copy Handbooks
- **Assignments** | Multiple Hands-on Exercises
- **Test Papers** - We provide **Practice Test** as part of our course to help you prepare for the actual certification exam.
- **Live Case Studies**
- **Live Projects** - Hands-on exercises and Project work. You will work on real time industry-oriented projects and assignments for each module to practice.
- **Key focus on Hands-on exercises and Project work.** You will work on real time industry-oriented projects.
- Faculty with more than **10+ Years of Experience** in the Industry.
- **Technical Resume Designing & Job Assistance:** With more than 100+ Clients across the Globe and we help learners to get a good job in their respective field. We also help learners with resume preparation.
- **Interview Q&A**
- **About Croma Campus Training Certificate:** Croma Campus will provide you with an industry-recognized (Certified by **ISO 9001:2015 & E-Cell IIT Jodhpur**) course completion certificate which has lifelong validity.
- **How I Unlock my Croma Campus Certificate:** Attend Complete Batch & Submit at least One Completed Project.

Course Content:

Module 1: Introduction

- Overview
- First steps in Postman
- The postman Landscape

Module 2: Creating with API Requests

- How to create a request in Postman?
- How to import a request from your browser in Postman?
- How to inspect HTTP responses in Postman?
- Handling cookies in Postman
- Troubleshooting Postman issues
- Saving requests to a collection in Postman

Module 3: Writing Tests and Scripts

- Introduction
- Your first API test in Postman
- Testing an API
- Path parameters vs query parameters
- Refactoring tests

Module 4: Writing Tests and Scripts using Variables

- Variables in Postman
- Global variables
- Environments
- Session variables (new in Postman 6.2!)
- Bulk editing removed (new in Postman 6.2!)
- Pre-request scripts in Postman
- Understanding different variable scopes / types
- How to setup different URLs using environments in Postman?
- Debugging tests

Module 5: Building and Testing an API Workflow using Github and Twilio

- Introduction to Github API
- Introduction to 2FA
- Setting up 2FA on Github
- Setting up 2FA in Postman
- Automating two-factor authentication (2FA) workflow - overview
- Introducing Twilio
- Get a new Twilio phone number & 2FA setup
- Setting up 2FA on Github with Twilio
- Troubleshooting why Twilio did not receive the SMS
- Using the Twilio API in Postman
- Conclusion

Module 6: Advanced Assertions

- Section overview
- Postman assertion basics
- Assertions
- Chai Assertion Library
- Assertions on arrays
- Assertions on nested objects

Module 7: Automatically Running Tests

- Overview
- Postman collection runner
- Postman Monitors
- Automating with Newman (Overview)
- Installing Newman
- Running a collection with Newman
- Newman v3 to v4 Migration Guide
- 3 ways to access your Postman collection from Newman
- Specifying environments with Newman
- Prerequisites for running Newman on Jenkins

- Running a collection with Jenkins and generating a report
- Creating an HTML report in Jenkins
- Generating better HTML reports
- Customizing HTML reports
- Running a collection from a Git repository with Jenkins

Module 8: Running Newman with other CI Servers/Tools

- Gitlab CI
- TeamCity
- Short introduction to Docker (optional)
- Running Jenkins with Docker
- Running Newman with Docker

Module 9: Workflows / Scenarios

- Overview
- Creating a basic workflow / scenario
- Advanced workflows

Module 10: Data-Driven Tests

- Using workflows to create data-sets
- Using external data files - Basic usage
- Using external data files - Writing tests
- Using external data files - Advanced usage

Module 11: Team Collaboration

- Introduction
- Using the Git version control system - Overview
- Using the Git version control system - Hands on
- Team Workspaces - Creating and sharing a workspace
- Team Workspaces - Understanding users and permissions
- Team Workspaces - Managing user permissions

Module 12: Mock Servers

- Introduction to mock servers
- Why use a mock server?
- Create your first mock server
- Recording responses from an existing API
- Known Limitations

Module 13: File Uploads

- Sending and testing multipart/form-data requests (file upload form)
- Automatic the upload and testing process with Newman

Module 14: Authentication / Authorization

- Basic access authentication
- OAuth2 Authorization Flow (Authorization Code Grant)
- Form-based / Session-based authentication
- JSON Web Tokens (JWT)

Module 15: New Features in Postman

- Designing APIs with Postman (OpenAPI 3.0.0 / Swagger)
- Sending GraphQL Queries in Postman

Module 16: JavaScript Fundamentals

- Overview
- Data Types in JS
- Variables
- Conditionals
- Functions
- Data Structures – Arrays/Objects
- Loops
- Modern JS
- Apply what you have learn in Postman
- Conclusion

Module 17: Placement Guide

- Tips to clear an Interview
- Common Interview questions and answers
- Postman API Testing Interview Questions and Answers
- Resume Building Guide
- Attempt for the related Global Certification Exam
- Earn Credentials and Start applying for Jobs