

Developing APIs with Google Cloud's Apigee API platform

Category: Cloud Platforms | **Vendor:** Google Cloud

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This course introduces you to the fundamentals of API Design and the out-of-the-box capabilities offered by Google Cloud's Apigee API Platform. Through a combination of lectures, hands-on labs, and supplemental materials, you will learn how to design, build, secure, deploy, and manage API solutions using Google Cloud's Apigee API Platform.

About This Course

This course introduces you to the fundamentals of API Design and the out-of-the-box capabilities offered by Google Cloud's Apigee API Platform. Through a combination of lectures, hands-on labs, and supplemental materials, you will learn how to design, build, secure, deploy, and manage API solutions using Google Cloud's Apigee API Platform.

Who Should Attend

Developers, architects, or engineers responsible for the solutioning, design, implementation, or management of APIs, API products, or digital products that leverage APIs.

Prerequisites & Entry Requirements

General Prerequisites:

Familiarity with HTTP, XML, Javascript.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

- Identify the purpose and value of Google Cloud's Apigee API Platform.
- Develop a good understanding of Google Cloud's Apigee API Platform terminology and organizational model.
- Interact with Google Cloud's Apigee API Platform.
- Solve scenarios by leveraging APIs, recommended practices, and an API-first strategy.
- Understand and put in practice the API lifecycle.
- Identify capabilities available to secure, scale, and manage APIs and API products.

Detailed Course Outline

Module 01: Apigee Overview

- Understand the placement and role of API management in modern application development.
- Define Apigee API Platform logical components and organizational structure.
- Differentiate between Apigee flexible deployment models.
- Explain API lifecycle.

Module 02: API First and OpenAPI Specifications

- Describe REST API design.
- Understand the value of API-First development and how to apply it.
- Discuss OpenAPI specification and its use in the context of API-First development.

Module 03: API Proxies

- Define the building blocks of APIs and API proxies.
- Describe how API proxies work and how capabilities such as flows, policies, route rules, virtual hosts and target servers play a role.
- Understand how APIs are exposed.
- Understand how API proxies connect to backend systems.

Module 04: API Products

- Define API products and the value behind API product strategy.
- Understand the role of developers, applications, and API keys in API management.
- Describe the API publication process.
- Understand API responses and status codes for REST APIs.

Module 05: Authentication, Authorization, and OAuth

- Discuss the importance of API Security.
- Understand the value of application identity.
- Understand the role of user authentication and authorization.
- Gain deep understanding of OAuth (Access token, Refresh token, Common pattern for all grant types) and its application in the context of API design and management.
- Discuss federated identity and the use of JSON Web Tokens in your API proxies.

Module 06: Content, Transport, and Internal Security

- Explore platform capabilities for protecting against content-based attacks and transport security.
- Understand how to protect sensitive data using encrypted KVMs, data masking, private variables.

Module 07: Mediation

- Understand the out-of-the-box platform capabilities for implementing mediation and fault handling.
- Describe implementation patterns and policies for JSON, XML, and SOAP.
- Understand extensibility options using Service Callouts, JavaScript, Python, and hosted targets.
- Explore development practices and capabilities used to reuse, share, and enforce execution of flows and policies.
- Illustrate out-of-the-box options to invoke Google Cloud services and third-party components using extensions.

Module 08: Traffic Management

- Describe when and how to use traffic management.
- Evaluate options and applicable use cases for rate limiting with spike arrests and quotas.
- Understand caching strategy and how to apply it.

Module 09: API Publishing

- Describe API publishing strategy and process.
- Expand understanding of REST API design by discussing API versioning.
- Describe the role of developer portals in the API lifecycle and as a critical part of API strategy.

Module 10: Logging and Analytics

- Discuss available options for message logging.
- Understand the value and use of API analytics.
- Differentiate between message logging and API analytics.
- Understand the extensibility options available for API analytics using custom metrics and dimensions.

Module 11: Advanced Topics

- Discuss recommended practices and tooling for Apigee offline development.
- Describe the capabilities offered by management API.
- Evaluate options to leverage CI/CD as part of API lifecycle.
- Explore Apigee Deployment Options., Traffic Management, API Publishing, Advanced Topics, Logging and Analytics, Apigee Overview, API-First and OpenAPI Specifications, API Proxies, API Products, Authentication, and OAuth, Content, and Internal Security, Mediation, API First and OpenAPI Specifications, Mediation

Skills You Will Learn:

- Identify the purpose and value of Google Cloud's Apigee API Platform.
- Develop a good understanding of Google Cloud's Apigee API Platform terminology and organizational model.
- Interact with Google Cloud's Apigee API Platform.
- Solve scenarios by leveraging APIs, recommended practices, and an API-first strategy.
- Understand and put in practice the API lifecycle.
- Identify capabilities available to secure, scale, and manage APIs and API products.

Frequently Asked Questions

Q: What delivery options are available for Developing APIs with Google Cloud's Apigee API platform?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Developing APIs with Google Cloud's Apigee API platform course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Developing APIs with Google Cloud's Apigee API platform training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Developing APIs with Google Cloud's Apigee API platform?

Yes, we provide corporate training, dedicated training, and closed classes for Developing APIs with Google Cloud's Apigee API platform. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Developing APIs with Google Cloud's Apigee API platform, Apigee, T-APIENG-B, Google Cloud, vILT

Q: Why choose Nexus Human for Developing APIs with Google Cloud's Apigee API platform?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Developing APIs with Google Cloud's Apigee API platform training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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