

# Vertex AI Agent Builder

7h

## What you'll learn

- Explore Vertex AI as a platform for enterprise-ready generative AI.
- Create a search engine using Vertex AI Search.
- Create a chat application by using Vertex AI Conversation.
- Integrate Vertex AI Search and Conversation into your applications.
- Understand how to create and share sample apps and databases.
- Productionize search engines and chat applications created in Vertex AI Search and Conversation.

## Target audience

Customers interested in learning how to use Vertex AI Search and Conversation and Vertex AI Agent Builder to create search engines and chat applications

## Prerequisites

[Google Cloud Fundamentals: Core Infrastructure](#) or equivalent Google Cloud experience.

## Course Outline

### Module 01: Introduction to Vertex AI Search and Conversation

Topics

- Vertex AI
- Vertex AI Search and Conversation
- Example use cases

## Objectives

- Explore Vertex AI as a platform for enterprise-ready generative AI.
- Describe example use cases of Vertex AI Search and Conversation.

## **Module 02: Vertex AI Search**

### Topics

- Apps, engines and data stores
- Data preparation
- Creating an custom search engine
- Configuration options

### Objectives

- Understand the main concepts of apps, engines, and data stores.
- Create a search engine using Vertex AI Search.
- Configure and integrate custom search engines.

### Activities

- Lab: Integrate Search in Applications Using Vertex AI Search

## **Module 03: Vertex AI Conversation**

- Dialogflow CX basic concepts
- Creating a chat app
- Options deploying conversational agents

### Objectives

- Understand the basic concepts of data store agents and Dialogflow CX.
- Create a chat application by using Vertex AI Conversation

### Activities

- Lab: Create a Generative Chat App with Vertex AI Conversation

## **Module 04: Productionizing Vertex AI Search and Conversation**

### Topics

- Refreshing data and schemas
- Security and DLP
- Monitoring and logging
- Troubleshooting

## Objectives

- Manage changing data and schemas in data stores.
- Explain security features of Vertex AI Search and Conversation.
- Use monitoring and logging for Vertex AI Search and Conversation apps.
- Troubleshoot Vertex AI Search and Conversation applications.

## Activities

- Lab: Maintaining Search Engines using Vertex AI Search