



Cybersecurity Essentials in Google Cloud

Course description

Learn cybersecurity fundamentals, security frameworks, cloud security best practices, and AI-powered threat detection using Google Cloud security services and modern security operations platforms.

Participants will also learn how artificial intelligence is transforming cybersecurity operations by accelerating threat detection, investigation, and incident response. Through demonstrations and discussions, learners will gain practical insights into protecting cloud environments using Google Cloud's security portfolio.

- Course level: Introductory
- Duration: 1 day

Activities

This course includes instructor-led training, interactive discussions, security framework walkthroughs, cloud security demonstrations, ai security case studies, knowledge checks and assessments, and real-world security scenarios to reinforce learning.

Course objectives

In this course, you will learn to:

- Define key cybersecurity concepts and domains.
- Understand the importance of cybersecurity in modern organizations.

- Explain core cybersecurity frameworks and models.
- Apply cybersecurity frameworks to Google Cloud security services.
- Differentiate between traditional and AI-powered security operations.
- Understand modern threat detection and response methodologies.
- Evaluate the role of AI in security investigations.
- Explore Google Cloud security tools and capabilities.

Key features

- Cybersecurity Foundations
- Threat Landscape Awareness
- Security Frameworks and Standards
- Google Cloud Security Services
- Identity and Access Security
- AI-Powered Security Operations
- Threat Intelligence and Incident Response
- Interactive Demonstrations and Discussions

Intended audience

This course is intended for:

- IT Professionals
- Cloud Engineers
- Junior Security Analysts
- Security Managers
- Cloud Administrators
- Security Operations Personnel
- Professionals Beginning Their Cloud Security Journey

Prerequisites

We recommend that attendees of this course have:

- Basic cybersecurity knowledge
- Basic IT and cloud computing knowledge

- Familiarity with SOC roles
- Familiarity with Google Cloud concepts
- Basic understanding of AI and machine learning concepts

Products covered

- Google Security Operations
- Gemini in Security
- Mandiant Threat Intelligence
- Security Command Center
- VirusTotal Code Insight
- Identity and Access Management
- Secret Manager

Course outline

Module 01 - Defining Cybersecurity

- Cybersecurity Definition
- Cybersecurity Domains
- Implementing Cybersecurity Programs

Module 02 - Cybersecurity's Importance and Relevance

- Threats and Attacks
- Cybersecurity in Context

Module 03 - Cybersecurity Frameworks and Models

- CIA Triad
- NIST CSF 2.0 Framework

Module 04 - Cybersecurity and Google Cloud Platform

- CIA Triad in Google Cloud
- NIST CSF 2.0 in Google Cloud
- Cybersecurity Domains in Cloud Environments

Module 05 - Cybersecurity and Google AI Integration

- Modern Threat Landscape
- Unified AI-Powered Security Platform

- AI-Driven Detection and Response
- Security Operations Modernization

Module 06 - Cybersecurity Essentials in Google Cloud Quiz

- Knowledge Validation
- Cybersecurity Concepts Review
- Google Cloud Security Review

Certification details

CloudThat Course Completion Certificate will be awarded to all learners who complete the training.

FAQs

Who should attend this course?

This course is designed for IT professionals, cloud engineers, junior security analysts, and security managers looking to build foundational cybersecurity knowledge in Google Cloud environments.

Is prior cybersecurity experience required?

Basic cybersecurity and cloud knowledge is recommended, but the course is designed as an introductory-level program.

Does the course cover AI in cybersecurity?

Yes. A major focus of the course is understanding how AI accelerates threat detection, investigation, and response.

Will Google Cloud security services be demonstrated?

Yes. The course includes demonstrations of IAM, Secret Manager, Firewall Rules, Confidential Computing, and Security Command Center.

Is this a hands-on course?

The course primarily uses instructor-led demonstrations, discussions, and case studies rather than hands-on labs.

What cybersecurity frameworks are covered?

The course covers the CIA Triad and the NIST Cybersecurity Framework (CSF) 2.0.

What security products are discussed?

The course covers Google Security Operations, Gemini in Security, Mandiant Threat Intelligence, Security Command Center, and VirusTotal Code Insight.

Will I receive a certificate?

Yes. A CloudThat Course Completion Certificate will be awarded upon successful completion of the course.