

Cybersecurity Essentials in Google Cloud

This course covers cybersecurity essentials, from foundational terms and frameworks to practical application on Google Cloud. You will learn to differentiate between traditional and modern AI-powered security, analyzing how AI accelerates threat detection, investigation, and response. Gain critical skills to protect cloud environments and evaluate the transformative impact of AI in security operations.

**DURATION**

2-3 hours

**LEVEL**

100 - Introductory

**FORMAT**

Instructor-led

**SCALABLE**

1-50, scaled to 1000

What you'll learn

- Define key cybersecurity terms and identify the primary domains of cybersecurity.
- Explain the importance of cybersecurity and the principles of cybersecurity frameworks.
- Apply cybersecurity frameworks to Google Cloud Platform security services.
- Differentiate between traditional and AI-powered approaches to threat detection and response.
- Evaluate AI's impact in accelerating security incident investigation and response.

Overview	6 modules
Who this course is for	• IT Professionals, Cloud Engineers, Junior Security Analysts, Security Managers
Products	• Google Security Operations • Google Threat Intelligence • Security Command Center Enterprise • Google Security Operations SIEM • Google Security Operations SOAR • Mandiant Threat Intelligence • VirusTotal Code Insight
Prerequisites	• Basic cybersecurity knowledge • Basic IT, Cloud • SOC role familiarity • Google Cloud familiarity • Basic AI, ML

Module 01

Defining Cybersecurity

Topics	• Cybersecurity definition • Cybersecurity domains • What it takes to implement cybersecurity
Objectives	• Define key cybersecurity terms and identify the primary domains of cybersecurity.

Module 02

Cybersecurity's importance and relevance

Topics	• Threats and attacks • Cybersecurity in context
Objectives	• Explain the importance of cybersecurity and the principles of cybersecurity frameworks.
Activities	• Cybersecurity in context: Discussion

Module 03 Cybersecurity frameworks and models

- Topics
- The CIA triad
 - NIST CSF 2.0 Framework
- Objectives
- Apply cybersecurity frameworks to Google Cloud Platform security services.
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Module 04 Cybersecurity and Google Cloud Platform

- Topics
- The CIA Triad in Google Cloud
 - NIST CSF 2.0 Framework in Google Cloud
 - Cybersecurity domains
- Objectives
- Apply cybersecurity frameworks to Google Cloud Platform security services.
- Activities
- Demo 1: Google Cloud IAM
 - Demo 2: Google Cloud Secret Manager
 - Demo 3: Firewall Rules for Network Security
 - Demo 4: Confidential Computing
 - Demo 5: Security Command Center
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Module 05 Cybersecurity and Google AI Integration

- Topics
- The modern threat landscape
 - Google Cloud's Unified AI-powered security platform
 - Case study: From AI detection to automated response
- Objectives
- Differentiate between traditional and AI-powered approaches to threat detection and response.
 - Evaluate AI's impact in accelerating security incident investigation and response.
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Module 06 Cybersecurity Essentials in Google Cloud: Quiz

- Topics
- Knowledge check on Cybersecurity Essentials in Google Cloud