

# Cybersecurity Essentials in Google Cloud

## Key information

Course code	Cybersecurity Essentials in Google Cloud
Course version	1.0
Course title	Cybersecurity Essentials in Google Cloud
Description	<p>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.</p>
What you'll learn	<ul style="list-style-type: none"><li>Define key cybersecurity terms and identify the primary domains of cybersecurity.</li><li>Explain the importance of cybersecurity and the principles of cybersecurity frameworks.</li><li>Apply cybersecurity frameworks to Google Cloud Platform security services.</li><li>Differentiate between traditional and AI-powered approaches to threat detection and response.</li><li>Evaluate AI's impact in accelerating security incident investigation and response.</li></ul>
Duration	3 hours
Level	Introductory
Format	Instructor-led

## Content overview

Who this course is for	IT Professionals
	Cloud Engineers
	Junior Security Analysts
	Security Managers
Total modules	6
Total videos	0
Total Labs	0
Total classroom activities	6
Prerequisites	<ul style="list-style-type: none"> <li>Basic cybersecurity knowledge</li> <li>Basic IT, Cloud</li> <li>SOC role familiarity</li> <li>Google Cloud familiarity</li> <li>Basic AI, ML</li> </ul>
Products	<ul style="list-style-type: none"> <li>Google Security Operations (SecOps)</li> <li>Gemini in Security</li> <li>Mandiant Threat Intelligence</li> <li>Security Command Center</li> <li>VirusTotal Code Insight</li> </ul>
Not covered	-

## Content breakdown

Module 1 title	Defining Cybersecurity
Module 1 topics	<ol style="list-style-type: none"> <li>1. Cybersecurity definition</li> <li>2. Cybersecurity domains</li> <li>3. What it takes to implement cybersecurity</li> </ol>
Module 1 objectives	<ul style="list-style-type: none"> <li>Define key cybersecurity terms and identify the primary domains of cybersecurity.</li> </ul>
Module 1 activities	-

<b>Module 2 title</b>	Cybersecurity's importance and relevance
<b>Module 2 topics</b>	<ol style="list-style-type: none"> <li>1. Threats and attacks</li> <li>2. Cybersecurity in context</li> </ol>
<b>Module 2 objectives</b>	<ul style="list-style-type: none"> <li>• Explain the importance of cybersecurity and the principles of cybersecurity frameworks.</li> </ul>
<b>Module 2 activities</b>	Cybersecurity in context: Discussion
<b>Module 3 title</b>	Cybersecurity frameworks and models
<b>Module 3 topics</b>	<ol style="list-style-type: none"> <li>1. The CIA triad</li> <li>2. NIST CSF 2.0 Framework</li> </ol>
<b>Module 3 objectives</b>	<ul style="list-style-type: none"> <li>• Apply cybersecurity frameworks to Google Cloud Platform security services.</li> </ul>
<b>Module 3 activities</b>	-
<b>Module 4 title</b>	Cybersecurity and Google Cloud Platform
<b>Module 4 topics</b>	<ol style="list-style-type: none"> <li>1. The CIA Triad in Google Cloud</li> <li>2. NIST CSF 2.0 Framework in Google Cloud</li> <li>3. Cybersecurity domains</li> </ol>
<b>Module 4 objectives</b>	<ul style="list-style-type: none"> <li>• Apply cybersecurity frameworks to Google Cloud Platform security services.</li> </ul>
<b>Module 4 activities</b>	<ul style="list-style-type: none"> <li>• Demo 1: Google Cloud IAM</li> <li>• Demo 2: Google Cloud Secret Manager</li> <li>• Demo 3: Firewall Rules for Network Security</li> <li>• Demo 4: Confidential Computing</li> <li>• Demo 5: Security Command Center</li> </ul>
<b>Module 5 title</b>	Cybersecurity and Google AI Integration
<b>Module 5 topics</b>	<ol style="list-style-type: none"> <li>1. The modern threat landscape</li> <li>2. Google Cloud's Unified AI-powered security platform</li> <li>3. Case study: From AI detection to automated response</li> </ol>
<b>Module 5 objectives</b>	<ul style="list-style-type: none"> <li>• Differentiate between traditional and AI-powered approaches to threat detection and response.</li> <li>• Evaluate AI's impact in accelerating security incident investigation and response.</li> </ul>
<b>Module 5 activities</b>	-

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<b>Module 6 title</b>	Cybersecurity Essentials in Google Cloud: Quiz
<b>Module 6 topics</b>	1. Knowledge check on Cybersecurity Essentials in Google Cloud
<b>Module 6 objectives</b>	N/A
<b>Module 6 activities</b>	-

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