Certificate of Cloud Security Knowledge Guide

Introduction to the CCSK

The Certificate of Cloud Security Knowledge (CCSK) enables everyone, from information security experts and CEOs, to department managers and technical sales teams, the ability to utilize cloud services more securely and speak with confidence about cloud security concerns. The CCSK gives a broad overview of cloud security and allows you to gain critical insights into issues such as data security, key management and identity and access management. Learn more about what earning your CCSK looks like in this guide.

Tips from the Trainer

Meet one of the course designers and trainer for our online CCSK course, Rich Mogull. Having led multiple trainings, we asked him to share his advice on the CCSK and how to best prepare for the exam.

Who should earn their CCSK?

The CCSK is designed for any IT professional working in cloud computing. For security professionals it's a no-brainer. We also see non-security professionals get value out of it, particularly developers, IT operations, and audit/compliance since the CCSK is really designed to give you a well rounded view of cloud security.

Which career paths does the CCSK help prepare for?

I like to describe the CCSK as a "survey course" similar to those introductory classes in university. The CCSK provides a broad overview of cloud security with hooks to dig in deeper to a student's specific coverage area. For example, developers and application security professionals will learn what is different about application security in the cloud and how and where to learn more. While an auditor will learn the fundamentals about assessing and auditing cloud and maintaining compliance. So really any career path where cloud and security overlap.

Which topics from the CCSK are typically the most difficult for students?

We find that there isn't one area where students struggle more, it depends on their background. Someone who hasn't ever worked in network security will struggle more in that section, while the network security engineer may struggle more with IAM. The best way to prepare is to review the CSA Guidance since that provides an overview in each of these areas.

What is the most common mistake people make on the CCSK?

Learning everything and then dropping it all after they are done with the test. Cloud moves fast and you have to keep up. The CCSK should just be the start of your cloud security journey.

Download Study Materials

❶ CSA Security Guidance v.4

Created by subject matter experts, this document is the ultimate guide to keeping your organization secure on the cloud. The rise of cloud computing as an ever-evolving technology brings with it a number of opportunities and challenges. This document provides both guidance and inspiration to support business goals while managing and mitigating the risks associated with the adoption of cloud computing technology. This latest version incorporates advances in cloud, security, and supporting technologies; reflects on real-world cloud security practices; integrates the latest CSA research projects; and offers guidance for related technologies.
https://cloudsecurityalliance.org/artifacts/security-guidance-v4/

> "If I could prepare differently, I would have devoted more time to studying and reading the CSA Guidance and ENISA Report a second time through."
>
> -Paul McAleer, *ISSM. Novetta Solutions*

❷ The Cloud Controls Matrix (CCM)

Considered the de-facto standard for cloud security assurance and compliance, the CSA Cloud Controls Matrix (CCM) gives a detailed understanding of security concepts and principles aligned to the Security Guidance v.4 domains. It provides fundamental security principles to guide cloud vendors as they create service offerings and assists prospective cloud customers in assessing the overall security risk of a cloud provider. The 133 controls in the CCM are founded on a customized relationship to other industry-accepted security standards, regulations, and control frameworks including ISO 27001/27002, ISACA COBIT, PCI, NIST SP 800-53, Jericho Forum and NERC CIP.
https://cloudsecurityalliance.org/artifacts/cloud-controls-matrix-v3-0-1

❸ ENISA's Cloud Computing Risk Assessment

Created by the European Union Agency for Cybersecurity (ENISA), this paper assesses the security risks and benefits of using cloud computing and provides security guidance for cloud users. ENISA, supported by a group of subject matter experts conducted a risks assessment on cloud computing business model and technologies. The result outlines key security risks of cloud computing and a set of practical recommendations.
https://www.enisa.europa.eu/publications/cloud-computing-risk-assessment/

No Prerequisites Required

There is no official work experience required, however it is helpful for attendees to have at least a basic understanding of security fundamentals such as firewalls, secure development, encryption, and identity and access management.

Topics Covered

Cloud Computing Fundamentals

The fundamentals of cloud computing, cloud architectures, service, delivery, and deployment models and the role of virtualization.

Data Security for Cloud Computing

The Data Security Lifecycle, data security issues with different delivery models, and managing encryption in the cloud.

Infrastructure Security for Cloud Computing

Securing the core infrastructure for cloud computing, networks, management interfaces and administrator credentials.

Application Security and Identity Management for Cloud Computing

Federated identity, different IAM applications, secure development, and managing application security in and for the cloud.

Managing Cloud Security and Risk

Risk assessment, governance, and key legal and compliance issues in the cloud such as discovery requirements.

Cloud Security Operations

Key considerations for evaluating, selecting, and managing cloud computing providers, Security as a Service, and incident response.

> Domain 1, "Cloud Computing Concepts and Architectures" is especially helpful when establishing a conversation with a customer who is very early on their journey, helping establish what the shared responsibility model will look like. For customers who are well on their cloud journey, I find Domain 6, "Management Plane and Business Continuity" to be extremely helpful."
>
> -Cory Cowgill, *VP and CTO, Fusion Risk Management*

Choose How to Study

Self-study.

If you are looking for a way to prepare for the exam on your own, download our free prep-kit for the CCSK exam here: https://cloudsecurityalliance.org/artifacts/ccskv4_exam_prep_kit

Self-paced training online.

If you have a hard time fitting in an instructor-led course and need training flexible enough for your schedule and budget, then our self-paced training may be a good fit. You can complete CCSK training modules on-the-go, without any deadlines, at a pace that's right for you. Preview the course for free at: https://knowledge.cloudsecurityalliance.org/ccsk-course-sample

Online training with an instructor.

The online, instructor-led training is good for companies with a tight travel budget. You can learn remotely, while still being able to ask questions and interact with your instructor.

In-person training.

The in-person training lets you interact with an instructor face to face, ask questions and learn in a traditional classroom setting.

Course Types

> "Legal aspects were my weakness, and from the plethora of recent changes in standards and regulations – PCI DSS3, NIST revisions, NYS DFS 500, GDPR and the myriad of local regulations – I suspect it is not going to get any easier."
>
> -John C. Checco, *President Emeritus, New York Metro InfraGard Members Alliance*

CCSK Foundation (Lectures)

Split into six modules, this foundation course covers all the domains from the CSA Security Guidance v4 along with information on the Cloud Controls Matrix, and recommendations from ENISA.

CCSK Plus (Lectures + Labs)

The CCSK Plus contains all the material in the foundation course in addition to hands-on labs. Learn how to apply the knowledge from the lectures by performing a series of exercises to bring a fictional organization securely into the cloud.

The Exam Format

90 ⏱ **60** 📋 **80** 📋%
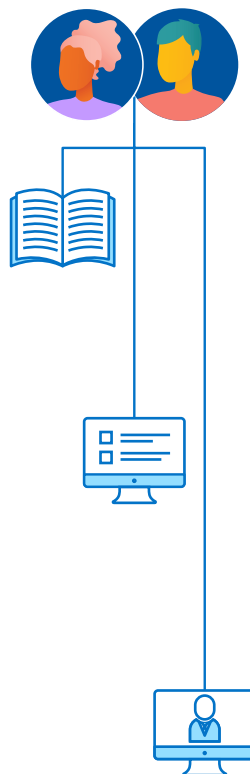
This is an open-book, online exam, completed in 90 minutes with 60 multiple-choice questions selected randomly from the CCSK question pool. The minimum passing score is 80%.

Question Format

All questions are multiple choice or true or false. Download the free CCSK Prep-Kit to preview a sample question from each module. To access a comprehensive practice test that covers material from all the modules, you can enroll in the online self-paced course.

Exam Difficulty

It may be open-book, but don't underestimate the difficulty of this exam. The passing rate is 62%.

DOMAINS	# OF QUESTIONS
1. Cloud Computing Concepts	6
2. Governance & Enterprise Risk Management	2
3. Legal Issues: Contracts and Electronic Discovery	3
4. Compliance & Audit Management	3
5. Information Governance	2
6. Management Plane & Business Continuity	4
7. Infrastructure Security	6
8. Virtualization & Containers	5
9. Incident Response	4
10. Application Security	6
11. Data Security & Encryption	6
12. Identity Entitlement and Access Management	3
13. Security as a Service	2
14. Related Technologies	1
15. CCM	4
16. ENISA	3

*Questions are selected at random from the CCSK question pool, so having a solid understanding of each domain and the CCM and ENISA documents is essential if you want to pass.

Take the Exam

1
Register at the CCSK exam website

Simply create an account to register for the exam. Because the exam is online, you can take the test where and when you want after purchasing a test token.

2
Purchase a CCSK exam token

Each CCSK test token provides you with two test attempts. If you choose to enroll in a training course, a complimentary token may already be included.

3
Take the exam

Make sure you have thoroughly studied the exam materials and reviewed your notes if you took a training course.

> "I felt that the legal and compliance management along with security incidents handling domains were quite interesting. Primarily, because these areas bring different challenges to cloud services, mainly in detailing the roles and responsibilities and limitations for both cloud consumers and cloud providers.
>
> - Satishkumar Tadapalli, *Information Security & Data Privacy Consultant*

CPE credits

Although there is currently no official CPE designations for any of CSA's training courses, we do issue a certificate of completion with a stated number of hours to complete the course for all courses we offer. You can then use this certificate of completion for CPE credit submission, but it will be determined if it qualifies for CPE credit by whomever receives your request. The online self-paced training automatically gives attendees 14 hours.

GI Bill Coverage

Veterans can now receive full coverage for the CCSK exam under the GI Bill. The Post-9/11 GI Bill is eligible for veterans who have served at least 90 days of active duty service after September 10, 2001 and received an honorable discharge. You can learn more about the requirements and reimbursement process at: https://www.benefits.va.gov/gibill/licensing_certification.asp

If you don't qualify for the GI Bill, please reach out to us for our discount policy.
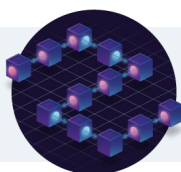
Join a CSA Working Group

After earning your Certificate of Cloud Security Knowledge, start applying your knowledge by volunteering for one of CSA's working groups. Our working groups cover a diverse range of topics and trends that impact cloud including: Artificial Intelligence, Blockchain, DevSecOps, Software Defined Perimeter, and the Internet of Things. Whether you are looking to join as an observer or author a research report, we encourage you to join. Our working groups are comprised of a diverse network of industry practitioners and corporate members that continuously cycle through researching, analyzing, formulating and delivering arguably the most advanced research and tools available across the cloud security spectrum.

Featured Working Groups

DevSecOps   **Blockchain**   **Internet of Things**

What's in it for me?

Joining a CSA Research working group is a chance to contribute and lead next-generation research in cloud security. Contributors have the opportunity to choose from over 20 areas of cybersecurity where they can best participate or observe. In some cases you may also be able to earn CPEs for hours volunteered.

The benefits of joining a CSA Research working group include:

- **Thought leadership** - Establish your voice in areas of cloud security and cybersecurity by offering subject matter expertise.
- **Build your resume** - Get recognized as an author, contributor or reviewer of leading cloud research artifacts.
- **Pulse of the industry** - Be a trailblazer in the field with the conversations and meetings in particular areas of expertise.
- **Peer-to-peer discussions** - Work with other like-minded professionals to converse and contribute on current events in cloud security.

Sign up here and a research analyst will be in touch with you shortly.
https://cloudsecurityalliance.org/research/working-groups/

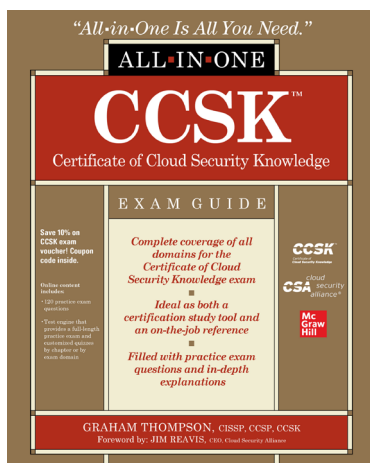# Certificate of Cloud Security Knowledge All-in-One Exam Guide

This effective study guide provides 100% coverage of every topic on the challenging CCSK exam from the Cloud Security Alliance

This integrated self-study system enables you to prepare for the Cloud Security Alliance's Certificate of Cloud Security Knowledge (CCSK) exam with confidence. Written by CSA-authorized trainer Graham Thompson in collaboration with the *Cloud Security Alliance*, the book offers exam-focused coverage of the latest cloud technologies, including virtualization, governance, and security. Beyond exam preparation, the book also serves as a valuable on-the-job reference.

To aid in learning, *CCSK Certificate of Cloud Security Knowledge All-in-One Exam Guide* features exam tips that highlight key information, chapter summaries that serves as quick reviews of salient points, and practice questions allow readers to test their comprehension. All questions closely match those on the live test in tone, format, and content. "Notes," "Tips," and "Cautions" throughout provide real-world insight and call out potentially harmful situations.

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$50.00 U.S.

- Features real-world examples, case studies, and best practices drawn from author's experience
- Online content includes access to 120 additional practice questions in the TotalTester online exam engine
- Includes 10% discount voucher coupon for the CCSK exam, a $39 value

Graham Thompson, CCSK, CCSP, CISSP is a cloud security trainer and consultant with over 20 years of IT security experience in large enterprises. He works with large enterprises and Government agencies implementing and assessing security controls in cloud environments.

CCSK™ Self-Paced Training

Study **Where**, **When** and **How** You Want.

Busy schedule?

Work around deadlines.

Don't need teacher motivation?

Self-paced is for you.

Already studied cloud?

Skip ahead to topics you haven't covered yet.

Small budget?

No worries, this training course is $795 and includes the exam.

Download our free
CCSK Prep-kit:

Preview the CCSK
course for free at: