CCSK v5 Knowledge Guide

The Certificate of Cloud Security Knowledge







Demonstrate a mastery of essential and up to date cloud security knowledge with the CCSK

Introduction to the CCSK

The <u>Certificate of Cloud Security Knowledge</u> (CCSK) is regarded as the benchmark for cloud security expertise providing a comprehensive and unbiased understanding of how to effectively secure data in the cloud. The CCSK enables everyone from information security experts to CEOs the ability to utilize cloud services more securely and speak with confidence about cloud security concerns. Whether you are just beginning your



cloud journey or are a seasoned cloud security expert, earning the CCSK certificate is the first step in preparing for other cloud certifications. The newly updated certificate will prove your skills in Zero Trust, DevSecOps, Cloud Telemetry and Security Analytics, Artificial Intelligence, and more. Learn more about what earning your CCSK looks like in this guide.

Benefits of Having Your CCSK

Demonstrate a mastery of essential and up to date cloud security knowledge with the CCSK.

Cloud computing is now the dominant information technology system and cloud security is the foundation of modern cybersecurity programs. Professionals earning the CCSK v5 not only demonstrate a mastery of essential and up to date cloud security knowledge but also retain permanent access to the first of its kind CCSK Chatbot. This is a unique tool to help professionals learn the body of knowledge as well as providing ongoing assistance in daily challenges with its unique interactive capabilities. CCSK v5 is the mark of the modern cybersecurity professional.



Career Advancement

With 83% of corporate boards recommending an increase in IT security headcount and a 3.4 million global shortage of cybersecurity professionals¹, the demand for proven cybersecurity knowledge is critical.



Future Ready Skills

With coverage on AI, GenAI, Zero Trust and additional rapidly emerging technologies, the CCSK equips you to tackle both present and upcoming security threats.



Earn a Digital Badge and Certificate

Boost your professional viability by displaying the <u>CCSK digital badge</u> and certificate on your digital profiles and resumes to demonstrate your verified skills.



Engage with our CCSK Community

Connect with CCSK instructors and students on Circle, CSA's online community forum, to gain insights, share experiences and knowledge, and learn from industry leaders who helped create the certificate.

Download Study Materials

CCSK Prep-Kit

Access everything you need to prepare for the industry's leading cloud security certificate in this curated collection of comprehensive study resources. The prep-kit is designed to give you all the necessary tools to prepare independently for the CCSK exam.

Inside the CCSK v5 prep-kit, you will find:

- Study Guide
- Security Guidance for Critical Areas of Focus in Cloud Computing v5
- Knowledge Guide
- Recommended Readings
- Justification Letter
- FAO
- Infographic How to Earn your CCSK
- 50 Sample Ouestions
- · Overview Presentation

Additional Study Materials

CSA Research Publications

CSA Research is created by the industry for the industry and is both vendor-neutral and consensus driven. Our publications are created by subject matter experts who volunteer for CSA's working groups which are focused on delivering the most advanced research and tools available across the cloud security spectrum. Recommended readings from CSA Research are included at the end of each domain in the Security Guidance.

New Content and Tools Included in CCSK v5

CCSK v5 has been substantially updated to provide a detailed understanding of modern cloud components and state-of-the-art security best practices. Leveraging the latest in Al technology, the CCSK v5 self-paced online course sounds a little different from earlier versions as an Al assistant was used for the voiceovers (with added overviews from instructors), enabling the course content to be updated more quickly over time.

CCSK v5 provides a comprehensive catalog of the essential knowledge cybersecurity professionals need to master including:

- The latest in cloud architecture, cloud native security, workloads, virtual networking, data protection, DevSecOps, Zero Trust, Generative Al and much more
- Vital information about managing risks, achieving compliance, optimizing organizational cloud security strategies and understanding the shared responsibility between the cloud provider and cloud user
- Permanent access to the groundbreaking CCSK Chatbot, CCSK Orb, a unique tool to help you master the body of knowledge and provide ongoing assistance in daily challenges

¹ Source: <u>NIST Cybersecurity Workforce Demand</u>

Topics Covered

The CCSK v5 evaluates an individual's knowledge and expertise in these 12 areas of critical cloud security knowledge:



Domain 1: Cloud Computing Concepts & Architectures

Describes and defines cloud computing, sets baseline terminology, and details the overall controls, deployment, and architectural models.



Domain 2: Cloud Governance

Focuses on cloud governance with an emphasis on the role of security and how enterprise governance helps align the strategic, tactical, and operational capabilities of information and technology with the business objectives.



Domain 3: Risk, Audit, & Compliance

Focuses on cloud security, risk, audit, and compliance, including evaluating cloud service providers and establishing cloud risk registries.



Domain 4: Organization Management

Focuses on managing your entire cloud footprint, including securing and validating service provider deployments.



Domain 5: Identity & Access Management

Focuses primarily on IAM between an organization and cloud providers or between cloud providers and services.



Domain 6: Security Monitoring

Presents unique security monitoring challenges and solutions for cloud environments, emphasizing the distinct aspects of cloud telemetry, management plane logs, service and resource logs, and the integration of advanced monitoring tools.



Domain 7: Infrastructure & Networking

Focuses on managing the overall infrastructure footprint and network security, including the CSP's infrastructure security responsibilities.



Domain 8: Cloud Workload Security

Focuses on the related set of software and data units that are deployable on some type of infrastructure or platform.



Domain 9: Data Security

Addresses the complexities of data security in the cloud, covering essential strategies, tools, and practices for protecting data in transit and at rest.



Domain 10: Application Security

Focuses on the unique challenges and opportunities presented by application security in the cloud environment from the initial design phase to ongoing maintenance.



Domain 11: Incident Response & Resilience

Focuses on identifying and explaining best practices for cloud incident response and resilience that security professionals may reference when developing their own incident plans and processes.



Domain 12: Related Technologies & Strategies

Introduces the foundational concepts and focuses on developing a strategic cybersecurity approach to Zero Trust and Artificial Intelligence.

No Prerequisites Required

There is no official experience required, however it is highly recommended that participants have a basic understanding of security fundamentals such as firewalls, secure development, encryption, and identity and access management. A familiarity with zero trust strategy, artificial intelligence, cloud workloads and application security is particularly relevant to the updated content in CCSK v5. To learn more about these topics prior to taking the CCSK v5, visit CSA's <u>Knowledge Center</u> to check out our complete training portfolio.

Choose How to Study

Study on Your Own

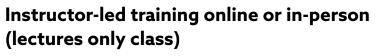
Use the free <u>CCSK Prep-Kit</u> to facilitate your independent learning style. The kit includes a comprehensive study guide, FAQ, overview presentation, recommended readings, and 50 sample questions to help you prepare on your own.



Enroll in Training

Self-paced training online

If you have a hard time fitting in an instructor-led course and/or need training flexible enough for your schedule and budget, then our <u>self-paced training</u> 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.



Ideal for individuals who prefer a more personal training experience and direct interaction with an instructor. Check out the <u>current class schedule</u> to find one that works for you.





CCSK Training and Certificate Options					
CCSK v5	CCSK Exam	CCSK Training & Exam Self-Paced	CCSK Training & Exam Instructor-Led		
Course Title	CCSK Exam	CCSK Foundation	CCSK Foundation	CCSK Plus	
Location	Online	Online	Online or In Person	Online or In Person with Labs	
Study Mode	Self Study with Study Guides	Interactive multimedia with practice quizzes	Instructor Led	Instructor Led	
Time to Complete	Based on time to read Study Guides independently	Hours will fluctuate as content is regularly updated	2 days minimum Online or In Person Classroom	2 days minimum Online or In Person Classroom	
Digital Study Guides Written Materials Only	365-day access	365-day access	365-day access	365-day access	
Fully Guided Study	×	✓	✓	✓	
Audio/Video Materials	×	✓	×	×	
Practice Quizzes or Sample Exam Questions	✓	✓	✓	✓	
Expert Instructor Access	×	×	~	✓	
Expert Q&A	×	×	✓	✓	
Community Support with CSA Circle	~	✓	~	~	
Exam Tokens One token, two attemps. Valid for 2 years.	✓	Also available without exam tokens for \$495	✓	✓	
CCSK Orb New Chatbot	✓	✓	~	~	
Hands-On Labs	×	×	×	✓	
Price	\$445	\$795	Starting at \$995* See classes for details	Starting at \$1695* <u>See classes with AWS</u> and Azure Labs for details	
Team Pricing	All versions are available for teams in enterprise organizations and government agencies. Contact teamtraining@cloudsecurityalliance.org for details.				

Contact <u>teamtraining@cloudsecurityalliance.org</u> for details.

GI Bill Coverage

United States 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 here. Veterans who do not qualify under the GI Bill are eligible to receive a 25% discount on the CCSK exam. Contact support@cloudsecurityalliance.org to learn if you qualify.

Train your Team

Build a cloud-savvy team. Give your staff the foundational cloud security knowledge they need to optimize the protection of the cloud infrastructure you rely on or provide. CSA offers <u>team trainings</u> designed and proven to:

- Fill your cloud security skills gaps
- · Get all your stakeholders trained, certified and aligned
- Meet your organization's staff training needs with exactly what fits your needs and budget
- Recognize training completion and incentivize staff with certificates and digital badges for passing the exam

While any organization can take advantage of CSA team training opportunities, CSA corporate members can receive up to a 40% discount on team training when you train up to 100 employees. To verify your organization's membership status and see if you qualify for discounted team training, or to learn how to become a CSA corporate member, contact teamtraining@cloudsecurityalliance.org.

Course Types

CCSK Foundation

Covering 12 domains of critical cloud security knowledge, this lectures-only class covers the core concepts, best practices and recommendations for securing an organization on the cloud regardless of the provider or platform.

CCSK Plus

The CCSK Plus contains all the material in the foundation course with the addition of 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. More information about the expanded material and labs covered in the CCSK Plus can be found here.





^{*}Baseline pricing only. Instructor-led pricing varies based on a variety of circumstances such as location, scope, duration, and more.

CCSK Exam Structure



Exam Format



This is an open-book, online exam, completed in **120 minutes** with **60 multiple-choice questions** selected randomly from the CCSK question pool. The minimum passing score is **80%**. You have two attempts to pass the exam. There is no waiting period to take your second attempt if you fail the first attempt, however it is recommended that students take a break and look over the study materials before attempting the exam a second time.



Question Format

All questions are multiple choice or true and false.



Exam Difficulty

It may be open-book, but don't underestimate the difficulty of this exam. Questions are selected at random from the CCSK question pool, so having a solid understanding of each domain and the material covered in the study guide is essential if you want to pass.



Domains & Number of Questions

Domains			# of Questions	
	1.	Cloud Computing Concepts & Architectures	5	
	2.	Cloud Governance	5	
	3.	Risk, Audit & Compliance	5	
	4.	Organization Management	5	
	5.	Identity & Access Management	4	
	6.	Security Monitoring	4	
	7.	Infrastructure & Networking	6	
	8.	Cloud Workload Security	7	
	9.	Data Security	5	
	10.	Application Security	6	
	11.	Incident Response & Resilience	5	
	12.	Related Technologies & Strategies	3	

Take the Exam



Simply create an account on <u>CSA Exams</u> to register for the exam. Because the exam is online, you can take the test where and when you want after purchasing an exam token.

Purchase a CCSK exam token

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

Take the exam

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

After Passing the Exam

Continuing Education Credits/Certificate

Although there are 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. Credit hours for the online self-paced course will fluctuate as the content is regularly updated.

Digital Badge

A <u>CCSK digital badge</u> is issued upon successful completion of the exam. Leverage the CCSK digital badge on your social media channels and resume to showcase your knowledge and validate your expertise.



Related CSA Certificates and Trainings

Certificates

Certificate of Competence of Zero Trust (CCZT)

The <u>Certificate of Competence in Zero Trust</u> (CCZT) is the authoritative Zero Trust <u>training</u> and <u>certificate</u> that delivers the knowledge needed to understand the core concepts of Zero Trust. Developed by CSA, the trusted industry leader for cloud security certificates, the CCZT builds knowledge to drive the definition, implementation and management of Zero Trust over time.



Certificate of Cloud Auditing Knowledge (CCAK)

The <u>Certificate of Cloud Auditing Knowledge</u> (CCAK) is the first credential available for industry professionals to demonstrate their expertise in the essential principles of auditing cloud computing systems. The CCAK credential and training program fills the gap in the market for technical education for cloud IT auditing.



Training

Cloud Infrastructure Security

Focusing on fundamental areas of cloud computing such as Top Threats, Cloud Key Management, Microservices and Containers, DevSecOps and more, the <u>Cloud Infrastructure Security</u> courses are designed to be succinct, short-form courses composed of up to several units each and a five-question knowledge check at the end.



STAR Lead Auditor

The <u>STAR Lead Auditor Training</u> is a self-paced course designed to help assessors, service providers, and consultants better manage the security of cloud services, as well as provide the credentials necessary to become a qualified STAR Auditor. This course equips individuals with the skills and knowledge required to audit cloud service providers (CSPs) against the <u>STAR Certification</u> scheme.



Share your Expertise

Forge Industry Connections on Circle

Connect with other CCSK holders or share your knowledge with students on <u>Circle</u>, CSA's online community forum that provides a space for professionals, novices and visionaries to share information. Join the <u>CCSK Community Group</u> and share tips learned from taking the training or exam, and gain insight from other industry leaders in cloud security to continue your learning journey.



Join a Research Working Group





Developer Debrief:

Who Should Earn the CCSK?

Meet one of the designers and trainers for our CCSK course, Rich Mogull. Having been involved in the development of the CCSK since the beginning, we asked him to share his insights on the latest version.



practices.

Rich Mogull
SVP Cloud Security at FireMon &
CEO Securosis

Who should pursue CCSK v5?

Version 5 of the CCSK is designed for a wide range of IT professionals with around 2 years of experience. While a background in security will help, we made sure it also addresses the needs of operations and development professionals working in cloud, especially if they work without the help of a designated security team. I also strongly recommend anyone with a previous version of the CCSK to update to v5, since this reflects the latest knowledge on cloud security

How does CCSK set up students for future opportunities and learning?

I also strongly recommend anyone with a previous version of the CCSK to update to v5, since this reflects the latest knowledge on cloud security practices.

I like to describe the CCSK as a "survey course." The material is meant to give you a broad background so you better understand where to dig in deeper on specific topics/trainings. It also provides the context to help you understand more focused education.

How were the updates for v5 determined?

We went through an extensive process which started with stepping back and reorganizing the entire structure of the training to better fit how cloud security is currently practiced. If you look at previous versions of the CCSK, they were designed when cloud technologies were in a very early state and

were predominantly used by early adopters or organizations just dipping their toes into cloud. Over the decade-plus we've been teaching and working operationally in the cloud, we learned a lot more about what skills and knowledge are needed to be successful in cloud security in today's far more complex environments.

So we built version 5 from the ground up. Instead of just adapting the previous material, we wrote every module from scratch, but pulled in the older material we knew still worked well based on our decade-plus of instructing.

We started with an outline that was released for review among CCSK instructors and then the public at large. We then developed each module, which was reviewed by a select group of the top CSA instructors. Where needed, we would perform additional research and engage with the CSA Research Team.

What is one of the most critical additions to v5?

This is really tough, but I'll say the addition of organization management content, which combines with the governance section. When we first created the CCSK, we didn't even have the capability to implement organization hierarchies and multi-deployment architectures. In my advisory work I still see a lot of enterprises struggle with how to design and manage their cloud footprint, so it was a bit of a passion project of mine to add this to the CCSK.

What Others Are Saying

"The CCSK is a benchmark for cloud security expertise. Our team of security architects and analysts has greatly benefited from the comprehensive understanding of cloud security principles and practices that this certification offers. It has enabled us to implement robust security strategies that align with industry best practices."

Shankar Chebrolu

Director of Security Architecture at Red Hat

"Obtaining the CCSK certificate was one of the best decisions I've made for my professional growth. Studying for the certificate not only deepened my technical knowledge but also improved my ability to communicate security concepts to non-technical stakeholders. It's a fantastic certificate for anyone serious about cloud security."

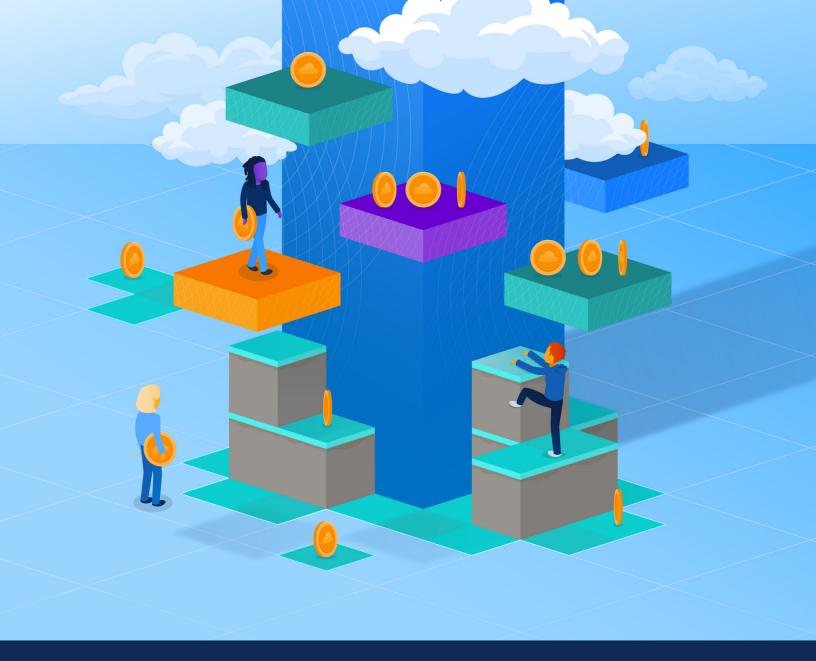
Salvador Guarino Jr.

CISO at PwC Philippines

"The CCSK has proven to be an invaluable resource for our leadership teams. It ensures that our leaders are well-versed in the latest cloud security trends and technologies, enabling us to make informed decisions and maintain a competitive edge in the market."

Tim Chase

Global Field CISO at Laceworks





Online training based on CSA's vendor-neutral research

Level up your cloud computing knowledge with the variety of CSA online courses and certificates for beginners and pros alike.

knowledge.cloudsecurityalliance.org