

Certificate of Cloud Security Knowledge

Instructor Bio

Instructor - Vana Khurana

Security Architect, The Vanguard Group, focusing on Cloud Security, CISSP, CCSP, CCSK, GSEC, GCFE, AWS Architect Associate and TOGAF Certified, Board member and Director of Training, DV Chapter of Cloud Security Alliance, Adjunct Faculty at Temple University, Philadelphia Authored "Does Business of IT Need a Process?" available at amazon.com

Disclaimer - Although I work at Vanguard, my employer is not responsible for any material presented here. I am not endorsing any vendor or vendor product. If some concepts relate to any specific product offering, that's purely accidental.

Cloud Computing Stats

""The worldwide public cloud services market is forecast to **grow 18%** in 2021 to total \$304.9 billion, up from \$257.5 billion in 2020, according to Gartner, Inc."

https://www.gartner.com/en/newsroom/press-releases/2020-11-17-gartner-forecasts-worldwide-public-cloud-end-user-spending-to-grow-18-percent-in-2021

"Insider threats increased by 47% from 3,200 in 2018 to 4,716 in 2020. It also revealed that the cost of insider threat incidents also surged by 31% from \$8.76 million in 2018 to \$11.45 million in 2020." https://www-cisomag-com.cdn.ampproject.org/c/s/www.cisomag.com/insider-threats-rise-by-47-in-two-years-report/amp/

Gartner: Worldwide Public Cloud Service Revenue Forecast (Billions of U.S. Dollars)

	2018	2019	2020	2021	2022
Cloud Business Process Services (BPaaS)	41.7	43.7	46.9	50.2	53.8
Cloud Application Infrastructure Services (PaaS)	26.4	32.2	39.7	48.3	58
Cloud Application Services (SaaS)	85.7	99.5	116	133	151.1
Cloud Management and Security Services	10.5	12	13.8	15.7	17.6
Cloud System Infrastructure Services (IaaS)					
	32.4	40.3	50	61.3	74.1
Total Market	196.7	227.8	266.4	308.5	354.6

 $\frac{https://www.gartner.com/en/newsroom/press-releases/2019-11-13-gartner-forecasts-worldwide-public-cloud-revenue-to-grow-17-percent-in-2020$

Capital One Story

The hack compromised personal **data** on roughly 100 million Americans, and approximately 6 million Canadians, who either have a **Capital One** credit card or have applied for **one**. **Capital One** has said that roughly 140,000 Social **Security** numbers were exposed, as were 80,000 bank account numbers. Aug 6, 2020

https://www.americanbanker.com > news > capital-one-to-...

Capital One to pay \$80M in connection with massive data breach...

Justice Department said. She was able to gain access by application firewall, according to a court filing.

Small things can amplify in a nonlinear way

Why Earn A Certification?

- Creates a baseline of your knowledge and expectations
- Helps organizations prove that they are providing training to support " Due Diligence"
- Promotes common set of principles across the world
- Familiarizes students with security threats and best practices for securing the cloud
- Develops a community of certified professionals to help each other

Benefits of the CCSK & How it Helps with Career Development

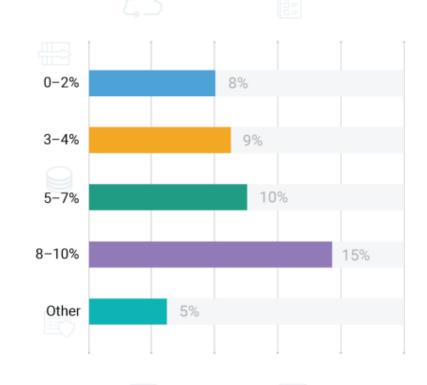
Over **50%** of **CCSK**Holders said the certificate helped get them a **new job**, **promotion**, **salary increase**, or a combination of the three.



Sometimes it's all about the \$\$\$. We asked whether or not the **CCSK** helped increase people's salaries.

27.11% said it did, but by

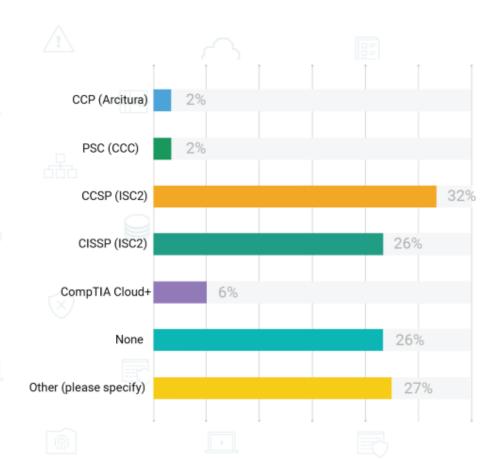
how much?

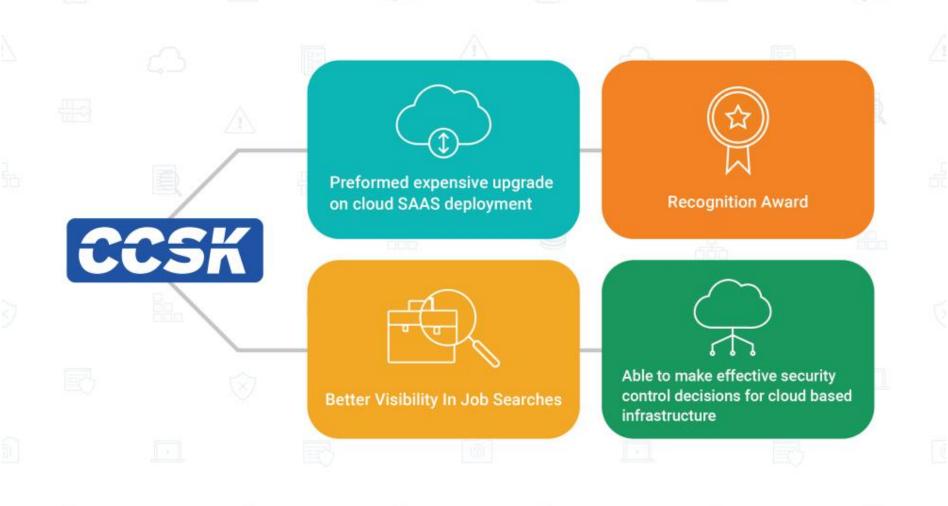


Can the **CCSK** complement other certifications?

Yes.

And the most popular ones are the **CISSP** and **CCSP**.





Security Certifications Requirements

- CISSP 6+ years of relevant experience and \$3000 plus
- CCSP 4+ years of experience and \$3000 plus
- SANS (\$7000)
- AWS/GCP/Azure \$1500
- CCSK / CCSK Plus (Certification of Cloud Security Knowledge) - \$1000

CCSK vs. CCSP

ССЅК	CCSP
100% focused on cloud security.	Covers traditional information security and cloud security
60% tactical, 40% strategic	70% strategic, 30% tactical
Quicker delivery and more comprehensive review of cloud-specific technologies (e.g. SDN, DevOps, Serverless)	More comprehensive review of IT security principles along the lines of the CISSP CBK
Less expensive course and exam	More expensive course and exam
Open book exam online (exam included with training cost)	Closed book proctored exam at testing center (exam additional charge)

Blog comparing the CCSK vs. CCSP written by an instructor who teaches both \rightarrow

CCSK vs. AWS Security

ССЅК	AWS Security
Vendor agnostic (applicable to AWS/Azure/GCP/Oracle cloud etc.)	AWS Specific
Includes Common Assessment Initiative Questionnaire (CAIQ), the Cloud Controls Matrix (CCM) and the ENISA risk report.	AWS uses CAIQ and CCM to promote AWS products but it's not included in the training.
Certification never expires.	Certification expires in 3 years. Need to retake the exam.
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CCSK Success Stories (Q&A blogs)

- Cloud Security Training from a CTO's Perspective
- CCSK Success Stories: From the Financial Sector
- CCSK Success Stories: From a Data Privacy Consultant
- <u>CCSK Success Stories: From an Information Systems Security</u>
 <u>Manager</u>

Testimonials

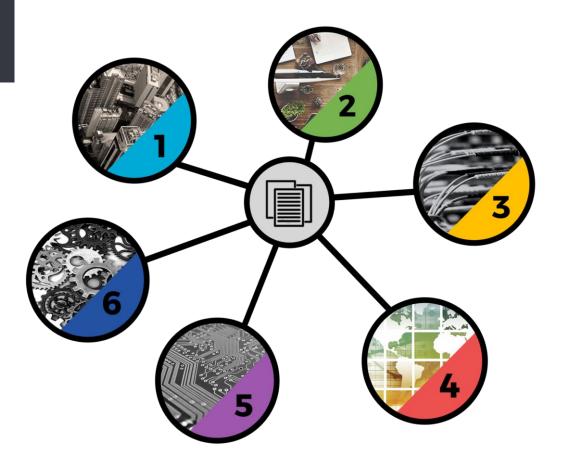
"I recently passed the CSA Certificate of Cloud Security Knowledge and I found so much of the **content directly valuable.** I would recommend it to all IT security professionals. It provides a set of comprehensive and vendor neutral cloud computing principles that are invaluable..."

- Cory Cowgill, CTO of Fusion Risk Management
- "The CCSK helped me establish my **credibility** as we formulated a strategy for securing the workloads that we are migrating to public cloud platforms."
 - Bradley Schaufenbuel, Chief Information Security Officer at Paylocity



Course Structure

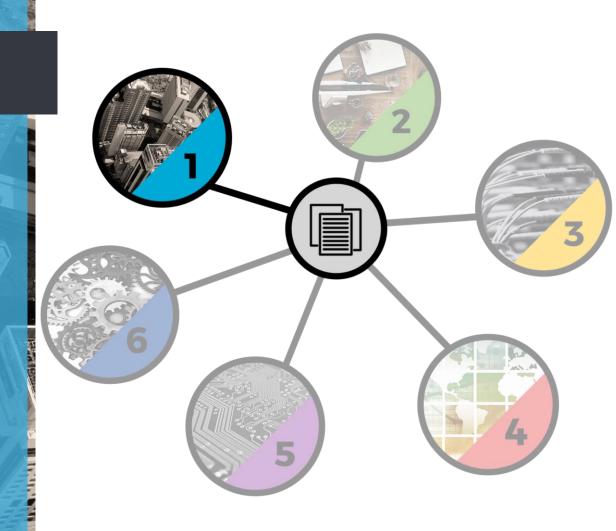
6 Modules that map to 16 Domains



Introduction To Cloud Computing

Domain 1 // Cloud Computing Concepts and Architectures

- NIST
- Essential characteristics
- Service models
- Deployment models



Infrastructure Security For Cloud

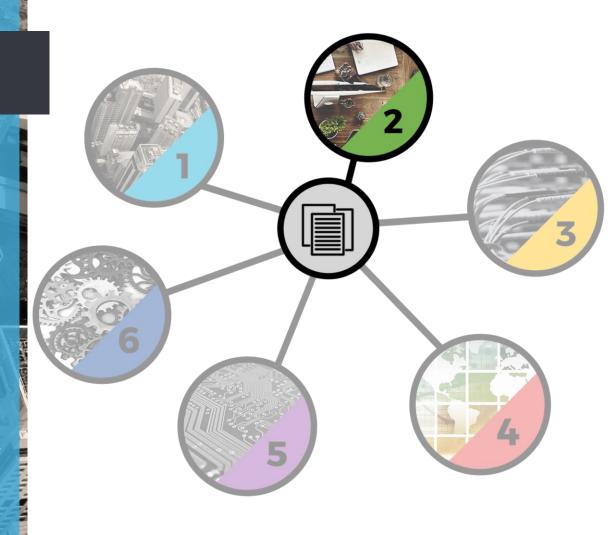
Domain 6 // Management Plane and Business Continuity

Domain 7 // Infrastructure Security

Domain 8 // Virtualization and Containers

Also maps to <u>CAIQ</u> and <u>CCM</u>, and ENISA

- BC/DR
- Securing base infrastructure
- Management plane security
- Securing virtual hosts and networks
- laaS, PaaS, SaaS security



Managing Cloud Security & Risk

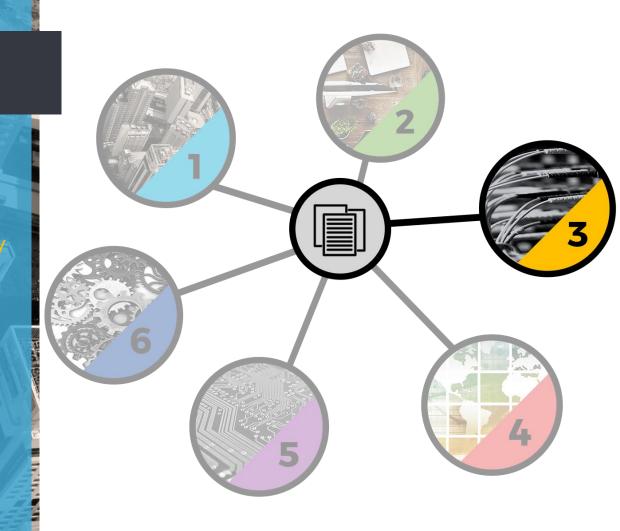
Domain 2 // Governance and Enterprise Risk Management

Domain 3 // Legal Issues,
Contracts and Electronic Discovery

Domain 4 // Compliance and Audit Management

Domain 5 // Information Governance

- Risk and governance
- Legal and compliance
- Audit

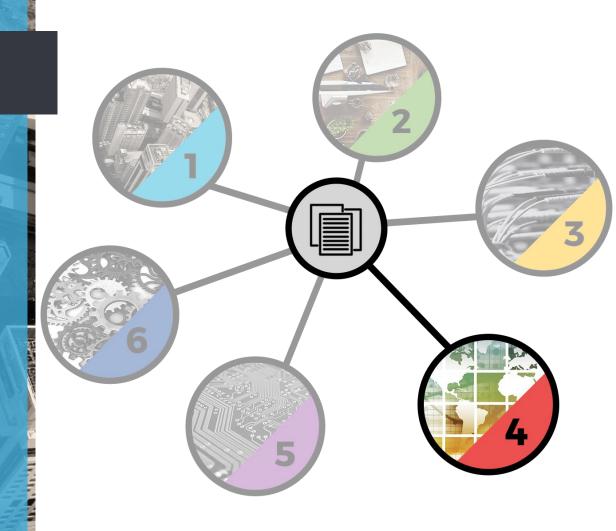


Data Security For Cloud

Domain 6 // Management Plane and Business Continuity

Domain 11 // Data Security

- Cloud data architectures
- Data governance
- Data security and encryption
- CASB and data loss prevention



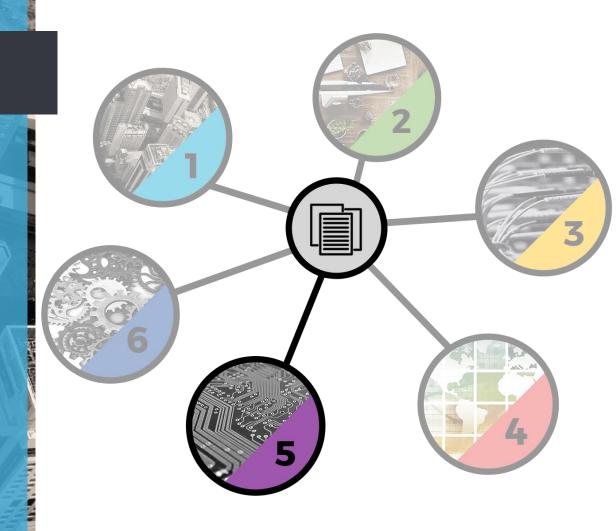
Securing Cloud Applications, Users & Related Technologies

Domain 10 // Application Security

Domain 12 // Identity Entitlement and Access Management

Domain 14 // Related Technologies

- Application security
- Identity and access management
- Related technologies



MODULE 6 // Cloud Security Operations

Domain 9 // Incident Response

Domain 13 // Security as a Service

- What to look for in a cloud provider
- Security as a Service
- Incident Response

