INFOSECTRAIN
Educate. Excel. Empower.

NEW SYLLABUS

# CCSP

## Certified Cloud Security Professional

### Training & Certification

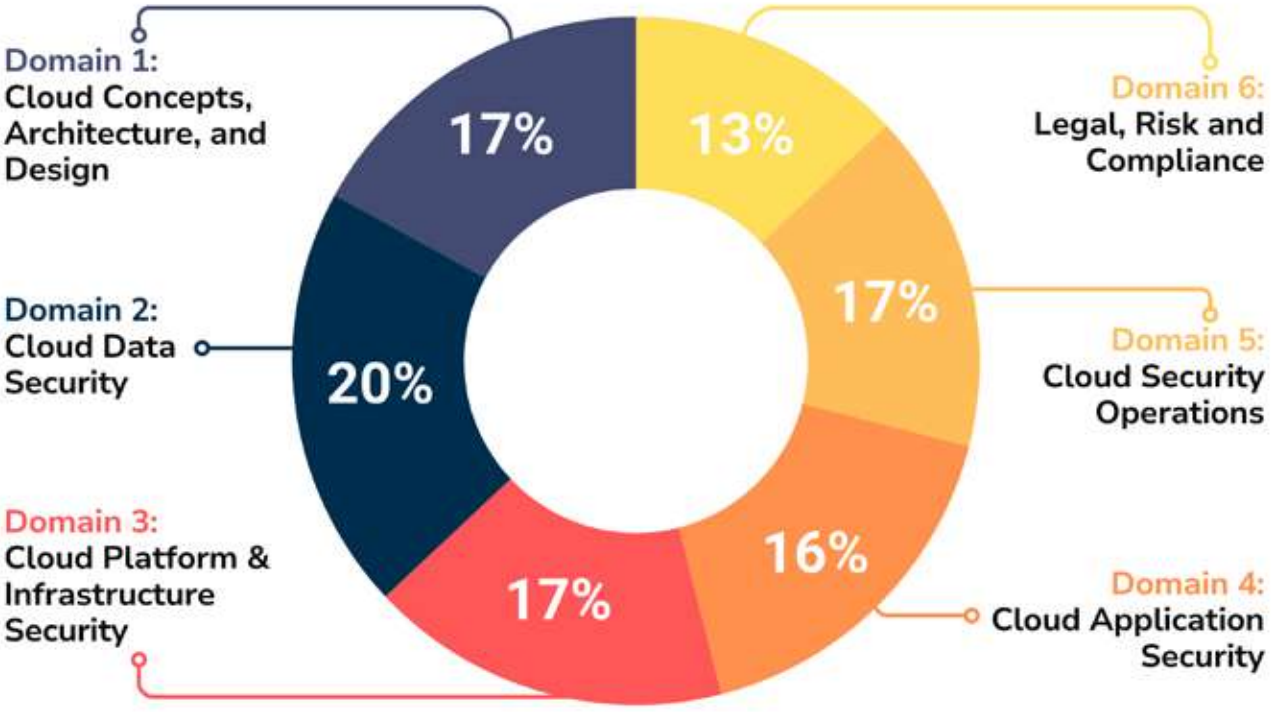
INFOSECTRAIN

# Course Highlights

- **48-Hour LIVE** Instructor-Led Training
- **Telegram Group** for Exam Practice
- Learn Better with **Flash Cards & Mind Maps**
- **Regular assessments** and knowledge checks
- **98%** Exam Pass Rate
- **Experienced** Industry Experts
- Real-world **Case Studies**
- Post Training **Support** Till Exam
- **Access to** Recorded Sessions

# About Course

This certification-focused CCSP course is based on the new syllabus that is designed to empower learners with all necessary skills and expertise to ace the CCSP certification. The key objective of the new version update of this certification training program is to arm learners with the right techniques and skills required to safeguard the critical data assets in a cloud environment.



INFOSECTRAIN

# Course Objectives

- Design and implement security controls for cloud infrastructure, applications, and data.
- Secure cloud-based applications, including software as a service (SaaS) and platform as a service (PaaS).
- Understand the legal and compliance aspects of cloud security, including privacy and audit requirements.
- Implement and manage security operations in the cloud, including monitoring, incident response, and disaster recovery.
- Understand the unique security challenges and considerations in cloud environments.
- Apply best practices for securing cloud services, data, and infrastructure.

## Target Audience

This CCSP training is suitable for experienced IT personnel who are involved with:

- Information Security
- Cloud Architecture
- Risk and Compliance
- Security Engineering
- Governance
- IT auditing & assessment

## Pre-requisites

The candidates who are enrolling for this course must have five years of working experience in information security and CCSP CBK domains. All those who fail to fulfill the eligibility criteria can take the exam to become an associate of (ISC)2 and can start working towards getting the experience to get the desired certification

INFOSECTRAIN

# Exam Information

| | |
|---|---|
| Certification Name | CCSP |
| Exam Duration | 180 minutes |
| Number of Questions | 100-150 |
| Exam Format | Multiple Choice and Advanced Question Types |
| Passing Score | 700 out of 1000 points |
| Exam Language | English, Chinese, Japanese and German |

INFOSECTRAIN

# Course Content

## Domain 1 Cloud Concepts, Architecture, and Design (17%)

### 1.1 Understand Cloud Computing Concepts

- Cloud Computing Definitions
- Cloud Computing Roles and Responsibilities
- Essential Cloud Computing Characteristics
- Building Block Technologies

### 1.2 Describe Cloud Reference Architecture

- Cloud Computing Activities
- Cloud Service Capabilities
- Cloud Service Categories
- Cloud Deployment Models
- Cloud Shared Considerations
- Impact of Related Technologies

### 1.3 Understand Security Concepts Relevant to Cloud Computing

- Cryptography and Key Management
- Identity and Access Control
- Data and Media Sanitization
- Network Security
- Virtualization Security
- Common Cloud Threats
- Security Hygiene

### 1.4 Understand Design Principles of Secure Cloud Computing

- Cloud Secure Data Lifecycle
- Cloud-based Business Continuity (BC) and Disaster Recovery (DR) Planning
- Business Impact Analysis (BIA)

- Functional Security Requirements
- Security Considerations and Responsibilities for Different Cloud Categories
- Cloud Design Patterns
- DevOps Security

**1.5 Evaluate Cloud Service Providers (CSP)**

- Verification Against Criteria
- System/Subsystem Product Certifications

**1.6 Comprehend Artificial Intelligence (AI)/Machine Learning (ML)**

- Cloud Threat Detection and Analysis
- Data Source Validation and Verification
- Security Orchestration, Automation and Response (SOAR)
- Ethical Concerns
- Regulatory Requirements

## Domain 2 Cloud Data Security (20%)

### 2.1 Describe Cloud Data Concepts

- Cloud Data Lifecycle Phases
- Data Dispersion
- Data Flows

### 2.2 Design and Implement Cloud Data Storage Architectures

- Storage Types
- Threats to Storage Types

### 2.3 Design and Apply Data Security Technologies and Strategies

- Encryption and Key Management
- Hashing (e.g., data integrity, non-repudiation)
- Data Obfuscation (e.g., masking, anonymization)
- Tokenization
- Data Loss Prevention (DLP)
- Keys, Secrets and Certificates Management

### 2.4 Implement Data Discovery

- Structured Data
- Unstructured Data
- Semi-Structured Data
- Data Location

### 2.5 Plan and Implement Data Classification

- Data Classification Policies
- Data Mapping
- Data Labelling and Tagging

### 2.6 Design and Implement Information Rights Management (IRM)

- Objectives
- Appropriate Tools

## 2.7 Plan and Implement Data Retention, Deletion and Archiving Policies

- Data Retention Policies
- Data Deletion Procedures and Mechanisms
- Data Archiving Procedures and Mechanisms
- Legal Hold

## 2.8 Design and Implement Auditability, Traceability and Accountability of Data Events

- Definition of Event Sources and Requirement of Event Attributes
- Logging, Storage and Analysis of Data Events
- Chain of Custody and Non-repudiation

## 2.9 Comprehend Data Protection of AI and ML Data

- Data Set and Model Privacy
- Data Set and Model Security

## Domain 3 Cloud Platform and Infrastructure Security (17%)

### 3.1 Comprehend Cloud Infrastructure Components

- Physical Environment
- Network and Communications
- Compute
- Virtualization
- Storage
- Management Plane

### 3.2 Design a Secure Data Center

- Logical Design
- Physical Design
- Environmental Design
- Design Resilience

### 3.3 Analyze Risks Associated with Cloud Infrastructure and Platforms

- Risk Assessment
- Cloud Vulnerabilities, Threats and Attacks
- Risk Treatment Strategies

### 3.4 Plan and Implementation of Security Controls

- Physical and Environmental Protection
- System, Storage and Communication Protection
- Identification, Authentication and Authorization in Cloud Environments
- Audit Mechanisms

### 3.5 Plan Business Continuity (BC) and Disaster Recovery (DR)

- Business Continuity (BC)/Disaster Recovery (DR) Strategy
- Business Requirements
- Creation, Implementation and Testing of Plan

## Domain 4 Cloud Application Security (16%)

### 4.1 Advocate Training and Awareness for Application Security

- Cloud Development Basics
- Common Pitfalls
- Common Cloud Vulnerabilities

### 4.2 Describe the Secure Software Development Life Cycle (SDLC) Process

- Business Requirements
- Phases and Methodologies (e.g., design, code, test, maintain, waterfall vs. agile)

### 4.3 Apply the Secure Software Development Life Cycle (SDLC)

- Cloud-Specific Risks
- Threat Modelling
- Avoid Common Vulnerabilities During Development
- Secure Coding
- Software Configuration Management (CM) and Versioning

### 4.4 Apply Cloud Software Assurance and Validation

- Functional and Non-functional Testing
- Security Testing Methodologies
- Quality Assurance (QA)
- Abuse Case Testing

### 4.5 Use Verified Secure Software

- Securing Application Programming Interfaces (API)
- Supply-Chain Management
- Third-Party Software Management
- Validated Open-Source Software

## 4.6 Comprehend and Apply the Specifics of Cloud Application Architecture

- Supplemental Security Components
- Cryptography
- Sandboxing
- Application Virtualization and Orchestration

## 4.7 Design Appropriate Identity and Access Management (IAM) Solutions

- Federated Identity
- Identity Providers (IdP)
- Single Sign-On (SSO)
- Multi-Factor Authentication (MFA)
- Cloud Access Security Broker (CASB)
- Secrets, Key, and Certificate Management

## Domain 5 Cloud Security Operations (17%)

### 5.1 Build and Implement Physical and Logical Infrastructure for Cloud Environment

- Hardware Specific Security Configuration Requirements
- Secure by Default
- Installation and Configuration of Management Plane Tools
- Virtual Hardware Specific Security Configuration Requirements
- Installation of Guest Operating System (OS) Virtualization Toolsets

### 5.2 Operate and Maintain Physical and Logical Infrastructure for Cloud Environment

- Access Controls for Local and Remote Access
- Secure Network Configuration
- Network Security Controls
- Operating Systems Hardening through Application of Baselines, Monitoring and Remediation
- Patch Management
- Availability of Clustered Hosts
- Availability of Guest Operating System (OS)
- Performance and Capacity Monitoring
- Hardware Monitoring
- Configuration of Host and Guest OS Backup and Restore Functions
- Management Plane

### 5.3 Implement Operational Controls and Standards

- Change Management
- Continuity Management
- Information Security Management
- Continual Service Improvement Management
- Incident Management

- Problem Management
- Release Management
- Deployment Management
- Configuration Management (CM)
- Service-Level Management
- Availability Management
- Capacity Management

### 5.4 Support Digital Forensics

- Forensic Data Collection Methodologies
- Evidence Management
- Collecting, Acquiring, and Preserving Digital Evidence

### 5.5 Manage Communication with Relevant Parties

- Vendors
- Customers
- Partners
- Regulators
- Other Stakeholders

### 5.6 Manage Security Operations

- Security Operations Center (SOC)
- Intelligent Monitoring of Security Controls
- Log Capture and Analysis
- Incident Response (IR)
- Vulnerability Assessments
- Penetration Testing

## Domain 5 Legal, Risk and Compliance (13%)

### 6.1 Articulate Legal Requirements and Unique Risks within the Cloud Environment

- Conflicting International Legislation
- Evaluation of Legal Risks Specific to Cloud Computing
- Legal and Regulatory Frameworks and Guidelines
- eDiscovery
- Forensics Requirements

### 6.2 Understand Privacy Requirements

- Difference Between Contractual and Regulated Private Data
- Country-Specific Legislation Related to Private Data
- Jurisdictional Differences in Data Privacy
- Standard Privacy Requirements
- Privacy Impact Assessments (PIA)

### 6.3 Understand Audit Processes, Methodologies, and Required Adaptations for a Cloud Environment

- Internal and External Audit Controls
- Impact of Audit Requirements
- Identify Assurance Challenges of Virtualization and Cloud
- Types of Audit Reports
- Restrictions of Audit Scope Statements
- Gap Analysis
- Audit Planning
- Internal Information Security Management System (ISMS)
- Internal Information Security Controls System
- Policies

- Identification and Involvement of Relevant Stakeholders
- Specialized Compliance Requirements for Highly Regulated Industries
- Impact of Distributed Information Technology (IT) Model

## 6.4 Understand Implications of Cloud to Enterprise Risk Management

- Assess Providers Risk Management Programs
- Difference Between Data Roles
- Regulatory Transparency Requirements
- Risk Treatment
- Different Risk Frameworks
- Metrics for Risk Management
- Assessment of Risk Environment

## 6.5 Understand Outsourcing and Cloud Contract Design

- Business Requirements
- Vendor Management
- Contract Management
- Supply-Chain Management

# Testimonials

**Selvan Seluvappan, CCSP, CISM, PMP** • 2nd
Network Security Architect | Cybersecurity | Cloud Security | Project ...
1mo • Edited • + Follow

I am excited to share that I have successfully earned the Certified Cloud Security Professional (CCSP) certification!
A special thanks to Mr. Krish for his exceptional training and guidance, and to Mr. Prabh Nair for his insightful YouTube content, both of which were invaluable in this journey.
This achievement inspires me to keep learning and growing in the field of cloud security. Here's to the next chapter!
#CCSP #CloudSecurity #ProfessionalGrowth


**Nikhil Patil** • 2nd
Senior technical specialist, CISSP, CCSP
1w • Edited • + Follow

Excited to share that I have earned Certified Cloud Security Professional (CCSP) from ISC2 certification.
I wanted to express my deepest gratitude for my mentor Krish . for your training guidance and support to prepare for the exam.
I would also thankful for Prabh Nair (Coffee shots) and Infosec Train team support.

Thank you for believing in me and helping me grow in my career.


**Vijayakumar T T** • 2nd
DGM IT | 17+ Years in IT Infrastructure & Cyber Security | CISSP | CG...
3w • + Follow

Excited to announce that I've cleared the CCSP (Certified Cloud Security Professional) certification!
This journey has been both challenging and rewarding, and I couldn't have done it without the invaluable guidance and support from some amazing people.
A huge thank you to Krish, Prabh Nair for his Coffee Shots, and Infosec Train for their incredible insights, resources, and mentorship throughout this process. Your support made all the difference in my preparation.
Looking forward to leveraging this knowledge to further enhance cloud security practices and contribute to the ever-evolving field of cybersecurity.


**Sarjerao Tupsamudre** • 2nd
Senior Cyber Security Architect @ UPL | CISSP CCSP
3w • Edited • + Follow

Starting New Year with an important achievement of my Cyber Security Career by clearing the CCSP (Certified Cloud Security Professional) exam today.
Thanks to all those who have supported and guided me throughout the exam preparation...
Special thanks to Avinash Selvamani and Krish . for your valuable guidance and support

I will share tips/feedback on exam preparation based on my experience shortly..


**Hariharasudhan Gopalakrishnan, CISSP, CCSP** • 2nd
Lead Cloud Architect @ HCLTech | Enterprise Solution Design | Tech...
3w • Edited • + Follow

View my verified achievement from ISC2.

I'm thrilled to share that I have passed the CCSP (Certified Cloud Security Professional) certification! This would not have been possible without the incredible support of Infosec Train and my trainer Krish . for their engaging sessions that equipped me with the necessary tools for success.

I also want to acknowledge the community leaders Prabh Nair [redacted] who foster learning and growth. Your dedication inspires me to further my journey in cloud security.

#CCSP #CloudSecurity #ProfessionalDevelopment #ISC2

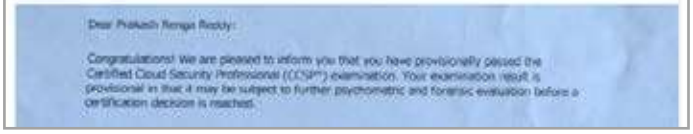

Certified Cloud Security Professional (CCSP) was issued by ISC2 to Hariharasudhan Gopalakrishnan.
credly.com

**Prakash Reddy** • 3rd+
Senior security Engineer | CISSP | CCSP
4w • + Follow

I'm excited to share that I've passed the #CCSP (Certified Cloud Security Professional) exam! This certification enhances my understanding of cloud security architecture and best practices.

Huge thanks to #KKSingh & Infosec Train for their training and guidance, which helped me pass this challenging exam.

Shoutout to Prabh Nair for his CCSP Coffee Shot videos on specific topics and valuable practice questions.



INFOSECTRAIN
Educate. Excel. Empower.

## Contact us

www.infosectrain.com
sales@infosectrain.com

## Follow us on