

# Emerging Technologies

## Certificate of Cloud Security Knowledge (CCSK) Program

### Curriculum

#### **Program Outline :**

#### **Module 1: Fundamentals of Cloud Security**

##### **1. Introduction to Cloud Security**

- Core principles of cloud security.
- Overview of cloud computing models and services.
- Key cloud security challenges and solutions.

##### **2. Cloud Security Controls**

- Understanding cloud security controls and their implementation.
- Best practices for securing cloud environments.
- Strategies for protecting cloud data and applications.

#### **Module 2: Advanced Cloud Security Principles**

##### **3. CSA Security Guidance**

- In-depth exploration of CSA Security Guidance for Critical Areas of Focus in Cloud Computing.
- Applying CSA principles to secure cloud environments.
- Case studies and real-world applications.

##### **4. ENISA Cloud Computing Risk Assessment**

- Understanding ENISA Cloud Computing Risk Assessment.

- Identifying and managing cloud security risks.
- Implementing ENISA recommendations for cloud security.

## **5. Cloud Compliance and Governance**

- Ensuring compliance with cloud security standards and regulations.
- Implementing governance frameworks for cloud security.
- Best practices for maintaining compliance in cloud environments.

## **6. Cloud Incident Response**

- Developing and implementing cloud incident response plans.
- Strategies for managing cloud security incidents.
- Case studies of cloud security incidents and responses.

## **Module 3: Practical Applications**

### **7. Hands-on Cloud Security Projects**

- Real-world projects to apply cloud security principles.
- Designing and implementing cloud security solutions.
- Collaborating with peers and mentors to solve complex challenges.

### **8. Cloud Security Integration**

- Integrating cloud security controls with existing systems.
- Best practices for seamless cloud security integration.
- Strategies for maintaining security in hybrid cloud environments.

## **Module 4: Exam Preparation**

### **9. CCSK Exam Preparation**

- Comprehensive preparation for the CCSK exam.
- Practice exams and review sessions.
- Exam tips and strategies for success.

### **10. Advanced Cloud Security Techniques**

- Deepening knowledge and exploring advanced cloud security capabilities.
- Implementing advanced security measures for cloud environments.

## **Elective Modules**

### **11. Data Ethics and Privacy**

- Ethical considerations, privacy laws, and compliance strategies.

### **12. AI for Cloud Security**

- Implementing AI solutions in cloud security.

### **13. Big Data Security**

- Managing security for big data applications in the cloud.

### **14. Cloud DevOps Security**

- CI/CD pipelines, automation, and containerization security.

### **15. Cloud Security Project Management**

- Leading cloud security projects and ensuring successful delivery.

### **16. IoT Security in Cloud**

- Integrating and securing IoT devices in cloud environments.

## **Websites:**

- <https://chools.in/>
- <https://ramaqchools.com/>
- <https://www.choolsgroup.com/>