

Course Curriculum

SC-500: MICROSOFT CERTIFIED-CLOUD AND AI SECURITY ENGINEER ASSOCIATE



500K+

Satisfied Students



100K+

Online Students



300+

Trainers



300K+

Placements



200+

Global Certifications



150+

Companies

Module 1: Cloud and AI Security Fundamentals

- ✓ Cloud Computing Security Fundamentals
- ✓ Shared Responsibility Model
- ✓ Zero Trust Security Framework
- ✓ Defense In Depth Strategy
- ✓ Security Governance Principles
- ✓ Risk Management Concepts
- ✓ Compliance And Regulatory Standards
- ✓ Introduction To AI Security
- ✓ Security Challenges In AI Environments
- ✓ Microsoft Security Architecture Overview

Module 2: Identity and Access Management

- ✓ Microsoft Entra ID Fundamentals
- ✓ Authentication And Authorization Concepts
- ✓ Multi-Factor Authentication (MFA)
- ✓ Passwordless Authentication
- ✓ Single Sign-On (SSO)
- ✓ Conditional Access Policies
- ✓ Identity Protection
- ✓ Self-Service Password Reset (SSPR)
- ✓ Privileged Identity Management (PIM)
- ✓ Role-Based Access Control (RBAC)
- ✓ Managed Identities
- ✓ Access Reviews And Governance

- Hands-On Lab
 - Configure MFA and Conditional Access Policies
 - Implement RBAC and PIM

Module 3: Governance and Compliance Management

- ✓ Azure Resource Management
- ✓ Management Groups And Subscriptions
- ✓ Azure Policy Implementation
- ✓ Resource Locks
- ✓ Governance Best Practices
- ✓ Security Baselines
- ✓ Compliance Manager
- ✓ Regulatory Compliance Monitoring
- ✓ Audit And Reporting
 - Hands-On Lab
 - Configure Azure Policies
 - Implement Compliance Controls

Module 4: Network Security

- ✓ Virtual Networks (VNet)
- ✓ Network Security Groups (NSG)
- ✓ Azure Firewall
- ✓ Azure DDoS Protection
- ✓ Azure Bastion
- ✓ VPN Gateway Security
- ✓ ExpressRoute Security
- ✓ Service Endpoints
- ✓ Private Endpoints
- ✓ Web Application Firewall (WAF)

✓ Secure Network Architecture Design

- Hands-On Lab
 - Configure NSGs and Azure Firewall
 - Implement Secure Network Connectivity

Module 5: Data Protection and Storage Security

✓ Azure Storage Security

✓ Access Control For Storage Accounts

✓ Shared Access Signatures (SAS)

✓ Encryption At Rest And In Transit

✓ Azure Disk Encryption

✓ Data Classification And Labeling

✓ Data Loss Prevention (DLP)

✓ Backup And Recovery Security

✓ Information Protection

- Hands-On Lab
 - Secure Azure Storage Accounts
 - Configure Data Protection Policies

Module 6: Azure Key Vault and Secrets Management

✓ Azure Key Vault Overview

✓ Managing Secrets And Keys

✓ Certificate Management

✓ Key Rotation Policies

✓ Hardware Security Modules (HSM)

✓ Application Integration With Key Vault

✓ Secure Secret Storage Best Practices

- Hands-On Lab
 - Configure Azure Key Vault
 - Manage Secrets and Certificates

Module 7: Database Security

- ✓ Azure SQL Security Features
- ✓ Transparent Data Encryption (TDE)
- ✓ Dynamic Data Masking
- ✓ Always Encrypted
- ✓ Vulnerability Assessment
- ✓ Database Auditing
- ✓ Threat Detection
- ✓ Secure Database Access Control
 - Hands-On Lab
 - Implement SQL Security Controls
 - Configure Auditing and Encryption

Module 8: Compute Security

- ✓ Virtual Machine Security
- ✓ Secure VM Deployment
- ✓ Just-In-Time (JIT) VM Access
- ✓ Endpoint Protection
- ✓ Azure App Service Security
- ✓ Azure Functions Security
- ✓ API Security Fundamentals
- ✓ Secure Compute Architecture
 - Hands-On Lab
 - Configure JIT Access
 - Secure Azure Compute Resources

Module 9: Container and Kubernetes Security

- ✓ Container Security Fundamentals
- ✓ Azure Kubernetes Service (AKS)

- ✓ Container Registry Security
- ✓ Image Scanning And Protection
- ✓ Kubernetes RBAC
- ✓ Network Policies
- ✓ Secrets Management
- ✓ Runtime Protection
- ✓ Container Threat Monitoring
 - Hands-On Lab
 - Deploy and Secure AKS Cluster
 - Implement Kubernetes Security Controls

Module 10: Microsoft Defender for Cloud

- ✓ Microsoft Defender For Cloud Overview
- ✓ Cloud Security Posture Management (CSPM)
- ✓ Secure Score Analysis
- ✓ Regulatory Compliance Dashboard
- ✓ Workload Protection
- ✓ Threat Detection And Response
- ✓ Security Recommendations
- ✓ Continuous Security Monitoring
 - Hands-On Lab
 - Configure Defender for Cloud
 - Analyze Security Recommendations

Module 11: Security Monitoring and Incident Response

- ✓ Microsoft Sentinel Overview
- ✓ Log Analytics Workspace
- ✓ Data Connectors Configuration
- ✓ Kusto Query Language (KQL)

- ✓ Analytics Rules
- ✓ Workbooks And Dashboards
- ✓ Incident Management
- ✓ Threat Hunting Techniques
- ✓ Automation Rules And Playbooks
 - Hands-On Lab
 - Configure Microsoft Sentinel
 - Perform Threat Hunting Using KQL

Module 12: Security Operations and Threat Protection

- ✓ Microsoft Defender XDR
- ✓ Endpoint Detection And Response (EDR)
- ✓ Threat Intelligence
- ✓ Attack Surface Reduction
- ✓ Identity Threat Detection
- ✓ Email And Collaboration Security
- ✓ Security Incident Response Process
- ✓ Security Operations Best Practices
 - Hands-On Lab
 - Investigate Security Incidents
 - Implement Threat Protection Policies

Module 13: AI Security Fundamentals

- ✓ Introduction To AI Security
- ✓ AI Threat Landscape
- ✓ Prompt Injection Attacks
- ✓ Data Poisoning Risks
- ✓ Model Security And Protection
- ✓ Responsible AI Principles

- ✓ Privacy And Compliance In AI Systems
- ✓ AI Risk Management Frameworks
 - Hands-On Lab
 - Assess AI Security Risks
 - Implement AI Security Controls

Module 14: Microsoft Security Copilot

- ✓ Security Copilot Overview
- ✓ Generative AI For Security Operations
- ✓ Threat Investigation With Copilot
- ✓ Security Incident Analysis
- ✓ Threat Hunting Assistance
- ✓ Security Reporting And Summarization
- ✓ Copilot Integration Scenarios
- ✓ Best Practices And Governance
 - Hands-On Lab
 - Investigate Incidents Using Security Copilot
 - Generate Security Reports

Module 15: Azure AI and AI Workload Security

- ✓ Azure AI Services Security
- ✓ Azure AI Foundry Security
- ✓ AI Access Control Mechanisms
- ✓ AI Data Security And Privacy
- ✓ Secure AI Development Lifecycle
- ✓ Monitoring AI Workloads
- ✓ Compliance Requirements For AI Applications
- ✓ AI Governance And Risk Management
 - Hands-On Lab

- Secure Azure AI Services
- Configure AI Workload Monitoring

Module 16: Capstone Project and Certification Preparation

✓ Capstone Project

- Design and Secure an End-to-End Azure Environment
- Implement Identity, Network, Data, and AI Security Controls
- Configure Defender for Cloud and Sentinel
- Perform Threat Detection and Incident Response

✓ Certification Preparation

- Exam Objectives Review
- Scenario-Based Question Practice
- Mock Examinations
- Exam Strategy and Time Management
- Final Revision Sessions

e-Learning through LMS

Learning **Management System**

Our LMS (LearnPitch) is for the administration, documentation, tracking, reporting, automation, and delivery of educational courses, training programs, or learning and development programs.

Our LMS has been designed to identify training and learning gaps, using analytical data and reporting to keep you up with the class activities.

Key Features **Learning Management System**



Live Sessions with Class recordings



Get study material with Assignments.



Track your curriculum covered.



Track your class wise attendance



Share your feedback for Trainer & Training



Get your Training Certificate from LMS



| Training Certification

Earn Your **Certificate**

Your certificate and skills are vital to the extent of jump-starting your career and giving you a chance to compete in a global space.



|Croma Campus is Nasscom Certified

Croma Campus is now

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|Croma Campus! Reviews



"The most rewarding part of my experience has been achieving a prestigious certification in the subject that I love. Moreover, the training offered out by the specialists are of world-class and prepares out the students for corporate world. For me Croma Campus means a lot."

"By The Students For The Students,"

Your Success is **Our Story**



Bharat

"I am fully satisfied with the excellent training services received by the expert staff at Croma Campus. I want to thank Croma Campus for providing me with the most innovative and affordable training services for learning all the software testing procedures and guidelines. "



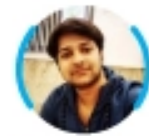
Ankit

"It was a lifetime experience for me to get trained by IT Experts of Croma Campus. What I liked most about the training was the consistent high-quality education, which was friendly and co-active. The placement department was also proactive, they keep me updated regarding new job opportunities and provide the grooming session to crack the interview. At last, I would like to thank all faculty members of Croma Campus for their immense help and support. "



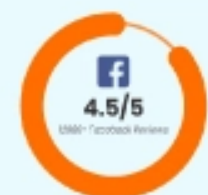
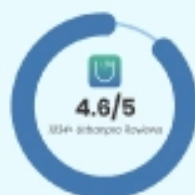
Umesh

"Without any second thought, I will give Croma Campus 10/10. Their placement department is highly proactive. I remember they started scheduling interviews for me from the very next day when I told them my course has been completed. These people are doing a phenomenal job and I highly recommend Croma Campus to everyone. "



Shams Khan

"Croma Campus is doing a phenomenal job in the IT training industry. The reason why I decided to join their training program was that they provide quality training at very a nominal price. Plus, the online training mode was also a factor due to which I decided to join the training program of Croma Campus as I didn't want to attend physical classes. "



| Meet Our Team



Sales Team

Our Sales team is highly passionate, emphatic, positive attitude, great listening skills, ability to deliver quick solutions, and they are multitasker too. Our team always remains up-to-date about all the latest technologies and market trends. With effective communication skills, they always work to deliver the right information to customers when it is needed.

Product Team

Our product team is highly functional and collaborative working together to achieve the common outcome of designing exceptional digital experiences. Each of our members is a contributor to help us achieve success in long-run. Sitting at the high-end of technology and innovation, team helps to deliver high-end customer experiences and always comes out with a big idea as a game-changing plan.

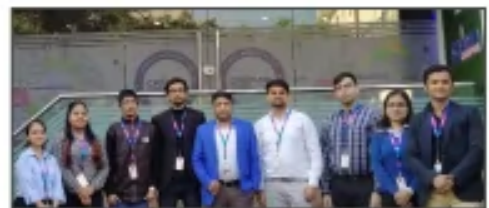


Marketing Team

Our Marketing team works as gladiators and helps us to achieve business success in all possible ways. They are included in almost everything either it is building a brand, creating brand awareness, promoting products or services, delivering trailblazing customer experiences or increasing engagement at public forums. They are the true backbone of the Company.

Content Team

Our content team is responsible for ideation, creation, optimization, and distribution of content throughout the company. The team always starts its work with a strategy, how to create high-quality contents, and how to promote or share the content. Our in-house content team help us to produce all types of contents either they are educational content pieces, marketing content, SEO content, or any other forms too.



Customer Access Team

This is the team that has actually been taken up us from reactive state to a pro-active state. The team utilizes high-valued solutions to satisfy customers in all possible ways. It is truly said that no company can succeed if your customers are not satisfied. And our customer success team is dedicatedly working to keep all the customers satisfied and we always consider our customer feedback on priority.

HR Team

Our HR team is committed to provide high-end solutions to employees as they require. Our HR team has the right skills and knowledge to make sure that the HR department can always be legally and strategically successful. They know how to keep employees motivated all the time with the best HR policies and fun activities too from time to time.

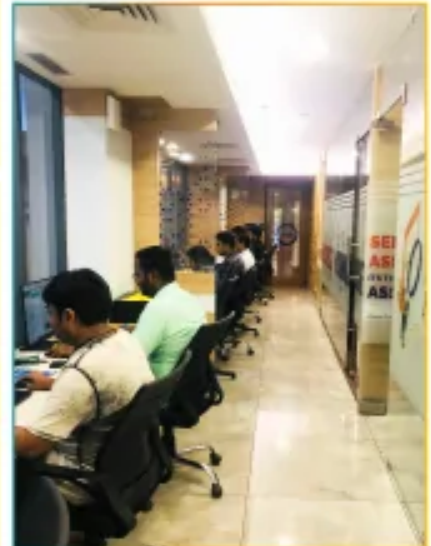


| Glimpse Of Our Office

Look **Who We are**

Our office's infrastructure comprises all the necessary software and network resources that are required to deliver IT & Design, Human Resources, Digital Marketing, and training services.

We are well-equipped with bright designed work bays for employees and managers having separate cabins with spacious cafeteria and training classrooms.



About Croma Campus


“ Our Mission is to Build Nation through Education & Beyond Limitation. ”

CROMA CAMPUS | #1 Asia's Leading Edtech Company

Croma Campus Training & Development Private Limited is an education platform providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty, industry & Infrastructure. In the past 14 years we have trained 18000+ candidates and out of which we are able to place 12000+ professionals in various industries successfully.



We're Here to Help –
Reach Out to Our Global Offices


 **India**

Croma Campus Training & Development Private Limited

G-21, Block-G, Sector 3, Noida, Uttar Pradesh-201301

+91-971 152 6942 [Chat on WhatsApp](#)

[View on Google Maps](#)


 **Canada**

Croma Campus Training & Development Private Limited

279-B Baltzan BLVD, Saskatoon, Saskatchewan, Canada-S7W0S1

+1 (647) 370-6470 [Chat on WhatsApp](#)

[View on Google Maps](#)

 **USA**

Croma Campus Training & Development Private Limited

454 church street Cairo, GA-39828, United States of America

+1 (647) 370-6470 [Chat on WhatsApp](#)

[View on Google Maps](#)

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