SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra

Category: Networking & Security | **Vendor:** Microsoft Technical

Duration: 4.00 hours (1 days) **3.3 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	Microsoft Applied Skills: Secure AI solutions in the cloud using Microsoft Defender for Cloud
Related Exam:	SC-5009

Course Overview

Secure AI solutions in the cloud by configuring AI workloads, applying cloud-native protections, and reinforcing security outcomes with identity controls. Learn how AI workloads authenticate, how trust boundaries are established, and how security posture and workload protection reduce risk using Microsoft Defender for Cloud and Microsoft Foundry. Extend these protections by using Microsoft Entra to design and apply identity and access controls that explain and harden earlier security decisions. Learning outcomes: Apply security posture management and workload protection for AI services using Microsoft Defender for Cloud Configure and secure Microsoft Foundry environments using cloud-native security controls Design and apply identity and access controls for AI workloads using Microsoft Entra

About This Course

Secure AI solutions in the cloud by configuring AI workloads, applying cloud-native protections, and reinforcing security outcomes with identity controls. Learn how AI workloads authenticate, how trust boundaries are established, and how security posture and workload protection reduce risk using Microsoft Defender for Cloud and Microsoft Foundry. Extend these protections by using Microsoft Entra to design and apply identity and access controls that explain and harden earlier security decisions. Learning outcomes: Apply security posture management and workload protection for AI services using Microsoft Defender for Cloud Configure and secure Microsoft Foundry environments using cloud-native security controls Design and apply identity and access controls for AI workloads using Microsoft Entra

Who Should Attend

This course is intended for professionals responsible for securing and operating AI workloads in the cloud. The audience includes cloud security engineers, platform engineers, and application teams working with AI services who need to understand how workload protection, security posture, and identity controls apply to AI environments. Familiarity with Azure, cloud-native security concepts, and basic identity and access principles is recommended.

Detailed Course Outline

1 - Understand how Microsoft Defender for Cloud supports AI security and governance in Azure

- Understand AI services in Azure
- Understand AI security risks in Azure
- AI guardrails and protections in Azure
- How Azure security and governance tools support AI workloads
- Module assessment

2 - Protect AI workloads with Microsoft Defender for Cloud

- Enable the AI workloads plan
- Review insights in the Data & AI security dashboard
- Assess and improve AI security posture with Cloud Security Posture Management (CSPM)
- Detect AI threats at runtime with Cloud Workload Protection (CWP)
- Investigate AI security alerts with prompt evidence in Microsoft Defender XDR
- Module assessment

3 - Configure and manage guardrails in Microsoft Foundry

- Understand guardrails and Microsoft Content Safety
- Understand safety controls in Microsoft Foundry
- Try out built-in guardrails
- Create and manage blocklists in Microsoft Foundry
- Configure and apply guardrails in Microsoft Foundry
- Choose and refine the right guardrails for your AI workloads
- Module assessment

4 - Secure Microsoft Foundry environments

- Control access to Microsoft Foundry with Microsoft Entra ID
- Manage access within Microsoft Foundry projects
- Secure Microsoft Foundry secrets with Azure Key Vault (preview)
- Isolate networks with managed virtual network and Private Link
- Enable diagnostic logging in Microsoft Foundry
- Module assessment

5 - Understand identity architecture for AI workloads

- Identity as the control layer for AI solutions
- Management plane and data plane access in AI workloads
- Authentication flows for AI endpoints in Microsoft Foundry
- Human and workload identities in AI workloads
- Role assignments and scope in AI environments
- Common identity misconfigurations in AI deployments
- Module assessment

6 - Implement access management for Azure resources

- Assign Azure roles
- Configure custom Azure roles
- Create and configure managed identities
- Access Azure resources with managed identities
- Analyze Azure role permissions
- Configure Azure Key Vault RBAC policies
- Retrieve objects from Azure Key Vault

7 - Plan, implement, and administer Conditional Access

- Plan security defaults
- Plan Conditional Access policies
- Implement Conditional Access policy controls and assignments
- Test and troubleshoot Conditional Access policies
- Implement application controls
- Implement session management and continuous access evaluation
- Microsoft Entra Conditional Access Optimization agent
- Module assessment

8 - Manage Microsoft Entra Identity Protection

- Review identity protection basics
- Implement and manage user risk policy
- Monitor, investigate, and remediate elevated risky users
- Implement security for workload identities
- Explore Microsoft Defender for Identity
- Explore the Identity Risk Management Agent
- Module assessment

□□ Certification Path

Microsoft Applied Skills: Secure AI solutions in the cloud using Microsoft Defender for Cloud

Exam: SC-5009

Frequently Asked Questions

Q: What delivery options are available for SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra course helps prepare you for the Microsoft Applied Skills: Secure AI solutions in the cloud using Microsoft Defender for Cloud certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the SC-5009 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 1-day SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra course provides up to 3.3 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra training?

The training takes place over 1 day(s), with each day lasting approximately 4.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra?

Yes, we provide corporate training, dedicated training, and closed classes for SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra, Microsoft, vILT, SC-5009

Q: Why choose Nexus Human for SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your SC-5009: Secure AI solutions in the cloud using Microsoft Defender for Cloud and Microsoft Entra training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

© 2026 Nexus Human. All rights reserved. This brochure was generated on 13/11/2026.