CompTIA SecAI+

Category: Networking & Security | **Vendor:** CompTIA

Duration: 24.00 hours (3 days) **19.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

CompTIA SecAI+ enables a safer digital future by empowering IT and cybersecurity talent worldwide to meet the emerging challenges and opportunities at the intersection of AI and security. CompTIA SecAI+ is the global IT industry’s first comprehensive “expansion” certification focused on the security of artificial intelligence systems and the secure application of AI in cybersecurity operations. This certification equips professionals with critical, vendor-neutral skills to understand, defend, and ethically deploy AI technologies within any organization.

About This Course

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Who Should Attend

Ideal for those who currently hold a CompTIA cybersecurity certification (such as Security+, CySA+, PenTest+, etc.) or equivalent experience, and are looking to expand their skill set for evolving job roles in the context of AI technologies

Prerequisites & Entry Requirements

General Prerequisites:

This is equivalent to 3–4 years of IT experience with approximately 2 years of hands-on cybersecurity experience.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Apply foundational and advanced AI concepts to strengthen organizational cybersecurity. Implement robust security controls and best practices for protecting AI systems and data. Leverage AI-driven tools to enhance threat detection, response, and automation of security operations. Navigate global governance, risk, and compliance frameworks to ensure responsible AI adoption.

Detailed Course Outline

Module 1 — AI and Data Concepts for Cybersecurity

- AI concepts and core AI types
- Generative AI and transformers
- Machine learning and deep learning
- Natural language processing
- AI model training approaches
- Prompt engineering fundamentals
- Model security considerations
- AI data types and data security techniques
- RAG (Retrieval Augmented Generation) concepts
- Data integrity and processing controls

Module 2 — Threat Modeling and Securing AI Systems

- AI threat modeling fundamentals
- Threat modeling processes and prerequisites
- AI threat modeling frameworks
- AI security control types
- Model guardrails and prompt templates
- Gateway and interface controls
- Usage quotas and limitation controls
- Security control testing

Module 3 — Access Controls for AI

- AI access control principles and models
- Model and agent access controls
- API and network access security
- AI data security controls
- Encryption and data safety measures
- Monitoring and logging AI systems
- Performance and cost monitoring
- AI auditing and compliance monitoring

Module 4 — AI Threats and Compensating Controls

- AI lifecycle security
- Ethical AI design considerations
- AI attack types and techniques
- Backdoor and trojan model attacks
- Model poisoning and inversion
- Model theft risks
- Compensating control strategies
- Post-incident AI analysis

Module 5 — Leveraging AI in Security Operations

- AI-enabled security tools
- AI use cases in detection and analysis
- AI for vulnerability assessment
- AI-enhanced attack vectors
- AI for social engineering and deception
- AI reconnaissance techniques
- AI-driven automation
- AI in DevSecOps workflows
- AI scripting and summarization

Module 6 — AI Governance, Risk, and Compliance

- AI governance structures
- AI organizational roles
- Responsible AI principles
- AI risk identification and assessment
- AI regulatory themes
- Compliance frameworks for AI
- Organizational AI policy design
- Compliance reporting

Upcoming Schedule

Available training dates for CompTIA SecAI+:

Start Date	End Date	Location	Delivery	Price
09 Dec 2026	11 Dec 2026	Online	Virtual	€1,795.00

Frequently Asked Questions

Q: What delivery options are available for CompTIA SecAI+?

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: How many CPD hours does this course provide?

The 3-day CompTIA SecAI+ course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the CompTIA SecAI+ training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for CompTIA SecAI+?

Yes, we provide corporate training, dedicated training, and closed classes for CompTIA SecAI+. 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: Why choose Nexus Human for CompTIA SecAI+?

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 CompTIA SecAI+ training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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