

AI+ Security: Level 3

Category: AI, Data & Analytics | **Vendor:** AI Certs

Duration: 40.00 hours (5 days)

32.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Certification: AI+ Security: Level 3

Related Exam: AI+ Security: Level 3

Course Overview

The AI+ Security: Level 3 course provides a comprehensive exploration of the intersection between AI and cybersecurity, focusing on advanced topics critical to modern security engineering. It covers foundational concepts in AI and machine learning for security, delving into areas like threat detection, response mechanisms, and the use of deep learning for security applications. The course addresses the challenges of adversarial AI, network and endpoint security, and secure AI system engineering, along with emerging topics such as AI for cloud, container security, and blockchain integration. Key subjects also include AI in identity and access management (IAM), IoT security, and physical security systems, culminating in a hands-on capstone project that tasks learners with designing and engineering AI-driven security solutions.

About This Course

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Who Should Attend

Security Analyst

Prerequisites & Entry Requirements

General Prerequisites:

Completion of AI+ Security: Level 1 and AI+ Security: Level 2, Intermediate/Advanced Python Programming: Proficiency or expert in Python, including deep learning frameworks (TensorFlow, PyTorch)., Intermediate Machine Learning Knowledge: Proficiency in understanding of deep learning, adversarial AI, and model training., Advanced Cybersecurity Knowledge: Proficiency in threat detection, incident response, and network/endpoint security., AI in Security Engineering: Knowledge of AI's role in identity and access management (IAM), IoT security, and physical security., Cloud and Container Expertise: Understanding of cloud security, containerization, and blockchain technologies., Linux/CLI Mastery: Advanced command-line skills and experience with security tools in Linux environments

Learning Outcomes

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

Course Objectives

- Gain proficiency in applying deep learning algorithms for advanced cyber defense applications, such as malware analysis, phishing detection, and predictive threat modeling.
- Develop expertise in integrating AI with cloud and container security, emphasizing scalable and automated threat mitigation for cloud-based platforms and containerized applications.
- Master the application of AI techniques to enhance identity and access management by streamlining identity verification, managing access control systems, and securing authentication processes.
- Explore the use of AI to secure IoT devices by addressing unique challenges, including detecting compromised devices and safeguarding communication protocols.

Detailed Course Outline

- Foundations of AI and Machine Learning for Security Engineering

Core AI and ML Concepts for Security AI Use Cases in Cybersecurity Engineering AI Pipelines for Security Challenges in Applying AI to Security

- Machine Learning for Threat Detection and Response

Engineering Feature Extraction for Cybersecurity Datasets Supervised Learning for Threat Classification Unsupervised Learning for Anomaly Detection Engineering Real-Time Threat Detection Systems

- Deep Learning for Security Applications

Convolutional Neural Networks (CNNs) for Threat Detection Recurrent Neural Networks (RNNs) and LSTMs for Security Autoencoders for Anomaly Detection Adversarial Deep Learning in Security

- Adversarial AI in Security

Introduction to Adversarial AI Attacks Defense Mechanisms Against Adversarial Attacks Adversarial Testing and Red Teaming for AI Systems Engineering Robust AI Systems Against Adversarial AI

- AI in Network Security

AI-Powered Intrusion Detection Systems AI for Distributed Denial of Service (DDoS) Detection AI-Based Network Anomaly Detection Engineering Secure Network Architectures with AI

- AI in Endpoint Security

AI for Malware Detection and Classification AI for Endpoint Detection and Response(EDR) AI-Driven Threat Hunting Implementing Lightweight AI Models for Resource-Constrained Devices

- Secure AI System Engineering

Designing Secure AI Architectures Cryptography in AI for Security Ensuring Model Explainability and Transparency in Security Performance Optimization of AI Security Systems

- AI for Cloud and Container Security

AI for Securing Cloud Environments AI-Driven Container Security AI for Securing Serverless Architectures AI and DevSecOps

- AI and Blockchain for Security

Fundamentals of Blockchain and AI Integration AI for Fraud Detection in Blockchain Smart Contracts and AI Security AI-Enhanced Consensus Algorithms

- AI in Identity and Access Management (IAM)

AI for User Behavior Analytics in IAM AI for Multi-Factor Authentication (MFA) AI for Zero-Trust Architecture AI for Role-Based Access Control (RBAC)

- AI for Physical and IoT Security

AI for Securing Smart Cities AI for Industrial IoT Security AI for Autonomous Vehicle Security AI for Securing Smart Homes and Consumer IoT

- Capstone Project - Engineering AI Security Systems

Defining the Capstone Project Problem Engineering the AI Solution Deploying and Monitoring the AI System Final Capstone Presentation and Evaluation

, Foundations of AI and Machine Learning for Security Engineering, Machine Learning for Threat Detection and Response, Deep Learning for Security Applications, Adversarial AI in Security, AI in Network Security, AI in Endpoint Security, Secure AI System Engineering, AI for Cloud and Container Security, AI and Blockchain for Security, AI in Identity and Access Management (IAM), AI for Physical and IoT Security, Capstone Project - Engineering AI Security Systems, Optional Module: AI Agents for

 Certification Path

AI+ Security: Level 3

Exam: AI+ Security: Level 3

Additional Course Details

Nexus Humans AI+ Security: Level 3 training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the AI+ Security: Level 3 course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for AI+ Security: Level 3?

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
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Q: What certification does this course prepare me for?

The AI+ Security: Level 3 course helps prepare you for the AI+ Security: Level 3 certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AI+ Security: Level 3 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 5-day AI+ Security: Level 3 course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AI+ Security: Level 3 training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AI+ Security: Level 3?

Yes, we provide corporate training, dedicated training, and closed classes for AI+ Security: Level 3. 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: AI+ Security: Level 3, AI Certs, vILT, AI+ Security

Q: Why choose Nexus Human for AI+ Security: Level 3?

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 AI+ Security: Level 3 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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