

AI+ Ethical Hacker

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+ Ethical Hacker

Related Exam: AI+ Ethical Hacker

Course Overview

The AI+ Ethical Hacker Course training delves into the intersection of cybersecurity and artificial intelligence, a pivotal juncture in our era of rapid technological progress. Tailored for budding ethical hackers and cybersecurity experts, it offers comprehensive insights into AI's transformative impact on digital offense and defense strategies. Unlike conventional ethical hacking courses, this program harnesses AI's power to enhance cybersecurity approaches. It caters to tech enthusiasts eager to master the fusion of cutting-edge AI methods with ethical hacking practices amidst the swiftly evolving digital landscape. The curriculum encompasses four key areas, from course objectives and prerequisites to anticipated job roles and the latest AI technologies in Ethical Hacking.

About This Course

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Who Should Attend

Security Engineer

Prerequisites & Entry Requirements

General Prerequisites:

Knowledge of Python, Java, C++,etc for automation and scripting., Understanding of networking protocols, subnetting, firewalls, and routing., Familiarity with fundamental cybersecurity concepts, including encryption, authentication, access controls, and security protocols., Proficiency in using Windows and Linux operating systems., Understanding of machine learning concepts, algorithms, and basic implementation., Understanding of web technologies, including HTTP/HTTPS protocols, and web servers.

Learning Outcomes

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

Course Objectives

- Establish foundational knowledge in Ethical Hacking, including methodology and legal aspects, as well as understanding hacker types, motivations, and information gathering techniques.
- Introduce AI's role in Ethical Hacking, covering fundamentals, technologies, and applications such as Machine Learning and Natural Language Processing.
- Explore AI tools and technologies for threat detection, penetration testing, and behavioral analysis in Ethical Hacking scenarios.
- Delve into AI-driven reconnaissance techniques, vulnerability assessment, and penetration testing, including automated scanning and fuzz testing.
- Examine the intersection of Machine Learning with threat analysis, behavioral analysis, incident response, identity management, system security, and ethical considerations in AI and Cybersecurity.

Detailed Course Outline

- Foundation of Ethical Hacking Using Artificial Intelligence (AI)

Introduction to Ethical Hacking
Ethical Hacking Methodology
Legal and Regulatory Framework
Hacker Types and Motivations
Information Gathering Techniques
Footprinting and Reconnaissance
Scanning Networks
Enumeration Techniques

- Introduction to AI in Ethical Hacking

AI in Ethical Hacking
Fundamentals of AI
AI Technologies Overview
Machine Learning in Cybersecurity
Natural Language Processing (NLP) for Cybersecurity
Deep Learning for Threat Detection
Adversarial Machine Learning in Cybersecurity
AI-Driven Threat Intelligence Platforms
Cybersecurity Automation with AI

- AI Tools and Technologies in Ethical Hacking

AI-Based Threat Detection Tools Machine Learning Frameworks for Ethical Hacking AI-Enhanced Penetration Testing Tools Behavioral Analysis Tools for Anomaly Detection AI-Driven Network Security Solutions Automated Vulnerability Scanners AI in Web Application AI for Malware Detection and Analysis Cognitive Security Tools

- AI-Driven Reconnaissance Techniques

Introduction to Reconnaissance in Ethical Hacking Traditional vs. AI-Driven Reconnaissance Automated OS Fingerprinting with AI AI-Enhanced Port Scanning Techniques Machine Learning for Network Mapping AI-Driven Social Engineering Reconnaissance Machine Learning in OSINT AI-Enhanced DNS Enumeration & AI-Driven Target Profiling

- AI in Vulnerability Assessment and Penetration Testing

Automated Vulnerability Scanning with AI AI-Enhanced Penetration Testing Tools Machine Learning for Exploitation Techniques Dynamic Application Security Testing (DAST) with AI AI-Driven Fuzz Testing Adversarial Machine Learning in Penetration Testing Automated Report Generation using AI AI-Based Threat Modeling Challenges and Ethical Considerations in AI-Driven Penetration Testing

- Machine Learning for Threat Analysis

Supervised Learning for Threat Detection Unsupervised Learning for Anomaly Detection Reinforcement Learning for Adaptive Security Measures Natural Language Processing (NLP) for Threat Intelligence Behavioral Analysis using Machine Learning Ensemble Learning for Improved Threat Prediction Feature Engineering in Threat Analysis Machine Learning in Endpoint Security Explainable AI in Threat Analysis

- Behavioral Analysis and Anomaly Detection for System Hacking

Behavioral Biometrics for User Authentication Machine Learning Models for User Behavior Analysis Network Traffic Behavioral Analysis Endpoint Behavioral Monitoring Time Series Analysis for Anomaly Detection Heuristic Approaches to Anomaly Detection AI-Driven Threat Hunting User and Entity Behavior Analytics (UEBA) Challenges and Considerations in Behavioral Analysis

- AI Enabled Incident Response Systems

Automated Threat Triage using AI Machine Learning for Threat Classification Real-time Threat Intelligence Integration Predictive Analytics in Incident Response AI-Driven Incident Forensics Automated Containment and Eradication Strategies Behavioral Analysis in Incident Response Continuous Improvement through Machine Learning Feedback Human-AI Collaboration in Incident Handling

- AI for Identity and Access Management (IAM)

AI-Driven User Authentication Techniques Behavioral Biometrics for Access Control AI-Based Anomaly Detection in IAM Dynamic Access Policies with Machine Learning AI-Enhanced Privileged Access Management (PAM) Continuous Authentication using Machine Learning Automated User Provisioning and De-provisioning Risk-Based Authentication with AI AI in Identity Governance and Administration (IGA)

- Securing AI Systems

Adversarial Attacks on AI Models Secure Model Training Practices Data Privacy in AI Systems Secure Deployment of AI Applications AI Model Explainability and Interpretability Robustness and Resilience in AI Secure Transfer and Sharing of AI Models Continuous Monitoring and Threat Detection for AI

- Ethics in AI and Cybersecurity

Ethical Decision-Making in Cybersecurity Bias and Fairness in AI Algorithms Transparency and Explainability in AI Systems Privacy Concerns in AI-Driven Cybersecurity Accountability and Responsibility in AI Security Ethics of Threat Intelligence Sharing Human Rights and AI in Cybersecurity Regulatory Compliance and Ethical Standards Ethical Hacking and Responsible Disclosure

- Capstone Project

Case Study 1: AI-Enhanced Threat Detection and Response Case Study 2: Ethical Hacking with AI Integration Case Study 3: AI in Identity and Access Management (IAM) Case Study 4: Secure Deployment of AI Systems

, Foundation of Ethical Hacking Using Artificial Intelligence (AI), Introduction to AI in Ethical Hacking, AI Tools and Technologies in Ethical Hacking, AI-Driven Reconnaissance Techniques, AI in Vulnerability Assessment and Penetration Testing, Machine Learning for Threat Analysis, Behavioral Analysis and Anomaly Detection for System Hacking, AI Enabled Incident Response Systems, AI for

Identity and Access Management (IAM), Securing AI Systems, Ethics in AI and Cybersecurity,
Capstone Project, Optional Module: AI Agents for Ethical Hacking

 Certification Path

AI+ Ethical Hacker

Exam: AI+ Ethical Hacker

Additional Course Details

Nexus Humans AI+ Ethical Hacker 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+ Ethical Hacker 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+ Ethical Hacker?

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+ Ethical Hacker course helps prepare you for the AI+ Ethical Hacker certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AI+ Ethical Hacker 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+ Ethical Hacker 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+ Ethical Hacker 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+ Ethical Hacker?

Yes, we provide corporate training, dedicated training, and closed classes for AI+ Ethical Hacker. 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+ Ethical Hacker, AI Certs, vILT

Q: Why choose Nexus Human for AI+ Ethical Hacker?

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+ Ethical Hacker 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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