

AI+ Network Practitioner

OEM: AI CERTs • Duration: 5 Days (40 hrs) • Code: AT-510

COURSE MODULES & TOPICS

At a Glance: Course + Exam Overview

- Instructor-Led: 5 days (live or virtual)
- Self-Paced: 40 hours of content

Who Should Enroll?

- Networking Professionals: Looking to advance your skills by integrating AI into network design, automation, and security to stay ahead in a competitive field.
- AI Enthusiasts: Interested in applying AI technologies like ML and automation Specifically, networking domains.
- IT Specialists: Focused on exploring the intersection of cloud computing, IoT, and AI to optimize infrastructure and network performance.
- Students and Fresh Graduates : Pursuing careers in AI, cybersecurity, or networking and wanting to gain hands-on experience and credentials to strengthen their professional profile.
- Cybersecurity Analysts: Seeking to utilize AI-driven solutions for threat detection, network protection, and predictive analytics.
- System Administrators: Eager to transition into roles involving network automation, orchestration, and AI-based tools for managing complex systems.
- Tech Innovators and Researchers : Interested in exploring emerging trends like 5G, edge computing, or blockchain in AI-enhanced networking.

Skills You'll Gain

- AI-driven network automation and orchestration.
- Automated network monitoring and anomaly detection.
- Predictive maintenance and fault prevention.
- AI-enhanced network security and threat mitigation.
- Network performance optimization using AI methods.
- Working with cloud, IoT, and modern network environments.
- Understanding how AI combines with current networking technologies.

What You'll Learn

- You will learn network types, topologies, networking components, protocols, IP addressing, VLANs, wireless standards, and essential network security concepts.
- You will explore VLANs, SDN, NFV, 5G, IoT, edge computing, advanced routing, data centers, and cloud networking technologies.

- You will learn AI and ML applications in networking, including traffic analysis, network optimization, anomaly detection, automation, and predictive maintenance.
- You will explore automation tools, Python scripting, APIs, AI-driven orchestration, intent-based networking, Kubernetes, and zero trust architecture.
- You will learn AI-based threat detection, incident response, secure network design, SIEM enhancement, predictive analytics, and AI security considerations.
- You will gain practical experience using simulation tools, AI-driven network automation, threat detection models, security implementation, and AI-enhanced network design projects.
- You will explore AI in 5G, quantum computing impacts, AI-powered IoT networks, blockchain security, and future career opportunities in AI networking.

Prerequisites

- Foundational Networking Knowledge: Basic understanding of networking fundamentals.
- Python Programming: Familiarity with programming languages such as Python.
- AI and Machine Learning (ML) Understanding: Fundamental knowledge of AI and ML concepts.
- Hands-On Experience with Network Management Tools: Experience with network management tools and technologies is a plus.

Exam Blueprint

- Networking Foundations - 13%
- Advanced Networking Technologies - 16%
- AI in Networking - 16%
- Network Automation and Orchestration - 16%
- AI-Enhanced Network Security - 13%
- Practical Labs and Hands-On Projects - 13%
- Emerging Trends and Future Directions - 13%

Choose the Format That Fits Your Schedule

- High-Quality Videos, E-book (PDF & Audio), and Podcasts
- AI Mentor for Personalized Guidance
- Quizzes, Assessments, and Course Resources
- Online Proctored Exam with One Free Retake
- Comprehensive Exam Study Guide
- 5 days of intensive training with live demos
- Real-time Q&A, peer collaboration, and hands-on labs
- Led by AI Certified Trainers and delivered through Authorized Training Partners
- ~40 hours of on-demand video lessons, e-book, podcasts, and interactive labs
- Learn anywhere, anytime, with modular quizzes to track progress