Enterprise Computing Solutions - Education Services

# TRAINING OFFERING

**Vous pouvez nous joindre ici**

.

Email: training.ecs.fr@arrow.com
Phone: 01 49 97 50 00

# AI+ Network™

| CODE: | DURÉE: | PRIX H.T.: |
|---|---|---|
| AIC_AT-510 | 35 Hours | €495.00 |

## Description

**Master the Future of Networking: Harness AI for Automation, Security, and Next-Generation Efficiency**
This course provides professionals with the basic knowledge and advanced skills needed to understand the combination of artificial intelligence and current networking technologies. It discusses fundamental networking concepts, newer technologies such as SDN and NFV, and how AI can enhance network efficiency. Important focus areas consist of AI-powered network automation, orchestration, and security upgrades, combined with hands-on projects and practical labs for real-life implementation. The class ends by examining new developments and upcoming pathways in AI-enhanced networking, getting students ready for leading positions in this quickly changing sector.
The following tools will be explored in this course:

- Elastic
- Juniper
- Netdata

## Objectifs

- AI-Powered Network Automation
  Ability to design, implement, and manage automated network operations using AI, optimizing efficiency and reducing manual intervention.
- Network Optimization through AI
  Skills in applying AI and machine learning algorithms to optimize network performance, improving speed, reliability, and scalability.
- AI-Enhanced Network Security
  Expertise in utilizing AI to detect and prevent cyber threats, including AI-driven threat intelligence and network monitoring.
- AI for Incident Response and Cybersecurity Intelligence
  Ability to leverage AI for real-time network security incident detection, response, and forensics, enhancing cybersecurity measures.

## Audience

It’s designed for network engineers, cybersecurity professionals, and AI developers.

## Prérequis

- Basic understanding of networking fundamentals.
- Familiarity with programming languages such as Python.
- Fundamental knowledge of AI and machine learning concepts.
- Experience with network management tools and technologies is a plus.

There are no mandatory prerequisites for certification. Certification is based solely on performance in the examination. However, candidates may choose to prepare through self-study or optional training offered by AI CERTs® Authorized Training Partners (ATPs).

## Programme

**Module 1: Networking Foundations**
1.1 Basic Networking Concepts
1.2 Networking Protocols and Standards
1.3 Network Infrastructure and Design
1.4 Introduction to Network Security

**Module 2: Advanced Networking Technologies**
2.1 Network Virtualization and Cloud Networking
2.2 Emerging Network Architectures
2.3 Advanced Routing and Switching
2.4 Network Storage and Data Centers

**Module 3: AI in Networking**
3.1 Introduction to AI and Machine Learning
3.2 AI-Driven Network Optimization
3.3 AI for Network Security and Threat Detection
3.4 AI-Enhanced Network Management

**Module 4: Network Automation and Orchestration**
4.1 Fundamentals of Network Automation
4.2 AI-Driven Network Orchestration
4.3 Policy-Driven Network Management
4.4 Case Studies in Network Automation

**Module 5: AI-Enhanced Network Security**
5.1 Advanced Threat Detection with AI
5.2 Secure Network Design and Architecture
5.3 AI for Cybersecurity Intelligence
5.4 Ethical Considerations in AI-Driven Security

**Module 6: Practical Labs and Hands-On Projects**
6.1 Network Simulation and Emulation
6.2 AI-Driven Network Automation Projects
6.3 AI for Network Security Projects
6.4 Capstone Project (Using Google Colab and Azure cloud)

**Module 7: Emerging Trends and Future Directions**
7.1 Future of AI in Networking
7.2 AI-Powered IoT Networks
7.3 Blockchain and AI in Networking
7.4 Continuous Learning and Career Development

**Optional Module: AI Agents for Network Management**
1. Understanding AI Agents
2. Case Studies
3. Hands-On Practice with AI Agents

## Follow on courses

**Recommended Certifications:**

- AI+ Security Level 1™
- AI+ Security Level 2™
- AI+ Security Compliance™
- AI+ Ethical Hacker™
- AI+ Security Level 3™

## Test et Certification

- AI-Powered Network Automation
  Ability to design, implement, and manage automated network operations using AI, optimizing efficiency and reducing manual intervention.
- Network Optimization through AI
  Skills in applying AI and machine learning algorithms to optimize network performance, improving speed, reliability, and scalability.

- AI-Enhanced Network Security
  Expertise in utilizing AI to detect and prevent cyber threats, including AI-driven threat intelligence and network monitoring.
- AI for Incident Response and Cybersecurity Intelligence
  Ability to leverage AI for real-time network security incident detection, response, and forensics, enhancing cybersecurity measures.

**Exam Details**

- Duration: 90 minutes
- Passing Score: 70% (35/50)
- Format: 50 multiple-choice/multiple-response questions
- Delivery Method: Online via proctored exam platform (flexible scheduling)

AI CERTs requires recertification every year to keep your certification valid. Notifications will be sent three months before the due date, and candidates must follow the steps in the candidate handbook to complete the process.

## Dates de session

| Date | Lieu | Time Zone | Langue | Type | Garanti | PRIX H.T. |
|---|---|---|---|---|---|---|
| 01 Jan 0001 | | | English | Self Paced Training | | €495.00 |

## Informations Complémentaires

Cette formation est également disponible sous forme de formation sur site. Veuillez nous contacter pour en savoir plus.