Standards.Academy

PECB

PECB Certified Artificial Intelligence Professional (CAIP)®

Gain expertise in designing, implementing, and managing AI systems

Why should you attend?

In today's AI-driven world, the demand for skilled professionals who can effectively implement and manage artificial intelligence systems is higher than ever. The Certified Artificial Intelligence Professional course is your gateway to mastering the essential skills and knowledge needed to succeed in this fast-changing field. This program goes beyond theoretical learning by equipping you with practical tools and real-world insights to design, deploy, and manage AI solutions effectively.

By attending this course, you will gain hands-on experience with advanced AI methodologies, including machine learning, deep learning and natural language processing. You will also explore computer vision, robotics and expert systems, along with best practices for ensuring compliance, managing AI risks, and upholding ethical standards. This unique combination of technical, strategic, and ethical expertise will make you a valuable asset to any organization pursuing AI initiatives.

Attaining the Certified Artificial Intelligence Professional credential demonstrates your commitment to staying at the forefront of AI advancements. It validates your ability to integrate AI into business strategies, solve complex problems, and manage AI projects responsibly. This certification not only enhances your credibility but also opens doors to exciting career opportunities in AI and related fields.

Whether you are an AI practitioner, a data scientist, or a decision-maker, this course will empower you to:

- Understand and navigate the latest AI trends and technologies.
- Build and optimize AI systems that drive innovation.
- Address critical challenges such as AI bias, privacy concerns, and compliance.
- Strategically align AI solutions with organizational goals to maximize value.

By joining this course, you are taking a significant step toward becoming a leader in AI implementation and ensuring your skills remain relevant in a technology-driven future.

Who should attend?

This course is particularly advantageous and intended for:

- AI Professionals actively involved in the development and implementation of AI technologies
- Experienced AI Practitioners seeking to enhance their knowledge, stay updated with the latest trends, and refine their leadership skills
- Data Scientists responsible for developing and optimizing AI models
- IT Managers overseeing AI projects and initiatives within their organizations
- AI Enthusiasts who aspire to advance into leadership roles, such as AI project managers or AI strategists
- Risk and Compliance Officers responsible for managing AI-related risks and ensuring compliance with regulations
- Executives, including CIOs, CEOs, and COOs, who play a crucial role in decision-making processes related to AI
- Professionals aiming for executive-level AI roles who need a comprehensive understanding of AI technologies and their applications

Course agenda

Duration: 5 days

Day 1 | Foundations of AI and Data Analysis

- Training course objectives and structure
- Fundamental concepts and principles of artificial intelligence
- Data analysis and visualization

Day 2 | Machine Learning

- Foundations of data science and machine learning
- Machine learning workflow
- Supervised learning
- Unsupervised learning
- Advanced ML and broader applications

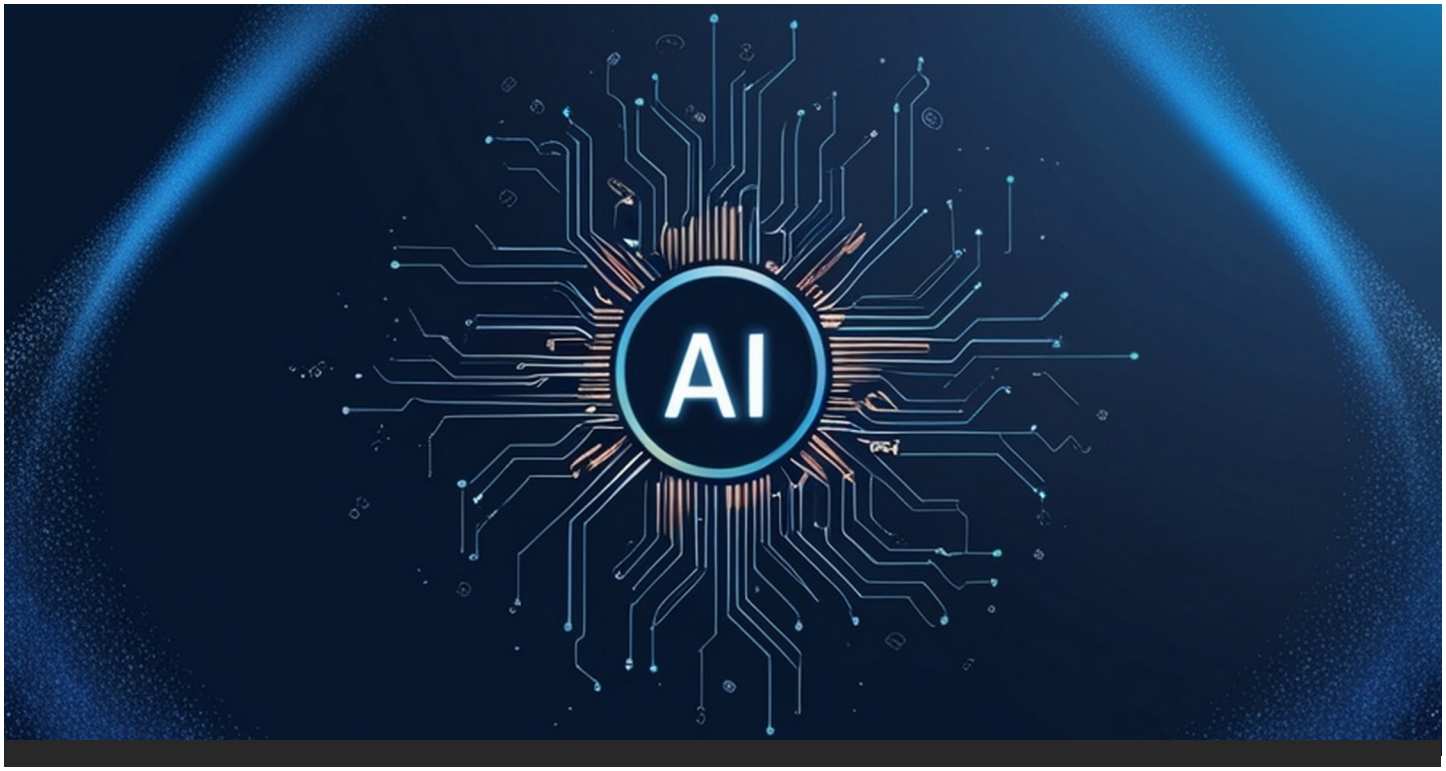
Day 3 | Natural Language Processing (NLP) and Deep Learning

- Foundational NLP concepts
- Classical and intermediate NLP techniques
- Modern NLP – Transformers and large language models
- NLP applications and future directions
- Fundamental concepts of deep learning
- Deep learning architectures and advanced techniques

Day 4 | Computer Vision, Robotics, AI Governance, Ethics, and Security

- Generative models and specialized architectures
- Deep learning and future directions
- Computer vision
- Robotics
- AI security
- AI ethics
- AI governance and strategy
- Closing of the training course

Day 5 | Certification exam



Learning objectives

By the end of this training course, the participants will be able to:

- Explain the foundational principles of AI and its various applications.
- Conduct data analysis and create meaningful visualizations to support AI projects.
- Apply machine learning techniques to real-world problems, including supervised, unsupervised, and reinforcement learning.
- Implement simple neural network and advanced deep learning architectures such as CNNs.
- Understand NLP systems and Computer Vision methodologies.
- Understand robotics and expert systems for AI-driven automation.
- Identify and mitigate AI risks while ensuring compliance with regulations.
- Develop ethical AI strategies aligned with organizational values and societal needs.

Examination

Duration: 3 hours

The PECB Certified Artificial Intelligence Professional" exam meets the requirements of the PECB Examination and Certification Program (ECP). It covers the following competency domains:

Domain 1 | Fundamental concepts and principles of artificial intelligence

Domain 2 | Data analysis and Visualization

Domain 3 | Building Machine Learning models

Domain 4 | Deep Learning and Natural Language Processing

Domain 5 | Knowledge and application of Computer Vision and Robotics

Domain 6 | AI Security

Domain 7 | AI Ethics, Governance, and Strategy

For specific information about exam type, languages available, and other details, please visit the List of PECB Exams and the Examination Rules and Policies.

Certification

After successfully passing the exam, you can apply for one of the credentials shown below. You will receive the certificate once you comply with all the requirements related to the selected credential.

Credential	Exam	Professional experience	ISMS project experience	Other requirements
PECB Certified Artificial Intelligence Professional	PECB Certified Artificial Intelligence Professional exam	Two years of artificial intelligence experience	None	Signing the PECB Code of Ethics and the PECB CLEH Code of Conduct

General information

- Certification and examination fees are included in the price of the training course
- An attestation of course completion worth 31 CPD (Continuing Professional Development) credits will be issued to the participants who have attended the training course.
- Candidates who have completed the training course but failed the exam are eligible to retake it once for free within a 12-month period from the initial date of the exam.