Certified Artificial Intelligence (AI) Practitioner (CAIP)

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

Duration: 40.00 hours (5 days) **32.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	Certified Artificial Intelligence Practitioner (CAIP)
Related Exam:	AIP-110

Course Overview

Artificial intelligence (AI) and machine learning (ML) have become an essential part of the toolset for many organizations. When used effectively, these tools provide actionable insights that drive critical decisions and enable organizations to create exciting, new, and innovative products and services. This course shows you how to apply various approaches and algorithms to solve business problems through AI and ML, follow a methodical workflow to develop sound solutions, use open source, off-the-shelf tools to develop, test, and deploy those solutions, and ensure that they protect the privacy of users. This course includes hands on activities for each topic area.

About This Course

Artificial intelligence (AI) and machine learning (ML) have become an essential part of the toolset for many organizations. When used effectively, these tools provide actionable insights that drive critical decisions and enable organizations to create exciting, new, and innovative products and services. This course shows you how to apply various approaches and algorithms to solve business problems through AI and ML, follow a methodical workflow to develop sound solutions, use open source, off-the-shelf tools to develop, test, and deploy those solutions, and ensure that they protect the privacy of users. This course includes hands on activities for each topic area.

Who Should Attend

The skills covered in this course converge on three areas—software development, applied math and statistics, and business analysis. Target students for this course may be strong in one or two or these of these areas and looking to round out their skills in the other areas so they can apply artificial intelligence (AI) systems, particularly machine learning models, to business problems.

Prerequisites & Entry Requirements

General Prerequisites:

A typical student in this course should have several years of experience with computing technology, including some aptitude in computer programming. This course is also designed to assist students in preparing for the CertNexus® Certified Artificial Intelligence (AI) Practitioner certification.

Learning Outcomes

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

Solve a given business problem using AI and ML. Prepare data for use in machine learning. Train, evaluate, and tune a machine learning model. Build linear regression models. Build forecasting models. Build classification models using logistic regression and k -nearest neighbor. Build clustering models. Build classification and regression models using decision trees and random forests. Build classification and regression models using support-vector machines (SVMs). Build artificial neural networks for deep learning. Put machine learning models into operation using automated processes. Maintain machine learning pipelines and models while they are in production.

Detailed Course Outline

1 - Solving Business Problems Using AI and ML

- Identify AI and ML Solutions for Business Problems
- Formulate a Machine Learning Problem
- Select Approaches to Machine Learning

2 - Preparing Data

- Collect Data
- Transform Data
- Engineer Features
- Work with Unstructured Data

3 - Training, Evaluating, and Tuning a Machine Learning Model

- Train a Machine Learning Model
- Evaluate and Tune a Machine Learning Model

4 - Building Linear Regression Models

- Build Regression Models Using Linear Algebra
- Build Regularized Linear Regression Models
- Build Iterative Linear Regression Models

5 - Building Forecasting Models

- Build Univariate Time Series Models
- Build Multivariate Time Series Models

6 - Building Classification Models Using Logistic Regression and k-Nearest Neighbor

- Train Binary Classification Models Using Logistic Regression
- Train Binary Classification Models Using k-Nearest Neighbor
- Train Multi-Class Classification Models
- Evaluate Classification Models
- Tune Classification Models

7 - Building Clustering Models

- Build k-Means Clustering Models
- Build Hierarchical Clustering Models

8 - Building Decision Trees and Random Forests

- Build Decision Tree Models
- Build Random Forest Models

9 - Building Support-Vector Machines

- Build SVM Models for Classification
- Build SVM Models for Regression

10 - Building Artificial Neural Networks

- Build Multi-Layer Perceptrons (MLP)
- Build Convolutional Neural Networks (CNN)
- Build Recurrent Neural Networks (RNN)

11 - Operationalizing Machine Learning Models

- Deploy Machine Learning Models
- Automate the Machine Learning Process with MLOps
- Integrate Models into Machine Learning Systems

12 - Maintaining Machine Learning Operations

- Secure Machine Learning Pipelines
- Maintain Models in Production

□□ Certification Path

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Exam: AIP-110

Upcoming Schedule

Available training dates for Certified Artificial Intelligence (AI) Practitioner (CAIP):

Start Date	End Date	Location	Delivery	Price
14 Dec 2026	18 Dec 2026	Online	Virtual	€3,495.00

Frequently Asked Questions

Q: What delivery options are available for Certified Artificial Intelligence (AI) Practitioner (CAIP)?

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

Q: What certification does this course prepare me for?

The Certified Artificial Intelligence (AI) Practitioner (CAIP) course helps prepare you for the Certified Artificial Intelligence Practitioner (CAIP) certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AIP-110 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 Certified Artificial Intelligence (AI) Practitioner (CAIP) 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 Certified Artificial Intelligence (AI) Practitioner (CAIP) 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 Certified Artificial Intelligence (AI) Practitioner (CAIP)?

Yes, we provide corporate training, dedicated training, and closed classes for Certified Artificial Intelligence (AI) Practitioner (CAIP). 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: Why choose Nexus Human for Certified Artificial Intelligence (AI) Practitioner (CAIP)?

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 Certified Artificial Intelligence (AI) Practitioner (CAIP) 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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