



Certified Artificial Intelligence Practitioner (CAIP™)

CertNexus

- **Nível:** Intermédio
 - **Duração:** 30h
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Sobre o curso

Artificial intelligence (AI) and machine learning (ML) have become essential parts 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, all while following a methodical workflow for developing data-driven solutions.

EXAM

This exam will certify that the candidate has the knowledge and skill set of AI concepts, technologies, and tools that will enable them to become capable AI practitioners in a wide variety of AI-related job functions.

- **Number of Items:** The exam should comprise 80 scored and 10 trial items with adequate time
 - **Passing Score:** 60% or 59% depending on exam form. Forms have been statistically equated.
 - **Items Duration:** 120 minutes (Note: exam time includes 5 minutes for reading and signing the Candidate Agreement and 5 minutes for the Pearson VUE testing system tutorial.)
 - **Exam Options:** In person or online proctoring
 - **Item Formats:** Multiple Choice/Multiple Response
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Destinatários

The skills covered in this course converge on four areas—software development, IT operations, applied math and statistics, and business analysis. Target students for this course should be looking to build upon their knowledge of the data science process so that they can apply AI systems, particularly machine learning models, to business problems.

So, the target student is likely a data science practitioner, software developer, or business analyst looking to expand their knowledge of machine learning algorithms and how they can help create intelligent decision-making products that bring value to the business.

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 (Exam AIP-210) certification.

Objetivos

In this course, you will develop AI solutions for business problems.

You will:

- 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.
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Pré-requisitos

To ensure your success in this course, you should be familiar with the concepts that are foundational to data science, including:

- The overall data science and machine learning process from end to end: formulating the problem; collecting and preparing data; analyzing data; engineering and preprocessing data; training, tuning, and evaluating a model; and finalizing a model.
- Statistical concepts such as sampling, hypothesis testing, probability distribution, randomness, etc.
- Summary statistics such as mean, median, mode, interquartile range (IQR), standard deviation, skewness, etc.
- Graphs, plots, charts, and other methods of visual data analysis.

You must also be comfortable writing code in the Python programming language, including the use of fundamental Python data science libraries like NumPy and pandas.