

AI-3004: Build an Azure AI Vision with Azure AI Services

Purpose

This course is designed for students performing computer vision tasks.

Course description

AI-3004 – Build an Azure AI Vision solution with Azure AI Services is intended for software developers wanting to build AI infused applications that leverage Azure AI Services and Azure AI Language. The course will use C# or Python as the programming language.

Learning objectives

After completing this course, students will be able to:

- Design a solution that analyzes images using prebuilt features.
- Create a custom vision model for classification and object detection.
- Perform optical character recognition (OCR) and extract insights from video.

Audience prerequisites

Before attending this course, students must have:

- Knowledge of Microsoft Azure and ability to navigate the Azure portal
- Knowledge of either C# or Python
- Familiarity with JSON and REST programming semantics

To gain C# or Python skills, complete the free [Take your first steps with C#](#) or [Take your first steps with Python](#) learning path before attending the course.

If you are new to artificial intelligence, and want an overview of AI capabilities on Azure, consider completing the [Azure AI Fundamentals](#) certification before taking this one.

Course Schedule

Day	Estimated Time	Classroom activity
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1	20 min	Course Introduction slide deck (time may vary due to the number of student introductions in a given course)
	90 minutes	Analyze and manipulate images Demo Exercise 1
	40 minutes	OCR Exercise 2
	45 minutes	Detect Faces Demo
	70 minutes	Custom models Exercise 3
	30 minutes	Analyze videos Demo
	20 minutes	Conclusion, Q&A

Adjust timing as necessary for your students. If you need more time to complete all the topics, consider demonstrating some exercises or skipping the video demo.

Labs

The labs must be completed within the lab environment provided by your lab hosting provider. Detailed, step-by-step instructions are provided for each lab and presented as part of the UI experience within your lab environment.

At the time the courses were released, the lab instruction had been thoroughly tested and the lab steps were 100% accurate. However, given the nature of Microsoft’s cloud products and the fact that Microsoft releases UI updates on a regular basis, it’s possible that at some point in time, the UI for a given feature may change so that it no longer matches the lab instruction.