

# Chegg Skills

# Applying AI in Web Development

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 Part-time (10 hours/week)

 100% online

 Certificate of Completion

# Introduction

Congratulations on taking a major step in advancing your career. In this program, you'll learn key skills and best practices to use AI to design, develop, integrate with, and deploy AI-powered applications.

As a member of the Chegg family, we are always Student First. Backed by one of the largest ed tech companies in the world, we're committed to giving you the skills and learning support you need to grow professionally.



## Here's what you need to know:

- **Program Length:** 3 months
- **Time Commitment:** Part-time (10 hours/week)
- **Instructional Type:** Online
- **Class Schedule:** Independent study
- **Credential Awarded:** Certificate of Completion

The minimum expected time commitment for this program is estimated at 10 hours/week. Within this self-paced course, some students may progress more quickly than others.



# About the Program

Take your career to the next level with our Applying AI in Web Development Certificate program. Gain valuable new skills in leveraging AI to automate routine tasks, optimize application development, and solve complex engineering challenges. Students working in web development roles will leave equipped to tackle software engineering challenges using real-world AI use cases, expand their knowledge of AI, and propel their web development career forward in the era of AI.

## This program covers 6 high-level objectives:

- 1 Harness the power of AI in web development
- 2 Gain knowledge on commonly used AI tools and libraries
- 3 Integrate AI functionalities into web applications
- 4 Design, develop, and deploy AI-powered web applications
- 5 Apply AI concepts to Python programming
- 6 Identify practical use cases for applying AI to web development roles

Course 1

# Fundamentals of AI

Unlock the power of artificial intelligence and understand its uses throughout the web development process.

## How You'll Apply These Skills:

Begin with an overview of the key concepts in artificial intelligence (AI), like machine learning, deep learning, large language models, natural language processing. You'll explore the pivotal role of AI in enhancing the software development process. Finally, you'll begin to delve into ethical and responsible AI usage, touching on data privacy and security to master AI effectively.

Course 2

# AI Applications in Web Development

Master the integration of AI tools and libraries into web applications.

## How You'll Apply These Skills:

Identify specific AI use cases in web development, while understanding and applying prompt engineering to solve coding challenges using an AI assistance to enhance your coding experience. You'll delve into AI ethics, understanding key considerations such as fairness, transparency, and safety. You'll leave with enhanced critical thinking skills so you can evaluate and effectively use AI assistants in programming tasks.

Course 3

## AI Programming with Python

Enhance your Python programming skills with AI to optimize web page development.

### How You'll Apply These Skills:

Dive into the fundamentals of machine learning and application in web development, specifically exploring decision trees and neural networks. Leveraging Python, you'll implement neural networks, understand their activation and loss functions, and begin to train deep learning models.

Course 4

## Data Manipulation using Pandas

Delve into the intricacies of data management with Pandas for web development.

### How You'll Apply These Skills:

Learn to handle data manipulation tasks using pandas, from installation and setup, to basic data operations and handling inconsistencies. You'll learn to reshape data using advanced techniques and perform exploratory data analysis using statistical methods.

Course 5

## Advanced App Development with Flask

Gain expertise in creating and managing robust web applications using Flask.

### How You'll Apply These Skills:

Learn to process various requests, send appropriate client responses, and implement RESTful operations. You'll learn more advanced skills including integrating AI models into Flask APIs, setting up and managing databases, and deploying Flask applications to production servers. These skills will equip you to develop advanced, user-friendly web applications.

Course 6

## Natural Language Processing and LLMs

Get an in-depth understanding of NLPs and large language models with LangChain.

### How You'll Apply These Skills:

Learn to apply regular expressions, tokenization, text preprocessing, and text classification techniques in NLP. You'll learn how to design, train, and integrate AI-powered conversational agents using LLMs within a Flask web application. You'll apply your newfound knowledge to develop interactive and intelligent chatbots using LangChain to enhance the user experience of your web applications.

# FAQs

## What support do you offer students during the program?

Unlike Chegg Skills other programs, AI courses are a short-form certificate program that can be expected to be completed in 2 months. Students will get real-time support through our live chat platform for answers to study-related questions, access to office hours, and academic support resources to guide them through the program effectively.

## Do I need a computer to take the course?

Chegg Skills programs require a computer with high-speed internet access and video capability, including a webcam, a microphone, and speakers. Every student must own or have access to a personal computer with at least:

- 16GB RAM
- At least 2.0 GHz processor
- At least 256 GB HD

Computers must be available prior to the first day of class. Headphones are highly recommended. Macs must have the most current OS version installed, and PCs must be using either Windows 10 (or newer Windows operating systems) or a current version of a Linux operating system.

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**Apply for the  
Applying AI in  
Web Development  
Certificate  
Program today.**

Supercharge your career here.