

# WEB APP DEVELOPMENT CERTIFICATE

## Program Description

In today's digital age, developing web programming skills can equip you to excel in a range of in-demand careers. Learning how to program is like learning a new language, where the most important benefits you acquire are the ability to understand how web applications work, how users interact online, and how the most complex problems are being solved.

In this certificate program, you will practice front- and back-end programming fundamentals to help you make sense of the technologies we use every day. Using a variety of tools, including Python, JSON, SQL, HTML, and CSS, you will write simple, modular programs of increasing complexity to reinforce your understanding of modern web-based applications. By using each of these tools to develop programs, you will gain a foundational skill set in programming that will enable you to create interactive web apps.

Whether you're a project manager who wants to better communicate with a tech team or an aspiring web developer, the logic you study and the skills you develop in writing simple programs are useful for developing your problem-solving abilities, empowering you to break down complex problems into smaller, more accessible components and write programs that solve them, step by step. This certificate program has a strong emphasis on learning by doing, and each course includes practical programming assignments to help you gain confidence in your programming abilities. By using each of the tools to develop programs, you will acquire an essential full-stack perspective of programming, enabling you to develop applications on the web.

## Key Takeaways

- Write programs that do simple calculations and text processing
- Use Python to automate repetitive tasks by working with basic data sets
- Write programs that process large and complex data sets
- Write programs that connect to the web to download data and use web services
- Create interactive web applications that increase functionality for the user
- Write a basic web-based application

## What You'll Earn

- Web App Development Certificate from Cornell Tech
- 80 Professional Development Hours (8 CEUs)

## Who Should Enroll

- Aspiring web developers
- Data analysts and database management professionals
- Entrepreneurs
- Any professional interested in strengthening problem-solving skills and better understanding technology fundamentals

## Total Investment

- 2.5 months to complete all the courses

*The courses in this certificate program are required to be completed in the order that they appear. Please note that the courses in this certificate program will increase in difficulty as you progress through the program. We recommend that students allocate 6 to 8 hours a week to successfully complete each of these courses.*

## Courses

Code	Title	Hours
eCornell CTECH40	How to Write Programs That Make Choices With Control Flow	0
eCornell CTECH40	How to Write Functions to Automate Repetitive Tasks	0
eCornell CTECH40	How to Write Programs That Work With Databases	0
eCornell CTECH40	How to Develop Web Interfaces With Online Protocols	0
eCornell CTECH40	How to Create Interactive Websites With HTML and CSS	0