

## INTRODUCTION TO PROGRAMMING FOR WEB DEVELOPMENT

# COURSE 2 Building Webpages with HTML and CSS

This is the second in a series of six courses from A&D Tutoring that, taken together, are designed to give students having *no prior experience of modern computer programming or Web technologies* the threshold knowledge and skills needed to succeed at advanced formal training in software and Web development. This course plus the one before it and the one after it, which focus on the fundamentals of computer programming and on the JavaScript language, form the core of the series. The content of this core is aligned with four separate certifications in the *Information Technology Specialist* suite of exams from Pearson Vue.

### **Description**

HTML is the code used to create and structure content on webpages, and CSS is used alongside HTML to control the appearance and style (typeface, colour, size, position) of all webpage elements. Together, these languages are at the "front end" of every website and every Web application. In this course, you will work through HTML and CSS from the essential basics on up, to construct ready-to-deploy multipage websites with sophisticated layouts, graphics, and user forms. Duration is 100 hours of instructor contact time.

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

- analyze and write HTML code to structure a webpage, at the document level and the content level;
- organize text and images on a webpage using semantic tags and non-semantic elements (including divisions, tables, and forms), and id and class attributes;
- place links on a webpage to internal and external locations, files and multimedia, email programs, style sheets, and executable scripts;
- analyze and construct CSS code to control the fonts, sizes, colours, positions, alignments, and other display properties of text, lists, tables, forms, and images on a webpage;
- create flexible layouts with columns, floats, grids and other content containers that change in response to browser or device size;
- build a multi-page website from scratch, including forms for user input and a navigation bar or menu;
- create style effects and change the display properties of webpage elements using CSS transitions, transforms, and keyframe animations.

#### **Prerequisites**

- Course 1 of this series, or comparable prior experience of programming in Python or a similar computer language.
- All-round familiarity with the Microsoft Windows operating system, command-line interfaces (e.g., PowerShell or Command Prompt), basic text editors, and Visual Studio Code.

#### Certification

When you have completed this course successfully, you will be prepared to write (optionally) the <u>IT Specialist HTML and CSS Exam</u>, which is part of Pearson Vue's <u>IT Specialist Certification Program</u>. Once you have completed *both* this course *and* the next one in our series—*Activating Webpages with JavaScript*—you will also be equipped to take (if you wish) the <u>IT Specialist HTML5 Application Development Exam</u>.