

Certificate: Web Frontend Development

Certificate Description:

This certificate is designed to provide students with basic technology skills needed to gain entry-level employment, or an internship, in Web development, particularly in the user interface or Frontend area. Students will develop skill in HTML, CSS, Javascript and PHP. This certificate is developed and granted by BYU-Idaho.

Course Code	Course Name	12 Credits
WDDPC 100	Introduction to Web Design and Development	1 Credit
CIT 160	Introduction to Programming	3 Credits
COMM 130	Visual Media	3 Credits
CIT 230	Web Frontend Development	3 Credits
WDD 331	Advanced CSS	2 Credits

Course Descriptions:

WDDPC 100 (1 credit) – Introduction to Web Design and Development

This course introduces students to the World Wide Web and to careers in web site design and development. The course is hands on with students actually participating in simple web designs and programming.

CIT 160 (3 credits) – Introduction to Programming

This course is an introduction to the basic concepts of computers and information technology. Students will learn the basics of computer hardware and the binary and hexadecimal number systems, design algorithms to solve simple computing problems, and will write computer programs using Boolean logic, control structures, and functions.

COMM 130 (3 credits) – Visual Media

This course is a practical application of the design principles and rules of typography to produce effective visual media. Students produce a portfolio of projects including fliers, ads, edited images, logos, stationery, and brochures to demonstrate design proficiency and expertise using industry-standard technology.

CIT 230 (3 credits) – Web Frontend Development

This course focuses on the planning and development of web sites using HTML, CSS, JavaScript and PHP with attention to usability principles.

WDD 331 (2 credits) – Advanced CSS

This course provides deeper learning into topics in cascading style sheets (CSS). Topics of study will include: complex CSS selectors, advanced CSS layout and positioning techniques, CSS transitions and animations, CSS Preprocessing, an introduction to CSS libraries, and using scalable vector graphics (SVG) with HTML and CSS.

Outcomes:

- Demonstrate skills in web design, HTML, CSS and Javascript.
- Develop web pages that are semantic and valid using the HTML5 markup language.
- Design web pages with valid Cascading Style Sheets (CSS) level 3 and avoid all HTML presentational markup.
- Provide visually appropriate, usable, and findable content to both humans and machines.
- Utilize skills in planning, designing, and developing web pages and sites according to best practices of organization and maintainability.
- Show proficiency with current design principles as applied to the web.
- Work effectively with others in a work environment by communicating clearly, fulfilling assignments and meeting deadlines.

Potential Employment:

- Web Frontend Developer
- Information Technologist
- UX/UI Designers
- Web Content Developer