WEB & INTERACTIVE MEDIA DESIGN
Professional Certificate Program

UC SANTA CRUZ SILICON VALLEY CAMPUS
UCSC Silicon Valley extension

in partnership with **ec** *Higher Education*

Designers must stay up–to–date with emerging trends in internet, mobile devices, multimedia, dynamic web pages and interactive gaming. Today's designers must also learn to define business problems and determine user needs while applying principles of information architecture, interaction design, graphic design, and user research. UCSC Silicon Valley Extension's Web and Interactive Media Design program equips you to meet the challenges of a changing industry.

Who Should Attend?

- Those looking for basic foundation skills for designing web sites and media
- Professionals looking to specialize their skill

Curriculum

Certificate & OPT | 3 Quarters | 29 Units

HTML Fundamentals | 2 Units
In this hands-on course, you'll learn to code HyperText Markup Language (HTML) to meet the most current standards and practices of coding as set by the World Wide Web Consortium (W3C). It covers all the major topics of coding and validating HTML, including meeting accessibility mandates and improving search engine optimization (SEO). The course also examines the new elements introduced by HTML5. The course is for anyone who has not coded Web pages before as well as for those who would like to review and update their HTML coding skills.

Designing with Cascading Style Sheets: Advanced | 2 Units
This course provides an in-depth exploration into the expanding world of Cascading Style Sheets (CSS), covering responsive website designs that work with smartphone, tablet or desktop monitors. Lectures and hands-on exercises cover essential CSS3 properties, concepts, techniques, and applications of media queries, styling forms, fonts and structural pseudo-classes. You will also learn how to handle browser compatibility issues and utilize the greater capabilities now available through CSS.

HTML5: The Living Language | 3 Units
An increasing number of companies are using HTML5 to develop Web and mobile applications. This course demystifies HTML5 and its powerful features. You will gain experience with redefined Web forms, new extended audio and video controls, new page structures and syntax. You'll learn and practice "meaningful markup", new canvas drawing methods, drag and drop, data storage methods, new JavaScript and CSS3 implementations, as well as geolocation and mobile application frameworks. The course includes a series of in-class exercises and lessons with homework.

Designing with Cascading Style Sheets: Fundamentals | 2 Units
Cascading style sheets (CSS) are a mandatory method for a Web designer to control the look and feel of a modern website. Combined with proper HTML markup, CSS allows for precise control over a Web page's appearance without the use of tables. This introductory course provides demonstration and hands-on exercises covering the application and syntax of CSS; handcoding CSS properties for font, text formatting and backgrounds, etc

Introduction to Website Hosting and Optimization | 1 Unit
This course covers the decision points and practical challenges of launching and administering a website, such as choosing a domain name and Web hosting platform. You will review and evaluate some popular e-commerce and content management systems, and learn the hands-on skills necessary to administer domains, monitor website performance with analytics, and get sites and pages listed by search engines.

Mobile Interface Design | 3 Units
There are many mobile apps in the App Store, but only a limited number of them have innovative design principles, friendly user interfaces, and most importantly, widespread adoption by users. In this hands-on lab and lecture course, you will learn the core principles for creating effective user interfaces for mobile devices incorporating iOS, Android, Windows, responsive/parallax design and more. You will discover useful patterns for developing mobile products and design a mobile user experience using an iterative and user-centered design process.

Adobe Photoshop, Introduction | 1.5 Units
This course introduces the basics of Photoshop CC, the standard for the creation and manipulation of digital images. The course is designed for beginners and taught with lectures, demonstrations, hands-on work, critiquing and troubleshooting in a lab setting. It covers the Photoshop interface and dense menu options, as well as basic color theory, workflow methodology and best practices. You will learn to use the tools for basic image editing, photo retouching, painting, creating composite images and working with type.

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Multimedia Fundamentals | 2 Units
This course provides hands-on instruction in the fundamental aspects of video and audio technology in the context of production for the Web. It begins with the fundamentals of light, color, camera, sound, microphone and recording technologies, with a review of the audio/video formats used in HTML5. You'll learn practical techniques for recording high-quality audio and video, including editing and storytelling development. The course includes lab exercises using Adobe Premiere and Audition for editing and quality enhancement. You will work under the guidance of the instructor to produce a final project.

Web Design Project | 2 Units
This course provides the opportunity to complete the entire process of developing a website for an actual client of your own choosing, including the processes of needs analysis, design and deployment. This is the last course in the Web and Interactive Media Design Certificate program, and you are expected to demonstrate the range of skills and knowledge you have acquired. The project involves information architecture, interface design, visual design, XHTML, CSS, cross browser compatibility and basic JavaScript.Complementary topics such as JQuery, CMS and mobile devices are also introduced.

Graphical Production for the Web | 1.5 Units
This course covers the creation of Web graphics using professional digital imaging tools. Photoshop is the primary focus, but other programs, including Fireworks and Illustrator, will be explored. You will learn the workflow for creating graphic components—from page layouts to navigation to animations—along with efficient production techniques. Topics include GIF vs. JPEG compression; color, type, and background images; layers; slicing images and creating rollovers.

User Experience Design Fundamentals | 3 Units
User experience design is a major factor in creating winning industry products. This course focuses on using user-centered design strategies and methods to create effective websites and Web applications that provide an excellent user experience. The course will also expose you to the multidisciplinary nature of the user experience design process, design thinking, and the steps you can take to succeed. The course covers methods and strategies of five overlapping phases: problem identification, information collection, idea generation, prototyping, evaluation/testing, and implementation.

Visual Design for the Interactive Web | 2.5 Units
This course discusses what constitutes a well-designed website when used on different displays, such as an iPad, smartphone, laptop or large screen. You will examine what makes a website engaging and how users successfully interact with it. The course focuses on the guiding principles and key aspects of visual design as they apply to a Web interface. You will apply these design principles by creating the information architecture and visual design layouts for a website.

Adobe Illustrator, Introduction | 1.5 Units
Illustrator's vector-based, small graphic format makes it a must for print and Web graphics. This hands-on course introduces the essential features of Adobe Illustrator. You will develop competency in this complex software, with emphasis on the Pen tool. Other topics include using the Pen tool to draw curved, corner and cusp points; using templates; selection techniques; layers; color swatches; and transformation tools.

Web Design Using Open Source Design Patterns, Libraries and Frameworks | 2 Units
The open source community has provided high productivity, fast-track alternatives to using commercial tools in Web design. This course introduces design patterns as an advanced technique for rapid website production and provides an overview of open source libraries and frameworks to add to the designer's toolbox. Today's professional designers have embraced grid standardization and responsive design layouts with frameworks like Twitter Bootstrap and Foundation. By working with a set of proven design patterns rolled into a well-tested framework, the designer can create a website for all contemporary viewports with the least amount of trial and error.

Internships (unpaid) | 3 Units Minimum 90 Hours Per Quarter
Enrolling in a certificate program allows you to participate in multiple unpaid internships at local companies in your field of study. Internships are available across a variety of sectors, generally at mid-sized companies, such as Agylytyx, Crowdera Inc, Innowest, and YMedia Labs. Good internships are much sought after and highly competitive. To stand the best chance of securing your preferred placement, our Internship Coordinators are on hand with expert support and guidance.

Courses in the certificate programs are subject to change based on schedule availability and/or student aptitude. Equivalent course substitutions will be made to accommodate.