UCSC Extension Silicon Valley

KNOWLEDGE YOU PUT TO WORK

PROGRAM SUMMARY

Web and Graphic Design

ENGINEERING AND TECHNOLOGY

Free Program Overviews

Web Design with Dreamweaver Preview

Learn about our courses and program philosophy, see student work, and have an opportunity for Q & A. This seminar provides an overview of working in Dreamweaver. During the session we will examine successful sites using Dreamweaver and explore features available in this popular software. This event is held in January.

Course 6667

and 22405

Web Design with Adobe Flash Preview

Learn about our courses and program philosophy, see student work, and have an opportunity for Q & A. Get a taste of one of our popular software courses with this Adobe Flash Preview. Flash is a powerful development tool for adding rich interactive content, animation and video to any Web site. During this demonstration, we will:

- Examine how Flash is used on the Web
- Explore some of the exciting features available in Flash
- Create a simple Flash movie and embed it into a Web page

This event is held in August.

Course 19319

and 22405

Web Designers Need Broader, Deeper Knowledge

The Internet's rapid evolution means professional Web designers must continually update and expand their skill sets to keep up with changing technologies and industry standards. Today's Web designers must be able to define the business problem and determine user needs, in addition to applying principles of information architecture, interaction design, graphic design, and user research. They also must know how to write their own front-end code and use visual authoring software.

Professional-Level Program Delivers Solid Expertise

The professional Web design program at UCSC Extension equips you to meet these challenges. Our newly revised certificate program delivers solid expertise, beginning with an orientation course entitled "Web Design, Introduction" that brings you up to date on opportunities in the field. The final course, "Web Design Project", provides an opportunity to apply newly acquired theory, tools, and techniques to create a professional-quality Web site. In between are courses that expose you to each step in the user-centered design process.

Flexible Requirements Accommodate Entry-level and Experienced Designers

Our certificate program includes foundation skills and advanced Web design courses. Those who are new to the Web Design field should start with the recommended prerequisites and take all the foundation courses. This will equip you with the broad skills needed to become a competent Web designer. Experienced Web designers who want to expand and update their knowledge can select a mix of foundation and advanced courses based on their current knowledge and career goals. Either approach leads to a UC certificate.

Get Hands-on Experience Working in Our State-of-the-Art Labs

Many software courses are taught in our state of-the-art Macintosh Lab. The lab features multi-core Mac Pros, the latest version of Mac OS X, and the latest software including Adobe CS5. This lab provides you with the opportunity to learn new skills on top-quality machines loaded with the most current software.

Benefits of Studying Web Design at UCSC Extension

The Web Design program offers current and aspiring professionals:

- The basic foundation skills for designing Web sites
- Courses in advanced topics to help students develop areas of specialization
- Courses taught by senior working professionals
- Convenient course schedules and Silicon Valley location
- Courses updated frequently to reflect the latest tools and techniques

About UCSC Extension Silicon Valley

The vital learning community at UCSC Extension Silicon Valley is well known for its collegial atmosphere and rigorous preparation. Our faculty of expert practitioners teaches state-of-the-art solutions to the everyday problems confronting technology professionals working in Silicon Valley. The professional education programs we offer build expertise, open doors to new opportunity, and deliver tangible value. Our broad portfolio of open-enrollment courses and certificates, affordable pricing, experience-based instruction, and central location in Silicon Valley help turn jobs into careers.

Web Design and Development Certificate

Certificate Requirements

To obtain the Certificate in Web Design, you must complete a minimum of **17.5 units.** Certificates are granted upon successful completion of "Web Design Project." For students new to the Web Design field, we strongly recommended: "Web Design, Introduction" and all eight other foundation courses. For those with two or more years of industry experience who are proficient in some Web design skills, foundation courses can be taken, as needed, to round out your skill set and to supplement the advanced courses. For additional information, go to **ucsc-extension.edu/webdesign.**

Prerequisites

There are no formal prerequisites to enter the certificate program. However, students should be proficient in Adobe Illustrator and Adobe Photoshop. For those in need of these skills, we offer introductory courses in Adobe Illustrator and Adobe Photoshop. These two recommended prerequisites do not count toward the total number of units required for the certificate and may be satisfied with equivalent experience. We also recommend "Graphic Design Fundamentals" as a prerequisite for students who do not have previous graphic design background.

Recommended Course Sequence

Depending on student experience in Web Design, the courses may be taken in any order, provided the individual course prerequisites have been fulfilled. All students should end with "Web Design Project." For more information, visit **ucsc-extension.edu/webdesign**. New students should attend the Program Overview or Open House events to receive course sequence information.

Curriculum

RECOMMENDED PREREQUISITES	Units	Course
Adobe Illustrator, Introduction	1.5	6497
Adobe Photoshop, Introduction	1.5	5307
Graphic Design Fundamentals	2.0	20025

FOUNDATION COURSES	Units	Course
Design Basics		
Web Design, Introduction	0.5	22609
User Centered Design Fundamentals for the Web	2.0	0087
Graphic Design Principles for the Web	2.5	18977
Production and Animation		
Graphical Production for the Web	1.5	1262
Adobe Flash I—Animation for the Web	1.5	1107
Technical Implementation		
Web Technologies, Introduction	1.0	22623
HTML/XHTML: Building Blocks for Web Development	2.0	20816
Designing with Cascading Style Sheets I	1.5	6673
Adobe Dreamweaver—Client Side	2.0	2212

ADVANCED COURSES	Units	Course
User Experience Design		
User Research: User Needs and Usability Assessment for Web and Software Products	2.0	20079
User Experience for Web-based Applications	2.0	3113
Advanced Implementation		
JavaScript for Designers	1.0	1879
Designing with Cascading Style Sheets II	1.0	21317
Adobe Flash II—Basic ActionScript Programming for the Web	1.5	5496
Site and Content Management		
Managing Web Site Development and Deployment	1.0	4313
Web Content Management Systems: Drupal and Wordpress, Introduction	2.0	22627

REQUIRED COURSE	Units	Course
Web Design Project	2.0	5228

Courses

Adobe Dreamweaver—Client Side

Adobe's Dreamweaver is a professional WYSIWYG Web authoring tool for designing, coding, and developing Web sites and Web applications. This course covers Dreamweaver's features, from inserting images, tables, and forms to using JavaScript behaviors for swapping images or using AP Divs. Other design techniques are discussed and demonstrated, such as creating and employing cascading style sheets, libraries, templates, and image maps, and incorporating Flash animation on your Web page. After completing this hands-on course, students will have sufficient Dreamweaver skills to create a functional and effective Web site.

Course 2212

Adobe Flash I—Animation for the Web

Adobe's Flash CS4 is a powerful application for creating content for the Web, mobile devices, CDs, videos and stand-alone desktop applications. This course explores the rich animation capabilities of Flash. Learning how to import Photoshop and Illustrator files will expand your resources. You'll also learn to build objects using the Flash toolset, employing key frame animation to create 2D and 3D effects, motion, masking and 3D rotation. The final project is a timeline-based Web site using basic ActionScript, Flash's programming language.

Course 1107

Adobe Flash II—Basic ActionScript Programming for the Web

This course covers the Flash ActionScript fundamentals that are used to build dynamic, responsive features into your Web sites. The course is for designers who lack a background in programming. It begins with the concept of "pathing," in which messages are sent between objects on your stage. The programming concepts of variables and conditional statements are introduced with the creation of a toggle button. You'll learn how to load and control external sounds, images, video and other Flash movies. The course concludes by introducing the pre-build components available, and incorporates many of these into a final project.

Course 5496

Course Descriptions

Designing with Cascading Style Sheets I

Cascading style sheets (CSS) are a mandatory method for a Web designer to control the look and feel of a modern Web site. Combined with proper HTML markup, CSS allows for precise control over a Web page's appearance without the use of tables. This beginning course includes demonstrations and hands-on exercises covering the application and syntax of CSS; hand-coding CSS properties for font, text formatting and backgrounds; the box model; creating vertical and horizontal navigation menus and two and three column page-layouts.

Course 6673

Designing with Cascading Style Sheets II

Today's browsers support a wide range of Cascading Style Sheets (CSS) Level 2.1 and now CSS Level 3 properties. CSS is considered a mandatory language for any Web designer in today's industry. This course includes lecture and hands-on exercises covering various properties, such as styling survey forms and creating layouts for image galleries with captions. It also covers some of the new capabilities that CSS Level 3 provides including opacity, rounded corners (border-radius), text-shadowing, structural pseudo-classes and more.

Course 21317

Graphic Design Principles for the Web

In this course, we will discuss the role of graphic design in the overall Web design process, the guiding principles and key aspects of graphic design, and how they apply to the Web. Students will be asked to create graphic design layouts for a Web site starting with the information architecture. Topics include using color, typography, layout and imagery; communicating the brand; creating a visual system; making it user friendly; presenting your design concepts; setting up your files; and an introduction to graphic production for the Web. Students will acquire knowledge that will help them create more appealing and usable Web sites.

Course 18977

Graphical Production for the Web

This course covers the creation of Web graphics using professional digital imaging tools. Photoshop is the primary focus of the class, but other programs, such as Fireworks and Illustrator, will be explored. Students 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, layer groups, layer comps, and layer styles; slicing images and creating rollovers; creating animated GIFs and SWFs; integration with Dreamweaver and the Web site design process.

Course 1262

HTML/XHTML 101: Building Blocks for Web Development

In this hands-on course, students create structurally sound and valid Web pages. The instructor discusses the history, power and limitations of basic Web page development using the Web's foundation languages, Hypertext Markup Language (HTML), Extensible Hypertext Markup Language (XHTML) and HTML5. This course is for students who have not coded Web pages before and is a review for students who have some HTML coding knowledge and want to build on that knowledge as the foundation for learning XHTML or HTML5.

Course 20816

JavaScript for Designers

Web designers today need to know JavaScript. This lab course introduces JavaScript programming with hands-on exercises that demonstrate how to modify code to create JavaScript functionalities. A wide range of basic programming concepts and elements of JavaScript are covered, including: Object Oriented Programming and the Document Object Module; JavaScript methods, properties, functions and events; and variables, operators, conditional statements and loops. Student will learn how to locate and modify JavaScript codes to produce desired functionalities on Web pages.

Course 1879

Managing Web Site Development and Deployment

This course covers the decision points and practical challenges of launching and administering a Web site. Relevant topics include strategic decisions such as choosing a domain name, a Web host, an e-commerce platform or a content management system. Also covered are the hands-on skills necessary to administer domains and get listed by search engines. The course includes hands-on exercises using Web site administrative control panels, content management and e-commerce "back-end" resources. The course is for students interested in the Web site administrator role.

Course 4313

User Centered Design Fundamentals for the Web

Creating effective Web sites starts with meeting the needs of the business and the end-users. This course demonstrates how to balance the requirements of both by applying a user-centered design process. The course covers three phases of the process: discovery, definition, and interaction design, with an emphasis on the interaction design phase. Topics include user and business requirements; site audits; personae; scenarios and task flows; interaction design; wireframing; prototyping and testing; and information architecture.

Course 0087

User Experience for Web-based Applications

Web applications are becoming the de facto standard for delivering software functionality to users. This project-oriented course provides an overview of the design process and best practices for web app development. In addition to the lectures, you'll create and design your own Web app using graphical and Web tools to address a real-world business problem. The course explores the key phases of the user experience design process, including strategy, competitive and user research, persona development, UI (user interface) framework and design, usability testing and rapid prototyping.

Course 3113

User Research: User Needs and Usability Assessment for Web and Software Products

It is commonly reported that more than 60 percent of rework in software products results from problems related to not understanding what users need. In this project-based class, students will learn how to make products more usable through a user-centered design (UCD) process. The instructor will provide real-life industry examples of applying UCD methods to software and Web projects. Topics include business scenarios, user profiles and user task analysis; inquiry methods, including contextual inquiry, focus groups, interviews and surveys; and assessment methods, including usability testing, heuristic evaluations, and inspections.

Course 20079

Courses continue on reverse…

Web Content Management Systems: Drupal and Wordpress, Introduction

This course begins with a survey of Content Management Systems (CMS) in use on the Web today, with a focus on two of the most popular systems: Drupal and Wordpress. These are modular Web frameworks with rich features for text, media and theme management. Students will be guided through the installation, configuration and administration of these frameworks, and learn about core capabilities and popular modules. Practical examples of professional Web applications are used to demonstrate the features of CMS. This course is lab-based with lectures and practical exercises.

Course 22627

Web Design, Introduction

Applications for web design skills are diverse. Marketing communications, e-commerce, social networking—the list is endless. As a result, the role of a Web designer has many variations. This course will start by defining the Web design process and roles. Case studies and guest speakers will provide unique perspectives on the industry. The course will show how the Web Design program maps to industry roles and conclude by helping participants identify Web design career goals.

Course 22609

Web Design Project

This course provides the opportunity to develop a Web site for an actual client that the student finds, including the processes of needs analysis, design and deployment. This is the last course in the Web Design Certificate program, and students are expected to demonstrate the range of skills and knowledge they have acquired. The project involves information architecture, interface design, visual design, XHTML, CSS, cross browser compatibility and basic JavaScript. Complementary topics such as CGI scripts, CMS and mobile devices are also introduced.

Course 5228

Web Technologies, Introduction

This course provides an introduction to the major technologies used in the production of Web applications. The course builds basic knowledge of the various Web technologies without teaching programming. It starts with the Internet fundamentals, followed by HTML basics and Cascading Style Sheets (CSS). It shows how JavaScript and AJAX work to create dynamic Web sites. It explains the Web server interface through Common Gateway Interface (CGI), Hypertext Preprocessor (PHP) and Perl scripting. The course also covers the implementation of database access and e-commerce tools.

Course 22623

Prerequisite Courses

Adobe Illustrator, Introduction

Illustrator's vector-based, small graphic format makes it a must for print and Web graphics. This hands-on course introduces the essential features and tools of Adobe Illustrator. Students develop basic competency in the use of 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; transformation tools; moving dialog boxes; painting objects; gradients and blends; gradient Mesh tool; transparency; type basics: point, area, path; patterns and brushes; and compound paths and masks.

Course 6497

Adobe Photoshop, Introduction

This course introduces the basics of Photoshop CS5, the industry 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. Students are introduced to the Photoshop interface and its dense menu options. They learn to use the tools for basic image editing, photo retouching, painting, creating composite images and working with type. Students also learn basic color theory, workflow methodology and best practices.

Course 5307

Graphic Design Fundamentals

If you need to make design decisions for presentations, Web pages or printed materials and you want your final product to be professional and effective, this is the course for you. This course will provide you with the basic skills used by designers everywhere. Students will learn to set a strategy for any given project, ideate via thumbnail sketches, select appropriate imagery and typeface, all while keeping the brand and project constraints in focus. Topics include typography, color theory, layouts and grids, and image selection. This course is highly recommended as a foundation for anyone interested in taking Web design courses. This course emphasizes visual problem solving skills and not computer instruction.

Course 20025

Program Update and Enrollment Information

Visit **ucsc-extension.edu/engineering**, for the most up-to-date information about our courses and programs, including textbooks, instructors, schedules and locations.

Enroll online at **ucsc-extension.edu**.

Send questions to **program@ucsc-extension.edu**

UCSC Extension Silicon Valley

"Silicon Valley's #1 Professional Engineering Educator"

Dynamic, Highly Educated Student Body

Nearly 100 percent of the students who enter our programs have Bachelor's degrees—and more than 40 percent already hold graduate degrees. So when studying at UCSC Extension Silicon Valley, you will learn and network with the best and brightest. Working professionals come here to build their careers rather than earn a degree—yet our certificates' quality and recognition have proven instrumental in helping them advance careers.

Wide Variety of Flexible, Competitively Priced Learning Options

We offer highly practical, real-world instruction in dozens of disciplines of high interest and demand in Silicon Valley. Our applied courses provide a theoretical foundation to enhance on-the-job performance. In addition, our programs are very competitively priced—often less than half that of comparable training available elsewhere—with many offered both in classrooms and online. You can take individual courses in any program or earn a full certificate.

Comprehensive Programs for Technology Industries

Our career-oriented education is organized under eleven certificate programs, each representing a significant technology discipline or industry. Course levels vary from basic to advanced. Students can either be beginners in the field, practicing engineers, or job seekers wanting a rigorous program to broaden their skills and enhance their value in the marketplace. Together these programs offer the broadest technology curriculum in Silicon Valley.

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How To Get Started

Go to **ucsc-extension.edu**. You'll find detailed information about the full range of certificates and courses we offer, including class schedules and online registration. Or call us at (408) 861-3860 for more information.

Program Contact

Engineering and Technology Department, (408) 861-3860 or e-mail **program@ucsc-extension.edu.**

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