

# COMPUTER INFORMATION SYSTEMS: WEB APPLICATIONS (CISW)

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**CISW 15 Web Site Development**  
**3.5 Units** (Degree Applicable, CSU)  
 Lecture: 54 Lab: 27  
**Advisory:** *CISB 15 or CISB 16*

Plan, develop, implement, publish, and maintain Web sites with a professional visual Web-authoring application, includes working with text and images, internal and external hyperlinks, image maps, tables, Cascading Style Sheets (CSS), Web page content, Web forms, multimedia objects (Flash text, Flash buttons, sounds, and video), interactions and behaviors, and Web page templates. Principles of Web site structures, documentation, management, and maintenance will be discussed.

**CISW 17 HTML, CSS, and JavaScript Programming**  
**3 Units** (Degree Applicable, CSU)  
 Lecture: 54  
**Advisory:** *CISB 11*

Plan, program, implement, publish, and maintain web sites using Hypertext Markup Language version 5 (HTML5), Cascading Style Sheets version 3 (CSS3), and JavaScript. Includes working with text, semantic, and multimedia objects, tables, forms, Application Programming Interfaces (APIs), Document Object Model (DOM), cross-browser compatibility, markup validation, client-side interactivity, and principles of web page design, web site construction, documentation, and publishing.

**CISW 21 Secure Web Programming with ASP.NET**  
**3 Units** (Degree Applicable, CSU)  
 Lecture: 54  
**Corequisite:** *CISW 21L*  
**Advisory:** *CISB 15*

Secure Web programming using programming, scripting and markup languages such as eXtensible Markup Language(XML), XML HyperText Markup Language (XHTML), Dynamic HTML, Javascript, Asynchronous Javascript and XML (AJAX), and Active Server Pages .NET (ASP.NET) with Visual Basic .NET (VB.NET) or C Sharp (C#) for designing user interfaces, processing user input, and accessing Web servers and databases. Students must be enrolled in CISW 21L, a concurrent lab co-requisite.

**CISW 21L Secure Web Programming with ASP.NET Laboratory**  
**0.5 Units** (Degree Applicable, CSU)  
 Lab: 27  
**Corequisite:** *CISW 21*

Laboratory for secure Web server programming using programming, scripting and markup languages such as XML (eXtensible Markup Language), XHTML (XML HyperText Markup Language), Dynamic HTML, Javascript, AJAX (Asynchronous Javascript and XML), and ASP.NET (Active Server Pages .NET) with VB.NET (Visual Basic .NET) or C# (C Sharp) for designing user interfaces, processing user input, and accessing Web servers and databases. Student must be enrolled in CISW 21, a concurrent lecture co-requisite.

**CISW 24 Secure Web Server Programming in Python**  
**3 Units** (Degree Applicable)  
 Lecture: 54  
**Corequisite:** *CISW 24L*

Secure web programming to create user interfaces, extract information and manage databases, manage files, format reports, and access web servers using Python programming language. Student must be enrolled in CISW 24L, a concurrent lab co-requisite.

**CISW 24L Secure Web Server Programming in Python Laboratory**  
**0.5 Units** (Degree Applicable)  
 Lab: 27  
**Corequisite:** *CISW 24*

Laboratory for secure web programming to create user interfaces, extract information and manage databases, manage files, format reports, and access web servers using Python programming language. Student must be enrolled in CISW 24, a concurrent lecture co-requisite.

**CISW 31 Secure Web Server Programming in PHP**  
**3 Units** (Degree Applicable)  
 Lecture: 54  
**Corequisite:** *CISW 31L*  
**Advisory:** *(CISN 34 and CISN 34L) or (CISW 24 and CISW 24L)*

Plan, install, and manage secure Apache Web servers using server side programming language like PHP (PHP: Hypertext Preprocessor) to access, manage, and secure MySQL databases. Student must be enrolled in CISW 31L, a concurrent lab co-requisite.

**CISW 31L Secure Web Server Programming in PHP Laboratory**  
**0.5 Units** (Degree Applicable)  
 Lab: 27  
**Corequisite:** *CISW 31*

Laboratory to plan, install, and manage secure Apache Web servers using server side programming language like PHP (PHP: Hypertext Preprocessor) to access, manage, and secure MySQL databases. Student must be enrolled in CISW 31, a concurrent lecture co-requisite.

**CISW 81 Work Experience in Web Programming**  
**1-4 Units** (Degree Applicable)  
 (May be taken for Pass/No Pass only)  
 Lab: 60-300  
**Prerequisite:** *Compliance with Work Experience regulations as designated in the College Catalog.*

Provides students with actual on-the-job experience in web programming at an approved work site, which is related to classroom based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester of supervised work is required for each one unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed, but assistance is provided.