Computer Science and Information Systems - Web Technology (CSWB)

See also CSIS - Computer Science, CSIS - Database, CSIS - Information Technology, and CSIS - Networking

Contact the Computer Science and Information Systems Department for further information.
(760) 744-1150, ext. 2387
Office: ST 6
http://www.palomar.edu/csis

Certificates of Proficiency -

Certificate of Proficiency requirements are listed in Section 6 (green pages).
• Web Developer with Emphasis in Java/Open Source
• Web Developer with Emphasis in Windows
• Web Server Administrator with Emphasis in Linux
• Web Server Administrator with Emphasis in Windows

PROGRAMS OF STUDY

Web Developer with Emphasis in Java/Open Source

This program includes the Web page design and programming languages that allow a developer to build dynamic Web applications with emphasis in the Java/Open Source platform.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
CSWB 110/		
R CSIS 110	Web Site Development with XHTML	3
CSWB 120	JavaScript	3
CSWB 150	PHP with MySQL	3
CSWB 170	Java for Information Systems	2.5
CSWB 220	Advanced JavaScript and XML (AJAX)	3
Electives (Select 1 course)		
CSWB 130	Advanced Web Site Development	3
CSWB 180	Python Programming	3
CSWB 270	JAVA Servlets and JSPs	3
CSDB 110	Introduction to SQL	3
CSDB 140	Introduction to Oracle	3
TOTAL UNITS		**17.5**

Web Developer with Emphasis in Windows

This program includes the Web page design and programming languages that allow a developer to build dynamic Web applications with emphasis in the Java/Open Source platform.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
CSWB 110/		
R CSIS 110	Web Site Development with XHTML	3
CSWB 120	JavaScript	3
CSWB 130	Advanced Web Site Development	3
CSWB 210	Active Server Pages	3
CSIT 180	C# Programming I	3
TOTAL UNITS		**15**

Web Server Administrator with Emphasis in Linux

This program includes the use and implementation of web-networked environments for the purpose of administering Internet/Intranet applications. Strong emphasis is placed on hands-on server administration, networking, supplemented with web development and design. The student may choose an emphasis on either the Linux/UNIX or Windows platforms.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
CSWB 110	Web Site Development with XHTML	3
CSWB 160	Perl Programming	2
CSCI 130	Linux Fundamentals	3
CSNT 140	Linux Administration	3
CSNT 141	Linux Networking and Security	3
Electives (Select 1 course)		
CSCI 132	Linux Shell Scripting	3
GCMW 217	Online Store Design I	3
CSWB 290	Implementing and Administering Web Servers	3
TOTAL UNITS		**17**

Web Server Administrator with Emphasis in Windows

This program includes the use and implementation of web-networked environments for the purpose of administering Internet/Intranet applications. Strong emphasis is placed on hands-on server administration, networking, supplemented with web development and design.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
CSWB 110/		
R CSIS 110	Web Site Development with XHTML	2
CSDB 210	SQL Server Administration	3
CSNT 120	Windows Client	3
CSNT 121	Windows Server	3
Electives (Select 1 course)		
CSWB 290	Implementing and Administering Web Servers	2.5
CSDB 220	SQL Programming	3
GCMW 217	Online Store Design I	4
TOTAL UNITS		**13.5 - 14**

COURSE OFFERINGS

CSWB 110   Web Site Development with XHTML   (3)
2 hours lecture - 3 hours laboratory
Note: *Cross listed as R CSIS 110, may be taken 3 times*
Transfer acceptability: *CSU*
A foundation course for Internet/Intranet technologies. Skills required to develop and publish web sites utilizing XHTML, including using HTML tables, frames, web page forms, and basic CSS (Cascading Style Sheets).

CSWB 120   JavaScript   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: *CSWB/R CSIS 110*
Transfer acceptability: *CSU*
Introduces the skills required to design Web-based applications using the JavaScript scripting language such as writing small scripts; working with data types; creating interactive forms using various form objects; and using the advanced features of JavaScript including loops, frames and cookies.

CSWB 130   Advanced Web Site Development   (3)
2 hours lecture - 3 hours laboratory
Recommended preparation: *CSWB 110*
Note: *May be taken 2 times*
Transfer acceptability: *CSU*
Web-based application development using advanced features of HTML, Dynamic HTML, XHTML, and XML.

CSWB 150   PHP with MySQL   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: CSWB 110/R CSIS 110
Transfer acceptability: CSU
Provides the knowledge and skills necessary to use the PHP scripting language to develop dynamic Web-based applications. Topics of study include the fundamentals of the scripting, using PHP with HTML forms, creating functions, and integrating with databases using MySQL.

CSWB 160   Perl Programming   (2)
1½ hours lecture - 1½ hours laboratory
Transfer acceptability: CSU
Develops basic competency in the Perl programming language. Topics of study include scalar and array variables, control structures, file I/O, regular expressions and subroutines.

CSWB 170   Java for Information Systems   (2.5)
2 hours lecture - 2 hours laboratory
Recommended preparation: CSWB 120 or CSIT 170
Transfer acceptability: CSU
An introduction to Java programming with emphasis on the syntax and structure of the Java language. Specific topics will include data types, exception handling, object-oriented programming, event-driven programming and an introduction to Java Servlets and JSPs.

CSWB 180   Python Programming   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: CSWB 110
Transfer acceptability: CSU
Provides the knowledge and skills necessary to use the Python programming language to develop software for Internet applications, perform systems programming, and implement user interfaces. Topics of study include the fundamentals of the language, parallel system tools, system tools, graphical user interfaces, network scripting, client-side scripting, and server-side scripting. Also covered are databases and persistence, and data structures.

CSWB 197   Topics in Web Technology   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU
Topics in Web Technology. See class schedule for specific topic offered. Course title will designate subject covered.

CSWB 210   Active Server Pages   (3)
2½ hours lecture - 1½ hours laboratory
Prerequisite: A minimum grade of 'C' in CSWB 110 and CSIT 170
Transfer acceptability: CSU
Introduction to the technologies and features in Active Server Pages. Topics include introduction to ASP, Webforms, controls, events, validation, custom controls, data binding, and various methods of code reuse, state management, configuration, caching, and application deployment.

CSWB 220   Advanced JavaScript and XML (AJAX)   (3)
2½ hours lecture - 1½ hours laboratory
Prerequisite: A minimum grade of 'C' in CSWB 120
Transfer acceptability: CSU
Provides the knowledge and skills necessary to use JavaScript, XML, and server-side languages to develop dynamic Web-based applications. Topics of study include the use of asynchronous JavaScript, how to use the Document Object Model, the use of XML in Web page requests, how to use server-side languages (e.g. PHP, Java) to query and return information from a database and how to design and develop new AJAX applications.

CSWB 270   Java Servlets and JSPs   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: CSWB 170
Transfer acceptability: CSU
Provides the knowledge and skills necessary to perform server-side Java programming using Servlets and JSPs, HTML form data, Session Tracking, Cookies, JSP scripting elements, including Applets in JSP documents, using JavaBeans with JSP, and creating custom JSP Tag libraries.

CSWB 290   Implementing and Administering Web Servers   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: CSNT 121
Transfer acceptability: CSU
Explores issues dealing with building and managing a web server. Topics will include web server and network issues, TCP/IP connectivity, server setup, web site administration, security, Internet commerce, and the function of the Webmaster.

CSWB 295   Directed Study in Web Technology   (1, 2, 3)
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson/director
Note: May be taken 4 times
Transfer acceptability: CSU
Designed for the student who has demonstrated a proficiency in computer science subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes.

Construction Inspection (CI)

Contact Occupational & Noncredit Programs for further information.
(760) 744-1150, ext. 2284
Office: AA-138

Associate in Arts Degrees -
AA Degree requirements are listed in Section 6 (green pages).
• Construction Inspection

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Construction Inspection

PROGRAM OF STUDY

Construction Inspection

Prepares students for a career as Building Construction Inspectors, or upgrades skills necessary for employment in the building construction trades.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CI 89	Plumbing Codes	2.5
CI 90	Mechanical Codes	2.5
CI 100	Building Codes I	3
CI 101	Building Codes II	3
CI 105	Electrical Codes I	3
CI 106	Electrical Codes II	3
CI 115	Nonstructural Plan Review	3
CI 120	Structural Plan Review	3
CI 125	Plan Reading	3
TOTAL UNITS		**26**

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

CI 89   Plumbing Codes   (2.5)
2½ hours lecture
Note: May be taken 2 times
An in-depth study of the fundamental concepts and interpretations of current state adopted plumbing codes. Topics covered include compliance issues, plumbing specifications, basic plumbing principles, and inspection methods and techniques. International Conference of Building Officials (ICBO) revisions every three years.