

**CSNT 224 Active Directory Services Administration (3)**

2½ hours lecture - 2 hours laboratory

**Prerequisite:** A minimum grade of 'C' in CSNT 121**Transfer acceptability:** CSU

Provides the knowledge and skills necessary to install, configure, and administer Microsoft Windows Active Directory Services. Also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers.

**CSNT 230 Microsoft SQL Server (2.5)**

2 hours lecture - 2 hours laboratory

**Prerequisite:** A minimum grade of 'C' in CSNT 221, and 222**Transfer acceptability:** CSU

Provides the knowledge and skills necessary to implement and manage a Microsoft Windows SQL Server in an enterprise network.

**CSNT 231 Design Windows Network Security (2.5)**

2 hours lecture - 2 hours laboratory

**Prerequisite:** A minimum grade of 'C' in CSNT 221, 222, and 224**Transfer acceptability:** CSU

Provides the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks using Microsoft Windows technologies.

**CSNT 235 Microsoft Exchange Server (3)**

2½ hours lecture - 2 hours laboratory

**Prerequisite:** A minimum grade of 'C' in CSNT 121, 221, and 224**Transfer acceptability:** CSU

Provides the knowledge and skills necessary to implement, administer, and troubleshoot information systems that incorporate Microsoft Exchange Server.

**CSNT 260 Cisco Advanced Routing and Switching (3)**

2½ hours lecture - 2 hours laboratory

**Prerequisite:** A minimum grade of 'C' in CSNT 161**Transfer acceptability:** CSU

Development of knowledge and skills to configure advanced routing protocols, Local Area Networks (LANs), and LAN switching. Design and management of advanced networks. This 70-hour course of instruction prepares the student for Cisco certification examination.

**CSNT 261 Cisco Wide Area Network Design and Support (3)**

2½ hours lecture - 2 hours laboratory

**Prerequisite:** A minimum grade of 'C' in CSNT 260**Transfer acceptability:** CSU

Development of knowledge and skills to design and configure advanced Wide Area Network (WAN) projects using Cisco IOS command set. This 70-hour course of instruction prepares the student for Cisco certification examination.

**CSNT 280 Computer Forensics Fundamentals (3)**

2 hours lecture - 3 hours laboratory

**Transfer acceptability:** CSU

Introduces methods used to properly conduct a computer forensics investigation beginning with a discussion of ethics, while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession; the computer investigation process; understanding operating systems boot processes and disk structures; data acquisition and analysis; technical writing; and a review of familiar computer forensics tools.

## Computer Science and Information Technology - Web Technology (CSWB)

See also CSIT - Computer Science

CSIT - Information Technology, and CSIT - Networking

Contact the Computer Science and Information Systems Department for further information.

(760) 744-1150, ext. 2387

Office: MD-275

<http://www.palomar.edu/csit>**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

**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	Web Site Development with HTML5/CSS3	3
CSWB 120	JavaScript	3
CSWB 150	PHP with MySQL	3
CSWB 170	Java for Information Technology	3
<b>Electives (Select 1 course)</b>		
CSWB 130	Mobile Web Application Development	3
CSWB 220	Advanced JavaScript	3
CSIT 150	Introduction to SQL	3
CSIT 160	Introduction to Oracle	3
<b>TOTAL UNITS</b>		<b>15</b>

### 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	Web Site Development with HTML5/CSS3	3
CSWB 120	JavaScript	3
CSWB 130	Mobile Web Application Development	3
CSWB 210	Active Server Pages	3
CSIT 180	C# Programming I	3
<b>TOTAL UNITS</b>		<b>15</b>

## COURSE OFFERINGS

### CSWB 110 Web Site Development with HTML5/CSS3 (3)

2 hours lecture - 3 hours laboratory

**Transfer acceptability:** CSU

A foundation course for Internet/Intranet technologies. Skills required to develop and publish web sites utilizing HTML, including using HTML tables, web page forms, and basic CSS (Cascading Style Sheets).

### CSWB 120 JavaScript (3)

2½ hours lecture - 1½ hours laboratory

**Recommended preparation:** CSWB 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 Mobile Web Application Development (3)

2 hours lecture - 3 hours laboratory

**Recommended preparation:** CSWB 120

**Transfer acceptability:** CSU

Mobile Web-based application development using advanced features of HTML5, JavaScript/JQuery, and CSS.

### CSWB 140 Ruby on Rails Programming (3)

2½ hours lecture - 1½ hours laboratory

**Recommended preparation:** CSWB 110

**Transfer acceptability:** CSU

Provides the knowledge and skills necessary to use the Ruby on Rails (RoR) web application framework to code and deploy web applications. Topics of study include working with layouts; using controllers and models; developing with Scaffolding and REST; presenting models with forms; managing databases; and using Ajax with Rails.

### CSWB 150 PHP with MySQL (3)

2½ hours lecture - 1½ hours laboratory

**Recommended preparation:** CSWB 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 Technology (3)

2½ hours lecture - 1½ hours laboratory

**Transfer acceptability:** CSU

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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.

**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 (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 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

**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-135

### Associate in Science Degrees -

AS 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

Provide comprehensive education in inspection procedures, California code standards, and interpretation of construction drawings to a diverse constituency for a career in the construction industry.

## A.S. 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 125	Plan Reading Technologies	3
CI 130	CalGreen Codes	3
<b>TOTAL UNITS</b>		<b>26</b>