COURSE OFFERINGS

CSWB 110 Web Site Development with XHTML (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 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 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 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 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 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 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
TOTAL UNITS		**26**

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

CI 89 Plumbing Codes (2.5)
2½ hours lecture
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 Association of Plumbing and Mechanical Officials (IAPMO) revisions every three years.

CI 90 Mechanical Codes (2.5)
2½ hours lecture
An in-depth study of the fundamental concepts and interpretations of current state adopted mechanical codes. Topics covered include compliance issues, mechanical specifications, basic mechanical principles, and inspection methods and techniques. International Conference of Building Officials (ICBO) revisions every three years.

CI 100 Building Codes I (3)
3 hours lecture
Transfer acceptability: *CSU*
Introduction to building code requirements with an emphasis on minimum construction standards and code enforcement. Code requirements controlling the design, construction, quality of materials, use, occupancy and location of all buildings are evaluated. Revisions to the International Building Code are every three years.

CI 101 Building Codes II (3)
3 hours lecture
Transfer acceptability: *CSU*
A study of the requirements and standards for design, loads, wood, concrete, masonry and steel buildings. The study of exits, roofs, fireplaces, drywall, glass and stucco systems are examined. Interpretation is based on the International Code Council (ICC) building code which is revised every three years.

CI 105 Electrical Codes I (3)
3 hours lecture
Transfer acceptability: *CSU*
The first half of The National Electrical Code reviewed in an explanatory, easy-to-understand, yet in-depth manner. Basic electrical theory as it pertains to building construction is discussed with real-life situations used as examples of Code items and inspection techniques. Prepares students for electrical certification tests based on the building codes (both the ICC and the IAEI certifications), as well as advaning knowledge levels for existing Inspectors.

CI 106 Electrical Codes II (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in CI 105*
Transfer acceptability: *CSU*
The second half of The National Electrical Code reviewed in an explanatory, easy-to-understand, yet in-depth manner. Basic electrical theory as it pertains to building construction is discussed with real-life situations used as examples of Code items and inspection techniques. Prepares students for electrical certification tests based on the building codes (both the ICC and the IAEI certifications), as well as advancing knowledge levels for existing Inspectors.

CI 115 Nonstructural Plan Review (3)
3 hours lecture
Transfer acceptability: *CSU*
A study of basic methods used by plans examiners to check the nonstructural details of construction drawings in compliance with the international building code. Topics cover analyzing nonstructural details and determining compliance with the minimum requirements for concrete, masonry, wood, and steel structures.

CI 125 Plan Reading Technologies (3)
3 hours lecture
Transfer acceptability: *CSU*
A survey of technologies in the construction inspection industry relating to plan reading. Content includes an introduction to construction plan reading; a review of the standard details and specifications used in the San Diego region; discussions on the various roles of the construction and building inspectors; employment opportunities and certifications; an overview of special inspection requirements; construction scheduling; and when and how often inspections should be performed. Content also includes an introduction to California Title 24 including the building, plumbing, electrical, mechanical, California Green Codes, and an introduction to the Americans with Disabilities Act (ADA).

CI 130 CalGreen Codes (3)
3 hours lecture
Transfer acceptability: *CSU*
Emphasizes the proper interpretation of the California Green Building Code and green building technologies. The scope of the course will provide inspectors, designers and contractors with the latest code requirements and national standards to promote sustainable communities. Topics include site planning and development, energy conservation, storm water pollution prevention and basic sustainability concepts.

CI 197 Construction Inspection Topics (.5-3)
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 Construction Inspection. May be repeated with new subject matter. See Class Schedule for specific topic offered. Course title will designate subject covered.

Cooperative Education (CE)

Contact the Cooperation Education Department for further information.
(760) 744-1150, ext. 2354
Office: ST-54

In accordance with Board Policy 4103:

COURSE OFFERINGS
Students may earn a maximum of 16 units in Cooperative Education (CE) in any combination of CE 100 or CE 150, not exceeding 8 units per semester. CE 110 is not repeatable.

STUDENT QUALIFICATIONS: In order to participate in cooperative work experience education students shall meet the following requirements:

1. Be a legally indentured or a certified apprentice, an intern, volunteer, or a paid employee.
   AND
2. Have approval of the Cooperative Work Experience Education academic personnel.
   AND
3. Pursue a planned program of cooperative work experience education which, in the opinion of the Coordinator, includes new or expanded responsibilities or learning opportunities beyond those experienced during the previous employment.
   AND
4. Attend orientation(s) at the beginning of the semester.

The number of units received each semester for on the job experience will be based on the total number of hours worked each semester or summer session as follows:

1 unit - 75 paid hours per semester or session; 60 volunteer hours
2 units - 150 paid hours per semester or session; 120 volunteer hours
3 units - 225 paid hours per semester or session; 180 volunteer hours
4 units - 300 paid hours per semester or session; 240 volunteer hours

CE 100 Cooperative Education (1,2,3,4)
1, 2, 3, or 4 hours lecture
Transfer acceptability: *CSU*
Supervised on the job training for all occupational students.
Note: *The Occupational Cooperative Work Experience Program is designed to coordinate on the job training and classroom instruction. Supervised employment is related to the occupational goal of the individual student. Employment may be on or off campus; the student may or may not receive pay, depending on where the work is performed.*