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.

CI 90 Mechanical 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 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
Note: *May be taken 2 times*
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
Note: *May be taken 2 times*
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
Note: *May be taken 2 times*
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
Note: *May be taken 2 times*
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
Note: *May be taken 2 times*
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 120 Structural Plan Review (3)
3 hours lecture
Note: *May be taken 2 times*
Transfer acceptability: *CSU*
Provides inspectors, contractors, and building department technicians with the basic methods used for structural review of plans for code compliance required before permits can be issued. The structural provisions of the International Building Code will be studied and applied to typical residential and low-rise construction plan examples. The role and responsibilities of the plan check technician in his or her job performance will be defined according to public needs, industry practice, and the Professional Engineers Act.

CI 125 Plan Reading (3)
3 hours lecture
Transfer acceptability: *CSU*
How to read construction drawings and how to establish a systematic method of reviewing plans for compliance with the Uniform Building Code.

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, 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 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

General Cooperative Work Experience

In accordance with Board Policy 4103, the General Cooperative Work Experience Education Program is designed to give job information and experience to those students employed in jobs not related to coursework in school. Employment may be on or off campus; the student may or may not receive pay depending on where the work is performed. The Cooperative Education Coordinator will assist students in obtaining jobs.

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

1. Complete no less than seven units (summer session, one course) including cooperative work experience education.
2. Have approval of the Cooperative Work Experience Education Coordinator.
3. Have occupational or education goals to which, in the opinion of the Coordinator, the cooperative work experience education will contribute.
4. 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.

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

A maximum of six units may be earned in general cooperative work experience, not to exceed three units each semester. In addition to the hours worked, a student must attend a coordinating class. Topics of discussion in the class include choice of occupation, employee information, job application, human relations, and appearance and personality development as related to employment in the vocational field.

Occupational Cooperative Work Experience

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. The Cooperative Education Coordinator will assist students in obtaining jobs.