

CSIS 272 Java Programming for Information Systems (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS 117 or 138**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, multi-threaded programming, event-driven programming and an introduction to Java Servlets and JSPs.

CSIS 273 Java Servlets and JSPs (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS 272

This course provides students with 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.

CSIS 280 C++ and Object Oriented Programming (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 221 or CSIS 235**Transfer acceptability:** CSU; UC

Detailed study of the C++ programming language and its support for data abstraction and object-oriented programming. Presents an introduction to the fundamental elements of object-oriented programming including encapsulation, classes, inheritance, polymorphism, templates, and exceptions.

CSIS 282 C# Programming (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS/R CSIS 137**Transfer acceptability:** CSU

This course provides students with the knowledge and skills necessary to use the C# programming language in the .NET Framework, build both server-side programs and with Windows applications, accessing data with ADO.NET, use C# with Web Forms and using C# with the .NET CLR.

CSIS 285 Windows Programming I (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 221**Transfer acceptability:** CSU

An introduction to the fundamental concepts of Windows programming which will enable students to develop Windows applications using a graphical user interface. Includes a detailed study of the Windows Application Programming Interface.

CSIS 288 Windows Programming II (3)

3 hours lecture-2 hours laboratory

Prerequisite: CSIS 280 and 285**Transfer acceptability:** CSU

Windows programming using the WIN32 API for writing applications that use multitasking, threads, synchronization, and structured exception handling. Covers implementation of Dynamic Link Libraries (DLLs), Graphic Device Interface (GDI) optimization, and creation of Help files. Includes a detailed study of the Microsoft Foundation Class (MFC) Library. Presents techniques to add Object Linking and Embedding (OLE) functionality to Windows applications.

CSIS 294 Enterprise JavaBeans and J2EE (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS 273**Transfer acceptability:** CSU

This course provides students with the knowledge and skills necessary to code and deploy Enterprise JavaBeans (EJBs), how to use JDBC with EJBs, Servlets and EJBs working together and the Java Naming and Directory Interface (JNDI).

CSIS 295 Directed Study in Computer Science and Information Systems (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 for a maximum of 6 units**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

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

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

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 Uniform 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 code enforcement and inspection. Interpretation is based on the International Conference of Building Officials (ICBO) manual 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 basic rules pertaining to electrical installations for light, heat, and power in residential, commercial, and industrial applications. National Fire Protection Association (NFPA).

CI 106 Electrical Codes II (3)

3 hours lecture

Note: May be taken 2 times**Prerequisite:** CI 105**Transfer acceptability:** CSU

A continuation of Electrical Codes I. National Fire Protection Association (NFPA) revisions every three years.

CI 115 Nonstructural Plan Review (3)

3 hours lecture

Prerequisite: CI 100**Note:** May be taken 2 times

A study of basic methods used by plans examiners to check the nonstructural details of construction drawings in compliance with the uniform 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

Prerequisite: CI 100**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 Uniform 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

Prerequisite: CI 100**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.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

CT 97 Construction Technology 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

Topics in Construction Technology. 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 Cooperative Education Department for further information, (760) 744-1150, ext. 2354

General Cooperative Work Experience

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.

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

1. Be a legally indentured or certified apprentice.
- OR

Construction Technology (CT)

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