CTE - CIP Course Details Catalog

Cluster: Information Technology

CIP: 11.0202 - Computer Programming, Specific Applications.

Status: Open   **Start Year:** 2011   **End Year:**

Minimum Carnegie Units: 2.00

Group 1

Minimum Course Selection: School: 1   ACC: 0   Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
12001A001	Business and Technology Concepts	1.00	2011	
12005A001	Keyboarding and Formatting	0.50	2011	
10004A001	Computer Concepts and Software Applications	0.50	2011	

Group 2

Minimum Course Selection: School: 0   ACC: 1   Regional: 1

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
10152A001	Computer Operations and Programming I	3.00	2011	
10152A002	Computer Operations and Programming II	3.00	2011	

Group 3

Minimum Course Selection: School: 0   ACC: 0   Regional: 0

State Course ID	State Course Title	Max Carnegie Units	Start SY	End SY
22153A001	Cooperative Education	3.00	2011	

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Course Descriptions

CIP: 11.0202 - Computer Programming, Specific Applications.

State Course ID: 12001A001 **Course Title:** Business and Technology Concepts

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

State Course ID: 12005A001 **Course Title:** Keyboarding and Formatting

Keyboarding and Formatting is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

State Course ID: 10004A001 **Course Title:** Computer Concepts and Software Applications

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

State Course ID: 10152A001 **Course Title:** Computer Operations and Programming I

Computer Operations and Programming I is the first of two skill-level courses designed to develop computer programming and program design skills through the use of various programming languages such as Visual Basic, C#, Java, and other object-oriented languages. Students will be exposed to the fundamentals of system analysis and design (e.g. flowcharting, diagramming, system design and planning), and the systems development life cycle. Instruction will include basic programming tools that are common to many programming languages. These may include items such as input/output statements, constants, assignment statements, string and numeric variable types, conditional processing, and branching and looping control structures. Students will learn programming techniques such as counting, averaging, rounding, and generation of random numbers to develop a good programming technique. Students will apply what they learn to create programs and applications that solve real world business related problems. Students will create programs to store, locate and retrieve data.

State Course ID: 10152A002 **Course Title:** Computer Operations and Programming II

Computer Operations and Programming II is a skill-level course for students who have completed Computer Operations and Programming I. Students will use procedural and object-oriented programming languages such as Visual Basic, C# and Java. Students will learn programming concepts such as inheritance and polymorphism, advanced data handling (pointers, arrays, strings, and files), and common algorithms (recursion, searching and sorting). Students will be able to write, compile, run, test, debug and modify programs and applications that solve real world problems. Problem examples may include tracking inventory, scheduling rooms and facilities, accessing information and performing calculations.

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Course Descriptions

CIP: 11.0202 - Computer Programming, Specific Applications.

State Course ID: 22153A001   **Course Title:** Cooperative Education

Cooperative Education is a capstone   course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal   development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written   training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator.   The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.