



**SANTA CLARA COUNTY OFFICE OF EDUCATION
SANTA CLARA COUNTY REGIONAL OCCUPATIONAL PROGRAM
Serving Santa Clara and San Benito Counties**



1. COURSE TITLE - CAREER TECHNICAL EDUCATION PATHWAY/SECTOR

Computer Business Applications SCROP Information & Media Support Services/Information Technology
Computer Information Technology NCROP Information & Media Support Services/Business

2. CBEDS TITLE

Information Processing

3. CBEDS NUMBER

4615

4. JOB TITLES

	O*NET	TITLE
	43-6011.00	Administrative Assistant
	49-2011.00	Automated Office Management Specialist
25-2023.00/25-1194.00/25-1011.00		Business Education Teacher
17-3023.01/27-4011.00		Computer Aided Audio/Visual Engineer
	31-9092.00	Computerized Medical Office Assistant
	43-9021.00	Data Entry Technician
	43-9022.00	Word Processing Clerk
	27-1014.00	Graphic Artist/Computer Animator
43-6014.00/ 43-6011.00/ 43-4171.00		Secretary/Receptionist

5. COURSE DESCRIPTION

This instructional program prepares individuals to create business correspondence, reports, publications, and forms by using computer operating systems; word processing; database, spreadsheet, and desktop publishing software; hardware and peripherals; and/or electronic typewriters. The student will use appropriate electronic information resources to research and transmit information and operate industry-standard equipment.

6. HOURS

Classroom Theory/Applied	220
Community Classroom/Coop Voc Ed	540
TOTAL HOURS	760

7. RECOMMENDED PREREQUISITE

Required	Must be 16 years of age or older, a junior or senior in high school, an out-of-school youth, or an adult.
Recommended	One semester of keyboarding

8. DATE WRITTEN **October 29, 2004** **REVISED June 15, 2005**
UPDATED **June 16, 2008** **REVISED June 26, 2009**

9. COURSE OUTLINE			
A. Career Preparation Skills			
Class Hours	CC/CVE Hours	GENERAL WORKPLACE SKILLS	Standards
30	Integrated throughout the course	<ul style="list-style-type: none"> • Attitude and Work Habits <ol style="list-style-type: none"> 1. Works both independently and collaboratively 2. Attends regularly and on time 3. Practices good safety procedures 4. Solves problems thinks critically and makes good decisions 5. Plans work and takes initiative 6. Demonstrates leadership and the willingness to help train others • Job Employment Skills <ol style="list-style-type: none"> 1. Develop a plan to achieve career goals 2. Complete a career portfolio 3. Use effective job search strategies 4. Perform employment research 5. Complete job application and resume 6. Develop effective interviewing and follow-up skills. 7. Demonstrate an awareness of importance of lifelong learning. 8. Aware of current marketplace trends, including conservation and ecology 	<p>CPS: Personal Skills; Interpersonal Skills</p> <p>SCANS: Personal Qualities; Interpersonal Qualities</p> <p>CPS: Employment Literacy</p>

Sources:
 CPS - *Career Preparation Standards*. California Department of Education and WestEd
 SCANS - *What Work Requires of Schools: A SCANS Report of America 2000*.
 The Secretary's Commission on Achieving Necessary Skills, Publication of the US Dept. of Labor, June 1991.
Career Technical Education Model Curriculum Standards. California Department of Education. May 2005

B. Career Technical Skills						
Class Hours	CC/CVE Hours	CONTENT AREA SKILLS	Foundation Standards	Mention - M Reinforced - R Taught - T	CTE Pathway Standards	Mention - M Reinforced - R Taught - T
20	40	I. COMPUTER LITERACY	* See attached pages that follow			
		A. Introduce the history of computers B. Knowledgeable about how computers have contributed to saving energy and reducing waste C. Discuss hardware 1. Define terms 2. Identify basic computer components 3. Identify peripherals 4. Differentiate disk drives D. Discuss software 1. Explain operating system functionality 2. Demonstrate use of tool bars and menus 3. Evaluate software packages 4. Discuss Groupware, Shareware, Freeware D. What makes the computer work 1. Explain RAM and ROM 2. Identify reasons and techniques for system maintenance E. Environment 1. Practice Ergonomics techniques 2. Understand and practice sound energy saving principles G. Define and use Blogging	History 10.3.2 4.0 4.1 10.0 10.6 10.7	M R T M	Media support B3 Info support A7.1 A7.2 Media support B3 Info support A7.5 A8.3	M T M T M
30	50	II. COMMUNICATION SKILLS				
		A. Prepare and review written material 1. Grammar 2. Punctuation 3. Proofreading 4. Revisions B. Evaluate Letter structures 1. Block style letters 2. Modified block style letters 3. Report formats C. Discuss presentation skill 1. Use multimedia tools	W 2.4, 2.5 10.0 10.1 11.0	R	Info support A6.2 Media support B2.4 Info support A7.1 A7.1 B1.2	R T

Career Technical Skills						
Class Hours	CC/CVE Hours	CONTENT AREA SKILLS	Foundation Standards	Mention - M Reinforced - R Taught - T	CTE Pathway Standards	Mention - M Reinforced - R Taught - T
25	70	III. KEYBOARDING PROFICIENCY	* See attached pages that follow			
30	80	A. Practice keyboarding <ul style="list-style-type: none"> 1. Speed 2. Accuracy <ul style="list-style-type: none"> ▪ Achieve minimum 40+ AWPM 3. Keyboard manipulation and coordination 	10.0 10.1	R	Info support A7.1	T
		IV. WORD PROCESSING				
25	80	A. Produce document types <ul style="list-style-type: none"> 1. Letters 2. Agendas 3. Memoranda 4. Reports 5. Newsletters 	R 2.1 W 2.5 11.0	T	Info support A7.1	T
		B. Insert charts and graphs C. Construct tables/columns D. Insert headers/footers E. Apply footnotes F. Develop macros and use templates	S 1.2 W 1.8 11.0		Media support B2.4 B4.3 B2.4 B1.7	
		V. SPREADSHEETS				
		A. Spreadsheet Basics <ul style="list-style-type: none"> 1. Identify cells 2. Generate simple formulas 3. Change number formats 	Science I & E 1.2 1.a 11.0	T	Info support A7.1	T
		B. Use as a database <ul style="list-style-type: none"> 1. Create lists 2. Sort lists 3. Construct merge documents 				
		C. Insert charts and graphs and format				
		D. Develop macros and use templates				

Career Technical Skills						
Class Hours	CC/CVE Hours	CONTENT AREA SKILLS	Foundation Standards	Mention - M Reinforced - R Taught - T	CTE Pathway Standards	Mention - M Reinforced - R Taught - T
20	70	VI. DATABASES	* See attached pages that follow			
		A. Use forms 1. Enter data 2. Edit data B. Run reports 1. Select data C. Construct merge documents	11.0	T	Info support A7.1	T
25	70	VII. PUBLISHING AND PRESENTATION SOFTWARE				
		A. Create simple projects 1. Reports 2. Newsletters 3. Flyers 4. Brochures 5. Printed programs B. Evaluate and import graphic designs from internet 1. Visual display 2. Slides	R 2.3 10.0 10.1 11.0	R T	Info support A7.1 A7.3	T R
25	20	VIII. ELECTRONIC AND NETWORK COMMUNICATION				
		A. Create, transmit, receive and respond using email B. Attach documents and images for transmission C. Manage email address books D. Demonstrate the use of the Internet for research E. Make appointments and use calendar	W 1.3 W 2.2 10.5 I&E 11.0	R	Media support B2.3 B2.4 LS 2.5	T
20	60	IX. FILE MANAGEMENT				
		A. Save and organize files and folders B. Understand the concept of file name and location C. Cut, copy and paste text D. Differentiate drives, folders, and briefcases E. Identify file types and extensions	10.0 10.6	R	Info support A10	T
220	540	Total Hours				

C. Expected Student Proficiencies

ATTITUDE AND WORK HABITS

- Works both independently and collaboratively
- Attends regularly and on time
- Practices good safety procedures
- Solves problems, thinks critically and makes good decisions
- Plans work and takes initiative
- Demonstrates leadership and the willingness to help train others

COMPUTER LITERACY

- The history of computers, including energy saving principles
- Hardware/Software
- Operating systems and software packages
- Ergonomics

KEYBOARD PROFICIENCY

- Exhibit speed and accuracy of 40+ wpm

WORD PROCESSING

- Produce various document types
- Create tables/columns
- Insert headers/footers
- Insert charts and graphs

SPREADSHEETS

- Construct simple formulas
- Work with number formats
- Create and work with lists
- Construct merge documents
- Insert charts and graphs

DATABASES

- Use forms
- Run reports
- Construct merge documents

DESKTOP PUBLISHING AND GRAPHICS

- Create newsletters, flyers, brochures
- Create slide presentation

ELECTRONIC / NETWORK COMMUNICATION

- Create, transmit, receive and respond using email including attachments
- Complete internet research

FILE MANAGEMENT

- Save and organizing files
- Cut, copy and paste text
- Differentiate drives, folders, and briefcases

10. ADDITIONAL RECOMMENDED/OPTIONAL ITEMS

A. **Academic credit:** One year or 10 credits of elective

B. **Other – n/a**

x	ARTICULATION	Gavilan
	UC APPROVAL	None
	INDUSTRY CERTIFICATION	None

C. **Instructional Strategies:**

- | | |
|---|--|
| <ul style="list-style-type: none"> • Lecture • Demonstration • Design problems and vocabulary • Readings • Project-based learning • Multimedia • Questioning | <ul style="list-style-type: none"> • Guest presentations • Group projects • Computer programs • Field trips • Simulations • Internet research • Internships • Peer learning • Role Play |
|---|--|

D. **Instructional Materials**

Textbooks:

Hoggatt and Shank, Century 21 Computer Applications and Keyboarding, 8th Edition, Thomson South-western Publishing Company, 2006.

Robinson, et. al., Century 21 Keyboarding, Formatting, and Document Processing, 5th ed., South-Western Publishing Company, 1993.

Pasewark and Pasewark, Microsoft Office Excel 2003 Introductory Course, Thomson Course Technology, 2003

Teacher-prepared lesson plans and handouts

Office XP, Comprehensive, Hinkle, Marple & Stewart Glencoe/McGraw-Hill 2002

11. FOUNDATION STANDARDS ALIGNED

1.0 Academics

Students understand the academic content required for entry into postsecondary education and employment in the Engineering and Design sector. *(The standards listed below retain in parentheses the numbering as specified in the mathematics, science, history–social science, and visual and performing arts content standards adopted by the State Board of Education.)*

Science

1a. Select and use appropriate tools and technology (such as computer-linked probes, spreadsheets, and graphing calculators) to perform tests, collect data, analyze relationships, and display data.

History/Social Science

10.3.2 Examine how scientific and technological changes and new forms of energy brought about massive social, economic, and cultural change (e.g., the inventions and discoveries of James Watt, Eli Whitney, Henry Bessemer, Louis Pasteur, Thomas Edison)

2.0 Communications

Students understand the principles of effective oral, written, and multimedia communication in a variety of formats and contexts. *(The standards listed below retain in parentheses the numbering as specified in the English–language arts content standards adopted by the State Board of Education.)*

Reading

2.2 Prepare a bibliography of reference materials for a report using a variety of consumer, workplace, and public documents.

Writing

1.3 Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources

1.8 Design and publish documents by using advanced publishing software and graphic programs.

Written & Oral English Language Conventions

2.3 Write expository compositions, including analytical essays and research reports

2.4 Write persuasive compositions

2.5 Write business letters

Listening & Speaking

(2.3) Apply appropriate interviewing techniques:

- a. Prepare and ask relevant questions.
- b. Make notes of responses.
- c. Use language that conveys maturity, sensitivity, and respect.
- d. Respond correctly and effectively to questions.
- e. Demonstrate knowledge of the subject or organization.
- f. Compile and report responses.
- g. Evaluate the effectiveness of the interview.

2.5 Understand written business communication modes, such as memos, e-mail messages, and one-page executive summaries.

3.0 CAREER PLANNING & MANAGEMENT

Students understand how to make effective decisions, use career information, and manage personal career plans:

3.1 Know the personal qualifications, interests, aptitudes, knowledge, and skills necessary to succeed in careers.

3.2 Understand the scope of career opportunities and know the requirements for education, training, and licensure.

3.3 Develop a career plan that is designed to reflect career interests, pathways, and postsecondary options.

3.4 Understand the role and function of professional organizations, industry associations, and organized labor in a productive society.

3.5 Understand the past, present, and future trends that affect careers, such as technological developments and societal trends, and the resulting need for lifelong learning.

3.6 Know important strategies for self-promotion in the hiring process, such as job applications, résumé writing, interviewing skills, and preparation of a portfolio.

3.7 Explore career opportunities in business through such programs as virtual

4.0 TECHNOLOGY

Students know how to use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments:

- 4.1 Understand past, present, and future technological advances as they relate to a chosen pathway.
- 4.2 Understand the use of technological resources to gain access to, manipulate, and produce information, products, and services.
- 4.3 Understand the influence of current and emerging technology on selected segments of the economy.
- 4.4 Understand effective technologies used in Web site development and the Internet.
- 4.5 Know procedures for maintaining secure information, preventing loss, and reducing risk.

5.0 PROBLEM SOLVING & CRITICAL THINKING

Students understand how to create alternative solutions by using critical and creative thinking skills, such as logical reasoning, analytical thinking, and problem-solving techniques:

- 5.1 Apply appropriate problem-solving strategies and critical thinking skills to work-related issues and tasks.
- 5.2 Understand the systematic problem-solving models that incorporate input, process, outcome, and feedback components.
- 5.3 Use critical thinking skills to make informed decisions and solve problems.
- 5.4 Understand how financial systems and tools are used to solve business problems.

6.0 HEALTH & SAFETY

Students understand health and safety policies, procedures, regulations, and practices, including the use of equipment and handling of hazardous materials:

- 6.1 Know the policies, procedures, and regulations regarding health and safety in the workplace, including employers' and employees' responsibilities.
- 6.2 Understand critical elements for health and safety practices related to storing, cleaning, and maintaining tools, equipment, and supplies.
- 6.3 Understand the environmental and ergonomic risks associated with the use of business equipment and the financial impact of an unsafe work environment.

7.0 RESPONSIBILITY & FLEXIBILITY

Students know the behaviors associated with the demonstration of responsibility and flexibility in personal, workplace, and community settings:

- 7.1 Understand the qualities and behaviors that constitute a positive and professional work demeanor.
- 7.2 Understand the importance of accountability and responsibility in fulfilling personal, community, and workplace roles.
- 7.3 Understand the need to adapt to varied roles and responsibilities.
- 7.4 Understand that individual actions can affect the larger community.

8.0 ETHICS & LEGAL RESPONSIBILITY

Students understand professional, ethical, and legal behavior consistent with applicable laws, regulations, and organizational norms:

- 8.1 Know the major local, district, state, and federal regulatory agencies and entities that affect the industry and how they enforce laws and regulations.
- 8.2 Understand the concept and application of ethical and legal behavior consistent with workplace standards.
- 8.3 Understand the role of personal integrity and ethical behavior in the workplace.
- 8.4 Understand major local, state, and federal laws and regulations that affect business as well as the procedural requirements necessary for compliance.
- 8.5 Know how to design systems and applications to allow access to all users.

9.0 LEADERSHIP & TEAMWORK

Students understand effective leadership styles, key concepts of group dynamics, team and individual decision making, the benefits of workforce diversity, and conflict resolution:

- 9.1 Understand the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace settings.
- 9.2 Understand the ways in which preprofessional associations, such as DECA (An Association of Marketing Students) and Future Business Leaders of America, and competitive career development activities enhance academic skills, promote career choices, and contribute to employability.
- 9.3 Understand how to organize and structure work individually and in teams for effective performance and the attainment of goals.
- 9.4 Know multiple approaches to conflict resolution and their appropriateness for a variety of situations in the workplace.

9.5 Understand how to interact with others in ways that demonstrate respect for individual and cultural differences and the attitudes and feelings of others.

10.0 TECHNICAL KNOWLEDGE & SKILLS

10.1 Know how to use a variety of business- and industry-standard software and hardware, including major proprietary and open standards.

10.2 Understand the information technology components of major business functions (e.g., marketing, accounting, and human resource management) and their interrelationships.

10.3 Understand the economic effects of technology on a business in the global marketplace.

10.4 Know how financial systems and tools are used to perform business transactions through the use of technology.

10.5 Use technology and electronic media to manage the work flow and to provide feedback.

10.6 Understand the interrelationships between hardware components and supportive software.

10.7 Analyze the functions, features, and limitations of different operating systems, environments, applications, and utilities.

10.8 Know how to use appropriate help resources (e.g., help desks, online help, manuals) to install, configure, upgrade, diagnose, and repair operating systems, environments, applications, and utilities.

11.0 DEMONSTRATION & APPLICATION

Students demonstrate and apply the concepts contained in the foundation and pathway standards.

12. Information Support Services and Media Support Services Pathway Standards

A. Information Support and Services Pathway

6.2 Use technical writing and communication skills to work effectively with diverse groups of people

7.1 Know common industry-standard software and its applications

7.2 Evaluate the effectiveness of software to solve specific problems

7.5 Know current and emerging industry-standard technology and trends

8.3 Analyze the effectiveness of online information resources to support collaborative tasks, research, publications, communications, and increased productivity

10.0 Students understand and implement database management systems

B. Media Support and Services Pathway

1.7 Use technical skills (e.g., pagination, printing, folding, cutting, binding) to produce publishable materials

2.2 Understand the differences between various Internet protocols (e.g., http, ftp, mailto, telnet).

2.4 Know the appropriate ways to validate and cite Internet resources

LEGEND FOR REFERENCE OF ACADEMIC STANDARDS

Parenthetical notation preceding the content standard item refers to the grade level for the standard. i.e. (8) refers to grade 8, (9-10) refers to grades 9 & 10.

Example: (8) W2.1 refers to the Eighth Grade Writing Standard Item 2.1

English-Language Arts:

R Reading
W Writing
WOC Written & Oral Conventions
LS Listening & Speaking

CRP: Connections, Relationships,
Proficient

CRA: Connections, Relationships,
Advanced

Mathematics:

NS Number Sense
AF Algebra & Functions
SDP Statistics, Data Analysis & Probability
MR Mathematical Reasoning
MG Measurement & Geometry
AI Algebra I
G Geometry
AII Algebra II
P&S Probability & Statistics
APP&S Advanced Placement Probability &
Statistics
C Calculus

ELA: English-Language Arts with in VPA

ELA- LRA: Literary Response and Analysis

ELA-WSA: Writing Strategies &
Applications

ELA-WOELC: Written & Oral English
Language Conventions

Sectors

AME Arts, Media and Entertainment
BTC Building Trades and Construction
ECDFS Education, Child Development &
Family Services
EU Energy & Utilities
ED Engineering & Design
FID Fashion and Interior Design
FAB Finance and Business
HSMT Health Science & Medical Technology
HTR Hospitality, Tourism & Recreation
IT Information Technology
MPD Manufacturing and Product
Development
MSS Marketing, Sales, & Services
PS Public Services
T Transportation

Science:

PH Physics
CH Chemistry
ES Earth Science
I&E Investigation and Experimentation

History-Social Science:

WH World History, Culture and Geography
USH United States History and Geography
AD American Democracy
ECON Economics

Visual and Performing Arts:

APP: Artistic Perception Proficient Level
APA: Artistic Perception Advanced
CEP: Creative Expression Proficient
CEA: Creative Expression Advanced
HCCP: Historical & Cultural Proficient
HCCA: Historical & Cultural Advanced
AVP: Aesthetic Valuing Proficient
AVA: Aesthetic Valuing Advanced