Computer Applications Technology

Award Type: **Associate in Applied Science**  
Initiating College: **Estrella Mountain Community College**  
Effective First Year/Term: 2007 Spring  
Program Availability: College Specific  
Overall G.P.A.: **2.00**  
Total Credits: **64**  

Major Code: **3547**  
CIPS Code: **52.04.07**  
Faculty Initiator: Valerie Akuna  
Instructional Council: Computer Information Systems (12)

Development Date: 8-15-06  
District Curriculum Committee Online Agenda Date: 10-23-06 to 10-26-06  
MCCCD Governing Board Approval Date: 11-28-06

**Description:** The Associate in Applied Science (AAS) Computer Applications Technology Program includes courses in the following microcomputer areas: general usage and applications, operating systems, word processing, database, spreadsheets, and desktop publishing. Other skills which are integrated with the microcomputer training are accounting, English, and math. Many of the courses are offered in a self-paced format to enable students to enter and complete the program in a timely and flexible manner. Students take the courses for personal development of microcomputer skills and to prepare for or enhance employment. This degree program is designed to prepare students for entry-level occupations in the rapidly expanding field of computer information systems. Upon completion of the program students should be able to operate a microcomputer and use a variety of software in a professional manner.

**Program Notes:**
+ indicates course has prerequisites and/or corequisites.
++ indicates any module.

**Admission Criteria:** **None**

**Program Prerequisites:** **None**

**Required Courses:** **Credits: 30**
Students must earn a grade of "C" or better for each course in the "Required Courses" area.  
BPC/CIS120++ courses cannot be used to satisfy both "Required Courses" and "Restricted Electives" areas.

- **BPC/CIS114++** Electronic Spreadsheet (Any module) 3
- **BPC/CIS117++** Database Management (Any module) 3
- **BPC/CIS118++** Desktop Presentation Software (Any module) 3
- **BPC/CIS120++** Microcomputer Graphics (Any module) 3
- **BPC/CIS121AE** Windows Operating System: Level I 1
- **BPC/CIS133AA** Internet/Web Development Level I-A AND  
  + **BPC/CIS133BA** Internet/Web Development Level I-B AND  
  + **BPC/CIS133CA** Internet/Web Development Level I-C OR  
  + **BPC/CIS133DA** Internet/Web Development Level I 3
- **+ BPC/OAS135++** Word Processing Software (Any module) 2
Restricted Electives: Credits: 9
Students should select nine (9) credits from the following courses in consultation with a program advisor.

- BPC/CIS120DB Computer Graphics: IBM Adobe Illustrator 3
- BPC/CIS120DC Computer Graphics: Macromedia Flash 3
- BPC/CIS120DF Computer Graphics: Adobe Photoshop 3
- BPC170 Computer Maintenance I: A+ Prep 3
- CIS/MMT140 Survey of Multimedia Technology 2
- CIS150 Programming Fundamentals 3
- CIS159 Visual Basic Programming I 3
- CIS233DA Internet/Web Development Level II 3
- OAS101AA Computer Typing I: Keyboard Mastery (1) OR
- OAS102 Computer Typing II: Document Production (3) 1-3
- TQM/CSM101 Quality Customer Service 3
- CIS250 Management of Information Systems 3

General Education: Credits: 25

CORE: Credits: 15

First-Year Composition
- ENG101 First-Year Composition 3
- ENG111 Technical Writing 3

ENG102 First Year Composition is acceptable if ENG111 is not available.

Oral Communication
- COM100 Introduction to Human Communication (3) OR
- COM110 Interpersonal Communication (3) OR
- COM225 Public Speaking (3) OR
- COM230 Small Group Communication (3) 3

Critical Reading
Any approved general education course from the Critical Reading Area or equivalent as indicated by assessment. 3

Mathematics
- MAT102 Mathematical Concepts/Applications 3

DISTRIBUTION: Credits: 10

Humanities & Fine Arts
Any approved general education course from the Humanities and Fine Arts Area 3

Natural Sciences
Any approved general education course from the Natural Sciences Area 4

Social and Behavioral Sciences
- ECN212 Microeconomic Principles 3
Program Competencies

1. Demonstrate mastery of microcomputing accounting systems including the general ledger, accounts receivable, accounts payable and payroll (OAS120)
2. Use a microcomputer presentation program to create, store, modify and print presentations. (BPC/CIS118++)
3. Use a microcomputer spreadsheet program to create, store, modify, and print electronic spreadsheets. (BPC/CIS114++)
4. Use a microcomputer database program to create, store, modify, and generate reports. (BPC/CIS117++)
5. Use a microcomputer graphics program to create, store, and print charts, graphs, and other visual images for business purposes. (BPC/CIS120++)
6. Use a microcomputer word processing system to create, modify, and print a variety of business documents. (BPC/OAS135++)
7. Use appropriate commercial software packages to compose and print newsletters, flyers, resumes, brochures, advertisements, and other typical desktop publications from templates and models. (BPC138++)
8. Use the Internet's communication features and information search and retrieval tools to solve problems. (BPC/CIS133++)
9. Describe common uses of computers in modern business practices. (CIS105)
10. Identify and describe common microcomputer hardware and software. (CIS105)
11. Use word processing, spreadsheet, database, and graphics software to complete common business operations and transactions. (CIS105)
12. Use a graphical user interface (GUI) to control an operating system for enhancing and improving application functionality. (BPC/CIS121AE)
13. Define and apply data communication terminology and hardware configurations associated with a Local Area Network computing environment to hands-on application of skill. (CIS190)