

## COMPUTER INFORMATION SYSTEMS

### ASSOCIATE OF ARTS *or* CERTIFICATE OF ACHIEVEMENT

Students satisfactorily completing the following required courses will be eligible for the **AA degree** and the **Certificate of Achievement in Computer Information Systems**. Confer with a counselor or the dean concerning the specific pattern of requirements for this program and refer to the Degrees and Programs section of the Catalog for information on the Associate in Arts degree.

Computers are everywhere and impact many of our daily activities. Our lives are dependent on information from a computer. Computer skills are a necessity in today's technological world.

The **CIS program at College of Alameda** prepares you for entry-level business opportunities requiring the use of computer applications, such as word processing, spreadsheet, database management, and geographical information systems (GIS) programs. Our CIS program prepares you for transfer to a university. Advanced students take programming courses, help desk and networking courses, and web publishing courses.

We offer beginning and advanced office application courses. We are the only Peralta college to offer help desk (desktop support technician) courses and networking courses. Our web publishing courses, offered as hybrid (with some face to face meetings) as well as online, lead to a certificate of proficiency upon successful completion of the courses. We also offer other online CIS courses which can fit your busy schedule.

#### Career Opportunities

The Computer Information Systems (CIS) program prepares students for entry level business positions requiring the use of computer applications, and will qualify students in the use of word processing, spreadsheet and database management applications. More advanced students may enroll in telecommunications and computer networking courses. In some instances, students with work experience in the above mentioned areas may challenge courses based on that experience. Students seeking advanced placement must meet with an instructor to verify knowledge and skills.

#### Program Learning Outcomes

*Upon completion of this program a student will be able to:*

- Develop an understanding of the problems and issues confronting individuals and society in general in the use of computers
- Analyze problems and design solutions using the program life cycle concept, HIPO charts, and program logic flowcharts
- Use and write simple Visual Basic code
- Create presentation-quality charts of several types

#### Degree Major/Certificate Requirements:

Dept/No.	Title	Units	Dept/No.	Title	Units
CIS 1	Introduction to Computer Information Systems (4)		<b>Select a minimum of 9-10 units from the following:</b>		
	<b>or</b>		BUS 238B	Word Processing II (3)	
CIS 5	Introduction to Computer Science (5)	4-5		<b>or</b>	
CIS 40	Database Management	4	CIS 238B	Word Processing II (3)	
CIS 42	Spreadsheet Applications	4	CIS 23	C# Programming (4)	
BUS 238A	Word Processing I (3)		CIS 25	Object-Oriented Programming Using C++ (4)	
	<b>or</b>		CIS 36A	Java Programming Language I (4)	
CIS 238A	Word Processing I (3)	3	CIS 36B	Java Programming Language II (4)	
			CIS 39A	UNIX/LINUX Operating System (4)	
			CIS 97A	Oracle SQL and PL/SQL (4)	
			CIS 209	Introduction to Windows (1)	
			CIS 234A	World Wide Web Publishing I (2)	
			CIS 234B	World Wide Web Publishing II (2)	
			CIS 234D	Web Authoring (2)	
			CIS 234E	Creating an E-Commerce Web Site (2)	
			CIS 239	Help Desk Tools and Techniques (2)	<u>9-10</u>
			<b>Total Required Units:</b>		
					<b>24-26</b>