

COMPUTER INFORMATION SYSTEMS

Program Description

This program generally prepares individuals to perform basic data and text entry using standard and customized software products. This includes instruction in keyboarding skills, personal computer and work station operation, reading draft texts and raw data forms, and various interactive software programs used for tasks such as word processing, spreadsheets, databases, and others.

Campus

MOV, NOR, RIV

Award Type

AS, S, CP

Career Opportunities

- Application Analysis Programmer
- Computer Operations Manager
- Computer Support System
- Computer System Hardware Analyst
- Network Administrator
- Programmer Analyst
- Software Analyst
- Software Engineer

Wages

	Annual	Hourly
Computer Software Engineer	\$93,062	\$48.47
Computer Support Specialist	\$48,152	\$25.07
Network Administrator	\$72,517	\$37.69
Software Analyst	\$76,667	\$39.93

Contact Information

Moreno Valley – (951) 571-6125
 Norco – (951) 372-7067
 Riverside – (951) 222-8551



COMPUTER APPLICATIONS Certificate Program

AS726/CE726

Required Courses (31.5 units)

		Units
CIS-1A	Introduction to Computer Information Systems	3
CIS-1B	Advanced Concepts in Computer Information Systems	3
CIS-5	Fundamentals of Programming Logic using C++	3
or		
CIS-28A	MS Access Programming	3
CIS-21	Introduction to Operating Systems	3
CIS-95A	Introduction to the Internet	1.5
CAT-31	Business Communications	3
or		
BUS-22	Management Communications	3
Electives 1	(Choose from list below)	7.5
Electives 2	(Choose from list below)	7.5

Electives 1 (7.5 units)

CIS-2	Fundamentals of Systems Analysis	3
CIS-23	Software and End User Support	3
CIS-25	Data Communications	3
CIS-61	Introduction to Databases	3
CIS/CAT-80	Word Processing: Microsoft Word for Windows	3
CIS/CAT-84	Word Processing: WordPerfect for Windows	3
CIS/CAT-98B	Advanced Excel	1.5
GIS-1	Introduction to Geographic Information Systems	3

Electives 2 (7.5 units)

CIS-12	PHP Dynamic Web Site Programming	3
CIS-14A	Web Programming: Java Script	3
CIS-14B	Web Programming: Active Server Pages	3
CIS/CAT-54A	Introduction to Flash	3
CIS/CAT-56A	Designing Web Graphics	3
CIS/CAT-72A	Introduction to Web Page Creation	1.5
CIS/CAT-72B	Intermediate Web Page Creation using Cascading Style Sheets (CSS)	1.5
CIS-73A	Introduction to Multimedia Authoring	3
CIS/CAT-76A	Website Creation using Microsoft FrontPage	3
CIS/CAT-76B	Introduction to DreamWeaver	3
CIS/CAT-78A	Introduction to Adobe PhotoShop	3
CIS/CAT-79	Introduction to Adobe Illustrator	3
CIS/CAT-81	Introduction to Desktop Publishing using Adobe InDesign	3

Associate in Science Degree

The Associate in Science Degree in Computer Information Systems, Computer Applications, will be awarded upon completion of the requirements for the certificate, plus completion of the graduation requirements as described in the catalog, as well as electives totaling 60 units of college work as required for the Associate Degree.

COMPUTER INFORMATION SYSTEMS

Program Description

This program focuses on the general writing and implementation of generic and customized programs to drive operating systems that generally prepare individuals to apply the methods and procedures of software design and programming to software installation and maintenance. This includes instruction in software design; low and high level languages and program writing; program customization and linking; prototype testing; troubleshooting; and related aspects of operating systems and networks.

Campus
RIV

Award Type
AS, S, CP

Career Opportunities

- Computer Programmer
- Computer Manufacturer
- Internet Programmer
- Management Consultant
- Programmer Analyst
- Software Developer
- Technical Support Specialist

Wages

	Annual	Hourly
Computer Programmer	\$75,996	\$39.58
Computer Support Specialist	\$48,152	\$25.07

Contact Information

Riverside – (951) 222-8551



COMPUTER PROGRAMMING

AS28/CE728

Certificate Program

Required Courses (25.5 units)

	Units
CIS-1A Introduction to Computer Information Systems	3
CIS-2 Fundamentals of Systems Analysis	3
CIS-5 Fundamentals of Programming Logic Using C++	3
CIS-21 Introduction to Operating Systems	3
CIS/CAT-72A Introduction to Web Page Creation	1.5
Electives From Group 1	6
Electives From Group 2	6

Electives - Group 1 (6 units)

CIS-12 PHP Dynamic Web Site Programming	3
CIS-14A Web Programming: JavaScript	3
CIS-14B Web Programming: Active Server Pages	3
CIS-15A Visual Basic Programming: Objects	3
CIS-17A C++ Programming: Objects	3
CIS-18A Java Programming: Objects	3

Electives - Group 2 (6 units)

CIS-11 Computer Programming using Assembler	3
CIS-15B Visual Basic Programming: Advanced Objects	3
CIS-15C Visual Basic Programming: Databases	3
CIS-17B C++ Programming: Advanced Objects	3
CIS-17C C++ Programming: Data Structures	3
CIS-18B Java Programming: Advanced Objects	3
CIS-18C Java Programming: Data Structures	3

Associate in Science Degree

The Associate in Science degree in Computer Information Systems, Computer Programming, will be awarded upon completion of the requirements for the certificate, plus completion of the graduation requirements as described in the catalog, as well as electives totaling 60 units of college work as required for the associate degree.

COMPUTER INFORMATION SYSTEMS

The following Certificates may lead to employment competency, but do not lead to an associate in science degree:

C++ PROGRAMMING CE803 Certificate Program

Required Courses (9 units)		Units
CIS-5	Fundamentals of Programming Logic using C++	3
CIS-17A	C++ Programming: Objects	3
CIS-17B	C++ Programming: Advanced Objects	3
or		
CIS-17C	C++ Programming: Data Structures	3

CISCO NETWORKING CE810 Certificate Program

Required Courses (16 units)		Units
CIS-26A	Cisco Networking Academy 1A	4
CIS-26B	Cisco Networking Academy 1B	4
CIS-26C	Cisco Networking Academy 1C	4
CIS-26D	Cisco Networking Academy 1D	4

E-COMMERCE CE807 Certificate Program

Required Courses (15 units)		Units
BUS-10	Introduction to Business	3
CIS-21	Introduction to Operating Systems	3
CIS-25	Introduction to Data Communications	3
CIS/CAT-76A	Web site Creation using Microsoft FrontPage	3
Electives	(Choose from list below)	3

Electives (3 units)		Units
CIS-14A	Web Programming: JavaScript	3
CIS-15B	Visual Basic Programming: Advanced Objects	3
CIS-15C	Visual Basic Programming: Databases	3
CIS-17B	C++ Programming: Advanced Objects	3
CIS-18B	Java Programming: Advanced Objects	3

JAVA PROGRAMMING CE809 Certificate Program

Required Courses (9 units)		Units
CIS-5	Fundamentals of Programming Logic using C++	3
CIS-18A	Java Programming: Objects	3
CIS-18B	Java Programming: Advanced Objects	3
or		
CIS-18C	Java Programming: Data Structures	3

PC PUBLISHING CE815 Certificate Program

Required Courses (12 units)		Units
CIS/CAT-78A	Introduction to Adobe PhotoShop	3
CIS/CAT-78B	Advanced Adobe Photoshop	3
CIS/CAT-79	Introduction to Adobe Illustrator	3
CIS/CAT-81	Introduction to Desktop Publishing using Adobe InDesign	3

RELATIONAL DATABASE MANAGEMENT TECHNOLOGY CE816 Certificate Program

Required Courses (15 units)		Units
CIS-61	Introduction to Database Theory	3
CIS-62	Microsoft Access DBMS: Comprehensive	3
CIS-63	Introduction to Structured Query Language (SQL)	3

plus
6 units from Group I below – Access
or
6 units from Group II below – Oracle

Group I Electives		Units
CIS-15A	Visual Basic Programming: Objects	3
CIS-15C	Visual Basic Programming: Databases	3
CIS-28A	MS Access Programming	3

Group II Electives		Units
CIS-29A	Introduction to Oracle	3
CIS-29B	Oracle Application Development	3
CIS-29C	Oracle Database and Server Administration	3

SYSTEMS DEVELOPMENT CE806 Certificate Program

Required Courses (9 units)		Units
CIS-2	Fundamentals of System Analysis	3
CIS-20	Systems Analysis and Design	3
and		
CIS-28A	MS Access Programming	3
or		
CIS-62	MicroSoft Access DBMS: Comprehensive	3

VISUAL BASIC PROGRAMMING CE817 Certificate Program

Required Courses (9 units)		Units
CIS-5	Fundamentals of Programming Logic using C++	3
CIS-15A	Visual Basic Programming: Objects	3
CIS-15B	Visual Basic Programming: Advanced Objects	3
or		
CIS-15C	Visual Basic Programming: Databases	3

WEB MASTER CE820 Certificate Program

Required Courses (13.5 units)		Units
CIS-14A	Web Programming: JavaScript	3
CIS/CAT-72A	Introduction to Web Page Creation	1.5
CIS/CAT-72B	Intermediate Web Page Creation using Cascading Style Sheets (CSS)	1.5
CIS/CAT-76B	Introduction to DreamWeaver	3
Electives	(Choose from list below)	4.5

Electives (4.5 units)		Units
CIS-12	PHP Dynamic Web Site Programming	3
CIS-14B	Web Programming: Active Server Pages	3
CIS/CAT-54A	Introduction to Flash	3
CIS/CAT-56A	Designing Web Graphics	3
CIS-72C	Introduction to XML	1.5