COMPUTER INFORMATION SYSTEMS CERTIFICATE

PROGRAM CODE: 2C21267A

The **Computer Information Systems Certificate** is designed to prepare students for entry-level employment in programming, networking, website design, database design and administration, cyber-security, project management, or game design. Students learn in a well-equipped technical environment for instruction and lab. CIS courses are taught providing hands-on experience in the use of industry-standard hardware, application software, operating systems, networking, and programming tools. This program also requires students to choose a "Career Track" from the sets of Restricted Electives below. This certificate requires 20-23 units.

Code	Title	Units
Required Courses:		**(14 UNITS)**
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
or CIS 111 F	Introduction to Information Systems	
or CIS 111HF	Honors Introduction to Information Systems	
CIS 152 F	Web Design I (formerly Web Page Design II)	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 201 F	Introduction to Python Programming	3
Choose Restricted Electives from ONE CAREER TRACK below:		
Restricted Electives - Cyber Security Career Track:		**(8 UNITS)**
CIS 107 F	Introduction to Operating Systems	3
CIS 109 F	Personal Computer Security	2
CIS 160 F	Introduction to Cyber Security (formerly Introduction to Computer Forensics)	3
OR		
Restricted Electives - Programming Career Track:		**(6-7 UNITS)**
CIS 223 F	Programming in C++	3
or CIS 226 F	Java Programming I	
CIS 142 F	Database I	3
OR		
Restricted Electives - Network Administration Career Track:		**(6 UNITS)**
CIS 181 F	Computer Certification Preparation	3
CIS 182 F	Computer Certification Prep II	3
OR		
Restricted Electives - Web Design Career Track:		**(6 UNITS)**
CIS 157 F	Web Design II (formerly Dreamweaver I)	3
CIS 176 F	Web Page Layout with CMS	3
OR		
Restricted Electives - Information System Project Management Career Track:		**(9 UNITS)**
CIS 123 F	Beginning Word Processing (MS Word) (formerly Word Processing)	3
CIS 106 F	Beginning Spreadsheet (MS Excel)	3
CIS 120 F	Project Management I	3
OR		
Restricted Electives - Game Design Career Track:		**(6 UNITS)**
CISG 100 F	Introduction to Computer Game Design	3
CISG 110 F	Introduction to Programming for Computer Games	3
TOTAL UNITS:		**20-23 UNITS**

Outcome 1: Demonstrate proficiency in one or more common business software programs.

Outcome 2: Demonstrate an understanding of common computer technology-related terms.

Outcome 3: Demonstrate the ability to be effective communicators using common business communication tools.

Outcome 4: Demonstrate knowledge of common internet-related technologies and software.

https://www.curricunet.com/fullerton/reports/program_report.cfm?programs_id=974