Skills Certificate in Logistics
Major Code: 05140**6**

This skill certificate is designed for students who want a fast-track course of study that will prepare them for an entry level career in the Logistics industry. Warehouse and distribution operations, flow of goods and documents, shipping and receiving concepts, communication skills, teamwork, customer service, applied math, and warehousing software will be explored and covered.

Total		17
BUS 1	Introduction to Business (3)	
BUS 60	Business Documents Processing (1)	
BUS 130	Introduction to Supply Chain Management (3)	
CAOT 85	Microcomputer Office Applications: Spreadsheets (3)	
CAOT 129	Technology in Global Logistics (1)	
CO INFO 1	Principals of Business Computer Systems (3)	
INT BUS 1	International Business (3)	

Skills Certificate in Medical Office Assistant
Major Code: 051421

Total		16
BIOLOGY 33	Medical Terminology (3)	
CAOT 9	Keyboarding Improvement 1	
CAOT 21	Medical Secretarial Procedures I (5)	
CAOT 64	CAOT Laboratory (1)	
CAOT 84	Microcomputer Office Applications: Word Processing (3)	
CAOT 86	Microcomputer Office Applications: Database (3)	

Skills Certificate in Office Automation
Major Code: 051402

Preparation for the Microsoft Office Certification Exams

Total (Core and Electives)		16
Core (13 units)		
CAOT 1	Computer Keyboarding I (3)	
or CAOT 2	Computer Keyboarding II (3)	
CAOT 64	CAOT Laboratory (1)	
or CAOT 185	Directed Study – Computer Applications Office Technology (1)	
CAOT 79	Word Processing Applications (3)	
CAOT 82	Microcomputer Software Survey in the Office (3)	
CAOT 85	Microcomputer Office Applications: Spreadsheets (3)	
Electives (choose 3 units minimum)		
CAOT 86	Microcomputer Office Applications: Database (3)	
CAOT 88	Microcomputer Office Applications: Desktop Publishing (3)	
CAOT 110	Microcomputer Office Applications: Presentation Design (3)	

Computer Information Systems

Associate in Science Degree in Computer Information Systems
(formerly Computer Information Systems - Information Management)
Major Code: 070200

This certificate program provides the student with minimum skills necessary for entry level positions.

Program Learning Outcomes: Upon successful completion of the program, the student will be able to explain why it is essential to learn about computers today and discuss several ways computers are integrated into our business and personal lives; understand how data and programs are represented to a computer and be able to identify a few of the coding systems used to accomplish this to be able to successfully complete business applications using Word, Power Point, Excel, and Access software; and explain why all computer users should be concerned about computer security and understand what information systems are and why they are needed.

Updated program learning outcomes may appear on one or both of the following websites: http://www.lahc.edu/slo/program.html and/or
https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18_SLO-SAO_Assessment.aspx. If so, those listed on the latter site supersede all others.

Major (Core and Electives)	41
Additional LACCD GE Plan Requirements*	**18**
(Not including 3 double-countable major units. Students wishing to transfer are advised to use either the CSU GE or IGETC plan instead.)	
Additional Degree-applicable Requirements˙	**1**
Total	**60**

Core (22 units)

BUS 1	Introduction to Business (3)
BUS 60	Keyboarding Fundamentals (1)
CO INFO 1	Principles of Business Computer Systems (3)
CO INFO 8	Microcomputer Applications (3)
CO INFO 15	Database programming (3)
CO INFO 16	Spreadsheet Applications (3)
CO INFO 21	Business Computer Programming (3)

CO INFO 23	Programming Laboratory (1)
or CO INFO 64	Microcomputer Laboratory (1)
CO INFO 24	Accounting on Microcomputers (2)

Electives (choose 19 units minimum)

ART 633	Introduction to Computer Graphics (3)
BUS 5	Business Law (3)
BUS 31	Business English (3)
BUS 38	Business Computations (3)
CO INFO 7	Introduction to Multimedia (3)
CO INFO 14	Introduction to Computer Communications (3)
CO INFO 64	Microcomputer Laboratory (1)
CO SCI 92	HyperText Markup Language (3)
CO SCI 344	Programming in Java (3)
CO TECH 35	Linux+ (3)
CO TECH 80	Server+ (3)

Certificate of Achievement in Microcomputer Applications
Major Code: 070210

This certificate program provides the student with minimum skills training necessary for entry level positions. See the program learning outcomes listed under the CO INFO degree above.

Total (Choose 30 units minimum)	30
ART 633	Introduction to Computer Graphics (3)
CO INFO 1	Principles of Business Computer Systems I (3)
CO INFO 7	Introduction to Multimedia (3)
CO INFO 8	Microcomputer Applications (3)
CO INFO 9	Network System Manager (4)
CO INFO 14	Introduction to Computer Communications (3)

CO INFO 15	Database Programming (3)
CO INFO 16	Spreadsheet Applications (3)
CO INFO 21	Business Computer Programming (3)
CO INFO 23	Programming Laboratory (1)
CO INFO 24	Accounting on Microcomputers (2)
CO INFO 64	Microcomputer Laboratory (1)
CO SCI 92	Hyper-Text Markup Language (3)
CO TECH 35	Linux+ (3)
CO TECH 80	Server+ (3)

Skills Certificate in Business Software Applications
Major Code: 070402

This certificate prepares the student for certification and employment using Microsoft© Office applications. See the program learning outcomes listed under the CO INFO degree above.

Total	14
CO INFO 1	Principles of Business Computer Systems (3)
CO INFO 8	Microcomputer Applications (3)

CO INFO 15	Database programming (3)
CO INFO 16	Spreadsheet Applications (3)
CO INFO 23	Programming Laboratory (1)
CO INFO 64	Microcomputer Laboratory (1)

Skills Certificate in Cisco Network Academy
Major Code: 070200

This program will prepare students for a challenging career in Information Technology with a focus in Cisco Networking and Local Area Network Administration. Students will develop skills to administer and support data communication hardware such as, file servers, printers and other related peripheral input/output devices. Upon completion of this program students are qualified for the Cisco Certified Networking Administration Certificate (CCNA) exam. The program covers Fundamentals of Computer Internet-working, Protocols, Network Theory and Standards, Cabling, Electrical Considerations, OSI Models, IP Addressing, basic networking Hardware, router fundamentals, beginning router setup and configuration, WAN fundamentals, network troubleshooting, network management, risk management and security technology (Firewalls and VPNs).

Program listings do not include basic skills prerequisites for college-level courses or prerequisites for GE courses. Numbers appearing in parentheses beside each course title represent course units. Courses may not be offered every term. Students are strongly advised to see a counselor prior to enrolling in any program.

Total	**15**	

CO INFO 001	Principles of Business Computer Systems (3)
CO INFO 070	Cisco Networking Academy I (3)
CO INFO 071	Cisco Networking Academy II (3)

CO INFO 072	Cisco Networking Academy III (3)
CO INFO 073	Cisco Networking Academy IV (3)
Effective Summer 2017	

Skills Certificate in Programming
Major Code: 070401

This certification provides training in the skills necessary for creating business application software. See the program learning outcomes listed under the CO INFO degree above.

Total	**14**
CO INFO 1	Principles of Business Computer Systems (3)
CO INFO 015	Database programming (3)
CO INFO 021	Business Computer Programming (3)

CO INFO 23	Programming Laboratory (1)
CO INFO 64	Microcomputer Laboratory (1)
CO SCI 092	HyperText Markup Language (3)
or CO SCI 344	Programming in Java (3)

Skills Certificate in Web Development
Major Code: 070403

This certificate provides training in the skills necessary for the student to create and maintain interactive internet and web sites. See the program learning outcomes listed under the CO INFO degree above.

Total	**14**
CO INFO 1	Principles of Business Computer Systems (3)
CO INFO 7	Introduction to Multimedia (3)

CO INFO 14	Introduction to Computer Communications (3)
CO INFO 23	Programming Laboratory (1)
CO INFO 64	Microcomputer Laboratory (1)
CO SCI 344	Programming in Java (3)

Computer Science

Associate in Science Degree in Computer Science and Engineering
Major Code: 070710

The Associate in Science in Computer Science and Engineering (A.S.) Degree is intended for students who are seeking employment as Computer Systems Analysts, Software Developers, Web Developers, and Computer Support Specialists and related fields, or transfer to a computer science, computer technology, or related program at a four-year institution. Note: additional units and/or alternative courses may be required for transfer. Transfer-bound students should consult a counselor and the Transfer Center for specific information regarding preparation for the intended major at the transfer institution of choice in order to facilitate a seamless transition.

Program Learning Outcomes: Upon successful completion of the program, students will able to, articulate and justify technical problems through oral, written, and graphical communication, troubleshoot a variety of electronic and/or computer-based components and systems including signal processing, communications, computer networks, and controls, employ mathematics, science, and computing techniques in a systematic, comprehensive, manner to support the study and solution of engineering problems, demonstrate industry-standards when interpreting and creating engineering drawings, and describe professional and ethical responsibilities in engineering.

Major (Core and Electives)	**42**
Additional LACCD GE Plan Requirements	**15**
(Not including 6 double-countable major units and 3 Area E units that may be waived for this degree via graduation petition. Students wishing to transfer are advised to use either the CSU GE or IGETC plan instead.)	

Additional Degree-applicable Requirements	**3**
Total	**60**

Core (30 units)

Updated program learning outcomes may appear on one or both of the following websites: http://www.lahc.edu/slo/program.html and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18_SLO-SAO_Assessment.aspx. If so, those listed on the latter site supersede all others.