

COMPUTER INFORMATION TECHNOLOGY

DEGREES, CERTIFICATES AND AWARDS

Associate in Science Degree (A.S.)

Certificate of Achievement

DESCRIPTION

Computer Information Technology is the use and study of computers, networks, computer languages, and computer systems within an organization to solve real problems. The major prepares students for application programming, networking, systems administration, system security, computer hardware and software, and operating systems.

In this major, students learn about the theory, organization and process of information collection, transmission and utilization through computers. Students learn how to analyze user needs and how to plan, design, develop, implement, and manage networks and computer systems.

PROGRAM LEARNING OUTCOMES

1. Ability to identify and troubleshoot computer hardware and software issues.
2. Ability to secure a computer system and deploy monitoring strategies to maintain security protocols.
3. Apply programming concepts and methodologies to produce applications.

ASSOCIATE DEGREE AND CERTIFICATE OF ACHIEVEMENT PROGRAMS

The Associate in Arts (AA) or the Associate in Science (AS) Degree involves satisfactory completion of a minimum of 60 semester units with a C average or higher, including grades of C in all courses required for the major, and fulfillment of all IVC district requirements for the associate's degree along with all general education requirements. The degree provides a sound basis for transfer to upper division institutions for additional degrees or for higher vocational preparation. To be eligible to receive an Associate Degree the student must complete the requirements for the major, the District requirements for an Associate Degree, and the General Education requirements. In addition students must maintain a minimum grade point average and meet the minimum grade requirements of their program. Detailed information is available in the college catalog.

The Certificate of Achievement program is designed for students with personal or occupational goals who wish early employment. To qualify for the Certificate, a student must satisfy the following requirements: (1) complete all courses listed for a particular certificate.; (2) achieve a "C" average (2.0 GPA) for all courses used to complete the certificate; and, (3) file a Certificate Application form with Admissions and Records by the appropriate deadline(s) identified on the application.

CAREER OPPORTUNITIES

Of the career opportunities identified many will usually require the completion of degree requirements at 4-year colleges and universities.

- Computer & Information Sciences
- Computer Software & Media Applications
- Computer Systems Analysis
- Data Entry & Microcomputer Application
- Information Specialist
- Electrical Equipment Installation/Maintenance/Repair
- Information Processing/Data Entry Technology
- Computer System Networking & Telecommunication
- Management Information Systems/Services
- Computer Programming
- Computer System Administration
- Applications Programmer
- Systems Programmer
- Information Science & Studies

TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree at Imperial Valley College may not be the same as those required for completing the major at a transfer institution offering a bachelor's degree. Students who plan to transfer to a four-year college or university should schedule an appointment with an IVC Counselor to develop a student education plan (SEP) before beginning their program.

Transfer Resources:

www.ASSIST.org – CSU and UC Articulation Agreements and Majors Search Engine

www.CSUMentor.edu – CSU System Information

www.universityofcalifornia.edu/admissions/index.html - UC System Information

www.aiccu.edu – California Independent Colleges and Universities, Association of

<http://wiche.edu/wue> - Western Undergraduate Exchange Programs

FINANCIAL AID

Paying for the cost of a college education requires a partnership among parents, students and the college. As the cost of higher education continues to rise we want you to know that IVC offers a full array of financial aid programs – grants, work study, scholarships, and fee waivers (we do not participate in the federal loan programs). These programs are available to both full and part time students who are seeking a degree or certificate. For those who qualify, financial aid is available to help with tuition, fees, books and supplies, food, housing, transportation, and childcare. Please log onto our website for additional information: www.imperial.edu/students/financial-aid-and-scholarships/

COMPUTER INFORMATION TECHNOLOGY

ASSOCIATE DEGREE PROGRAM

COMPUTER INFORMATION TECHNOLOGY MAJOR- A.S. DEGREE

Twenty-five/twenty-six (25.0-26.0) units for the major.

ALL COURSES FOR THIS MAJOR MUST BE COMPLETED WITH A MINIMUM GRADE OF "C" OR BETTER.

I. Required courses for the major (16.0 units)

CIS	101	Introduction to Information Systems	3.0
CIS	160	Computer Hardware and Software	3.0
CIS	161	Introduction to Cybersecurity: Ethical Hacking	3.0
CIS	162	Computer Network Fundamentals	3.0
CIS	202	Programming Concepts and Methodologies	3.0

II. Select two courses (6.0 units) from the following:

CIS	163	Routing and Switching Essentials (3.0)
CIS	166	Digital Forensics (3.0)
CIS	167	Systems and Network Administration (3.0)
CIS	210	Programming in C++ (3.0)

III. Select one course (3.0-4.0 units) from the following:

MATH	119	Elementary Statistics (4.0)
MATH	122	Finite Mathematics (3.0)
MATH	150	College Algebra (4.0)
MATH	170	Introductory Calculus with Applications (4.0)
MATH	192	Analytic Geometry and Calculus I (4.0)

Total Major Units

25.0 - 26.0

CERTIFICATE PROGRAM

COMPUTER INFORMATION TECHNOLOGY

Twenty-two (22.0) units for the certificate.

ALL COURSES FOR THIS CERTIFICATE MUST BE COMPLETED WITH A MINIMUM GRADE OF "C" OR BETTER.

I. Required courses for the certificate (16.0 units)

CIS	101	Introduction to Information Systems	3.0
CIS	160	Computer Hardware and Software	4.0
CIS	161	Introduction to Cybersecurity: Ethical Hacking	3.0
CIS	162	Computer Network Fundamentals	3.0
CIS	202	Programming Concepts and Methodologies	3.0

II. Select two courses (6.0 units) from the following:

CIS	163	Routing and Switching Essentials (3.0)
CIS	166	Digital Forensics (3.0)
CIS	167	Systems and Network Administration (3.0)
CIS	210	Programming in C++ (3.0)

Total Certificate Units

22.0