COMPUTER INFORMATION SYSTEMS

ASSOCIATE DEGREE & CERTIFICATE PROGRAMS | **2023–2024 CATALOG**

DESCRIPTION

Computer Information Systems encompasses the fields of Computer Science and Information Systems. Primary fields of study include software development, programming, and applications. Careers in today's information systems require knowledge and hands-on experience in microcomputer applications as well as programming. Professionals in the computing field seek to advance the fundamental understanding of how information is processed, as well as the practical design of software and hardware to accomplish specific functions. The Associate in Science degree requirements are designed to satisfy core requirements for many Computer Science and Information Systems transfer patterns. However, students should consult a counselor and especially the catalog of the intended transfer institution for specific transfer requirements in the major. The program in Computer Information Systems offers students an opportunity to earn an associate's degree as well as coursework in general CIS electives for students in other fields of study campus-wide. The program also offers certificates and courses for high-demand skill areas such as mobile device development.

ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS

An Associate Degree, depending on the focus of study, is designed to prepare students for transfer into upper division course work in a bachelor's degree program, or, to prepare students to enter the workforce in a particular vocational field. To qualify for an Associate's Degree, a student must: (1) complete each major-specific course required for the degree with at least a "C" grade or better, (2) complete all Cuesta College general education, graduation and residency requirements, and (3) achieve an overall grade point average of 2.0 for all courses attempted (major, general education, elective).

A Certificate Program is designed for students who desire specific training to meet an immediate occupational or personal goal, or for promotion or lateral transfer within their existing field of employment. To qualify for a Certificate of Achievement or a Certificate of Specialization, a student must 1) complete all courses required for the Certificate with an overall grade point average of 2.0.

DEGREES, CERTIFICATES & AWARDS

- Associate in Science (A.S.)
- Certificate of Achievement (C.A.)
- Certificate of Specialization (C.S.)

CAREER OPPORTUNITIES

- Applications Programmer
- Applications Specialist
- Computing Applications Specialist
- Data Administrator
- Database Administrator
- Database Manager
- Help Desk Technician
- Information Specialist
- Mobile Applications Developer
- Network Administrator
- Network Technician
- Programmer
- Programmer Analyst
- Project Manager
- Software Engineer
- System Administrator
- System Manager
- System Operator
- Systems Analyst
- Systems Integrator
- Systems Programmer
- Web Designer
- Web Developer
- Webmaster

CONTACT

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ASSOCIATE DEGREE PROGRAM

Computer Science — Associate in Science

Computer Information Systems encompasses the fields of Computer Science and Information Systems. Primary fields of study include software development, programming, and applications. Careers in Today's information systems require knowledge and hands-on experience in microcomputer applications as well as programming. Professionals in the computing field seek to advance the fundamental understanding of how information is processed, as well as the practical design of software and hardware to accomplish specific functions. The Associate in Science degree requirement are designed to satisfy course requirements for many Computer Science and Information Systems transfer patterns. However, students should consult a counselor and especially the catalog of the intended transfer institution for specific transfer requirements in the major. The program in Computer Information Systems offers students an opportunity to earn an associate's degree as well as course work in general CIS electives for students in other fields of study campus-wide. The program also offers courses for high demand skill areas such as mobile device development.

Required Courses (37 credits)

CIS 201	Introduction To Computer Science	3
CIS 231	Fundamentals Of Computer Science I	4
CIS 232	Fundamentals Of Computer Science II	2
CIS 233	Fundamentals Of Computer Science III	2
CIS 240	Microcomputer Architecture & Programming	3
CIS 241	Discrete Structures	3
CHEM 201A	General College Chemistry I	5
and		
CHEM 201B	General College Chemistry II	5
or		
PHYS 208A	Principles Of Physics 1	(5)
and		
PHYS 208B	Principles Of Physics 2	(5)
MATH 265A	Calculus I	5
MATH 265B	Calculus II	5
Total Credits:		**37**

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TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree may differ from those needed to prepare to transfer. Students who plan to transfer to a four-year college or university should schedule an appointment with a Cuesta College counselor to develop a student education plan (SEP) before beginning their program.

TRANSFER RESOURCES:

CSU and UC Articulation Agreements and Majors Search Engine:
www.ASSIST.org
CSU System Information:
www2.calstate.edu

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 Cuesta College offers a full array of financial aid programs—grants, work study, scholarships, federal loan programs, and fee waivers. 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.cuesta.edu/student/studentservices/finaid

ASSOCIATE DEGREE PROGRAM

Management Information Systems — Associate in Science

Computer Information Systems encompasses the fields of Computer Science and Information Systems. Primary fields of study include software development, programming, and applications. Careers in Today's information systems require knowledge and hands-on experience in microcomputer applications as well as programming. Professionals in the computing field seek to advance the fundamental understanding of how information is processed, as well as the practical design of software and hardware to accomplish specific functions. The Associate in Science degree requirement are designed to satisfy course requirements for many Computer Science and Information Systems transfer patterns. However, students should consult a counselor and especially the catalog of the intended transfer institution for specific transfer requirements in the major. The program in Computer Information Systems offers students an opportunity to earn an associate's degree as well as course work in general CIS electives for students in other fields of study campus-wide. The program also offers courses for high demand skill areas such as mobile device development.

Required Courses (38 credits)

ACCT 201A	Financial Accounting	4
ACCT 201B	Managerial Accounting	4
BUS 218	Business Law	4
CIS 201	Introduction To Computer Science	3
CIS 210	Introduction To Computer Applications	4
CIS 216	Electronic Spreadsheet Applications	4
CIS 231	Fundamentals Of Computer Science I	4
CIS 232	Fundamentals Of Computer Science II	2
ECON 201A	Principles Of Macroeconomics	3
ECON 201B	Principles Of Microeconomics	3
MATH 255	Calculus For Business And Management	3
Total Credits:		**38**

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CERTIFICATE PROGRAMS

Cloud Computing — Certificate of Achievement

The Cloud Computing certificate is an entry-level position certificate with a focus on computer programming in a cloud network. Coursework includes software development, computer programming, databases, security, networking, mobile applications, and cloud architecture. The courses within this certificate provide complete training for the following certifications: AWS Cloud Practitioner, AWS Developer, AWS Big Data, AWS Architecture, AWS Security. Students who choose the Android development course will receive preparation for Android/Google certifications.

Required Courses

CIS 201	Introduction To Computer Science	3
CIS 220	Introduction To Cloud Computing	2
CIS 223	Cloud Programming	3
CIS 225	Cloud Databases	2
CIS 226	Cloud Architecture And Security	3
CIS 203	IOS Development I	3
or CIS 207	Android Development I	(3)
Total Credits:		**16**

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Android Developer — Certificate of Specialization

The Android Developer Certificate provides a framework for students to obtain the necessary skills to succeed as an Android Developer. The program prepares students to develop professional-quality apps that demonstrate skill mastery.

Required Courses (6 credits)

CIS 207	Android Development I	3
CIS 208	Android Development II	3
Total Credits:		**6**

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Internet Applications Developer — Certificate of Specialization

The Internet Applications Developer Certificate provides a framework for students to obtain the necessary skills to succeed as a developer of Internet-Based applications. The program prepares students to develop professional-quality applications that demonstrate skill mastery.

Required Courses (8 credits)

CIS 201	Introduction To Computer Science	3
CIS 220	Introduction To Cloud Computing	2
CIS 223	Cloud Programming	3
Total Credits:		**8**

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IOS Developer — Certificate of Specialization

The iOS Developer Certificate provides a framework for students to obtain the necessary skills to succeed as an iOS Developer. The program prepares students to develop professional-quality apps that demonstrate skill mastery.

Required Courses (6 credits)

CIS 203 . . . . . . IOS Development I. 3
CIS 204 . . . . . . IOS Development II 3
Total Credits: **6**

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