Program Overview: Bachelor of Science
Computer Information Systems

COLORADO MESA UNIVERSITY

About This Major . . .

The Bachelor of Science in Computer Information Systems (CIS) is a degree required today as organizations face the challenges of technology management. This program provides graduates with business management skills and computer information systems expertise to manage computer systems in today's organizations. Graduates assist businesses with creating, obtaining, and maintaining computer information systems that solve problems and assist in facilitating routine business processes. As businesses increasingly rely on technology to provide a competitive advantage, employees with an understanding of both business concepts and computer systems are necessary. Graduates from the program take a variety of courses that were developed based on national guidelines for quality degrees in information systems.

In the senior-level capstone course, students demonstrate their teamwork and acquired information systems knowledge and skills to create realistic projects for clients. Students also take the Information Systems Analyst (ISA) certification exam where an 80% qualifies a student for the professional certificate, a definite point of interest on a student's resume. The ISA exam pass rate for CMU CIS graduates has been 84.2% the last six years. The high ISA exam pass rate demonstrates the CIS programs are successful in meeting the primary objective: to educate and train information systems analysts. Oral presentations, written papers, and teamwork on the semester project all combine to present students with the knowledge and skills needed to manage information systems successfully in the future.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning.

In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Critical Thinking Skills: Apply business knowledge and skills in appropriate business contexts and transfer knowledge and skills to new business situations.
2. Communication Skills: Independently communicate clearly, appropriately, and persuasively to the audience, both orally and in writing.
3. Quantitative fluency: Analyze business data critically, reason logically, and apply quantitative analysis methods correctly to develop appropriate business conclusions.
4. Strategic Application of Information: Strategically apply information across functional business areas.
5. Team Work: Effectively work in a team.
6. General Business Knowledge: Integrate knowledge from multiple functional areas of business to solve business problems and to develop sound business strategies.
7. Work Products: Produce professional business work products.
8. Identify, formulate and correctly solve information systems problems. (Specialized Knowledge)

Program Highlights:

Graduates of this program currently hold the following positions: systems analyst, database administrator, network administrator, programmer/ analyst, help desk specialist, and chief information officer.

At the national Association of Information Technology Professionals competition, students have won several top-ten awards annually, demonstrating the knowledge and skills acquired through this program.

Computer Heroes provides CIS students with an opportunity for hands-on experience. The campus and local community can bring in a "sick" computer and, for a donation, students fix the computer. Under the mentorship of faculty, students are able to combine classroom knowledge with practical application.

Internships are available for juniors and seniors with local, regional, and international companies.

Specialized classroom space offers students access to work with networks, servers, and computer hardware, as well as specialized software.

A solid base in business enables students to gain the necessary knowledge to work across the functional areas of business in today's global environment.

A student must follow CMU graduation requirements by completing 120 semester credit hours, including 40 credits of coursework at the 300+ level. See the "Undergraduate Graduation Requirements" in the catalog for additional graduation information. Students should work closely with a faculty advisor when selecting and scheduling courses prior to registration. In general, CMU's programs of study are based on two curriculum groups:

1. Essential Learning

CMU's Essential Learning program provides the foundation of skills and information that cuts across all fields of study and the support for advanced concepts that students will later encounter in their majors. Before moving into work at the 300+ level, students complete the Maverick Milestone and its co-requirement, Essential Speech. This pair of courses is a capstone experience where students integrate what they have learned from their foundation courses by making connections among diverse areas of knowledge. The capstone is also an opportunity for students to work with disparate ideas, a critical skill expected of all CMU graduates that will aid them in solving the complex and unscripted problems they will encounter in their personal, professional, and civic lives.

2. What You Will Study in This Major. . .

Foundational Courses

These courses provide a solid basis for upper division business classes and focus in functional areas.

- Accounting
- Advanced Business Software
- Basic Programming
- Fundamentals of Information Systems
- Business Analysis

Computer Information Systems Core Classes

These include the following business support courses as well as others.

- Computer Skills
- Legal Environment of Business
- Finance
- Economics
- Management
- Marketing
- Business Decision Making
- Quantitative Decision Making

Concentration Requirements

These courses will provide the basis for study in the ever-evolving field of computer information systems. Analysis, critical thinking, and communication are key skills any effective business person needs in today's workplace.

Required
- Enterprise Architecture
- Information Systems Infrastructure
- Advanced Business Programming
- Management of Information Systems

Electives from which to choose
- Solving Problems using Spreadsheets
- Solving Problems using Databases
- Leadership
- E-Commerce

Electives

The foundation courses plus the business courses assure students have the basic educational and business background to support their major classes. Specific classes in CIS allow students to acquire needed industry knowledge and skills.

Additionally, students can select from electives in the following areas.
- Emerging Markets
- Business Ethics
- Investments
- Big Questions in Business
- Security and Portfolio Analysis
- Managerial Accounting
- Intermediate

For more information about this major, go to: http://www.coloradomesa.edu/business/degrees.html or contact the Academic Department Head for Business, 309 Dominguez Hall, 970.248.1778.