

BACHELOR OF SCIENCE IN

# COMPUTER INFORMATION SYSTEMS (CIS)

## OVERVIEW

The field of computer information systems focuses on making a business more competitive by applying computer technology into successful business information systems. Whether working in accounting, economics, management, marketing, finance, or communications, having an understanding of computer information systems is crucial. Computer Information Systems (CIS) majors learn to use and apply computer security, Web design, databases, programming, and project management in order to manage information, analyze business problems, and develop appropriate solutions.

## OBJECTIVES

The CIS curriculum provides a solid background in the integration of computing, including technology in the business environment, systems analysis, database management, computer security, Web development, and network administration. It also provides the essential business and management training that the traditional business core courses deliver. The Mission of CIS: to train future professionals to apply their practical knowledge of how to assemble, use and maintain integrated computer-based solutions that enable organizations to compete more successfully in the global marketplace. Furthermore, the solid business background provided by the CIS curriculum helps CIS graduates fill project management and other supervisory roles later in their careers.

## HIGHLIGHTS

### *Faculty*

- The Lewis University College of Business provides a full spectrum of business curriculum taught by talented and dedicated faculty.
- CIS faculty come from a variety of computer-related backgrounds and bring a wealth of experience to the classroom.

### *Curriculum*

- Strong relationships with local business and industry ensure a curriculum that reflects the latest technology, approaches to managing information, and other related areas.

### *Computer Labs and Equipment*

- Three labs installed with the latest software and hardware.
- Computers equipped with multiple operating systems.

## CONTACT

Lewis University  
Office of Admission, Unit 297  
One University Parkway  
Romeoville, IL 60446-2200  
(815) 836-5250  
[admissions@lewisu.edu](mailto:admissions@lewisu.edu)

knowledge. The Lewis University College of Business Internship Program allows students to earn academic credit toward a bachelor's degree in CIS while gaining valuable experience through on-the-job training. Internships are offered throughout the fall, spring and summer sessions.

Some of the companies Lewis University has partnered with include:

**Caterpillar Inc.**  
**Exelon – Mobile**  
**Grainger**  
**Computer Science Corp.**

**Deltek Computers**  
**AT & T**  
**Navistar**  
**KPMG**

## CAREER OUTLOOK

The job market in information technology is still favorable. A high demand exists for personnel skilled in computer technology, and well versed in the business acumen to incorporate that information into a structure that supports and protects the needs and the goals of the organization. Furthermore, the large number of organizations conducting business online and the resulting security needs demand quality personnel that can design, implement and support the sophisticated computer networks that link businesses to their various publics.

The U.S. Bureau of Labor Statistics reports that CIS jobs will increase by 17 percent through 2018, a rate much higher than the national average of projected job growth for all other occupations.

The Lewis University CIS curriculum prepares majors for a wide variety of careers including:

- Information systems analysts
- Systems designers
- IT Project Manger
- Database analysts
- Data administrators
- Web Developer
- IT managers
- Web Master
- Security administrators
- IT consultants

## INTERNSHIPS

Internship opportunities for CIS majors are very popular, offering students a wealth of experience and

## **BACHELOR OF SCIENCE / COMPUTER INFORMATION SYSTEMS**

Total Credit Hours: 128

Major Credit Hours: 67

### **I. Core Courses (40)**

- 04-200 Basic Macroeconomics (3)
- 04-201 Basic Microeconomics (3)
- 23-120 Principles of Accountancy I (3)
- 23-121 Principles of Accountancy II (3)
- 24-349 Business Statistics (3)
- 24-350 Decision Science (3)
- 25-200 Principles of Marketing (3)
- 61-200 Principles of Management (3)
- 61-250 Business Law I (3)
- 61-300 Business Communication in the Digital Age (3)
- 61-390 Management Seminar (1)
- 62-200 Principles of Finance (3)
- 63-200 Introduction to Information Systems (3)

*Select one of the following:*

- 24-230 Finite Mathematics (3)
- 24-240 Business Calculus (3)

### **II. Major Area Courses (27)**

- 63-220 Business Programming I (3)
- 63-305 Management Information Systems (3)
- 63-310 Principles of Project Management (3)
- 63-315 Systems Methodology and Design (3)
- 63-330 Database Management Systems (3)
- 63-415 Web Design Applications (3)
- 63-430 Data Networks (3)
- 63-450 Enterprise Security (3)
- 63-480 System Implementation (3)

**III. The advanced writing requirement of the general education curriculum is satisfied by Computer Information Systems majors by successful completion of Business Communications in the Digital Age (61-300).**

## **DOUBLE MAJOR**

*Accountancy, Business Administration, Economics, Finance, Information Security and Risk Management, and Marketing majors can earn a double major in Computer Information Systems by completing the nine Major Area Courses (27) listed above.*

## **MINOR / CIS FOR BUSINESS MAJORS**

*Accountancy, Business Administration, Economics, Finance, Information Security and Risk Management, and Marketing majors can earn a minor in Computer Information Systems by completing four of the following courses (12):*

### **I. Core Courses (6)**

- 63-305 Management Information Systems (3)
- 63-310 Principles of Project Management (3)

### **II. Select two electives (6)**

- 63-220 Business Programming (3)
- 63-315 Systems Methodology and Design (3)
- 63-330 Database Management Systems (3)
- 63-415 Web Design Application (3)
- 63-430 Data Networks (3)
- 63-450 Enterprise Security (3)

## **MINOR / CIS FOR NON-BUSINESS MAJORS**

*Non-College of Business majors can minor in Computer Information Systems by completing five of the following courses (15):*

### **I. Core Courses (9)**

- 63-200 Introduction to Information Systems (3)
- 63-305 Management Information Systems (3)
- 63-310 Principles of Project Management (3)

### **II. Select two electives (6)**

- 63-220 Business Programming (3)
- 63-315 Systems Methodology and Design (3)
- 63-330 Database Management Systems (3)
- 63-415 Web Design Applications (3)
- 63-430 Data Networks (3)
- 63-450 Enterprise Security (3)

*Computer Information Systems (CIS) versus Computer Science*

| <b>Computer Information Systems (CIS)</b>   | <b>Computer Science</b>  |
|---|--|
| Focus on the application and use of computer technology.  | Focus on the development of computer technology.   |
| Provide strong computer technology skills to solve business problems and improve organizational efficiency.   | Provide strong programming and networking skills and solid mathematical background.  |
| Teaches how to integrate and put together the different computer technology components such as software applications, database systems, and networks. | Teaches theory of computer technology, what makes each component work, and how to improve its design.  |
| Expand understanding of the various areas of business such as Marketing, Management, Finance, Accounting, Economics and Operations.                   | Expand understanding of computational sciences such as Artificial Intelligence, Simulation and Gaming, Cloud Computing, Distributed Computing, and Data Visualization. |
| Empowers you to grow as an IT manager and a leader in your organization.  |  |