

CATALOG INFORMATION

Dept and Nbr: CS 84.21

Title: MANAGEMENT INFO SYS

Full Title: Management Information Systems

Last Reviewed: 12/12/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: CIS 66

**Catalog Description:**  
Students will examine the use of information systems to support the management activities of an organization. They will explore topics including: the fundamentals of hardware, software, and database management; data communications; business intelligence; networks; commerce; artificial intelligence; mobile computing; and systems analyses and design. Students will also explore information systems that support transaction processing and decision support, among others. Case studies and software packages will be utilized to illustrate the principles covered.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Eligibility for ENGL 1A or equivalent and Course Completion of CS 5

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Students will examine the use of information systems to support the management activities of an organization. They will explore topics including: the fundamentals of hardware, software, and database management; data communications; business intelligence; networks;

commerce; artificial intelligence; mobile computing; and systems analyses and design. Students will also explore information systems that support transaction processing and decision support, among others. Case studies and software packages will be utilized to illustrate the principles covered. (Grade Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 1A or equivalent and Course Completion of CS 5

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>

<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
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<b>CSU Transfer:</b>	Transferable	Effective:	Spring 1989	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**CID:**

CID Descriptor:BUS 140	Business Information Systems, Computer Information Systems
SRJC Equivalent Course(s):	CS84.21
CID Descriptor:ITIS 120	Business Information Systems, Computer Information Systems
SRJC Equivalent Course(s):	CS84.21

### **Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Evaluate the role of management information systems including transaction processing systems (TPS), decision support systems (DSS), executive support systems (ESS), enterprise systems, and expert systems in today's competitive business environment.
2. Define and describe the fundamentals of hardware, software, database management, data networks, cloud computing, business intelligence (BI), e-commerce, and social networking, related to management activities of an organization.
3. Identify the principal management challenges posed by the ethical and social impact of information systems and management solutions.

### **Objectives:**

At the conclusion of this course, the student should be able to:

1. Demonstrate systems analysis and design in an organizational setting.
2. Summarize and define:
  - A. Decision Support Systems (DSS).
  - B. Management Information Systems (MIS).
  - C. Expert Systems.
  - D. Transaction Processing Systems (TPS).
  - E. Executive Support Systems (ESS).

- F. Enterprise systems.
- 3. Design a simple database management system.
- 4. Analyze the management of information systems (IS).
- 5. Employ various software to model common types of management information systems.
- 6. Evaluate and use Artificial Intelligence and expert systems.
- 7. Operate and describe the function of a computer's central processing unit, input devices, output devices, and secondary storage.
- 8. Understand new advances in MIS and the role of cloud computing, social networks, and mobile computing.
- 9. Understand ethical and social impact of information systems and management solutions.

## **Topics and Scope:**

### **I. Introduction to Information Systems**

- A. The importance of MIS
- B. Collaboration information systems for decision making and problem solving
- C. Business processes, information systems and information
- D. Organizational strategy, information systems, and competitive advantage

### **II. Information Technology**

- A. Hardware and software
- B. Mobile systems
- C. Database processing
- D. Database design
- E. The cloud
- F. Network and cloud technology

### **III. Software Fundamentals**

- A. Systems software
- B. Programming - languages and development
- C. Database management

### **IV. Organization and Information Systems**

- A. Enterprise Resources Planning (ERP) systems
- B. Supply chain management
- C. Social media information systems
- D. Office information systems and office automation
- E. Enterprise social networks and knowledge management
- F. Business intelligence systems
- G. Database marketing
- H. Reporting systems and OLAP

### **V. Management Information Systems (MIS) Subsystems**

- A. Transaction Processing System (TPS)
- B. Decision Support System (DSS)
- C. Executive systems
- D. Office information system
- E. Expert systems

### **VI. Information Systems Management**

- A. Information systems security
- B. Data breaches
- C. E-commerce, digital markets, digital goods
- D. Systems analysis and design
- E. Information systems development
- F. Systems development project management
- G. Managing knowledge and Artificial Intelligence

**Assignment:**

1. Read from textbook (approximately 30 pages per week)
  2. Reading reports
  3. Homework as either written homework assignments or homework problems
  4. Projects
  5. Write case study analyses (2-6 assignments at 500-1,000 words each) to illustrate such topics as systems analysis and design, computer careers, and online databases. At least two assignments will be conducted as face-to-face or online teams
  6. Write weekly laboratory exercises employing software tools in such areas as word processing, database management, spreadsheets, Artificial Intelligence (AI), expert systems, programming, and operating systems.
- Note: Some exercises will be group projects and some group projects will be virtual groups that do not require face-to-face contact
7. Lab reports
  8. Exams (2-5)
  9. Participate in discussions on current topics (in class or online)

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Reading reports; written homework; projects; case study analysis

Writing  
55 - 65%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems; lab exercises using software tools; lab reports

Problem solving  
20 - 30%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Exams

Exams  
15 - 25%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation
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Other Category 0 - 10%
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**Representative Textbooks and Materials:**

Management Information Systems: Managing the Digital Firm. 17th ed. Laudon, Kenneth and Laudon, Jane. Pearson. 2022.