

## Computing (CSI)

### Division of Computing

**Mission:** The mission of the Division of Computing is to provide students with an opportunity to obtain the knowledge of computing necessary to succeed in today's increasingly technical world. The division's curriculum focuses on both theoretical knowledge and practical applications that enrich analytic, creative, and research capabilities essential to success in various computing fields. Our curriculum provides students the opportunities to pursue individual interests through special topic courses, internships, and projects that further enhance their learning experience outside the traditional classroom setting. Introductory courses in various computer-related topics are offered for non-major students.

#### Student Learning Outcomes

*Students will:*

- Understand and be able to demonstrate analytic and critical reasoning ability through algorithmic development and software implementation.
- Communicate effectively utilizing current technology in information systems. This includes the acquisition, summarization, and presentation of existing and synthesized knowledge.
- Demonstrate an understanding of computer and communication systems and hardware and software systems, including the design, development, implementation, and integration into an organization.

Students may obtain a Bachelor of Science degree with a major in computer science, computer information systems, computational science, cybersecurity, or management information systems. These majors focus on the scientific and business views of computing. Students in these majors develop the skills essential to becoming quality programmers. In addition, the upper-division requirements available to each of the majors provide the necessary specialized knowledge and skills.

Students within all majors experience a variety of programming environments including many microcomputer systems as well as multi-user environments. Students are exposed to a number of modern programming languages appropriate to their selected majors and gain valuable experience with a wide selection of computer hardware and resources. This variety of resources coupled with elective courses allows students to personalize the specialized knowledge they wish to obtain.

Students with majors in computer science, computer information systems, computational science, cybersecurity, or management information systems must complete all courses required for the major with a minimum of a 2.25 cumulative grade-point average. All courses must have a grade of C- or better to fulfill the prerequisite requirement. In addition, all courses for the major and minor must be completed with a grade of C- or better.

The division also offers minors in both computer science and computer information systems. Students who complete the required courses for the minor can expect to obtain programming skills and general computing knowledge.

### COMPUTER INFORMATION SYSTEMS

- **Major: 68 credit hours**
- **Minor: 22 credit hours**

#### PROGRAM REQUIREMENTS:

- **Major/Minor GPA required for graduation: 2.25**
- **All courses for the major and minor must be completed with a grade of C- or better.**

**Description of Major:** Computer information systems majors study a variety of business-related topics in addition to their programming skills and formal course work in database management, networking, and systems analysis. The course work ensures that the students obtain a thorough view of the modern business world and the impact of information technology on modern business practices. Computer information systems majors are prepared for further education in a graduate program or for employment in one of many jobs such as database administration, network administration, or applications programming.

**COMPUTER INFORMATION SYSTEMS MAJOR REQUIREMENTS**    **68 crs.**  
**REQUIRED COURSES**    **62 crs.**

---

CSI 130	INTRODUCTION TO COMPUTING I	(5)
CSI 215	INTRODUCTION TO DATABASES	(3)
CSI 230	INTRODUCTION TO COMPUTING II	(5)
CSI 235	MATHEMATICS OF COMPUTING	(3)
CSI 300	COMPUTER ORGANIZATION AND ARCHITECTURE	(3)
CSI 315	SYSTEMS ANALYSIS AND DESIGN	(3)
CSI 320	INFORMATION TECHNOLOGY MANAGEMENT (W)	(3)
CSI 330	DATA STRUCTURES AND ALGORITHMS	(3)
CSI 415	ADVANCED DATABASE CONCEPTS	(3)
CSI 417	PROJECT MANAGEMENT	(3)
CSI 450	COMPUTER NETWORKING AND COMMUNICATIONS	(3)
CSI 497	SENIOR SEMINAR I	(1)
CSI 498	SENIOR SEMINAR II	(2)
ENG 360	INTERDISCIPLINARY PROFESSIONAL AND TECHNICAL WRITING (W)	(3)
ECO 211	PRINCIPLES OF MICROECONOMICS	(3)
ACC 205	PRINCIPLES OF FINANCIAL ACCOUNTING	(3)
ACC 230	PRINCIPLES OF MANAGERIAL ACCOUNTING	(3)
MGT 204	PRINCIPLES OF MANAGEMENT	(3)
MKT 205	PRINCIPLES OF MARKETING	(3)
MTH 170	STATISTICS	(4)

**TWO COURSES FROM THE FOLLOWING****6 crs.**


---

CSI 325	ELECTRONIC COMMERCE	(3)
CSI 345	THE STRUCTURE OF OPERATING SYSTEMS	(3)
CSI 369	SOCIAL, LEGAL, AND ETHICAL ISSUES OF COMPUTING (W)	(3)
CSI		
380-389	SPECIAL TOPICS IN COMPUTING AND INFORMATION SYSTEMS	(3)
CSI 425	WEB PROGRAMMING	(3)
CSI 337	INFORMATION SECURITY	(3)
CSI 445	DATA MINING	(3)
CSI 470	INTERNSHIP IN COMPUTING AND INFORMATION SCIENCE	(3)
CSI 480	INDEPENDENT STUDY IN COMPUTING AND INFORMATION SCIENCE	(3)

**COMPUTER INFORMATION SYSTEMS MINOR REQUIREMENTS****22 crs.**


---

CSI 130	INTRODUCTION TO COMPUTING I	(5)
CSI 215	INTRODUCTION TO DATABASE	(3)
CSI 230	INTRODUCTION TO COMPUTING II	(5)
CSI 315	SYSTEMS ANALYSIS AND DESIGN	(3)
CSI 417	PROJECT MANAGEMENT	(3)
MGT 204	PRINCIPLES OF MANAGEMENT	(3)

---

**Mark Your Mark at McKendree University! [Apply Today!](#)**

- [Request Information](#)
- [Apply Online \(FREE\)](#)
- [Contact Us](#)
- [Visit Us](#)
- [Learn More](#)

[www.mckendree.edu](http://www.mckendree.edu)