

# Mayville State University

## Computer Information Systems *Bachelor of Science*



### Personal Service

We pride ourselves on being just the right size to give students the time they need to be successful. Our average class size is 15, so you will have small, personalized class settings with a technologic focus for you to receive the education that you deserve. Your professors will introduce you to new ways of thinking, explore issues creatively, and evaluate ideas as you engage in the world.

### Opportunity

Whether it's music, athletics, or politics, students at MSU have the chance to participate in a variety of activities and clubs. These organizations are a great way to make new friends with similar interests, and the involvement outside the classroom looks great on a resumé.

Some clubs and activities include:

- Theater
- Band & choir
- Computer Technology Club
- Science Club
- Comet Radio
- Student government
- Intramural sports

### Success

Our students get jobs. Period. We also have internship opportunities to give you real, hands-on learning experiences and make your resume stand out.

### Value

The combination of MSU's affordability and its unique offerings make it a Best in the Midwest College, as designated by the Princeton Review. This selection process is based on meeting criteria for academic excellence as well as results of surveys done by current MSU students.

### The Program

Mayville State's computer information systems program uses innovative methods to equip you to succeed in limitless employment opportunities found in the IT industry.

We want to prepare you for more than just "a job." We strive to prepare students for a lifelong career in technology!

Our program:

- Empowers you to develop database driven applications for web, standalone, and other environments.
- Enables you to build and maintain server and network solutions to meet company needs.
- Prepares awareness of emerging security designs and to implement safeguards for protection.
- Positions you to hit the ground running by creating engaging projects and broadening your knowledge base and experiences.
- Enhances learning through the use of robust simulation software to provide practical experiential learning.
- Assists in teaching the foundations of understanding the technology spectrum while focusing on Computer Programming, Network Administration, and Systems Administration.

### Advantages

**Technology-enriched.** You will complete the B.A.S. program with a modern focus while taking advantage of a technology-enriched curriculum and campus.

**Transfer Friendly.** This program is designed to serve the needs of students who have earned A.A., A.S., or A.A.S. degrees. All coursework will transfer into the program.

**Flexible.** The B.A.S. program will give you a strong foundation in computer information systems while providing flexibility to tailor the program to your specific areas of interest.



1.800.437.4104  
[www.MayvilleState.edu](http://www.MayvilleState.edu)



## A Word About Our Grads

Graduates with Mayville State's CIS major have been employed in a number of careers, including:

- Multimedia developers
- Database administrators
- Computer analysts
- Computer programmers
- Technology support personnel
- Software engineers
- System administrators
- Network administrators
- Security administrators
- Webmasters

Graduates of Mayville State's computer information systems program have gone on to successful careers at a number of top-notch companies and organizations including Eide Bailey, Microsoft, DigiKey, Noridian Mutual, Carlson Companies, North Dakota University System, Gremada Industries, National Information Solutions Cooperative, Schwan's, IBM, Polaris, and Sanford Health.

## Major: Computer Information Systems

**Required credits to graduate with this degree: 120**

This major is designed to provide students with the knowledge, skills, techniques, and experience essential for obtaining a variety of positions in the IT industry, with special emphasis available in programming/software engineering, network administration, and system administration. In addition to other institutional and graduation requirements, majors complete a 39-hour CIS core, and two specializations or a minor. Elective courses will be chosen to ensure students earn a total of no less than 120 hours. A requirement of the major is an internship experience that provides students with the opportunity to work in a field related to their major and earn credit for this work experience.

Within the 36-hour essential studies requirement, students must complete the following pre-requisite to this major: MATH 103.

## Minor: Computer Information Systems

This minor provides students with the knowledge, skills, and techniques desirable for employment in positions in which the computer is utilized as a tool. The core classes provide a general introduction to areas relevant to information technology. Careers that could benefit from this would be Business, Project, and IT Management. This minor consists of 18 semester hours of credit.

## CIS - B.S.

### Core Requirements:

BADM 302	Principles of Management	3 SH
BUSN 340	Project Management	3 SH
BUSN 355	Management Information Systems	3 SH
BUSN 391	Professional Development	1 SH
CIS 204	Programming I	3 SH
CIS 220	Hardware Troubleshooting	3 SH
CIS 240	Introduction to Graphic Design	3 SH
CIS 270	Operating System Principles	3 SH
CIS 300	Intro to Relational Database	3 SH
CIS 310	Data Communications	3 SH
CIS 330	Systems Analysis and Design	3 SH
CIS 365	Website Design and Development	3 SH
CIS 455	CIS Capstone	2 SH
CIS 497S	Internship	3 SH

**Total 39 SH**

### Specialization Areas:

*Choose two specialization areas or a minor.*

#### Programming/Software Engineering:

CIS 205	Programming II	3 SH
CIS 360	Advanced Relational Database Management Systems	3 SH
CIS 377	C#	3 SH
CIS 421	Web Application Programming	3 SH
OR		
CIS 422	.NET Web Application Programming	3 SH

**Total 12 SH**

#### Network Administration:

CIS 312	Network Administration I	3 SH
CIS 313	System Administration I	3 SH
CIS 320	Data and Network Security	3 SH
CIS 411	Advanced System and Network Administration	3 SH

**Total 12 SH**

#### System Administration:

CIS 313	System Administration I	3 SH
CIS 412	Database Server Administration	3 SH
CIS 414	Email Server Administration	3 SH
CIS 415	Web Server Administration	3 SH

**Total 12 SH**

