# COMPUTER SCIENCE

The Computer Science major prepares graduates for positions in computer-related fields and for graduate study. Computer science as a field spans a wide range of topics, from theoretical and algorithmic foundations to cutting-edge developments in artificial intelligence, data science, robotics, cloud computing, and enterprise and consumer software.

# **PROGRAMS**



#### **DEGREES AND CERTIFICATES**

- Bachelor of Science in Computer Science
- Computer Science Minor

#### ABOUT THE PROGRAM

Minnesota State Mankato's upper-division Computer Science program is entirely project-based. During junior and senior year, students complete four real-world industry projects, working with real industry partners, as they learn computer science by doing computer science.

# **REAL-WORLD CONNECTIONS**



#### SKILLS AND TALENTS

- Design Thinking and Problem-Solving
- Programming and Systems Development
- Data Analysis and Management
- Real-World Software Deployment
- Project and Client Management
- Technical Communication

#### **CAREERS**

- Software Engineer
- Software Architect/Designer
- Data Scientist
- Data Engineer
- Cloud Computing Engineer
- Web/Mobile App Developer

#### **EMPLOYERS**

- LinkedIn
- Microsoft
- Novus Media
- Regis Corporation
- IBM
- Early Stage Al Companies

# **INSPIRED ACTION**



### **EMPLOYMENT RATE**

100%

of program graduates begin their careers within one year of graduation.

Graduates: 1 Respondents: 1 <u>link.mnsu.edu/graduate-follow-up</u>

## MEDIAN SALARY

\$136,620

The median annual wage for Computer and Information Research Scientists in May 2022.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer and Information Research Scientists, at link.mnsu.edu/computer-science-salary

#### **PROGRAM WEBSITE**



cset.mnsu.edu/cis

# SAMPLE FOUR-YEAR PLAN - COMPUTER SCIENCE, BS

Einst Vorm /Emill	First Vary (Sarian)	
First Year (Fall)	First Year (Spring)	
CIS 121 Intro to Programming (4)	CIS 122 Data Structures (4)	
Math 121 Calculus I (4)	MATH 122 Calculus II (4)	
ENG 101 Foundations of Writing & Rhetoric (4)	Science Elective (3)	
Gen Ed (3)	General Education Course (3)	
Second Year (Fall)	Second Year (Spring)	
CIS 224 Computer Architecture (4) Math 247 Linear Algebra (1) Science Elective (4) General Education Course (3)	CIS 223 Algorithms (4) Math 280 Discrete Math for CS I (4) CMST 102 Public Speaking (4) OR ENG 271W Technical Communication (4) General Education Course (3)	
Third Year (Fall)	Third Year (Spring)	
CS 495 Seminar (4) CS 391W Computer Science Project (1) CIS 301 CS Core: Programming Languages (4) CIS 302 CS Core: Software Engineering & Parallel Computing (4) Math 380 Discrete Mathematics for Computer Science II (4) General Education Course (3)	CS 495 Seminar (4) CS 392W CS Project II (4) CS 303 CS Core: Programming Languages (2) CS 304 CS Core: Databases & Information Security (2) MATH 354 Concepts of Probability & Statistics (4) CS Elective	
Fourth Year (Fall)	Fourth Year (Spring)	
CS 495 Seminar (4) 491W Computer Science Capstone 1 (4) CS Elective (2) CS Elective (2) CS Elective (2) General Education (2) General Education Course (3)	CS 495 Seminar (4) CS 492W CS Capstone Project II (4) CS Elective (2) CS Elective (2) General Education General Education	

For more information about program requirements, visit: mnsu.edu/academics/academic-catalog

#### **LEARN MORE**

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