

# COMPUTER ENGINEERING

Computer Engineering encompasses research, development, design and operation of computers, computerized systems, and their components. The primary objective of the Computer Engineering program is to educate engineering professionals who possess a sound design and analytical background coupled with strong laboratory experience.

## PROGRAMS



### DEGREES AND CERTIFICATES

- Bachelor of Science in Computer Engineering

### ABOUT THE PROGRAM

The Bachelor of Science in Computer Engineering prepares students with a solid foundation in design and analytics coupled with strong laboratory experience.

## REAL-WORLD CONNECTIONS



### SKILLS AND TALENTS

- Computer Skills
- Cloud Computing
- Computer Systems
- Networking
- Problem-Solving
- Resilience

### CAREERS

- Computer Programmer
- Systems Engineer
- Computer Hardware Engineer
- Network Engineer
- Computer Engineer
- Solutions Architecture

### EMPLOYERS

- ConvergeOne
- Cummins Power Generation
- Design Ready Controls
- Honeywell
- IBM
- Microsoft

## INSPIRED ACTION



### EMPLOYMENT RATE

**92.5%**  
of program graduates begin their careers within one year of graduation.

Graduates: 74  
Respondents: 58  
[link.mnsu.edu/graduate-follow-up](https://link.mnsu.edu/graduate-follow-up)

### MEDIAN SALARY

**\$138,080**  
The median annual wage for Computer Hardware Engineers in May 2023.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer Hardware Engineers, at [link.mnsu.edu/computer-engineering-salary](https://link.mnsu.edu/computer-engineering-salary)

### PROGRAM WEBSITE



[cset.mnsu.edu/computerengineering](https://cset.mnsu.edu/computerengineering)



## SAMPLE FOUR-YEAR PLAN - COMPUTER ENGINEERING, BSEC

First Year (Fall)	First Year (Spring)
ENG 101 Foundations of Writing & Rhetoric (4) EE 105 Introduction to Electrical and Computer Engineering & Technology (1) EE 106 Fundamental Digital System Design for Electrical and Computer Engineers (3) MATH 121 Calculus I (4) General Education Course (3)	EE 107 Introduction to Electrical and Computer Engineering Through Software Development (3) MATH 122 Calculus II (4) PHYS 221 General Physics I (4) ENG 271W Technical Communication (4)
Second Year (Fall)	Second Year (Spring)
PHYS 222 General Physics II (3) EE 230 Circuit Analysis I (3) PHYS 232 General Physics II Laboratory (1) EE 240 Evaluation of Circuits (1) EE 281 Digital System Design with Testability (3) EE 282 Digital System Design with Testability Lab (1) Math 321 Ordinary Differential Equations (4)	MATH 223 Calculus III (4) EE 231 Circuit Analysis II (3) EE 234 Microprocessor Engineering I (3) EE 235 Microprocessor Engineering Laboratory I (1) EE 245 Robotics Programming (4) Elective Course in Major (3)
Third Year (Fall)	Third Year (Spring)
EE 332 Electronics I (3) EE 334 Microprocessor Engineering II (3) EE 336 Principles of Engineering Design I (1) EE 341 Signals & Systems (3) EE 342 Electronics Laboratory (1) EE 344 Microprocessor II Laboratory (1) EE 395 Computer Hardware and Organization (3)	MATH 280 Discrete Mathematics for Computer Science I (4) EE 333 Electronics II (3) EE 337 Principles of Engineering Design II (1) EE 343 Electronics II Laboratory (1) EE 358 Control Systems (3) EE 368 Control Systems Laboratory (1) Elective Course in Major (4)
Fourth Year (Fall)	Fourth Year (Spring)
EE 450 Engineering Economics (3) EE 467W Principles of Engineering Design III (1) EE 481 VSLI Design Laboratory (1) EE 484 VLSI Design (3) EE 486 Signal Integrity (3) Elective Course in Major (4)	PHYS 223 General Physics III (3) ME 299 Thermal Analysis (2) EE 477W Principles of Engineering Design IV (1) EE 485 ASIC Design (4) General Education Course (3) Elective Course in Major (4)

For more information about program requirements, visit:  
[mnsu.edu/academics/academic-catalog](https://mnsu.edu/academics/academic-catalog)

### LEARN MORE

**Department of Electrical and  
 Computer Engineering and Technology**

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### NOTES

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