2026-27 Academic Year

COMPUTER SCIENCE

In today's world, computers are woven into the fabric of our daily lives, transforming the way we work, communicate, and innovate. In the Computer Science degree program, you'll learn to understand the "why" and the "how" of computer programs and hardware. You'll learn essential programming languages and mathematical principles that form the backbone of software and operating systems. Plus, you'll develop hands-on skills in networking, server security, and management — key areas in today's tech landscape. With a degree in Computer Science, you'll not only decode complex computer code but also understand how various components seamlessly integrate. This knowledge will pave the way for a thriving career in systems and software development, cybersecurity, web development, or even cutting-edge research in the latest technologies. Step into the future and shape it — your journey starts here!

fast facts

Credit hours: 57

Students must also take 30 credit hours of General Studies courses. A total of 120 credit hours are needed to graduate from WSC. Additional majors or minors can be added to help meet graduation requirements.

Degree options: B.A. or B.S.

Department: Computer Technology and Information Systems

School: Business and Technology

Popular pairings: Management Information Systems, Mathematics, Networking and Cybersecurity, Programmer/Analyst, Web Specialist

focus on results

Skills Learned

- Computer hardware and architecture
- Scientific principals and scientific method
- Mathematic essentials for the field
- Software analysis, and design
- Object-oriented programming
- Server security and management
- Database design and development using SQL
- Critical thinking and analysis
- Computer troubleshooting
- Networking concepts and technologies

Possible Careers

- Software developer
- Application developer
- Computer systems engineer
- Computer programmer
- Web developer
- Systems analyst
- IT administrator
- IT project manager
- Database administrator
- Computer repair technician
- Computer forensics specialist
- Chief technology officer

Types of Employers

- Software companies
- Computer companies
- IT development companies
- Manufacturing companies
- Banking and financial institutions
- Data warehouse companies
- Government / federal agencies
- Businesses and corporations
- Schools, colleges, and universities
- Technical support centers

outside the classroom

Visit www.wsc.edu/clubs to learn more about clubs and organizations on campus.

Activities / Opportunities

- Career Scholars Program
- Programming and robotics competitions
- Workshops and presentations
- Peer tutoring and mentoring
- Service-Learning
- Study Abroad

Clubs / Organizations

- Association for Computing Machinery (ACM)
- Upsilon Pi Epsilon (International Computing Honorary)
- SkillsUSA

Courses and outcomes

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The following courses are required for the program of study described on this sheet. Every effort is made to ensure this information is current, but please be aware that some content may have changed. To develop a plan for registering and taking these courses, please consult the current academic catalog and your advisor.

Program courses

Take MAT 140 Calculus I for CAT 3. Take PHY 326 Electronics for CAT 7.

Computer Science Courses

CIS 132 Principles of Computing and Information Systems 3
CIS 171 Networking I 3
CIS 360 Software Engineering I 3
CIS 361 Software Engineering II 3
CIS 366 Introduction to Database 3
CIS 372 Computer Hardware and Operating Systems 3
CIS 462 Software Engineering III 3
CSC 150 Programming Fundamentals I 3
CSC 160 Programming Fundamentals II 3
CSC 310 Data Structures 3
CSC 320 Computer Organization 3
CSC 345 Computer Graphics 3
CSC 363 Full Stack Application Development 3
CSC 380 Operating Systems 3
CSC 450 Infrastructure and Server Operations 3
CSC 480 Seminar in Computer Science 3
MAT 305 Discrete Mathematics 3
Elective (choose one from the following) 3
BUS 226 Business Statistics (3)
MAT 130 Precalculus (5)
MAT 180 Applied Probability and Statistics (3)
Upper-level MAT course by advisement
Elective (choose one from the following) 3
CIS 472 Advanced Computer Hardware and Embedded Systems (3)
CSC 302 Fundamentals of Artificial Intelligence (3)
CSC 497 Computer Science Internship (3)

Student learning outcomes

1. Apply the foundational concepts of computer science
2. Work in groups in a modern computer science context
3. Communicate in professional computer science contexts
4. Establish a plan for maintaining professional relevance in computer science
5. Apply an appropriate ethical framework to a computer science scenario

computer science faculty

Visit www.wsc.edu/computer-technology-information-systems-department to learn more about the Department of Computer Technology and Information Systems.

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Revised on: 5/8/26