Bachelor of Science in Computer Science

The Bachelor of Science in Computer Science is an educational degree program that provides a foundation of knowledge in the field of IT. Our computer science degree equips you with the knowledge to apply information technology theory and principles to address real-world business challenges with advanced concepts in math, programming and computer architecture. You can also use elective courses to earn a certificate in cybersecurity, networking, cloud computing and much more.

Top skills learned in this program:

- Complex problem solving
- Integration
- Leadership
- Software engineering
Projected job growth: 22%
According to Bureau of Labor Statistics

What can you do with a Bachelor of Science in Computer Science?

A BSCS degree can prepare you to be:

- Application developer
- Computer consultant
- Information technology analyst (IT analyst)
- Software developer
- Technical consultant

According to the Bureau of Labor Statistics, job growth for software developer occupations is projected to be much faster as average between 2020 and 2030.

BLS projections are not specific to University of Phoenix students or graduates.

Institutional accreditation

University of Phoenix is accredited by the Higher Learning Commission (HLC), hlccommission.org. Since 1978, University of Phoenix has been continually accredited by the Higher Learning Commission.
Requirements and prerequisites

You'll need 120 credits to complete this online computer science degree. An academic counselor will help you select the courses needed to complete your degree. Your course schedule may vary based on transferable credits or credits earned through the University’s Prior Learning Assessment.

18 Core Courses

Here’s where you’ll pick up the bulk of your program-specific knowledge. By the time you finish these courses, you should have the confidence and skills needed in this field.

- CSS/200: Foundations of Computer Science
- PRG/211: Algorithms and Logic for Computer Programming
- WEB/240: Web Design Fundamentals
- MTH/221: Discrete Math for Information Technology
- DAT/210: Data Programming Languages
- PRG/420: Java Programming I
- PRG/421: Java Programming II
- DAT/305: Data Structures for Problem Solving
- CSS/421: Computer Organization and Architecture
- CSS/325: Ethics in Computer Science
- NTC/362: Fundamentals of Networking
- MTH/360: Linear Algebra
- POS/355: Introduction to Operating Systems
- BSA/385: Intro to Software Engineering
- CSS/422: Software Architecture
- CSS/430: Algorithmic Theory and Practice
- CSS/440: Artificial Intelligence and Big Data Trends
- CSS/450: Computer Science Capstone

15 General Education

Select from a variety of courses that help lay the foundation for all our degree programs. Because communication, math and writing skills aren’t just universally applicable in IT — they’re useful in daily life.
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- GEN/201: Foundations for University Success
- PSY/110: Psychology of Learning
- ENG/110: English Composition I
- HUM/115: Critical Thinking in Everyday Life
- FP/100T: Everyday Economics and Finances
- ENG/210: English Composition II
- BIS/221T: Introduction to Computer Applications and Systems
- CIS/207T: Information Systems Fundamentals
- CYB/110: Foundations of Security
- MTH/220T: College Algebra
- PHY/201: General Physics I with Laboratory
- PHY/202: General Physics II with Laboratory
- NTC/248T: Foundations of Networking
- MTH/280: Calculus I
- MTH/290: Calculus II

6 Electives

Elective courses allow you to learn about topics you're interested in. That means you'll have a degree that's unique to you and your education goals.

- CIS/291: PC and Device Fundamentals
- CIS/293: Network Troubleshooting and Support
- CIS/295: Introduction to PC and Mobile Operating Systems
- CIS/297: Computer Security and Operational Support Fundamentals
- NTC/260: Foundations of Cloud Services
- BSA/250: Foundations of Data Analytics

Schedule

Attend class whenever it fits your life, day or night because our online classroom is available 24/7/365. Your academic counselor will help schedule your courses for a computer science degree.

What you’ll learn

When you earn your online Bachelor of Science in Computer Science, you’ll be equipped with a concrete set of skills you can apply on the job.

You’ll learn how to:
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- Analyze a complex computing problem to apply principles of computing and other relevant disciplines to identify solutions.
- Evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.

*While widely available, not all programs are available to residents of all states. Please check with a University Enrollment Representative.

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