Bachelor of Science in

APPLIED COMPUTER SCIENCE

Move Your Career Forward at the Intersection of Computing and AI

The emergence of artificial intelligence has opened new doors of opportunity in information technology. Develop the technical and mathematical skills to take your career to exciting new heights with Purdue Global's Bachelor of Science in Applied Computer Science. In our 100% online program, you'll explore all aspects of computer science with a focus on practical, project-based learning and complex problem-solving. Prepare to qualify for roles in the areas of computing and information management, software development, information security, and other computer science fields.

PURDUE GLOBAL™

Why Study Applied Computer Science at Purdue Global?

Built for Working Adults

Complete courses 100% online, without compromising your work or family schedule.

Backed by the Power of Purdue

Earn a degree you can be proud of — and employers will respect. Achieve more in the IT field with a name that opens doors in your career.

Experience Counts as Credit

It's time to get the credit you deserve. Our average bachelor's graduate saves 50% on tuition with credit for prior learning.[1]

Customize Your Degree

Specialize in an area of computer science, including artificial intelligence, by earning a micro-credential of your choice as part of your degree plan.

Practical Experience You Can Count On

Experience real-world learning through hands-on projects and applications, including a capstone project based on your interests.

Expert Faculty

Learn from professors who are practicing professionals in the field. All faculty possess advanced academic degrees.

Personal Support

Work directly with your instructors through online discussion boards and seminars, and enjoy no-cost individual tutoring. In addition, academic and career advisors are dedicated to helping you balance school with your career and life responsibilities.

Introductory Trial Period

Make sure online learning at Purdue Global is right for you. Enroll and try our undergraduate classes for 3 weeks — before you owe any tuition. That's the Purdue Global Commitment.[2]

An Education That's Proven and Respected

Purdue Global is backed by Purdue University. One of the most prestigious universities in the world, Purdue ranked #16 overall and #1 in education among *Fast Company* magazine's prestigious World's Most Innovative Companies.[4]

Take the Next Step in Your Career and Education

Build the Core Skills and Competencies That Employers Demand

At the end of our Applied Computer Science bachelor's program, you'll have the skills to:

- Apply the fundamental and emerging concepts of computer science
- Analyze all aspects of computer systems
- Create complex software applications
- Devise computer science-based solutions to solve real-world problems
- Collaborate using ethically grounded strategies

Prepare for Sought-After Roles

The program advances your technical, mathematics, and programming skills and provides a strong foundation to help you secure a professional role within the evolving computer science field.

Graduate Program Pathway

Earn your master's degree in less time with Purdue Global's graduate program pathway. You'll take graduate-level courses while completing your bachelor's degree and get a head start on your master's program. View the University Catalog for more information.[3]

Curriculum

Our rigorous curriculum prepares you with the essential technical, mathematical, and professional knowledge and skills you need to succeed. Our dedicated curriculum department and advisory board regularly update our courses to ensure you're familiar with the most recent developments in the field.

Specialize your degree with an optional micro-credential in a related field including AI, cloud computing, cybersecurity, and more. Courses are embedded into your program.

What Will I Learn?

In this program, you'll develop a working knowledge of the concepts, tools, methods, and advanced technologies needed to design information systems. Your courses will cover topics in computing and information management and explore the algorithms and infrastructure of AI. In fact, most major courses include hands-on projects and AI applications.

Applied Computer Science Course Topics Include:

- Advanced Database Concepts
- Compilers
- Computer Architecture
- Database Concepts
- Data Structures and Algorithms
- Networking Concepts
- Network Security Concepts
- Operating Systems
- Programming for Data Analysis (Python, R, and Java)
- Software Design and Development Concepts Using Java
- Software Development Concepts Using Java
- Software Engineering
- Software Project Development Using Agile

In addition to taking courses in computer science, you'll build the mathematical foundation you need to advance professionally with courses like Linear Algebra and Calculus.

Purdue Global Is Accredited by the Higher Learning Commission
The HLC (HLCommission.org) is a regional accreditation agency recognized by the U.S. Department of Education.

Military Friendly
We offer reduced tuition rates for servicemembers, veterans, and spouses.

Program Detail

Credit Hours: 180

Program Length: 2–4 years[5] (standard online program)

With transfer credit and other prior experience, the average completion time for Purdue Global bachelor's degree graduates in 2021–2022 was 2.1 years.

Course Load: 2 courses per term (standard online program)

Terms: 10 weeks long

Start Dates: Throughout the year

Delivery: Online

Additional Programs

- Bachelor of Science in Cloud Computing
- Bachelor of Science in Cybersecurity
- Master of Science in Cybersecurity Management
- Master of Science in Information Technology

Career and Networking Opportunities

Industry Outlook[6]

- Employment of computer science and research occupations is projected to grow much faster than the average for all occupations, through 2033.
- The U.S. will add more than 356,700 IT jobs annually by 2033.
- Employment of software developers is expected to grow 17% from 2023 to 2033.
- Greater emphasis on programming, AI, cloud computing, and information security will drive demand for computer science professions.

Career Pathways and Outcomes[7]

Roles

- Computing and information management
- Information security
- Software development
- Systems research and management
- Related computer-oriented occupations

Settings and Industries

- Computer services
- Education
- Finance
- Government
- Health care
- Manufacturing
- Science

Center for Career Advancement

Our Career Specialists connect students with job and networking opportunities and offer the following assistance:

- Career assessment and exploration
- Resume and cover letter review
- Interview preparation and mock interviews
- Portfolio development to showcase your skills
- Assistance in building an online presence
- Job search and networking support
- Virtual career fairs
- 24/7 online access to job openings and career development tools

Contact an Admissions Advisor at 844-PURDUE-G or visit PurdueGlobal.edu.