Bachelor of Science in Software Engineering

PennState World Campus

A world of possibilities. Online.

Table of Contents

Bachelor of Science in Software Engineering.....3

Curriculum.....4

Career Opportunities for Graduates 4

Why Penn State?.....5

Frequently Asked Questions.....6

Begin Your Application Today 7

"Computing is ubiquitous in the age of the Internet of Things. Be it in small devices or gigantic spaceships, office automation or social networking, online education or e-commerce, software has been tremendously reshaping our world and how we live our everyday life. As software engineers, we are empowering things with intangible but innovative applications to make them smarter, faster, and better.

"Our goal is to help you learn software construction principles, computing skills, and project leadership via hands-on projects, which you can immediately use to advance your current career or explore new career opportunities."

—Xiaocong Fan
Associate Professor of Computer Science and Software Engineering
Penn State Behrend School of Engineering
Lead Faculty, Software Engineering Program

PennState
World Campus

A leader in online learning since 1998

To learn more about programs in software engineering, visit:
worldcampus.psu.edu/swengug

Bachelor of Science in Software Engineering

Many of the products we rely on in our daily lives are supported by software. As a software engineer, you will apply the theories and principles of computer science and mathematics to analyze users' needs and design, develop, test, and evaluate software and the systems that enable computers to perform their many applications.

Through Penn State's online 126-credit Bachelor of Science in Software Engineering program, you can learn problem-solving techniques and employ state-of-the-art technologies for developing mobile and web applications and software for embedded systems.

The software engineering program is accredited by the Engineering Commission of ABET, found at www.abet.org.

Graduates from an ABET–accredited program have received a solid educational foundation and can lead the way in innovation, emerging technologies, and in anticipating the welfare and safety needs of the public.

ABET | Engineering Accreditation Commission

Curriculum

Offered in a convenient online format, the program is designed to be an interactive, engaging, and collaborative learning experience that will help you build the skills and capabilities you need to prepare for the software engineering field. Your courses will present you with a variety of opportunities to engage with professors and your fellow students to enrich your learning.

To graduate from this program, you will be required to successfully complete a minimum of 126 credits of course work. As a student, you can gain knowledge in areas such as:

- computer programming
- requirements engineering
- object-oriented methodology
- software design
- software testing
- systems integration

During your senior-year capstone course, you'll collaborate with fellow students to design, plan, manage, and implement an industry-sponsored software design project, giving you valuable real-world experience.

Career Opportunities for Graduates

Because of the current rapid technological advances in the computer field, employers want to hire computer software engineers with the most up-to-date skills and level of knowledge.

Acquiring your degree from Penn State World Campus may help expand your opportunities for employment and prepare you for a challenging and rewarding career in a wide range of industries, including:

- web-based business
- health care
- manufacturing automation
- government and defense
- robotics
- aeronautics

With your Bachelor of Science in Software Engineering from Penn State, you'll have positioned yourself to pursue a rewarding career in software engineering or continue your education at the graduate level.

View a full list of learning outcomes and course offerings at:
worldcampus.psu.edu/swengug

Why Penn State?

Penn State has been serving students for more than 125 years through distance education and more than 20 years through online learning. And we've used that experience to develop a nationally recognized support system for students who are geographically removed from campus.

A Reputation for Excellence

Penn State is regarded as one of the finest higher education institutions in the United States and is regionally accredited by The Middle States Commission on Higher Education, with an outstanding reputation in research and teaching. As a pioneer in distance learning, we have significant experience in understanding the needs of off-campus students. Our faculty and course designers develop our degrees specifically for the online adult learner. And Penn State World Campus is the real Penn State. The only difference is the way in which the courses are delivered to you.

You can experience courses that are:

- designed around best practices in online delivery
- taught by faculty with experience teaching in an online environment
- created using technology to support successful learning outcomes, not just for convenience

Library Services

As a Penn State World Campus student, you will have access to one of the leading university research libraries in North America—the Penn State University Libraries system, which holds more than 800 online research databases, 110,000 scholarly journals, and 1 million electronic books. You can search the online catalog and review databases as if you were sitting at a terminal in any Penn State library.

Learner and Technical Support

Without having to set foot on campus, you will have access to various support services that resident students enjoy, including course scheduling and academic advising, technical support offered by the Penn State World Campus HelpDesk staff, and career counseling with a licensed professional counselor.

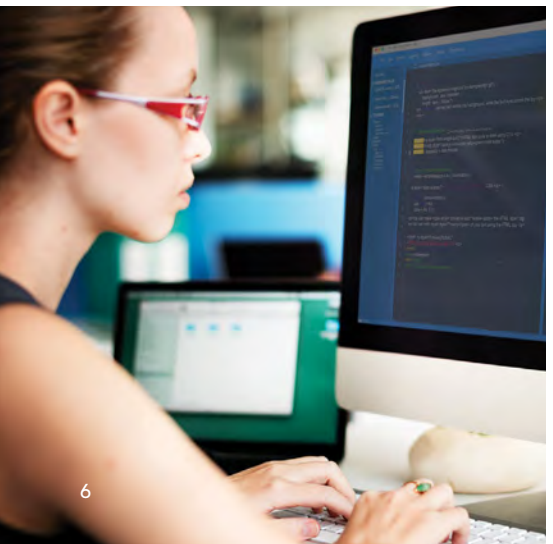
Frequently Asked Questions

How much is tuition?

Tuition is based on cost-per-credit, which may vary based on your program of study. Tuition rates are assessed every semester of enrollment. As a student, you may incur additional charges during your course of study, such as credit-by-examination, exam proctor, information technology, and transcript fees. Please visit our website for the most up-to-date tuition rate.

Can I obtain financial aid to pay for my courses?

Penn State realizes that one of the biggest challenges of returning to school is the cost. That's why our advisers have been trained to help you make the most of the financial aid options and opportunities available to you. Full- and part-time degree-seeking students are eligible for federal student aid. We also have flexible payment options to help you, including deferred payment plans, third-party payments for employed professionals, and military payment options.



How long will it take me to finish my program?

This answer varies for each student. There are many factors (e.g., transfer credits, course load per semester) that influence how long it will take. Depending on the program, some students are able to complete 12 credits every year—others more than 20 credits. You will work closely with an adviser to determine the best course of action for you to complete the program.

Is this the real Penn State?

Yes. Penn State values online education as highly as it does resident instruction. No distinction will be made on your official Penn State transcript or diploma that your courses were completed at a distance. The credits you receive are exactly the same as those awarded to resident students.

To obtain additional information, visit: **worldcampus.psu.edu**

Begin Your Application Today

How to Begin

1. Visit: **worldcampus.psu.edu/swengug**

2. Click the "Apply Now" button to access your application.

Application Materials

- Complete online application form and fee
- Official high school transcripts or GED transcript
- Official military transcripts (if applicable) and/or official college or university transcripts, if you attended another institution
- TOEFL or IELTS score (if applicable)

Deadlines

Your degree application, including all transcripts, must be received by the following deadlines to be considered complete:

June 30 for fall semester admission

October 31 for spring semester admission

March 15 for summer semester admission

Please visit our website for a more detailed description and the most up-to-date information about the program requirements and application procedure: **worldcampus.psu.edu/swengug**

Did You Know?

- Penn State is consistently ranked in the top 10 by *U.S. News & World Report* for having the best online bachelor's programs.
- Penn State credits and degrees earned online are identical to those earned on campus.
- Our online courses involve frequent interactions among students and faculty.

Contact Us

Admissions Questions

pennstateonline@psu.edu
814-863-5386
worldcampus.psu.edu/admissions

PennState
World Campus

The Pennsylvania State University
128 Outreach Building
University Park, PA 16802

@psuworldcampus

@PSUWorldCampus

Penn State World Campus

@pennstateworldcampus

This publication is available in alternative media on request.
Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. Produced by Outreach and Online Education Marketing
U.Ed. OUT 19-WC-0926/sms/sss Copyright © 2019 The Pennsylvania State University