COMPUTER ENGINEERING, B.S. (ENGINEERING)

Begin Campus: Any Penn State Campus

End Campus: University Park

Career Paths

Computer engineering graduates understand all aspects of computing hardware, are well-studied in the use of modern tools used to design and analyze hardware, are able to think at multiple levels of abstraction when working with system-level design, and have a solid foundation in software development. This background prepares graduates for a wide range of exciting careers in the technology industry and almost all other industry sectors as computer/hardware/embedded system designers. It also prepares them for pursuing academic careers. Computer engineers apply their skills and knowledge to solve challenging problems related to computer hardware. They work collaboratively in teams to design and build complex systems with many integrated parts. They research, study, and develop the new technologies that drive the advances in computing that impact our everyday lives.

Careers

Computer engineering graduates typically find positions as computer/hardware/embedded system designers in major technology companies like IBM, Intel, Cisco, and Qualcomm. Graduates are also highly recruited by major companies in areas such as aerospace, communication, transportation, and defense. Most graduates will find themselves a part of a team of engineers and after a few years possibly leading a design team. With the rapid changes and advances in the field of computing, graduates must continually keep up with the latest technology as their careers adapt and evolve to meet the new opportunities and challenges of computing.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES OF THE COMPUTER ENGINEERING PROGRAM (https://career.engr.psu.edu)

Opportunities for Graduate Studies

Graduates of this program can pursue graduate studies in computer engineering, computer science, and related disciplines, concentrating in specialized areas such as multicore architectures, low-power architectures, application-specific hardware architectures, and computer networking. A master’s degree allows one to specialize beyond the broad foundations offered by a bachelor’s degree. A doctoral degree prepares one for a career in research and academia.

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES (https://www.eecs.psu.edu/students/graduate/EECS-Graduate-Prospective.aspx)

Professional Resources

• ACM (https://acm.psu.edu)
• Association of Women in Computing (https://awc.cse.psu.edu)
• IEEE (https://sites.psu.edu/psuieee/)