EECS Department
The Electrical Engineering and Computer Science (EECS) Department at WSU offers undergraduate degrees in electrical engineering, computer engineering and computer science. EECS offers a Master of Science degree in computer science, electrical engineering, and a computer networking, and a doctoral degree in electrical engineering and computer science.

Engineer of 2020
To give our students the most complete education possible, we developed the Engineer of 2020 program. Through service learning, study abroad and global learning, undergraduate research, leadership, multidisciplinary education and internships and cooperative education, students make their engineering degree more meaningful, giving them an advantage in the job market and when applying to graduate school.

Computer Engineering at WSU
The computer engineering program at WSU is accredited by ABET, the accrediting body for all engineering and related programs. The undergraduate program in computer engineering allows you to take a broad array of electives or concentrate your electives in hardware related courses, computer networking courses or courses from the electrical engineering areas. In your senior year, you will work with a team of students on a two-semester real-world project under the supervision of a faculty member. These projects prepare you for a professional career with an emphasis on those skills required of engineering professionals.

Career Opportunities
The demand for computer engineering graduates continues to increase. As a computer engineering graduate, you will be qualified for entry positions in a large number of industries and governmental organizations as a result of your broad technical background. A computer engineering degree opens the door to a satisfying and rewarding career. Computer engineers have the potential to shape the future of society through creative problem solving, design, innovation and discovery.

Internships & Cooperative Education
There are many opportunities for EECS students to obtain valuable work experience while working toward their degree. EECS students currently participate in the co-op program at Bombardier-Learjet, Cessna, Hawker Beechcraft, Integra Technologies, NetApp, Qualcomm and many more.

Advising
You will be assigned an EECS department advisor who will help you plan your course of study. It is important that you complete Calculus I, Intro to Programming course, and Intro to Digital Design as soon as possible, since they are prerequisites for many EECS courses. The computer engineering program is designed to involve the student in design from their first semester through graduation. Students have the option of earning a second degree in electrical engineering, if a student chooses to do so, by selecting technical electives carefully, both degrees can be earned with a minimum of an additional 30 hours of course work.

Laboratory and Computer Facilities
At Wichita State, you will have access to modern electrical, electronic, and computer laboratories required for course and project completion. As an engineering student, you will also have access to design and simulation software in our computer studios, computational hub and virtual instrumentation lab in the new Experiential Engineering Building on WSU’s Innovation Campus.

Engineering Student Engagement
You are encouraged to participate in the student branch of the Institute of Electrical and Electronics Engineers, Inc. (IEEE), Association of Computing Machines (ACM), the Engineering Council, and many other student organizations. A chapter of Eta Kappa Nu, the national honor society for electrical and computer engineering students is located at WSU.
Education Requirements

Basic Skills (9 hours minimum)
Must be completed in the first 48 college hours and a C or better.
- College English Composition (Eng. 100 or 101 and 102) - 6 credit hours
- Public Speaking (Communication 111) - 3 credit hours

Mathematics and Natural Sciences
- Calculus I and II - 10 credit hours
- Differential Equations - 3 credit hours
- Physics for Scientists I and II - 8 credit hours
- General Chemistry I - 5 credit hours
- Linear Algebra - 3 credit hours
- Engineering Probability & Statistics I - 3 credit hours
- Discrete Structures I - 3 credit hours

Fine Arts, Humanities, and Social and Behavioral Sciences (18 hours minimum)
- One introductory course from a fine arts discipline - 3 credit hours
- One introductory course from a humanities disciplines - 3 credit hours
- One introductory course from a social and behavioral sciences discipline - 3 credit hours
- One introductory course from a second social and behavioral sciences or humanities discipline - 3 credit hours
- One advanced further study course from a humanities or social and behavioral sciences - 3 credit hours
- Philosophy 354 Ethics and Computers - 3 credit hours

Major Requirements

- Introduction to Programming - 4 credit hours
- Statics - 3 credit hours
- Circuits I and II - 7 credit hours
- Engineering Economy - 3 credit hours
- Thermodynamics - 3 credit hours
- Introduction to Digital Design - 4 credit hours
- Assembly Language Programming - 3 credit hours
- Data Structures - 4 credit hours
- Object Oriented Programming - 3 credit hours
- Operating Systems - 3 credit hours
- Computer Networks - 3 credit hours
- Electronic Circuits I - 4 credit hours
- Introduction to Computer Architecture - 3 credit hours
- Microprocessor Based System Design - 4 credit hours
- Electrical Design Projects I and II - 4 credit hours
- Technical Electives - 11 credit hours
- Engineering Probability & Statistics I - 3 credit hours
- Discrete Structures I - 3 credit hours

Faculty

Visvakumar Aravinthan (PhD). Power Systems.
Abu Asaduzzaman (PhD). Computer Architecture.
Rajiv Bagai (PhD). Data Bases, Programming Languages.
Animesh Chakravarthy (PhD). Dynamics and Controls.
Debawarna Bhattacharyya (PhD). Bioinformatics, machine learning.
Ali Eslam (PhD). Error Correcting Codes.
Yanwu Ding (PhD). Signal Processing.
Keenan Jackson (MS). Programming Languages. Lecturer
Murutza Jadiwala (PhD). Information Assurance and Security.
Huzefa Kagdi (PhD). Software Engineering.
Preethika Kumar (PhD). Quantum Computing.
Hyuck M. Kwon (PhD). Communications Systems.
Prakash Ramanan (PhD). Algorithms, Data Base Systems.
Manira Rani (MS). FPGA Programming.
Kaushik Sinha (PhD). Machine Learning and Data Mining.
Steven R. Skinner (PhD). Optics.
Perlekar Tamtam (PhD) Power Systems.
Pu Wang (PhD). Modeling and Optimization of Data Networks.

For more information
If you have further questions or would like to schedule a campus visit, please contact the Office of Admissions.

Marcus Welcome Center
Office of Admissions
1845 Fairmount
Wichita, KS 67260-0124
wichita.edu/admissions
wichita.edu/visit

KSDegreeStats.org

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Wichita State University, 1845 Fairmount, Wichita KS 67260-0138; telephone (316) 978-3187.

For more information on Computer Engineering at WSU visit wichita.edu/engineering or call (316) 978-3156.