

University of Kansas School of Engineering Involvement Guide

Brought to you by your Engineering Student Council (ESC)

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First-Year Engineering Student Council (FESC) Member: THIS COULD BE YOU!!!

Welcome

Welcome to the University of Kansas School of Engineering! During your time here, you will gain a world-class education and learn the necessary skills to prepare you for post-graduation success. Beyond that, you will have countless opportunities to get involved, meet lifelong friends and explore any area of interest you may have along the way.

Get Involved!

Participating in activities outside the classroom is a great way to meet other students and even future professors. Having extracurricular involvement is also critical for your resume and job interviews.

Engineering Student Council

The purpose of the Engineering Student Council (ESC) is to facilitate communication between the faculty and staff of the University of Kansas School of Engineering and its students, promoting engineering education and involvement within the school, and serving as a collective voice for the engineering student community. The Engineering Student Council also offers an opportunity for freshman involvement and leadership through the *First-Year Engineering Student Council*.

KU Student Senate

Student Senate is the officially recognized student government of the university. Student senators help student groups find funding and represent student interests in conversations with administrators. Senators also serve on various boards on campus and oversee the annual allocation of approximately \$24 million in student fees to key services: the bus system, Watkins Health Center, the Ambler Recreation Center, etc. If you are interested in student senate, please talk to a current senator.

How to Get Involved

Look for flyers around the engineering complex and keep up with student organization social media accounts/websites. Attend meetings/events, and if all else fails, send an email to the organization's president (found on RockChalkCentral).

Engineering Organizations

Directory of Engineering Organizations by Major¹

All engineering organizations accept students of all majors, but these are the traditional demographic. *Get involved in what interests you!*

Organization	Service & Honors	Diversity	Aero	Mech	C&PE	EECS	Bio	CEAE	EPHX
Alpha Sigma Kappa		X							
American Institute of Aeronautics and Astronautics			X						
American Institute of Chemical Engineers					X				
American Society of Civil Engineers								X	
American Society of Mechanical Engineers				X					
Associated General Contractors of America				X				X	
Association for Computer Machinery						X			
Biomedical Engineering Society				X			X		
ChemE Car					X				
Concrete Canoe								X	
Engineering Newcomer Club			X	X	X	X	X	X	X
Engineers Without Borders	X								
First-Year Engineering Student Council	X		X	X	X	X	X	X	X
Institute of Electrical and Electronics Engineers						X			
Institute of Transportation Engineers								X	

¹ Aero = Aerospace; Mech = Mechanical; C&PE = Chemical & Petroleum; EECS = Electrical Engineering and Computer Science; Bio = Bioengineering; EPHX = Engineering Physics; CEAE = Civil, Environmental, and Architectural Engineering

Please note: not all engineering student organizations are present in this directory. To find all active student organizations, visit RockChalkCentral.

Information Security Club						X			
Jayhawk Aero Design								X	
Jayhawk High Power Rocketry			X						X
Jayhawk Motorsports				X					
KU Artificial Intelligence						X			
KUbeSat			X			X			X
KU Robotics						X			X
National Society of Black Engineers		X							
oSTEM		X							
Society of Asian Scientists and Engineers		X							
Society of Hispanic Professional Engineers		X							
Society of Petroleum Engineers					X				
Society of Women Engineers		X							
Solar Car				X					
Steel Bridge								X	
Theta Tau	X		X	X	X	X	X	X	X
United States Green Building Council	X							X	

Alpha Sigma Kappa (ASK)

ASK for short is a STEM based social sorority, dedicated to academically and professionally encouraging women in generally male-dominated fields of study. This group values academic achievement and service at KU and in the community. They have a weekly chapter and various social events and ceremonies throughout the academic year. They are a group of women who support each other and have fun along the way. ASK is not panhellenic, but it still has many of the same aspects as big name sororities on campus.

American Institute of Aeronautics and Astronautics (AIAA)

AIAA, American Institute of Aeronautics and Astronautics, is a fantastic club to socialize and interact with upperclassmen interested in aerospace. They organize activities such as field trips, barbeques, and even opportunities to fly single engine aircraft out of Lawrence Executive Airport. They can offer advising, job opportunities, scholarships, and test files to those pursuing aerospace engineering.

American Institute of Chemical Engineers (AIChE)

American Institute of Chemical Engineers is a professional organization for Chemical Engineers. The purpose of the KU chapter of this organization is to further the networking of Chemical Engineers here on campus and to help them prepare for the engineering world. You can get involved by attending info sessions of various companies which are looking for chemical engineering full-times/interns.

American Society of Civil Engineers (ASCE)

The goal of this student organization is to provide engineering students, specifically hopeful Civil Engineers, with opportunities for leadership and community involvement.

American Society of Mechanical Engineers (ASME)

ASME is the international society of Mechanical Engineers. As the KU chapter, they strive to bring students into contact with industry. The goal for ASME is to bring all of the mechanical engineering students into a group where they can socialize, lead, and help one another, while also competing and learning about engineering. Our largest project is the Human Powered Vehicle.

Associated General Contractors of America (AGC)

Membership in one of AGC's 150 nationally chartered student chapters offers an extraordinary opportunity to learn more about construction, to further develop your abilities, and to observe at close quarters the industry in which you will work after graduation. Just as a building or suspension bridge is greater than the sum of its parts, an educational experience is also more than the combination of academic and practical experiences.

Association for Computer Machinery (ACM)

ACM is the premier international organization for computing professionals. KU ACM's meetings bring regional computing professionals to discuss life in industry and academia, as well to answer questions ACM members may have. In the past year, KU ACM hosted numerous speakers and also organized its own very successful intramural programming competition (HackKU) which was open to all levels of undergraduates.

Biomedical Engineering Society (BMES)

BMES is an engineering society dedicated to the application of engineering principles to medicine and biology. The society strives to encourage professional growth of its members through annual conferences, publications and career services, and to promote the biomedical engineering field.

ChemE Car

The Chemical Engineering Car (ChemE Car) is a shoe-box sized car that is powered by a chemical reaction. Chemical Engineering students of all levels contribute through their knowledge of chemical reactions, physics, circuits, and thermodynamics. The competition requires a payload of water up to 500mL to run a distance between 50 and 100 feet within two minutes.

Concrete Canoe

The KU Concrete Canoe Team is a group of students that design and build a canoe out of concrete, and then take it to a regional competition to compete with other schools on the basis of a design paper, oral presentation, overall product, and race times. This is a student-run project and is an excellent way to get involved and gain leadership skills.

Engineering Newcomer Club

The Engineering Newcomers Club is a club dedicated to welcoming and integrating new students into the field of engineering. Through various events and activities, they aim to create a supportive community where members can meet like-minded individuals, and gain valuable skills and knowledge relevant to the field. Whether you are a freshman exploring your interests or a transfer student looking to connect with others, this club provides an excellent opportunity to kickstart your engineering journey.

Engineers Without Borders (EWB)

Engineers Without Borders is a group consisting of all majors whose mission is to conduct community service locally, nationally, and internationally. They facilitate numerous opportunities for students to become active as they average an event per week throughout the year. Among the travel opportunities are projects in Bolivia and Uganda!

First-Year Engineering Student Council (FESC)

FESC is a mini-engineering student council run by ESC's VP of Recruitment. FESC members meet weekly to plan school-wide events, such as trivia nights and food giveaways; learn about KU engineering; and create connections with students outside of their major. Each FESC member has an ESC mentor and has opportunities to participate in fun networking events with the entire council. Most FESC members join the full ESC council following the completion of their term.

Institute of Electrical and Electronics Engineers (IEEE)

IEEE is the world's leading professional association for the advancement of technology. Our purpose is to increase interest in the engineering profession and provide KU students with the skills necessary to have successful careers. IEEE invites speakers to come in and talk with students about their jobs in industry.

Institute of Transportation Engineers (ITE)

The Institute of Transportation Engineers is an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of ground transportation. Through its products and services, ITE promotes professional development of its members, supports and encourages education, stimulates research, develops public awareness programs and serves as a conduit for the exchange of professional information.

Jayhawk Aero Design (JAD)

Jayhawk Aero Design is a platform for KU engineering students to learn beyond the classroom and get hands-on experience with aircraft via competitions.

Jayhawk High Power Rocketry (JHPR)

Jayhawk High Power Rocketry (JHPR) exists to certify students in high power rocketry (HPR), connect classroom knowledge with practical hands-on system design, and compete and represent the University of Kansas at collegiate level HPR competitions.

Jayhawk Motorsports (JMS)

Every year, JMS designs and builds race cars that compete in International SAE Competitions. The business structure of the organization allows for students with many different interests to get involved. Students that are interested in: computer design and testing, racing, manufacturing techniques, welding, machining, composites, marketing, management, event planning and photography are encouraged to get involved. JMS is open to all students and all majors.

KU Artificial Intelligence (KU AI)

KU AI Organization is project-driven and members are encouraged to collaborate and share their knowledge of computer science, mathematics, engineering, finance, natural sciences, and any other relevant fields to develop projects of their choosing. In addition to providing a space to work on interesting AI/ ML projects with other students, this organization provides opportunities to compete in machine learning competitions and find opportunities to learn more from an industry perspective through public webinars and speaker events.

KUbeSat

The KUbeSat organization, composed of teams of undergraduate and graduate students collaborating with faculty members and advisors, seeks to design and build cube satellites and their ground station systems. The goal is to encourage scientific and engineering discovery in aerospace and to provide the opportunity for students to directly work on astronomical research.

KU Robotics

KU Robotics is a student society dedicated to the investigation and development of robotics, along with the design and construction of robots of their own design. They endeavor to spread the fun and learning of robotics to all, ranging from elementary schools to KU itself.

National Society of Black Engineers (NSBE)

The goal of this engineering student organization is to increase the number of culturally responsible Black engineers who excel academically, succeed professionally, and positively impact the community and the KU student body.

oSTEM

Out in Science, Technology, Engineering, and Mathematics (oSTEM) creates a forum for LGBTQIA+ students to meet, work together, and build lasting friendships. This community works to increase the visibility of LGBTQ students, specifically within STEM fields, building a network for LGBTQ students with both industrial and academic intentions. In addition, oSTEM seeks to provide outreach and advocacy for the entire University of Kansas student body.

Society of Asian Scientists and Engineers (SASE)

SASE KU is dedicated to developing the University of Kansas's Asian heritage scientists and engineers in education and employment so that we can achieve our full career potential and be leaders in our respective fields.

Society of Hispanic Professional Engineers (SHPE)

SHPE pursues the advancement of future professional engineers through networking and community involvement. SHPE changes lives by empowering the Hispanic community to realize its fullest potential and to impact the world through STEM awareness, access, support and development.

Society of Petroleum of Engineers (SPE)

SPE's goal is to connect students interested in oil and gas to the energy industry. If you are at all thinking about your future in the energy industry, join KU's SPE student chapter. Get to know upperclassmen that have worked internships in the field and in the office and have taken all the classes that you will be taking. Get to know the Petroleum engineering faculty. Get the opportunity to meet world class companies and network.

Society of Women Engineers (SWE)

The Society of Women Engineers is a professional organization meant to stimulate women to achieve full potential in careers as engineers and leaders, expand the image of the engineering profession as a positive force in improving the quality of life, and demonstrate the value of diversity.

Solar Car

KU Solar Car is a group of dedicated students working to develop KU's first solar-powered vehicle. The team's goal is to gain advanced engineering experience while also promoting renewable energy and STEM learning in the community.

Steel Bridge

The KU Steel Bridge Team is a student competition team that designs and fabricates a scaled steel bridge. At competition, the team constructs the bridge in a timed setting and then loads the bridge. The winner is determined by the best combination of low weight, quick construction time, and small deflection in loading.

Theta Tau

Theta Tau is an organization for engineers of all disciplines. It is a coed fraternity that strives to promote a high standard of professional interest as well as academic success. The organization provides many professional development events for the engineering school which are open to any student willing to attend.

United States Green Building Council (USGBC)

The purpose of the KU Chapter of the U.S. Green Building Council is to educate members and the KU community about sustainable design and construction. USGBC - KU is a student organization that focuses on learning more about the latest green building design methods and strategies and using this knowledge to compete in design competitions and implement sustainable projects both in Lawrence and around the U.S.

Other Engineering Involvements

Engineering Ambassadorship

The Undergraduate Engineering Ambassadors are current KU engineering students dedicated to serving as representatives of the University of Kansas and the School of Engineering for the purpose of recruiting prospective students to KU. The primary job responsibility of the Undergraduate Engineering Ambassadors is to lead the facility tour—consistently the most important part of the visit for students and families selecting a college. Ambassadors also correspond with campus visitors through letters, emails, and postcards and may serve in a variety of ways to help with overall recruitment efforts.

Engineering Ambassadors are part of the Engineering Undergraduate Recruitment team, a group that works together to orchestrate a positive visit experience for all guests. To top it all off, a scholarship is associated with this program in the amount of \$1,000!

Self Engineering Leadership Fellows Program

The Madison A. and Lila Self Engineering Leadership Fellows Program is a co-curricular fellowship for students pursuing a baccalaureate degree in the School of Engineering at the University of Kansas. The purpose of the program is to enhance the leadership, business, entrepreneurial knowledge and skills of SELF Fellows. Those who receive the fellowship shall be accountable to themselves, their peers, and the program to continuously seek to demonstrate to the highest extent possible: integrity, humility, curiosity, creativity, academic excellence, perseverance and diligence while deepening their skills as represented by the seven pillars of the SELF Program. The fellowship has four-year and two-year tracks. Approximately 5 second-year engineering students with a track record of motivation, leadership and action will be selected to join this innovative program in their third year. SELF Fellows will receive an outstanding enrichment and leadership program paired with \$8,000 in each of the third and fourth years. Strong candidates will be able to show a track record of attributes that relate to successful leadership and will demonstrate how the SELF Program will help them work toward their passions.

Undergraduate Research Fellowship

This program provides a unique opportunity for undergraduate students interested in research by supporting their efforts to build their skills as the next generation of engineers and scientists. Support for UGRF includes a student stipend, transferable skill training to enhance hands-on experience with research projects, and access and training with advanced instrumentation in KU research facilities. Most of all, the UGRF program provides a remarkable experience to these fellows due to the mentoring they receive from the Engineering faculty, postdoctoral researchers, and graduate students. This combination of enriching experiences — personalized training, expert mentoring, and access to world-class resources — makes this a top-flight program.