Cybersecurity Engineering

University of Kansas

Johnson County Community College Transfer Program to the University of Kansas	School of Engineering
School of Engineering	785-864-3881 or 785-864-4620
Cybersecurity Engineering, B.S.	kuengr@ku.edu
Academic Year 2025-2026	http://www.eecs.ku.edu/

Program Description

Students interested in KU's Engineering programs need to work closely with advisors at both JCCC and KU. This helps students stay on track and not prolong the time it takes to earn an engineering bachelor's degree from KU. Students are advised to complete the Kansas Systemwide General Education requirements, and the prerequisite courses listed on the transfer guide. Students are also encouraged to use the Reverse Transfer **(**https://www.jccc.edu/student-resources/transfer/**) option (if eligible) after transferring to KU.** Reverse Transfer **(**https://www.jccc.edu/student-resources/transfer/**) allows students to earn their associate degree from JCCC while working towards their bachelor's degree at KU.**

Cybersecurity engineers identify threats and vulnerabilities in software, networks, and other systems. They apply their skills to design, develop, and implement high-tech solutions to defend against hacking, malware and ransomware, insider threats and all types of cybercrime. In addition to designing and developing safeguards, cybersecurity engineers continually monitor their systems and update them when necessary to prevent zeroday threats (from new and novel malware) and other emerging cybercriminal activity. For companies, cybersecurity engineers protect both information and the overall bottom line. Because of this, cybersecurity engineers are vital to the success of the organizations they serve.

Admission Requirements

- Admission to The University of Kansas is required, along with the following, for admission to the KU School of Engineering as a transfer student:
  - 2.5+ cumulative college GPA
  - “C” or better in MATH 125 Calculus I, or its direct equivalent (MATH 241 Calculus I* at JCCC)
  - “C” or better in all math, science and engineering coursework
- The School of Engineering recommends that students apply for transfer admission to KU by May 1 for summer and fall; December 1 for spring.
- Timely completion of prerequisite courses is imperative due to tight sequencing of major courses. Consult KU catalog and seek KU advising early.
- The B.S. in Computer Science is an ABET accredited program.
- A total of 126 credit hours is required for the B.S. in Cybersecurity Engineering. A maximum of 75 hours may be transferred to KU from community colleges. Students should be aware that 45 junior/senior credit hours are required for completion of the bachelor’s degree; the last 30 hours of course work must be at KU; and community college courses do not transfer as junior/senior hours.
- Transfer students will have their applications to the School of Engineering evaluated on a case-by- case basis and must have a minimum GPA of 2.5 to be considered.
- Transfer credits must have a grade of “C” or higher to be applied toward the degree.
- Upper Level Eligibility: In addition to prerequisites and co-requisites, EECS undergraduates are required to earn Upper Level Course Eligibility by attaining grades of “C” or better (“C-“ does not qualify) in each of the following 13 courses: Core 34: English (both), EPHX 210, MATH 125, 126, 127, 290, EECS 101, 140, 168, 210, 268, 348.
- If students earn less than a “C” in any of the above listed courses, they must repeat the course at the next available opportunity and must ***not*** take a course for which that course is a prerequisite. It is the *students' responsibility* to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).
- To enroll in any upper-level EECS course (numbered 300 and above), students must have fulfilled the Upper-Level Eligibility Requirements detailed above. Exceptions: EECS 312, EECS 330, EECS 361, and EECS 388 may be taken in the same semester as students are completing their upper-level eligibility. Students may also petition for a *Partial Waiver of Upper Level Eligibility Requirements* by completing the appropriate petition (http://www.eecs.ku.edu/).
- Credit/No Credit: For EECS majors, courses used to fulfill the KU Core 34 in Communications, Social & Behavioral Sciences, Arts & Humanities, U.S. Culture, and Global Culture accept Credit/No Credit.
- Students transferring to KU, that complete the General Education requirements required for the Associate of Arts (AA) (https://catalog.jccc.edu/degreerequirements/associate-arts/), Associate of Fine Arts (AFA) (https://catalog.jccc.edu/degreerequirements/associate-fine-arts/) or Associate of Science (AS) (https://catalog.jccc.edu/degreerequirements/associate-science/) degree from JCCC will be considered to have satisfied KU’s Core 34 general education curriculum.
- Students who transfer to KU, without completing the General Education requirements required for the Associate of Arts (AA) (https://catalog.jccc.edu/degreerequirements/associate-arts/), Associate of Fine Arts (AFA) (https://catalog.jccc.edu/degreerequirements/associate-fine-arts/) or Associate of Science (AS) (https://catalog.jccc.edu/degreerequirements/associate-science/) degree will have courses evaluated on a course-by-course basis toward meeting KU requirements. To learn more about courses that satisfy KU Core 34 Requirements (https://catalog.ku.edu/core34/) and KU CredTran (https://credittransfer.ku.edu/).
- Visit the KU Core 34 General Education guide (https://nam12.safelinks.protection.outlook.com/?url=http%3A%2F%2Fnextcatalog.jccc.edu%2Ftransfer-guides%2Fku%2Fku-general-education&data=05%7C02%7Cskhalif2%40jccc.edu%7C506a4b607ca34eaa00fb08de158ef1c2%7C15244239dcf245e7aefd127b69fc5438%7C1%7C0%7C638971900858599422%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=b2O9VaVq9VFjN8MJkWQ4YCl60oq5GZXnn69Vpa2sSL0%3D&reserved=0) for JCCC equivalents.

Program Requirements

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	**Title**		**Hours**		
KU Core 34					
Visit the KU Core 34 English (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents.					

Visit the KU Core 34 Communications (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents.					
Visit the KU Core 34 Core 34 Social and Behavioral Sciences (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents. (Select two courses in two different disciplines)					
Visit the KU Core 34 Arts and Humanities (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents. (Select two courses in two different disciplines – 6 hrs. total)					
Visit the KU Core 34 US Culture (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents.					
Visit the KU Core 34 Global Culture (https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/) for JCCC equivalents.					
Basic Science					
PHYS 220	Engineering Physics I*	5	PHSX 211 General Physics I+ AND PHSX 216 General Physics I Lab1		
Mathematics					
MATH 241	Calculus I*	5	MATH 125 Calculus I^+ OR MATH 115 Calculus I + AND MATH 116 Calculus II+		
MATH 242	Calculus II*	5	MATH 126 Calculus II+		
MATH 243	Calculus III*	5	MATH 127 Calculus III+		
MATH 246	Elementary Linear Algebra*	3	MATH 290	Elementary Linear Algebra	2
CS 210 & CS 211	Discrete Structures I* and Discrete Structures II*	6	EECS 210	Discrete Structures	4
Computer Science					
Select one of the following:					
CS 200	Concepts of Programming Algorithms Using C++*	4	EECS 168	Programming I	4
CS 202	Concepts of Programming Algorithms using Python*	4	EECS 168 Programming I+		
CS 205	Concepts of Programming Algorithms using Java*	4	EECS 168	Programming I	4
Select one of the following:					
CS 250	Basic Data Structures using C++*	4	EECS 268	Programming II	4
CS 252	Basic Data Structures Using Python* (strongly recommended)	4	EECS 268	Programming II	4
CS 255	Basic Data Structures Using Java*	4	EECS 268	Programming II	4

* JCCC course has a prerequisite or corequisite.
\+ Must earn a grade of “C” or better.

^ This course is a Required major course and is also part of Core 34: Systemwide General Education. If this course is not taken to fulfill the Core 34:SGE requirement, it must be taken in place of elective hours.

1 Students are required to take 4-5 hours of Natural and Physical Science credit that includes a lab. PHYS 220 is a combined lecture and lab course, so it will transfer to KU as both PHSX 211 and PHSX 216. Though PHSX 216 is not required for Cybersecurity Engineering.

Last Approved Tue Oct 28 21:21:26 2025