Johnson County Community College
Transfer Program to the University of Kansas
School of Engineering
Cybersecurity Engineering, B.S.
2024-2025 Catalog

Contact: School of Engineering
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****To graduate in four years, a student must transfer to KU after one year at JCCC.****

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 cyber crime. In addition to designing and developing safeguards, cybersecurity engineers continually monitor their systems and update them when necessary to prevent zero-day 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 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 Computer Science.
- A maximum of 64 credit hours may be applied to a KU degree from community colleges. The last 30 hours of course work must be completed at KU. A minimum of 45 upper-level hours must be completed at KU.
- 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 14 courses: Core 34: English (both), EPHX 210 & PHSX 216, 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, found in the EECS office or at 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.
- Effective Fall 2024: Students transferring to KU, with an AA, AFA or AS degree from JCCC will be considered to have satisfied KU's Core 34 general education curriculum.
- Effective Fall 2024: Students who transfer to KU, without completing AA, AFA or AS 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 visit: https://catalog.ku.edu/core34/ and https://credittransfer.ku.edu/
- KU's Core 34 General Education guide can be found here: https://www.jccc.edu/student-resources/transfer/files/transfer-guides/ku-core-requirements.pdf

It is the STUDENT'S RESPONSIBILITY to check for updates to all transfer information. This transfer guide is provided as a service and is updated as needed. Degree requirements at the four-year colleges are subject to change by those institutions. To ensure you have the most accurate up to date information about the program, it is imperative you meet with an advisor at the transfer institution.

Program Requirements

KU Courses	Hrs	JCCC Courses	Hrs	KU Core 34
KU Core 34				
Core 34: English	6	See KU Core 34 General Education guide	6	ENG
Core 34: Communications	3	See KU Core 34 General Education guide	3	CMS
Core: 34: Natural & Physical Sciences	4-5	See KU Core 34 General Education guide	5	NPS/NLEC/ NLAB
Core 34: Social and Behavioral Science *(Select two courses in two different disciplines)*	6	See KU Core 34 General Education guide	6	SBS
Core 34: Arts and Humanities *(Select two courses in two different disciplines – 6 hrs. total)* PHIL 375 Moral Issues in Computer Technology+	6	See KU Core 34 General Education guide No equivalent at JCCC	6	AH
Core 34: Arts and Humanities *(Select two courses in two different disciplines)*	6	See KU Core 34 General Education guide	6	AH
Core 34: US Culture – Institutionally Designated	3	See KU Core 34 General Education guide	3	USC
Core 34: Global Culture - Institutionally Designated	3	See KU Core 34 General Education guide	3	GLBC
Basic Science				
EPHX 210 General Physics I for Engineers	3	PHYS 220 Engineering Physics I*^+	5	N/A
Mathematics				
MATH 125 Calculus I#	4	MATH 241 Calculus I*#	5	MTS
MATH 126 Calculus II	4	MATH 242 Calculus II*	5	N/A
MATH 127 Calculus III	4	MATH 243 Calculus III*	5	N/A
MATH 290 Elementary Linear Algebra	2	MATH 246 Elementary Linear Algebra*	3	N/A
EECS 210 Discrete Structures	4	CS 210 Discrete Structures I* **AND** CS 211 Discrete Structures II*	3 3	N/A
Computer Science				
EECS 168 Programming I	4	CS 200 Concepts of Programming Algorithms Using C++* **OR** CS 202 Concepts of Programming Algorithms using Python* (strongly recommended) **OR** CS 205 Concepts of Programming Algorithms using Java*	4 4 4	N/A
EECS 268 Programming II	4	CS 250 Basic Data Structures using C++* **OR** CS 252 Basic Data Structures Using Python* (strongly recommended) **OR** CS 255 Basic Data Structures Using Java*	4 4 4	N/A

* JCCC course has a prerequisite or corequisite.

+This course is a Recommended Core 34: Systemwide General Education course. This specific course is not required but is recommended by the program's faculty.

#This course is a Required Core 34: Systemwide General Education course. This program is approved by the Kansas Board of Regents to require this specific Core 34: Systemwide General Education course. If a student did not take this course, it must be taken in addition to other degree requirements.

Note: To graduate in four years, a student must transfer to KU after one year at JCCC. It is not recommended for students to complete an associate degree at JCCC. Completing an associate degree may add up to four (4) additional years to complete your KU Engineering degree.