Johnson County Community College
Transfer Program to the University of Kansas
School of Engineering
Computer Engineering, B.S.
2023-2024 Catalog

Contact: School of Engineering
Phone: 785-864-4487
Email: undergraduate@eecs.ku.edu
Home Page: www.eecs.ku.edu

Computer engineers may work in computer elements and architectures, very large-scale integrated circuits for data processing and storage, embedded and real-time computer systems, or computer networking. Computer engineers may work in the computer industry, telecommunications, government and defense, software companies or consulting firms.

- 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.
- Admission is selective. Meeting minimum requirements does not guarantee admission.
- 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 Engineering is an ABET accredited program.
- A total of 126 credit hours is required for the B.S. in Computer Engineering.
- Sixty-four credits may be transferred to KU 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 17 courses: GE 2.1 (both), EPHX 210 & 216, MATH 125, 126, 127, 220, 290, EECS 101, 140, 168, 202, 210, 212, 220, 268. 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. 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, EECS 388, and EECS 468 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.
- Pass/Fail policy: only accepted for KU Core GE 2.1 Written Communication, GE 2.2 Oral Communication, GE 3H Humanities, GE 3S Social Sciences, AE 4.1 Human Diversity, AE 4.2 Global Awareness, and AE 5 Social & Ethical Responsibility. If an Engineering department recommends that certain course work be used to fulfill any of these requirements, those courses must be taken for an "A"-"F" grade.
- **NOTE**: Classes may count for a major requirement and a core requirement but may **NOT** count for 2 different core requirements.

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
Communications				
ENGL 101 Composition	3	ENGL 121 Composition I*	3	GE 2.1
ENGL 102 Critical Reading and Writing	3	ENGL 122 Composition II*	3	GE 2.1
COMS 130 Speaker-Audience Comm.	3	COMS 121 Public Speaking	3	GE 2.2
Arts/Humanities/Social Science				
ECON 144 Principles of Macroeconomics **OR** ECON 142 Principles of Microeconomics	3 3	ECON 230 Principles of Macroeconomics **OR** ECON 231 Principles of Microeconomics	3 3	GE 3S
KU Core Goal GE 3H Arts & Humanities	3	See list for Goal GE 3H	3	GE 3H
Mathematics				
MATH 125 Calculus I	4	MATH 241 Calculus I*	5	GE 1.2
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 220 Applied Differential Equations	3	MATH 254 Differential Equations*	4	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
Basic Science				
EPHX 210^/216 General Physics I/Lab	3/1	PHYS 220 Engineering Physics I*^	5	GE 1.1, 1.2, 3N
Additional required courses will be taken at KU.				
Computer Engineering				
EECS 168 Programming I	4	CS 200 Concepts of Programming Algorithms Using C++* **OR** CS 202 Concepts of Programming Algorithms using Python* **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* **OR** CS 255 Basic Data Structures Using Java*	4 4 4	N/A
Additional required courses will be taken at KU.				
Professional Elective – will be taken at KU. See catalog to select 3 hours from the approved list of technical, scientific, and professional courses.				
KU Core Goal AE 4.1 Diversity	3	See list for Goal AE 4.1	3	AE 4.1
KU Core Goal AE 4.2 Culture	3	See list for Goal AE 4.2	3	AE 4.2

* JCCC course has a prerequisite or corequisite.
^PHSX 211 (PHYS 220 at JCCC) satisfies the EPHX 210 requirement for Engineering at KU.

KU Core Requirements The KU Core comprises three general education goals and three advanced education goals. The general education goals are best met early in a student's career. The advanced education goals are most appropriately acquired using the foundation of knowledge gained from the general education goals and progression through the major. Courses can be used to satisfy one Core goal at a time, but may satisfy a major requirement and a core goal. To learn more about courses that satisfy the KU Core visit: https://credittransfer.ku.edu/