

Electrical 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
Electrical 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. The 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.

Electrical engineers may work in circuit design, electronic devices, electrical and optical communications, control and automation, electromagnetics, instrumentation, energy and power, or signal processing. Electrical engineers may work in telecommunications, consumer electronics, or public utility companies; government agencies; and defense-related or consulting firms.

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.
- 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 Electrical Engineering is an ABET accredited program.
- A total of 128 credit hours is required for the B.S. in Electrical 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 16 courses: Core 34: English (both), EPHX 210 & PHSX 216, MATH 125, 126, 127, 220, 290, EECS 101, 140, 168, 202, 212, 220, CHEM 130 or 150. 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 (<http://www.eecs.ku.edu/>) for a Partial Waiver of Upper-Level Eligibility Requirements.
- 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/archives/2025-26/degree/requirements/associate-arts/>), Associate of Fine Arts (AFA) (<https://catalog.jccc.edu/archives/2025-26/degree/requirements/associate-fine-arts/>) or Associate of Science (AS) (<https://catalog.jccc.edu/archives/2025-26/degree/requirements/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/archives/2025-26/degree/requirements/associate-arts/>), Associate of Fine Arts (AFA) (<https://catalog.jccc.edu/archives/2025-26/degree/requirements/associate-fine-arts/>) or Associate of Science (AS) (<https://catalog.jccc.edu/archives/2025-26/degree/requirements/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://creditransfer.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%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWU5IlYiOiIlwLjAuMDAwMCIslAIiOiJXaW4zMilslkFOLjoiTWFpbCIsIlUjjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=b2O9VaVq9VFjN8MJKWQ4YCI60oq5GZXnn69Vpa2sSL0%3D&reserved=0>) for JCCC equivalents.

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 information about the program, you must meet with an advisor at the transfer institution.

Program Requirements

Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	Title	Hours			

KU Core 34 Requirements

KU Core 34 English (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>)

Visit the KU Core 34 English (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. (two courses) **6**

KU Core 34 Communications (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>)

Visit the KU Core 34 Communications (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. **3**

KU Core 34 Social and Behavioral Sciences (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>)

Visit the KU 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 – 6 hrs. total) **6**

Select one of the following:

ECON 230	Principles of Macroeconomics %	3	ECON 144	Principles of Macroeconomics	3
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ECON 231	Principles of Microeconomics %	3	ECON 142	Principles of Microeconomics	3
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KU Core 34 Arts and Humanities (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>)

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) **6**

KU Core 34 US Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>)

Visit the KU Core 34 US Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. Institutionally Designated **3**

KU Core 34 Global Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>)

Visit the KU Core 34 Global Culture (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>) for JCCC equivalents. Institutionally Designated **3**

Basic Science

KU Core 34 Natural and Physical Sciences
(lab required) (<https://catalog.jccc.edu/transfer-guides/ku/ku-transfer-core34/>)

CHEM 124 & CHEM 125	General Chemistry I Lecture* and General Chemistry I Lab* +	5	CHEM 130	General Chemistry I	5
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PHYS 220	Engineering Physics I* #+	5	PHSX 211 & PHSX 216	General Physics I Lecture and General Physics I Laboratory	5
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Mathematics

Select one of the following:

MATH 241	Calculus I* #+	5	MATH 125	Calculus I	4
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MATH 231 & MATH 232	Business and Applied Calculus I* and Business and Applied Calculus II* +	3	MATH 115 Calculus I AND MATH 116 Calculus II		
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MATH 242	Calculus II* +	5	MATH 126	Calculus II	4
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MATH 243	Calculus III* +	5	MATH 127	Calculus III	4
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MATH 246	Elementary Linear Algebra* +	3	MATH 290	Elementary Linear Algebra	2
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MATH 254	Differential Equations* +	4	MATH 220	Analytic Geometry Calc I	4
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Electrical Engineering

Select one of the following:

CS 200	Concepts of Programming Algorithms Using C++* +	4	EECS 168	Programming I	4
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CS 202	Concepts of Programming Algorithms using Python* +	4	EECS 168	Programming I	4
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CS 205	Concepts of Programming Algorithms using Java* +	4	EECS 168	Programming I	4
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* JCCC course has a prerequisite or corequisite.

+ Must earn a grade of "C" or better.

% 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.