

Mechanical 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 785-864-3181
Mechanical Engineering, B.S.	kuengr@ku.edu
Academic Year 2025-2026	http://me.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.

The broad discipline of mechanical engineering enables students to have productive and rewarding careers, and to develop and improve new technologies in both traditional and emerging fields. Mechanical engineers apply fundamental principles to develop, design, manufacture, and test machines and other mechanical devices. Such devices include but are not limited to power-producing machines as well as power-consuming machines. Mechanical engineers are employed in diverse areas including but not limited to: the energy and power industries, the automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device development, patent law, engineering and corporate management, forensic engineering, and engineering sales.

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 Mechanical Engineering is an ABET accredited program. A concentration in Biomechanics is available.
- A total of 128 credit hours is required for the B.S. in Mechanical 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.
- For mechanical engineering majors, courses used to fulfill the KU Core 34 in English, 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/degree requirements/associate-arts/>), Associate of Fine Arts (AFA) (<https://catalog.jccc.edu/degree requirements/associate-fine-arts/>) or Associate of Science (AS) (<https://catalog.jccc.edu/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/degree requirements/associate-arts/>), Associate of Fine Arts (AFA) (<https://catalog.jccc.edu/degree requirements/associate-fine-arts/>) or Associate of Science (AS) (<https://catalog.jccc.edu/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://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%7C7CTWfPbGZsb3d8eyJFbXB0eU1hcGkiOnRydWU%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 – 6 hrs. total)

Select one of the following:

ECON 230	Principles of Macroeconomics #	3	ECON 144	Principles of Macroeconomics	3
ECON 231	Principles of Microeconomics #	3	ECON 142	Principles of Microeconomics	3
ECON 132	Survey of Economics	3	ECON 104 & ECON 105	Introductory Economics and "Introductory Economics, Honors"	4

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)

PHIL 143	Ethics #	3	PHIL 160	Introduction to Ethics	3
----------	----------	---	----------	------------------------	---

Visit the KU Core 34 US 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/>)

Mathematics

MATH 201	Statistics*	3	MATH 365	Elementary Statistics	3
----------	-------------	---	----------	-----------------------	---

Select one of the following:

MATH 241	Calculus I*	5	MATH 125	Calculus I	4
MATH 231	Business and Applied Calculus I*	3	MATH 115	Calculus I	3
MATH 232	Business and Applied Calculus II*	3	MATH 116	Calculus II	3
MATH 242	Calculus II*	5	MATH 126	Calculus II+	
MATH 243	Calculus III*	5	MATH 127	Calculus III	
MATH 254	Differential Equations*	4	MATH 220	Analytic Geometry Calc I	4

Basic Science

CHEM 124 & CHEM 125	General Chemistry I Lecture* and General Chemistry I Lab*	5	CHEM 130	General Chemistry I	5
CHEM 131 & CHEM 132	General Chemistry II Lecture* and General Chemistry II Lab*	5	CHEM 135	General Chemistry II	5
PHYS 220	Engineering Physics I* + 5		PHSX 211 General Physics I+ AND PHSX 216 General Physics I+ Lab		
PHYS 221	Engineering Physics II* 5		PHSX 212/236 General Physics II/Lab		

Mechanical Engineering

DRAF 129	Interpreting Architectural Drawings	2	ARCE 217	Computer-Assisted Building Design	
----------	-------------------------------------	---	----------	-----------------------------------	--

Select one of the following:

DRAF 143	Introduction to BIM Building Information Modeling*	2	ARCE 217	Computer-Assisted Building Design	
ENGR 131	Engineering Graphics I:AutoCAD*	4	ARCE 217	Computer-Assisted Building Design	

Select one of the following:

CS 200	Concepts of Programming Algorithms Using C++*	4	EECS 168	Programming I+	
--------	---	---	----------	----------------	--

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+
CS 235	Object-Oriented Programming Using C++*	4	ME 208 Intro to Digital Computational Methods in Mechanical Engineering+
ENGR 251	Statics* ^^	3	CE 201 Statics
Select one of the following:			
ENGR 254	Dynamics*	3	CE 250 Dynamics
ENGR 254	Dynamics*	3	ME 320 Dynamics

* JCCC course has a prerequisite or corequisite.

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

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.

Last Approved Tue Oct 28 21:23:04 2025