

Civil 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 785-864-3766
Civil Engineering, B.S.	kuengr@ku.edu
Academic Year 2025-2026	https://ceae.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.

Civil engineering (CE), the oldest and broadest of the divisions of engineering, implements a range of public and private projects for improving society's physical infrastructure and the environment. The civil engineer integrates scientific principles with engineering experience to plan, design, and construct networks of highways and railroads, airports, bridges and dams, environmental pollution control systems, industrial structures, water purification and distribution systems, and urban transportation systems that maintain, protect, and enhance the quality of life. Civil engineers are trained to consider the social effects as well as the physical and environmental factors that constrain the planning, design, construction, and operation of their projects. Environmental engineering, a technical specialization with its origins in civil engineering, is a growing discipline dedicated to the protection of the environment.

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
- Application (<http://enr.ku.edu/admission/>) deadline for the School of Engineering is 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 Civil Engineering is an ABET accredited program.
- A total of 128 credit hours is required for the B.S. in Civil Engineering. Students may identify broad concentrations in either general civil engineering or environmental engineering. Within these, students may choose elective courses to permit additional exposure to selected areas of civil or environmental engineering such as transportation, structural, geotechnical, environmental, and water resource engineering. In environmental engineering, electives may be selected to focus on water quality and treatment, bioremediation, solid and hazardous wastes, air quality, and air pollution control.
- 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.
- Civil Engineering does not accept Credit/No Credit. This is not an option for any credits counting towards the degree.
- Students must take the Fundamentals of Engineering (FE) Exam prior to graduation.
- 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://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%7CTWFPbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIslAiOiJXaW4zMilslkF0ljoiTWFpbiIsIldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=b2O9VaVq9VFjN8MJkQW4YCl60oq5GZXnn69Vpa2sSL0%3D&reserved=0>) for JCCC equivalents.

Program Requirements

KU Core 34

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

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	Introductory Economics	

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)

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.

Mathematics

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 Sciences

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 General Physics II	
CHEM 124 & CHEM 125	General Chemistry I Lecture* and General Chemistry I Lab*	5	CHEM 130 General Chemistry I	
CHEM 131 & CHEM 132	General Chemistry II Lecture* and General Chemistry II Lab*	4	CHEM 135 General Chemistry II	

Science Elective

BIOL 121	Introductory Biology for Non-Majors	4	BIOL 100	Principles of Biology	3
----------	-------------------------------------	---	----------	-----------------------	---

Basic Engineering Sciences

CS 235	Object-Oriented Programming Using C++*	4	CE 320 Numerical Methods for Civil Engineering OR EECS 138 Introduction to Computing	
CS 235	Object-Oriented Programming Using C++*	4	EECS 138 Introduction to Computing	
ENGR 251	Statics*	3	CE 201 Statics	

ENGR 254	Dynamics*	3	CE 250 Dynamics
DRAF 129	Interpreting Architectural Drawings	2	ARCE 217 Computer-Assisted Building Design
Select two 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

* 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 21:19:09 2025