

Johnson County Community College Academic Program Map for Transfer University of Kansas School of Engineering Petroleum Engineering, B.S. 2023-2024 Catalog Contact: School of Engineering

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Petroleum engineers search the world for reservoirs containing oil and natural gas. Once these resources are discovered, petroleum engineers work to understand the geologic formation and properties of the rock containing the reservoir, determine the drilling methods to be used, and monitor drilling and production operations. They design equipment and processes to achieve the maximum profitable recovery of oil and gas. Petroleum engineers typically work for major oil companies, independent oil exploration, and production and service companies.

- 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 Petroleum Engineering is an ABET accredited program.
- A total of 126 credit hours is required for the B.S. in Petroleum 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.
- 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 academic program map for transfer 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.

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/

Program Requirements

KU Courses	Hrs	JCCC Courses	Hrs	KU Core
General Education Component				
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
ENGL 203 Topics in Reading and Writing (Topic: Technical Writing for Engineers)	3	This is a required KU Engineering course, there is no equivalent at JCCC	3	GE 3H
KU Core Goal GE 3S Social Sciences	3	See list for Goal GE 3S	3	GE 3S
KU Core Goal AE 4.1 Human Diversity	3	See list for Goal AE 4.1	3	AE 4.1
KU Core Goal AE 4.2 Global Awareness	3	See list for Goal AE 4.2	3	AE 4.2
Basic Sciences – must earn a "C-" or better in CHEM 130, CHEM 135, PHSX 210 and PHSX 212				
CHEM 130 General Chemistry I	5	CHEM 124/125 General Chemistry I*/Lab*	4/1	GE 1.2, 3N
CHEM 135 General Chemistry II	5	CHEM 131/132 General Chemistry II*/Lab*	4/1	GE 1.2, 3N
PHSX 210^/216 General Physics I/Lab	3/1	PHYS 220 Engineering Physics I*^	5	GE 1.1, 1.2, 3N
PHSX 212/236 General Physics II/Lab	3/1	PHYS 221 Engineering Physics II*	5	GE 3N
GEOL 101 The Way the Earth Works AND GEOL 103 General Geology Lab	3 2	GEOS 130 General Geology	5	GE 3N
Additional required courses will be taken at KU.				
Mathematics – must earn a "C-" or better in the following courses:				
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 290 Elementary Linear Algebra	2	MATH 246 Elementary Linear Algebra*	3	N/A
MATH 220 Applied Differential Equations	3	MATH 254 Differential Equations*	4	N/A
Petroleum Engineering Science courses, Design and Integrating courses, Engineering and Science electives –				

Petroleum Engineering Science courses, Design and Integrating courses, Engineering and Science electives – Required coursework will be taken at KU – a cumulative 2.0 grade-point average in C&PE courses is required for graduation with a B.S. degree in Petroleum Engineering.

^{*}JCCC course has a prerequisite or corequisite.

[^]PHSX 211 (PHYS 220 at JCCC) satisfies the PHSX 210 requirement for Engineering at KU.