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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 to The University of Kansas is required, along with the following, for admission to the KU School of Engineering as a transfer student:
 1. 2.5+ cumulative college GPA
 2. "C" or better in MATH 125 Calculus I, or its direct equivalent (MATH 241 Calculus I* at JCCC)
 3. "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.
- 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.
- Effective Fall 2024: Students transferring to KU, with an AA, AFA or AS degree from JCCC will be considered to have satisfied KU's Core 34 general education curriculum.
- Effective Fall 2024: Students who transfer to KU, without completing AA, AFA or AS 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 visit: <https://catalog.ku.edu/core34/> and <https://credittransfer.ku.edu/>
- KU's Core 34 General Education guide can be found here: <https://www.jccc.edu/student-resources/transfer/files/transfer-guides/ku-core-requirements.pdf>
- 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.

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 34 |
|--|-----|--|------------|-----------------------|
| KU Core 34 | | | | |
| Core 34: English | 6 | See KU Core 34 General Education guide | 6 | ENG |
| Core 34: Communications | 3 | See KU Core 34 General Education guide | 3 | CMS |
| Core 34: Social and Behavioral Science (<i>Select two courses in two different disciplines – 6 hrs. total</i>) ECON 144 Principles of Macroeconomics# OR ECON 142 Principles of Microeconomics# | 6 | See KU Core 34 General Education guide ECON 230 Principles of Macroeconomics# OR ECON 231 Principles of Microeconomics# | 6 | SBS |
| Core 34: Arts and Humanities (<i>Select two courses in two different disciplines – 6 hrs. total</i>) PHIL 160 Introduction to Ethics# | 6 | See KU Core 34 General Education guide PHIL 143 Ethics | 6 | AH |
| Core 34: US Culture – Institutionally Designated | 3 | See KU Core 34 General Education guide | 3 | USC |
| Core 34: Global Culture - Institutionally Designated | 3 | See KU Core 34 General Education guide | 3 | GLBC |
| Mathematics | | | | |
| MATH 365 Elementary Statistics | 3 | MATH 181 Statistics* | 3 | MTS |
| MATH 125 Calculus I# | 4 | MATH 241 Calculus I* | 5 | MTS |
| 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 |
| Basic Science - Chemistry – Select one of the following: | | | | |
| CHEM 150 Chemistry for Engineers | 5 | CHEM 124/125 General Chemistry I*/Lab* AND CHEM 131/132 General Chemistry II*/Lab* | 4/1 4/1 | NPS/NLEC/ NLAB |
| CHEM 130 General Chemistry I | 5 | CHEM 124/125 General Chemistry I*/Lab* | 4/1 | NPS/NLEC/ NLAB |
| CHEM 135 General Chemistry II | 5 | CHEM 131/132 General Chemistry II*/Lab* | 4/1 | NPS/NLEC/ NLAB |
| Basic Science – Physics I and Physics II | | | | |
| EPHX 210 General Physics I for Engineers^# AND PHSX 216 General Physics I Lab# OR PHSX 210 General Physics I AND PHSX 216 General Physics I Lab OR PHSX 211 General Physics I AND PHSX 216 General Physics I Lab (<i>Must earn a grade of "C-" or better</i>) | 3/1 | ^^PHYS 220 Engineering Physics I* | 5 | NPS/ NLEC/ NLAB |
| PHSX 212/236 General Physics II/Lab | 3/1 | PHYS 221 Engineering Physics II* | 5 | NPS/NLEC/ NLAB |
| Mechanical Engineering | | | | |
| ME 320 Dynamics OR CE 260 Statics & Dynamics^^ | 5 | ENGR 254 Dynamics* OR ENGR 251 Statics* AND ENGR 254 Dynamics* | 3 3 | N/A |

*JCCC course has a prerequisite or corequisite.

^PHSX 211 (PHYS 220 at JCCC) satisfies the EPHX 210 and PHSX 216 requirement for Engineering at KU

^^CE 201 **AND** CE 250 (ENGR 251 **AND** ENGR 254 at JCCC) satisfies the CE 260 requirement for Engineering at KU

#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.

Note: To graduate in four years, a student must transfer to KU after one year at JCCC. It is not recommended for students to complete an associate degree at JCCC. Completing an associate degree may add up to four (4) additional years to complete your KU Engineering degree.