



TRANSFER PATHWAY GUIDE 2019-2020

Associate in Science to UofL for Bachelors of Science in Industrial Engineering

Overview

Completion of the following curriculum will satisfy the requirements for the Associates in Science at the Kentucky Community and Technical College System and leads to the Bachelors of Science in Engineering at the University of Louisville.

Admission Requirements

Transfer students must have a minimum of 24 transferable credit hours and a minimum GPA of 2.8. Students must have a minimum grade of B- in the following courses: Calculus I (MAT 175) and College Chemistry I (CHE 170). All other grades must be have a C- minimum in order to count towards the degree requirements.

Degree Requirements

The baccalaureate degree in science is the undergraduate degree offered by the university. It is awarded to students who have completed both university-wide requirements and the requirements of the selected degree program. The following university-wide requirements apply to all baccalaureate degrees. The student must complete all Cardinal Core requirements, complete all required courses and program requirements listed in this form, have a cumulative GPA of at least a 2.25, or higher, complete 120 hours applicable to this program, and complete at least 60 hours at an accredited 4-year institution. Please visit <https://catalog.louisville.edu/undergraduate/majors/industrial-engineering-bs/> for a list of all degree requirements.

General Transfer Requirements

Please reference the following links for information about applying, scholarship, and speaking with an admission counselor.

- Application Process: <http://louisville.edu/admissions/apply/transfer/admissions>
- Scholarship: <http://louisville.edu/admissions/apply/transfer/cost-of-attendance/kctcs>
- Admissions Counselor: <https://booknow.appointment-plus.com/9qq1pbnv/>

All transfers students are required to meet with an academic advisor prior to registering for classes. During your advising appointment, your academic advisor will assess your transfer credit and provide a timeline to degree.

The J.B. School of Engineering has the following deadlines for their application:

Fall – March 1st

Spring – October 1st

Summer – March 1st

KCTCS Associate in Science TO the University of Louisville Bachelor of Science in Industrial Engineering CHECKLIST

Kentucky Community and Technical College System

Category 1: KCTCS General Education Core Requirements (33 hours)

| KCTCS Course | Course or Category | Credits | UofL Course | Completed |
|--------------|--|-----------|--------------|-----------|
| ENG 101 | Writing 1 | 3 | ENGL 101 | |
| ENG 102 | Writing II | 3 | ENGL 102 | |
| COM 181 | Oral Communications | 3 | COMM 111 | |
| TBS XXX | Social & Behavioral Science* | 3 | SBS XXX | |
| TBS XXX | Social & Behavioral Science* | 3 | SBS XXX | |
| HIS XXX | Heritage*- recommend HIS 101, 102, 108 or 109 | 3 | HIST XXX | |
| TBS XXX | Arts & Humanities* | 3 | A/H XXX | |
| PHY 231/241 | General University Physics I & lab | 5 | PHYS 298/295 | |
| CHE 170/175 | General College Chemistry I & lab | 5 | CHEM 201/207 | |
| MAT 175 | Calculus I ** | 5 | ENGR 101 | |
| MAT 185 | Calculus II | 5 | ENGR 102 | |
| | Subtotal General Education Core Courses | 41 | | |

*One of these courses must be selected from the KCTCS identified Cultural Studies course list, indicate by placing (CS) next to the course name in Category 1 or 2 table.

** Students who do not test into MAT 175 must complete MAT 150 **AND** MAT 155 before being able to take MAT 175. Students may also complete MAT 171 according to placement.

Category 2: KCTCS Associate in Science Requirements (6 hours)

| KCTCS Course | Course or Category | Credits | UofL Course | Completed |
|--------------|---|----------|-------------|-----------|
| CHE 180 | General Chemistry II | 4 | CHEM 202 | |
| MAT 275 | Calculus III | 4 | ENGR 201 | |
| | Subtotal AA/AS Requirement Courses | 8 | | |

Category 3: KCTCS Electives (21 hours)

| KCTCS Course | Course or Category | Credits | UofL Course | Completed |
|--------------|-------------------------------------|--------------|--------------|-----------|
| CIT 105 | Digital Literacy or IC3 test out | 0-3 | Elective XXX | |
| FYE 105 | First-Year Experience | 3 | GEN 100 | |
| MAT 285 | Differential Equations | 3 | ENGR 205 | |
| TBS XXX | Any College Level Course | 2-5 | TBD XXX | |
| | Subtotal Elective Courses | 11-13 | | |
| | TOTAL Associate Degree Hours | 60-63 | | |

University of Louisville

Major Requirements for Bachelor of Science in Industrial Engineering

| UofL Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|---|--|------------|--------------|----------------|
| CECS 130 | Intro to Programming Language | 3 | | |
| CEE 205 | Mechanics I: Statics | 3 | | |
| CHE 253 | Materials Science | 3 | | |
| CHEM 202 | General Chemistry II | 3 | | |
| ECE 252 | Introduction to Electrical Engineering | 3 | | |
| ENGR 110 | Engineering Methods, Tools, & Practice I | 2 | | |
| ENGR 111 | Engineering Methods, Tools, & Practice II | 2 | | |
| ENGR 151 | Engineering Graphics Technology | 1 | | |
| ENGR 330 | Linear Algebra for Engineering | 3 | | |
| IE 240 | Fundamentals of Industrial Engineering | 3 | | |
| IE 250 | Data Mgmt. & Spreadsheet Modeling for Industrial Engineering | 3 | | |
| IE 288 | Industrial Engineering Co-op Ed. Seminar | 0 | | |
| IE 289 | Industrial Engineering Co-op I | 1 | | |
| IE 320 | Manufacturing Processes | 4 | | |
| IE 360 | Probability & Statistics for Engineers | 3 | | |
| IE 370 | Engineering Economic Analysis | 3 | | |
| IE 380 | Work Design | 3 | | |
| IE 389 | Industrial Engineering Co-op II | 1 | | |
| IE 421 | Facility Location & Layout | 3 | | |
| IE 425 | Production & Inventory Control | 3 | | |
| IE 430 | Quality Control | 3 | | |
| IE 489 | Industrial Engineering Co-op III | 1 | | |
| IT 499 | IE Capstone Design | 3 | | |
| IE 515 | Operations Research Methods | 3 | | |
| IE 516 | Stochastic Operations Research | 3 | | |
| IE 541 | Simulation | 3 | | |
| IE 563 | Experimental Design in Engineering | 3 | | |
| IE 580 | Intro to human Factors Engineering & Ergonomics | 3 | | |
| ME 251 | Thermodynamics I | 3 | | |
| TBD XXX | Industrial Engineering Elective | 6 | | |
| Subtotal University of Louisville Credit Hours | | 81 | | |
| Total Baccalaureate Degree Credit Hours | | 124 | | |

Updated: 7/22/2019