

TRANSFER DEGREE PATHWAY GUIDE

Associate in Science to UofL for Bachelor of Science in Electrical Engineering

Overview

Completion of the following curriculum will satisfy the requirements for the Associate in Science at the Kentucky Community and Technical College System and leads to the Bachelor of Science in Electrical 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

<u>https://catalog.louisville.edu/undergraduate/majors/bioengineering-bs/</u> for a list of all degree requirements.

General Transfer Requirements

Please reference the following links for information regarding admissions, scholarships, 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: <u>uofl.me/trf-appointment</u>

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

Associate of Science to Bachelor of Science in Electrical Engineering

Kentucky Community and Technical College System

| 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 Gen Ed* | 3 | SBS XXX | |
| TBS XXX | Social & Behavioral Science Gen Ed* | 3 | SBS XXX | |
| HIS XXX | Heritage*- recommend HIS 101, 102, 108 or 109 | 3 | HIST XXX | |
| TBS XXX | Arts & Humanities Gen Ed* | 3 | A/H XXX | |
| PHY 231/241 | General University Physics I | 5 | PHYS 298/295 | |
| CHE 170/175 | General College Chemistry I | 5 | CHEM 201/207 | |
| MAT 175 | Calculus I ** | 5 | ENGR 101 | |
| MAT 185 | Calculus II | 5 | ENGR 102 | |
| | Subtotal General Education Core Courses | 41 | | |

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

TBS XXX means to be selected by KCTCS student.

*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 |
|-----------------|------------------------------------|---------|----------------|-----------|
| PHY 232/242 | General University Physics II | 5 | PHYS 299/296 | |
| MAT 275 | Calculus III | 4 | ENGR 201 | |
| | Subtotal AA/AS Requirement Courses | 9 | | |

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 | 3 | | |
| TBS XXX | Any College Level Course (if needed) | (1-3) | | |
| | Subtotal Elective Courses | 10-12 | | |
| | TOTAL Associate Degree Hours | 60-62 | | |

University of Louisville

| UofL Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|------------------------|--|---------|-----------------|-------------------|
| CECS 130 | Introduction to Programming Language | 3 | | |
| ECE 210 | Logic Design | 3 | | |
| ECE 211 | Logic Design Laboratory | 1 | | |
| ECE 220 | Network Analysis I | 3 | | |
| ECE 221 | Network Analysis I Laboratory | 1 | | |
| ECE 288 | Electrical & Computer Engineering Co- op Ed. Seminar | 0 | | |
| ECE 289 | ECE Co-op I | 1 | | |
| ECE 320 | Network Analysis II | 3 | | |
| ECE 322 | Introduction to ECE Computing Tools | 1 | | |
| ECE 333 | Electronics I | 3 | | |
| ECE 334 | Electronics I Laboratory | 1 | | |
| ECE 360 | Probabilistic Methods in ECE | 3 | | |
| ECE 389 | ECE Co-op II | 1 | | |
| ECE 412 or CECS 412 | Intro to Embedded Systems | 3 | | |
| ECE 420 | Signals and Linear Systems | 3 | | |
| ECE 473 | Intro to Electromagnetic Fields & Waves | 3 | | |
| ECE 489 | ECE Co-op III | 1 | | |
| ECE 496 | Professional Issues & Current Topics Sem. | 2 | | |
| ECE 497 | Capstone Design in ECE | 3 | | |
| ENGR 110 | Engineering Methods, Tools, & Practice I | 2 | | |
| ENGR 111 | Engineering Methods, Tools, & Practice II | 2 | | |
| ENGR 330 | Linear Algebra for Engineering | 2 | | |
| IE 370 | Engineering Economic Analysis | 3 | | |
| TBD XXX* | Electrical & Computer Engineering Elective (500 Level) | 12 | | |
| TBD XXX* | Electrical & Computer Engineering Elective Laboratory (500 Level) | 2 | | |
| TBD XXX* | Engineering Science Elective | 3 | | |
| TBD XXX* | CECS/Math/Science Elective | 3 | | |
| TBD XXX* | CECS/Math/Science Elective or ECE Elective | 6 | | |
| | Subtotal UofL Credit Hours | | 74 | |
| | Total Baccalaureate Degree Credit Hours | 1 | 23 | |

Major Requirements for Bachelor of Science in Electrical Engineering:

*TBD XXX to be determined with the conjuncture of the Academic Advising Unit

Updated: 2/20/2020