



TRANSFER PATHWAY GUIDE 2022-2023

Associate in Science to Bachelor of Science in Computer Engineering

Overview

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

Admission Requirements

Engineering Standing upon transfer is available to students who maintain an overall and pre-major GPA of 2.5. Pre-major courses considered in the standing for Computer Engineering include the following or their equivalencies: CHE 105, CIS/WRD 110, CS 215, CS 216, CPE/EE 282, and PHY 231.

KCTCS students planning to transfer to the University of Kentucky should work closely with a UK Transfer Advisor each semester to ensure that both KCTCS and UK degree requirements are met.

Degree Requirements

Students can transfer a total of 67 credit hours from a two-year institution. Additionally, 30 of the final 36 credit hours earned toward a UK degree must be completed at UK. To graduate, students must maintain a 2.0 cumulative GPA and complete 120 total credit hours.

General Transfer Requirements

All prospective transfer students are encouraged to receive advising from the University of Kentucky Transfer Center. Appointments are offered online and in-person, and can be scheduled online at <https://www.uky.edu/admission/transfer-advising>.

Additionally, we recommend reviewing the transfer admission requirements (<https://www.uky.edu/admission/transfer-requirements>) and the Frequently Asked Questions (<https://www.uky.edu/admission/transfer/frequently-asked-questions>) on our website: <https://www.uky.edu/admission/transfer>.

For more information, please contact the UK Transfer Center by email at UKTransfer@uky.edu, by phone at 859-257-2000, or in-person in Room 100 of the Funkhouser Building on UK's campus.

KCTCS ASSOCIATE IN SCIENCE TO UNIVERSITY OF KENTUCKY BACHELOR OF SCIENCE IN COMPUTER ENGINEERING CHECKLIST

Kentucky Community and Technical College System

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

| KCTCS Course | Course or Category | Credits | UK Course | Completed |
|--------------|--|--------------|-------------|-----------|
| ENG 101 | Writing I (WC) | 3 | ENG 101 | |
| ENG 102 | Writing II (WC) | 3 | ENG 102 | |
| TBS XXX | Oral Communication (OC) | 3 | TBD XXX | |
| TBS XXX | Heritage (AH) | 3 | TBD XXX | |
| TBS XXX | Humanities (AH) | 3 | TBD XXX | |
| TBS XXX | Social and Behavioral Science (SB) | 3 | TBD XXX | |
| TBS XXX | Social and Behavioral Science (SB) | 3 | TBD XXX | |
| PHY 231 /241 | University Physics I (NS) | 5 | PHY 231/241 | |
| CHE 170/175 | General College Chemistry I + Lab (NS) | 4 | CHE 105/111 | |
| MAT 174/175 | Calculus I (QR) | 4-5 | MA 113 | |
| MAT 184/185 | Calculus II (QR) | 4-5 | MA 114 | |
| | Subtotal General Education Core | 38-40 | | |

TBS XXX means to be selected by KCTCS student.

TBD XXX means to be determined by University of Kentucky based on course selected.

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.

Category 2: KCTCS AS Requirements (6 hours)

| KCTCS Course | Course or Category | Credits | UK Course | Completed |
|--------------|---|----------|-----------|-----------|
| MAT 275 | Calculus III | 4 | | |
| MAT 285 | Calculus IV | 3 | | |
| | Subtotal AA/AS Requirement Courses | 7 | | |

Category 3: KCTCS Electives (21 hours)*

| KCTCS Course | Course or Category | Credits | UK Course | Completed |
|--------------|---|--------------|-----------|-----------|
| TBS XXX | Digital Literacy** | 0-3 | CS 101 | |
| | First-Year Experience | 0-3 | | |
| CS 115U | Introduction to Computer Programming | 3 | CS 115 | |
| CS 215U | Introduction to Program Design, Abstraction and Problem Solving | 4 | CS 215 | |
| CS 216U | Introduction to Software Engineering | 3 | CS 216 | |
| CS 275U | Discrete Mathematics | 4 | CS 275 | |
| | Subtotal Elective Courses | 14-20 | | |
| | TOTAL Associate Degree Hours | 60-67 | | |

*Students should work with their KCTCS academic advisors to ensure they earn a total of 60 credit hours from KCTCS to graduate with their AS.

**It's recommended that students take the IC3 exam to bypass the Digital Literacy exam.

University of Kentucky

Major Requirements for Bachelor of Science in Computer Engineering

| UK Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|--|--|---------|----------------|----------------|
| MA 214 | Calculus IV | 3 | MA 214 | |
| CS 270 | Systems Programming | 3 | CS 270 | |
| CS 275 | Discrete Mathematics | 4 | CS 275 | |
| CS 315 | Algorithm Design and Analysis | 3 | | |
| EE 211 | Circuits I | 4 | EE 211 | |
| EE 223 | AC Circuits | 4 | | |
| CPE 200 | Computer Engineering Sophomore Seminar | 1 | | |
| CPE 287 | Introduction to Embedded Systems | 4 | | |
| EE 421G | Signals and Systems | 3 | | |
| EE 461G | Introduction to Electronics | 3 | | |
| CPE 380 | Computer Organization | 3 | | |
| CPE 480 | Advanced Computer Architecture | 3 | | |
| STA 381 | Engineering Statistics-A Conceptual Approach | 3 | | |
| CPE 490 | ECE Capstone Design I | 3 | | |
| CPE 491 | ECE Capstone Design II | 3 | | |
| TBS XXX | CPE Technical Elective* | 9 | | |
| TBS XXX | Hardware/Software Elective | 6 | | |
| TBS XXX | Technical Elective | 6 | | |
| | | | | |
| Subtotal UK Credit Hours | | | 73 | |
| Total Baccalaureate Degree Credit Hours | | | 133-140 | |

*These courses will be selected in conjunction with a UK academic advisor.

Updated: Fall 2022

Sample Course Sequence: KCTCS Associate in Science to UK Bachelor of Science in Computer Engineering

| KCTCS Fall Semester 1 | |
|-----------------------|--------------|
| ENG 101 | 3 |
| First-Year Course | 3 |
| SBS | 3 |
| MAT 174/175 | 4-5 |
| CS 115U | 3 |
| | |
| Total | 16-17 |

| KCTCS Spring Semester 1 | |
|-------------------------|--------------|
| ENG 102 | 3 |
| CS 215U | 4 |
| MAT 184/185 | 4-5 |
| PHY 231/241 | 5 |
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| | |
| Total | 16-17 |

| KCTCS Summer Semester 1 | |
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| KCTCS Fall Semester 2 | |
|-----------------------|-----------|
| PHY 232/242 | 5 |
| MAT 275 | 4 |
| CHE 170 | 4 |
| CS 216U | 3 |
| | |
| | |
| Total | 16 |

| KCTCS Spring Semester 2 | |
|-------------------------|-----------|
| MAT 285 | 3 |
| SBS | 5 |
| CS 275U | 4 |
| Oral Comm. | 3 |
| Heritage | 3 |
| | |
| Total | 18 |

| KCTCS Summer Semester 2 | |
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| UK Fall Semester 3 | |
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| UK Spring Semester 3 | |
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| Total | |

| UK Summer Semester 3 | |
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| UK Fall Semester 4 | |
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| Total | |

| UK Spring Semester 4 | |
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| Total | |

| UK Fall Semester 5 | |
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| Total | |