



TRANSFER PATHWAY GUIDE

Associate in Science to Bachelor of Science in Biomedical 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 Biomedical Engineering 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 Biomedical Engineering include the following or their equivalencies: BIO 148, BIO 152, BME 201 with a grade of C or better, CHE 105, CIS/WRD 110, CIS/WRD 111, EGR 101+103 (or EGR 215), EGR 102, MA 113, MA 114, MA 213, PHY 231, PHY 232, PHY 241 and PHY 242.

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

To graduate, students must maintain a 2.0 cumulative GPA and complete a minimum of 120 credit hours. Additionally, 30 of the final 36 credit hours earned toward a UK degree must be completed at UK.

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 BIOMEDICAL 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	
PHY 232/242	University Physics II (NS)	5	PHY 232/242	
MAT 174/175	Calculus I (QR)	4-5	MA 113	
MAT 184/185	Calculus II (QR)	4-5	MA 114	
	Subtotal General Education Core	39-41		

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
CHE 170	General College Chemistry I	4	CHE 105	
CHE 180	General College Chemistry II	4	CHE 107	
	Subtotal AA/AS Requirement Courses	8		

Category 3: KCTCS Electives (21 hours)*

KCTCS Course	Course or Category	Credits	UK Course	Completed
	Digital Literacy**	0-3		
	First-Year Experience	0-3		
BIO 150	Principles of Biology I	3	BIO 148	
BIO 152	Principles of Biology II	3	BIO 152	
TBS XXX	CIS 155 or CIT 142/143/144/149 or CS 115U	3	CS 115	
MAT 275	Calculus III	4	MA 213	
MAT 285	Calculus IV	3	MA 214	
	Subtotal Elective Courses	16-22		
	TOTAL Associate Degree Hours	63-71		

*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 Biomedical Engineering

UK Course	Course	Credits	KCTCS Course	Taken at KCTCS
BME/PRD 170	Human Anatomy for Design	3		
EE 305	Electrical Circuits and Electronics	3		
EM 221	Statics	3		
BME 201	Introduction to Biomedical Engineering	3		
TBS XXX	EM 313 or MSE 201	3		
PRD 230	Means of Productions II: Computer Aided Design	3		
BME 322	Design Strategies for Biomedical Engineering	3		
BME 330	Experimental Methods in Biomedical Engineering	3		
BME 350	Materials and Processes	3		
PRD 260	Ergonomics	3		
BME 420	Senior Design Project in Biomedical Engineering I	3		
BME 421	Senior Design Project in Biomedical Engineering II	3		
BME 431	Biotransport	3		
BME 451	Integrated Entrepreneurship in Produce Design	2		
CHE 107	General College Chemistry II	3	CHE 107	
MA 214	Calculus IV	3	MA 214	
PGY 206	Elementary Physiology	3	PGY 206U	
PGY 207	Case Studies in Physiology	1		
STA 381	Engineering Statistics-A Conceptual Approach	3		
TBS XXX	4 BME Electives (BME 395, any 400-level excluding required courses)	12		
TBS XXX	One engineering or science elective* (see catalog specific requirements)	3		
TBS XXX	Additional engineering or science elective (see catalog)	3		
Subtotal UK Credit Hours		73		
Total Baccalaureate Degree Credit Hours		133-143		

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

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

KCTCS Fall Semester 1	
ENG 101	3
First-Year Course	3
CHE 170	4
MAT 174/175	4-5
CS 115U	3
Total	17-18

KCTCS Spring Semester 1	
ENG 102	3
CHE 180	4
MAT 184/185	4-5
Humanities	3
Total	14-15

KCTCS Summer Semester 1	

KCTCS Fall Semester 2	
PHY 231/241	5
SBS	3
Heritage	3
MAT 275	4
BIO 150	3
Total	18

KCTCS Spring Semester 2	
MAT 285	3
PHY 232/242	5
Oral Comm.	3
SBS	3
BIO 152	3
Total	17

UK Summer Semester 2	

UK Fall Semester 3	
Total	

UK Spring Semester 3	
Total	

UK Summer Semester 3	
Total	

UK Fall Semester 4	
Total	

UK Spring Semester 4	
Total	

UK Summer Semester 4	

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