TRANSFER PATHWAY GUIDE
2022-2023

Associate in Science to Bachelor in Biosystems 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 a BS in Biology at the University of Kentucky.

Admission Requirements

Engineering Standing upon transfer is available to students who maintain an overall and premajor GPA of 2.5. Premajor courses considered in the standing for Biosystems Engineering include the following or their equivalencies: BAE 200, BIO 148, CE 106, CIS/WRD 110, CIS/WRD 111, CHE 105, CHE 107, EGR 101, EGR 102, EGR 103, MA 113, MA 114, MA 213, PHY 231, and PHY 241.

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 BIOSYSTEMS ENGINEERING

Kentucky Community and Technical College System

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

KCTCS Course	Course or Category	Credits	UK Course	Completed
ENG101	Writing I (WC)	3	ENG 101	
ENG102	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	
SOC 101	Introduction to Sociology (SB)	3	SOC 101	
PSY 110	General Psychology (SB)	3	PSY 11--	
CHE 170	General Chemistry I (NS)	4	CHE 105	
PHY231/241	University Physics I + Lab (NS)	5	PHY231+241	
MAT 175	Calculus I (QR)	5	MA 113	
MAT 185	Calculus II (QR)	5	MA 114	
	Subtotal General Education Core Courses	**40**		

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.

Category 2: KCTCS AS Requirements (6 hours)

KCTCS Course	Course or Category	Credits	UK Course	Completed
PHY241/242	University Physics II	5	PHY232/242	
CHE180	General Chemistry II	4	CHE107	
	Subtotal AA/AS Requirement Courses	**9**		

Category 3: KCTCS Electives (21 hours)

KCTCS Course	Course or Category	Credits	UK Course	Completed
TBS XXX	Digital Literacy	3	TBD XXX	
TBS XXX	First-Year Experience	3	TBD XXX	
BIO 150	Introduction to Biology	3	BIO 148	
MAT 275	Calculus III	4	MA 213	
MAT 285	Calculus IV	3	MA 214	
CS 115U	Computer Science	3	CS 115	
	Subtotal Elective Courses	**19**		
	TOTAL Associate Degree Hours	**68**		

University of Kentucky

Major Requirements for Bachelor of Biosystems Engineering

UK Course	Course	Credits	KCTCS Course	Taken at KCTCS
BAE 202	Probability and Statistics for Biosystems	3		
BAE 301	Economic Analysis of Biosystems	2		
BAE 305	DC Circuits and Microelectronics	3		
BAE 310	Heat and Mass Transfer in Biosystems Engineering	3		
BAE 400	Senior Seminar	1		
BAE 402	Biosystems Engineering Design I	2		
BAE 403	Biosystems Engineering Design II	2		
BIO 152	Introductory Biology II	3	BIO 152	
EE 305	Electrical Circuits and Electronics	3		
EM 221	Statics	3		
EM 302	Mechanics of Deformable Solids	3		
EM 313	Dynamics	3		
MA 214	Calculus IV	3	MA 214	
ME 220	Engineering Thermodynamics I	3		
ME 330	Fluid Mechanics	3		
BAE 502	Modeling of Biological Systems	3		
PHY 232	General University Physics	4	PHY 232	
PHY 242	General University Physics Laboratory	1	PHY 242	
TBS XXX	Biological Science Elective*	3		
TBS XXX	Biosystems Engineering Core Elective*	9		
TBS XXX	Technical Elective*	9		
WRD 204	Technical Writing*	3		
	Subtotal UK Credit Hours			
	Total Baccalaureate Degree Credit Hours			

Updated: Fall 2022

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

KCTCS Fall Semester 1	
ENG 101	3
First Year Experience	3
CHE170	4
MAT175	5
Total	**15**

KCTCS Spring Semester 1	
ENG 102	3
Oral Com. Course	3
MAT185	5
CHE180	4
Digital Literacy	3
Total	**15**

KCTCS Summer Semester 1	
Soc. Behav. Sci.	3
Digital Lietarcy	3

KCTCS Fall Semester 2	
BIO 150	3
MAT275	5
PHY231+241	5
Soc. Behav. Sci	3
Total	**16**

KCTCS Spring Semester 2	
PHY232+242	5
Humanities	3
Soc. Behav. Sci.	3
CS115U***	3
MAT285???	
Total	**14**

KCTCS Summer Semester 2	

UK Fall Semester 3	
Total	

UK Spring Semester 3	
Total	

UK Summer Semester 3	

UK Fall Semester 4	
Total	

UK Spring Semester 4	
Total	

UK Summer Semester 4	