

ASSOCIATE IN SCIENCE AND BS IN BIOSYSTEMS ENGINEERING

Completion of the following curriculum will satisfy both the requirements for an Associate in Science at KCTCS as well as the requirements for the University of Kentucky's bachelor's degree in Biosystems Engineering.

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 Biosystems Engineering include: CIS/WRD 110 (or equivalent), MA 113 (or equivalent), MA 213 (or equivalent), CHE 105 (or equivalent), and PHY 231.

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

1 st Semester	
ENG 101: Writing I (3)	
CHE 170: General College Chemistry I (4)	
MA 113, MAT 174, or MAT 175: Calculus I (4-5)	
CS 115 or CIT 144 or CIT 149 (3)	
*Humanities course (3)	
Semester Hours	17-18

2 nd Semester	
ENG 102: Writing II (3)	
CHE 180: General College Chemistry II (4)	
BIO 150 or 114: or BIO 148 Principles of Biology I (3)	
MA 114, MAT 184, or MAT 185: Calculus II (4-5)	
*Social and Behavioral Science course (3)	
Semester Hours	17-18

First Summer Option
Semester Hours

3 rd Semester	
PHY 231 + 241: University Physics I (5)	
BIO 152 or 116: Principles of Biology II (3)	
MA 213 + 195, MAT 213, or MAT 275: Calculus III (4-5)	
Oral Communication course (3)	
Semester Hours	15-16
	15-16

4 th Semester	
MA 214, MAT 214, or MAT 285: Calculus IV/Differential Equations (3)	
PHY 232 + 242: University Physics II (5)	
*Social and Behavioral Science course (3)	
*Heritage course (3)	
Semester Hours 14	

Total Credit Hours: 63-66

Notes: *One course must satisfy the Cultural Studies requirement.

The student must test out of the computer literacy requirement so that CS 115, CIT 144, or149 can be used to satisfy the Bachelor's Degree requirement.



Second Summer Option	
EM 221 (3)	
Semester Hours	3

5 th Semester	
EGR 215 (3)	
BAE 200 (3)	
CE 106 (3)	
ME 220 (3)	
EE 305 (3)	
Semester Hours	15

6 th Semester	
BAE 202 (3)	
BAE 305 (3)	
CE 341 (4)	
EM 302 (3)	
Biological Science Elective (3)	
Semester Hours	16

Third Summer Option	
EM 313 (3)	
WRD 204 (3)	
Semester Hours	6

7 th Semester		
BAE 301 (2)		
BAE 400 (1)		
BAE 402 (2)		
ME 325 (3)		
BAE Core 1 (3)		
Technical Elective 1 and Technical Elective 2 (6)		
Semester Hours	17	

8 th Semester	
BAE 403 (2)	
ME 340 (3)	
BAE Core 2 (3)	
BAE Core 3 (3)	
Technical Elective 3 (3)	
Semester Hours	14

Total Credit Hours: 71

Notes:

