



TRANSFER PATHWAY GUIDE 2024-2025

Associate in Science to Bachelor of Science in
Aerospace 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 Aerospace 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 Aerospace Engineering must be successfully completed with a C or higher and include the following or their equivalencies: AER 245, AER 251 CHE 105, CIS/WRD 111, EGR 101, EGR 102, EGR 103 (or EGR 215), EM 221, MA 113, MA 114, MA 213, PHY 231, PHY 241, PHY 232 and PHY 242.

Chemistry labs must be taken in an in-person format.

**It is strongly recommended that students take the IC3 exam for Digital Literacy.

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 AEROSPACE 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
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	
TBS XXX	Social and Behavioral Science (SB)	3	TBD XXX	
TBS XXX	Social and Behavioral Science (SB)	3	TBD XXX	
PHY231/241	University Physics I with Lab (NS)	5	PHY231/241	
CHE170	General College Chemistry (NS)	4	CHE105	
MAT174/175	Calculus I (QR)	4-5	MA 113	
MAT 184/85	Calculus II (QR)	4-5	MA 114	
	Subtotal General Education Core Courses	38-40		

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
TBS XXX	STA 200/210U/220+221/251/296U	3-4	TBD XXX	
	Additional hours completed by other coursework.			
	Subtotal AA/AS Requirement Courses	3		

Category 3: KCTCS Electives (21 hours)

KCTCS Course	Course or Category	Credits	UK Course	Completed
TBS XXX	Digital Literacy**	0-3	CS 101	
FYE XXX	First-Year Experience	0-3	GEED 1--	
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	
PHY 232/242	University Physics II	5	PHY232/424	
	Subtotal Elective Courses	15-21		
	TOTAL Associate Degree Hours	60-65		

University of Kentucky

Major Requirements for Bachelor of Science degree in Aerospace Engineering

UK Course	Course	Credits	KCTCS Course	Taken at KCTCS
AER/ME 220	Engineering Thermodynamics I	3	ME 220	
MA 214	Calculus IV	3	MA 214	
EM 221	Statics	3		
EM 302	Mechanics of Deformable Solids	3		
EM 313	Dynamics	3		
EE 305	Electrical Circuits and Electronics	3		
AER 245	Introduction to Aerospace Engineering	3		
AER/ME 251	Introduction to Materials & Manufacturing Processes	3		
AER 305	Aerospace Structures	3		
AER/ME 310	Engineering Experimentation I	3		
AER 320	Propulsion	3		
AER/ME 325	Elements of Heat Transfer	3		
AER/ME 330	Fluid Mechanics	3		
AER 335	Aerodynamics	3		
AER 345	Flight Dynamics	3		
AER 355	Engineering Analysis	3		
AER 410	Aerospace Engineering Laboratory	3		
AER 411	AER Capstone Design I	3		
AER 412	AER Capstone Design II	3		
AER 440	Design of Control Systems	3		
AER 447	Orbital Dynamics	3		
TBS XXX	Technical Elective*	9		
WRD 204	Technical Writing*	3		
Subtotal UK Credit Hours				
Total Baccalaureate Degree Credit Hours				

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

KCTCS Fall Semester 1	
ENG 101	3
FYE Course	3
CHE 170	5
MAT 174/175	4-5
CS 115	3
Total	19

KCTCS Spring Semester 1	
ENG 102	3
MAT 184/185	4-5
Digital Literacy**	3
Soc&Behav. Sci	3
Oral Comm. Course	3
Total	19

KCTCS Summer Semester 1	

KCTCS Fall Semester 2	
PHY 231/232	5
MAT 275	3
Heritage Course	3
Humanities Course	3
Total	14

KCTCS Spring Semester 2	
PHY241/242	5
MAT 285	3
Social & Behav. Sci	3
Total	11

KCTCS Summer Semester 2	