



SUGGESTED THREE-YEAR GRADUATION PLAN

Roadmap: **Aeronautics – Aeronautical Studies – Bachelor of Science
AT-BS-AERN-AEST**

College of Applied Engineering, Sustainability and Technology
Catalog Year: 2016-2017

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designed as critical (!) must be completed in the semester listed to ensure a timely graduation.

Critical	Course Subject and Title	Credit Hours	Min. Grade	Major GPA	Attribute	Notes
Post-Secondary Coursework or Credit By Examination Upon Entry as a Freshman: [30 Credit Hours]						
	AERN 15000 Introduction to Aeronautics	3		■		
	AERN 25250 Elements of Aviation Weather	3		■		
	MATH 11010 Algebra ¹	3			KMC	
	MATH 11022 Trigonometry ¹	3			KAD	
	TECH 21021 Survey of Electricity and Electronics	4		■		
	Kent Core Composition ¹	6				
	Kent Core Social Sciences ¹	6				
	Kent Core Humanities and Fine Arts ¹	3				
	Kent Core Humanities ¹	3				
Semester One [16 Credits]						
!	PHY 13001 General College Physics I	4			KBS	
!	PHY 13021 General College Physics Laboratory I	1			KBS	
	AERN 15745 Non-Pilot Elements of Flight Theory	3		■		
	AERN 20000 Professional Development in Aeronautics I	1		■		
	TECH 20002 Materials and Processes	3		■		
	UC 10097 Destination Kent State: First Year Experience ²	1				
	Kent Core Requirement	3				
Semester Two [14 Credits]						
!	PHY 13012 College Physics II³	2			KBS	
	AERN 25350 Fundamentals of Air Traffic Control	2		■		
	AERN 25351 Fundamentals of Air Traffic Control Laboratory	1		■		
	AERN 35020 Aircraft Propulsion Systems	3		■		
	AERN 35150 Aircraft Structures	3		■		
	COMM 15000 Introduction to Human Communication	3			KAD	
Semester Three [16 Credits]						
	AERN 35040 Aircraft Systems I	3		■		
	AERN 35340 Airport Management	3		■		
	AERN 45030 Aircraft Systems II	3		■		
	TECH 21021 Survey of Electricity and Electronics	4		■		
	TECH 31000 Cultural Dynamics of Technology	3	C ⁴	■	DD/WIC	
Semester Four [16 Credits]						
	AERN 30000 Professional Development in Aeronautics II	1		■		
	AERN 35341 Air Transportation Systems	3		■		
	AERN 45130 Physiology and Human Factors of Flight	3		■		
	AERN 45135 Aviation Safety Theory	3		■		
	AERN 45350 Avionics	3		■		
	General Electives ⁵	3		■		
Semester Five [15 Credits]						
	AERN 45150 Applied Flight Dynamics I	3		■		
	AERN 45250 Aviation Law	3		■		
	General Electives ⁵	9				
Semester Six [13 Credits]						
	AERN 45099 Aeronautical Studies Capstone or AERN 45092 Aeronautical Internship/Cooperative Education	3		■	ELR	
	AERN 45291 Aerospace Senior Seminar	1		■		
	AERN 45791 Aviation Security and Policy Seminar	3	C ⁴	■	WIC	
	General Electives ⁵	6				

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours 30000 – 40000 level course	Minimum Kent Core Hours	Minimum	
			Major GPA	Overall GPA
120	39	36	2.000	2.000

1. See list of Kent Core courses that can be earned through AP, CLEP or CBE exams on page 3
2. UC 10097 is not required of transfer students with 25 credits (excluding College Credit Plus) or students age 21+ at time of admission.
3. Students who successfully completed PHY 13002 will have met the requirement for 13012.
4. A minimum C grade must be earned in AERN 45791 or TECH 31000 to fulfill the writing-intensive requirement.
5. Total number of credit hours required depends on meeting minimum 120 credit hours and minimum 39 upper-division hours.

University Requirements: Bachelor's degree-seeking students must meet Kent Core (general education requirements), diversity, writing-intensive and experiential learning requirements. For more information about these requirements, please read the following sections in the University Catalog: Kent Core – www.kent.edu/catalog/kent-core; Diversity Course Requirement – www.kent.edu/catalog/diversity; Writing-Intensive Course Requirement – www.kent.edu/catalog/wic; Experiential Learning Requirement – www.kent.edu/catalog/elr.

Attribute Legend: **DD** Diversity–Domestic; **DG** Diversity–Global; **ELR** Experiential Learning; **KAD** Kent Core Additional; **KBS** Kent Core Basic Sciences; **KCM** Kent Core Composition; **KFA** Kent Core Fine Arts; **KHU** Kent Core Humanities; **KMC** Kent Core Mathematics and Critical Reasoning; **KSS** Kent Core Social Sciences; **WIC** Writing Intensive