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
Semester One [16 Credits]						
!	**AERN 15000 Introduction to Aeronautics**	**3**		■		
!	**AERN 15745 Non-Pilot Elements of Flight Theory**	**3**		■		
	TECH 13580 Engineering Graphics I	3		■		
	UC 10097 Destination Kent State: First Year Experience [1]	1				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Two [16 Credits]						
!	**MATH 12002 Analytic Geometry and Calculus I [2]**	**5**			KMC	
!	**PHY 23101 General University Physics I**	**5**			KBS	
	AERN 25350 Fundamentals of Air Traffic Control	2		■		
	AERN 25351 Fundamentals of Air Traffic Control Laboratory	1		■		
	COMM 15000 Introduction to Human Communication	3			KAD	
Semester Three [17 Credits]						
!	**MATH 12003 Analytic Geometry and Calculus II**	**5**				
!	**PHY 23102 General University Physics II**	**5**			KBS	
	AERN 20000 Professional Development in Aeronautics I	1		■		
	AERN 25250 Elements of Aviation Weather	3		■		
	Kent Core Requirement	3				
Semester Four [16 Credits]						
!	**AERN 35040 Aircraft Systems I**	**3**		■		
!	**MATH 22005 Analytic Geometry and Calculus III**	**4**				
	ECON 22060 Principles of Microeconomics	3			KSS	
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Five [16 Credits]						
!	**AERN 35340 Airport Management**	**3**		■		
!	**AERN 45030 Aircraft Systems II**	**3**		■		
	TECH 21021 Survey of Electricity and Electronics	4		■		
	TECH 33033 Hydraulics/Pneumatics	3		■		
	TECH 33111 Strength of Materials [F]	3		■		
Semester Six [16 Credits]						
!	**AERN 45150 Applied Flight Dynamics I**	**3**		■		
	AERN 30000 Professional Development in Aeronautics II	1		■		
	AERN 45121 Aerospace Propulsion for Engineering and Engineering Technology [S]	3		■		
	AERN 45130 Physiology and Human Factors of Flight	3		■		
	TECH 36620 Project Management in Engineering and Technology	3		■		
	Kent Core Requirement	3				
Semester Seven [13 Credits]						
!	**AERN 45151 Applied Flight Dynamics II [F]**	**3**		■		
!	**AERN 45250 Aviation Law**	**3**		■		
!	**AERN 45350 Avionics**	**3**		■		
	AERN 45291 Aerospace Senior Seminar	1		■		
	Kent Core Requirement	3				
Semester Eight [12 Credits]						
!	**AERN 45135 Aviation Safety Theory**	**3**		■		
!	**AERN 45700 Aircraft Design**	**3**	C	■	ELR	
!	**AERN 45791 Aviation Security and Policy Seminar [3]**	**3**	C [3]	■	WIC	
	TECH 47200 Systems Engineering	3		■		

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours 30000 – 40000 level course	Minimum Kent Core Hours	Minimum	
			Major GPA	Overall GPA
122	39	36	2.500	2.000

1. UC 10097 is not required of transfer students with 25 credits (excluding College Credit Plus) or students age 21+ at time of admission.

2. Students not placed into MATH 12002 should take MATH 11010 and MATH 11022 (Kent Core courses) in first year of study.

3. A minimum C grade must be earned in order to fulfill the writing-intensive requirement

F Offered in fall only

S Offered in spring only

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