

## Roadmap: Aeronautics - Flight Technology - Bachelor of Science AT-BS-AERN-FLGT

College of Applied Engineering, Sustainability and Technology Catalog Year: 2015-2016

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				
!	MATH 11010 Algebra for Calculus	3			KMC	
	AERN 25350 Fundamentals of Air Traffic Control	2				
	AERN 25351 Fundamentals of Air Traffic Control Laboratory	1				
	US 10097 Destination Kent State: First Year Experience <sup>1</sup>	1				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	r Two [14 Credits]					
	nent: Student must have a 2.500 cumulative GPA prior to comm		training c	ourses		
!	AERN 15740 Elements of Flight Theory	5				
!	AERN 15741 Private Pilot Flight	3				
!	AERN 25250 Elements of Aviation Weather	3				
!	MATH 11022 Trigonometry	3			KMC	
Semester	Three [16 Credits]					
!	AERN 25743 Commercial Pilot Flight I	2				
!	PHY 13001 General College Physics I	4			KBS	
!	PHY 13021 General College Physics Laboratory I	1			KBS	
	COMM 15000 Introduction to Human Communication	3			KAD	
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester	Four [15 Credits]					
!	AERN 35340 Airport Management	3				
!	AERN 35644 Instrument Flight Theory	3				
!	AERN 35645 Instrument Pilot Flight	2				
!	PHY 13012 College Physics II <sup>2</sup>	2			KBS	
!	PHY 13022 General College Physics Laboratory II	1			KBS	
	AERN 20000 Professional Development in Aeronautics I	1				
	Kent Core Requirement	3				
Semester	r Five [15 Credits]			1		
!	AERN 35040 Aircraft Systems I	3				
!	AERN 35647 Commercial Pilot Flight II	2				
!	AERN 35746 Commercial Pilot Theory	2				
!	AERN 35747 Commercial Pilot Flight III	2				
!	AERN 45150 Applied Flight Dynamics I	3				
	Kent Core Requirement	3				
Semester	r Six [15 Credits]			1		
!	AERN 35020 Aircraft Propulsion Systems	3				
!	AERN 45030 Aircraft Systems II <sup>3</sup>	3				
!	AERN 45130 Physiology and Human Factors of Flight	3				
!	AERN 45648 Theory of Flight Instruction	3	С		ELR	
!	AERN 45649 Flight Instructor/Airplanes	2				
	AERN 30000 Professional Development in Aeronautics II	1				
Semester	Seven [15 Credits]					
!	AERN 45250 Aviation Law	3				
!	AERN 45651 Flight Instructor-Instruments	2				
!	AERN 45653 Multi-Engine Pilot Flight	1				
!	AERN 45720 Crew Resource Management	2				
!	AERN 45721 Crew Resource Management Laboratory	1		•		
	AERN 45350 Avionics	3				
	Kent Core Requirement	3				



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Semeste	r Eight [14 Credits]					
!	AERN 45291 Aerospace Senior Seminar	1				
!	AERN 45710 Turbine Engine Theory and Operation	2				
!	AERN 45711 Turbine Engine Theory and Operation Laboratory	1				
!	AERN 45791 Aviation Security and Policy Seminar	3	C <sup>3</sup>		WIC	
	AERN 45135 Aviation Safety Theory	3				
	AERN 35150 Aircraft Structures  or AERN 45730 Applied Transport Category Aircraft Systems  or AERN 45740 Flight Management Systems	3		•		
	General Electives (lower or upper division)	1				

## **Graduation Requirements Summary**

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum		
Willimum Total Hours	30000 - 40000 level course	William Rent Core Hours	Major GPA	Overall GPA	
120	39	36	2.500	2.500	

- 1. US 10097 is not required of transfer students with 25 credits (excluding College Credit Plus and dual-enrollment credit) or students age 21+ at time of admission.
- 2. Students who successfully completed PHY 13002 will have met the requirement for PHY 13012.
- 3. A minimum C grade must be earned to fulfill the writing-intensive requirement

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 – <a href="https://www.kent.edu/catalog/kent-core">www.kent.edu/catalog/kent-core</a>; Diversity Course Requirement – <a href="https://www.kent.edu/catalog/diversity">www.kent.edu/catalog/kent-core</a>; Experiential Learning Requirement – <a href="https://www.kent.edu/catalog/elr.">www.kent.edu/catalog/wic</a>; Experiential Learning Requirement – <a href="https://www.kent.edu/catalog/elr.">www.kent.edu/catalog/elr.</a>

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