

Roadmap: Aeronautics - Air Traffic Control - Bachelor of Science

AT-BS-AERN-ATC

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.

Semester One [16 Credits]	Notes
AERN 15000 Introduction to Aeronautics AERN 15250 FAA Orientation 3	
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AERN 15745 Non-Pilot Elements of Flight Theory MATH 11010 Algebra for Calculus US 10097 Destination Kent State: First Year Experience ¹	
MATH 11010 Algebra for Calculus 3	
US 10097 Destination Kent State: First Year Experience 1	
Kent Core Requirement 3 Semester Two [15 Credits] AERN 25350 Fundamentals of Air Traffic Control 2	
AERN 25350 Fundamentals of Air Traffic Control 2	
! 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 MATH 11022 Trigonometry 3 KMC TECH 13580 Engineering Graphics I 3 EM Kent Core Requirement 3 ■ Semester Three [15 Credits] *** *** AERN 20000 Professional Development in Aeronautics I 1 ■ AERN 25250 Elements of Aviation Weather 3 ■ MIS 24163 Principles of Management 3 ■ PHY 13001 General College Physics I 4 KBS PHY 13021 General College Physics Laboratory I 1 KBS TECH 20002 Materials and Processes 3 ■ Semester Four [15 Credits] 2 ■ ! AERN 35342 Terminal Operations I Laboratory 1 ■ ! AERN 35340 Airport Management 3 ■ PHY 130012 College Physics II 2 2 KBS PHY 13012 College Physics Laboratory II 1 KBS PHY 13022 General College Physics Laboratory II 1 KBS <td></td>	
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! AERN 35040 Aircraft Systems I 3 ■	
! AERN 45320 Terminal Operations II 2 ■	
! AERN 45321 Terminal Operations II Laboratory 1	
AERN 30000 Professional Development in Aeronautics II	
AERN 35650 Non-Pilot Instrument Flight Theory ^F 3	
Kent Core Requirement 3	
General Electives (lower or upper division) 3	
Semester Six [15 Credits]	
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Kent Core Requirement 3	
Semester Seven [13 Credits]	
! AERN 45343 En Route II 2 ■	
! AERN 45344 En Route II Laboratory 1 ■	
AERN 45030 Aircraft Systems II ³ 3 ■	
AERN 45135 Aviation Safety Theory 3	
AERN 45291 Aerospace Senior Seminar 1	
AERN 45791 Aviation Security and Policy Seminar 3 C ³ ■ WIC	
Semester Eight [15 Credits]	
All students must successfully complete the comprehensive exit exam requirement prior to graduation with the B	S.S. in Aeronautics.
AERN 45130 Physiology and Human Factors of Flight 3 ■	
AERN 45300 Air Traffic Control Capstone 3 C ■ ELR	
Kent Core Requirement 3	
General Electives (lower or upper division) 6	



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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	2.500	2.000

- 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.
- F Offered fall 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/kent-core; 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