



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

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
<b>Semester One: [15 Credit Hours]</b>					
<b>AERN 15000 Introduction to Aeronautics</b>	<b>3</b>			■	
<b>AERN 15740 Elements of Flight Theory</b>	<b>5</b>			■	
MATH 11010 Algebra for Calculus	3				Fulfills Kent Core Mathematics and Critical Reasoning
US 10097 Destination Kent State: FYE	1				
Kent Core Requirement	3				
<b>Semester Two: [17 Credit Hours]</b>					
<b>AERN 15250 FAA Orientation</b>	<b>3</b>			■	
<b>AERN 25350 Fundamentals of Air Traffic Control</b>	<b>2</b>			■	Must be taken together
<b>AERN 25351 Fundamentals of Air Traffic Control Laboratory</b>	<b>1</b>			■	
MATH 11022 Trigonometry	2				
TECH 13580 Engineering Graphics	3				
TECH 20002 Materials and Processes	3				
Kent Core Requirement	3				
<b>Semester Three: [16 Credit Hours]</b>					
AERN 25250 Elements of Aviation Weather	3			■	
COMM 15000 Introduction to Human Communication	3				Fulfills Kent Core Additional
MIS 24163 Principles of Management	3				
PHY 13011 College Physics I	2				Fulfills Kent Core Basic Sciences; courses must be taken together
PHY 13021 College Physics I Laboratory	1				
TECH 21021 Survey of Electricity and Electronics	4				
<b>Semester Four: [15 Credit Hours]</b>					
<b>AERN 35342 Air Traffic Control</b>	<b>3</b>	■		■	Offered in spring only
AERN 35340 Airport Management	3	■		■	
PHY 13012 College Physics II	2				Fulfills Kent Core Basic Sciences; courses must be taken together
PHY 13022 College Physics II Laboratory	1				
Kent Core Requirements	6				
<b>Semester Five: [15 Credit Hours]</b>					
<b>AERN 35040 Aircraft Systems I</b>	<b>3</b>	■		■	Courses must be taken together; offered in fall only
<b>AERN 45320 Air Traffic Control II</b>	<b>2</b>	■		■	
<b>AERN 45321 Air Traffic Control II Laboratory</b>	<b>1</b>	■		■	
AERN 35644 Instrument Flight Theory	3	■		■	
TECH 31000 Cultural Dynamics of Technology	3	■		■	Fulfills writing-intensive requirement; fulfills domestic diversity requirement; see note on page 2
Kent Core Requirement	3				
<b>Semester Six: [15 Credit Hours]</b>					
<b>AERN 35343 En Route Air Traffic Control</b>	<b>2</b>	■		■	Must be taken together; offered in spring only
<b>AERN 35344 En Route Air Traffic Control Laboratory</b>	<b>1</b>	■		■	
AERN 45030 Aircrafts Systems II	3	■		■	Fulfills writing-intensive requirement; see note on page 2
AERN 45150 Applied Flight Dynamics	3	■		■	
AERN 45250 Aviation Law and Safety	3	■		■	
Kent Core Requirement	3				



Critical requirements are boldface in shaded areas.

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<b>Semester Seven: [15 Credit Hours]</b>					
<b>AERN 45343 En Route Air Traffic Control II</b>	<b>2</b>	■		■	<b>Must be taken together; offered in fall only</b>
<b>AERN 45344 En Route Air Traffic Control II Laboratory</b>	<b>1</b>	■		■	
AERN 45350 Avionics	3	■		■	Offered in fall only
AERN 45791 Aviation Security and Policy Seminar	3	■		■	Fulfills writing-intensive requirement; see note below
Kent Core Requirement	3				
General Elective	3				
<b>Semester Eight: [16 Credit Hours]</b>					
<b>All students must successfully complete the comprehensive exit exam requirement prior to graduation with the B.S. in Aeronautics.</b>					
AERN 45130 Physiology and Human Factors	3	■		■	
AERN 45135 Aviation Safety Theory	3	■		■	
AERN 45291 Aerospace Senior Seminar	1	■		■	
AERN 45300 Air Traffic Control Capstone	3	■		■	
Kent Core Requirements	3				
General Elective	3				

### Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Diversity Course Global / Domestic	Writing-Intensive	Minimum Major GPA	Minimum Overall GPA
124	39	36	TECH 31000 DD/Kent Core or General electives	AERN 45030, AERN 45791, TECH 31000	2.25	2.00

### Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
<b>Composition (6-8 credit hours)</b> <i>ENG 11002, 11011, 21011; HONR 10197, 10297</i>	Enrollment based on placement test	6-8
<b>Mathematics and Critical Reasoning (3-5 credit hours)</b>	Fulfilled in the major with MATH 11010	0
<b>Humanities and Fine Arts (9 credit hours)</b> <i>Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts</i>	May fulfill diversity requirement	9
<b>Social Sciences (6 credit hours)</b> <i>Must be selected from two curricular areas</i>	May fulfill diversity requirement	6
<b>Basic Sciences (6-7 credit hours)</b> <i>Must include one laboratory</i>	Fulfilled in this major with PHY 13011, PHY 13012, PHY 13021, PHY 13022	0
<b>Additional (6 credit hours)</b> <i>Must be selected from two Kent Core categories</i>	Fulfilled in this major with COMM 15000	3

**Note:** A minimum C grade must be earned in either AERN 45030, AERN 45791 or TECH 31000 in order to fulfill the writing-intensive requirement.

**Comprehensive Exit Exam:** Exit exam requirements are to be satisfied by all graduation candidates no later than the eighth week of the semester of intended graduation. The exit exams shall be offered during the fourth and eighth weeks of the fall and spring semesters. Students who fail will be allowed to retake the exit exams. An overall passing grade of 70 is required. Students who transfer into the aeronautics program and receive academic credit for core areas are still responsible for taking the exam in its entirety.

#### Kent Core

Students must complete a minimum 36 credit hours of the Kent Core. Certain courses required in programs and in student's major field may also fulfill the Kent Core. Honors equivalents shall satisfy the Kent Core. None of the courses on the Kent Core list may be taken with a pass/fail grade. Visit [www.kent.edu/catalog/kent-core](http://www.kent.edu/catalog/kent-core) for course list.

#### Diversity Course Requirement

Students must complete a two-course diversity requirement, consisting of one with a domestic (U.S.) focus and one with a global focus. One course must come from the Kent Core. The second course may be taken as a second Kent Core, within a major or minor, or as a general elective; or, with dean's approval, by completing one semester of study in another country. Visit [www.kent.edu/catalog/diversity](http://www.kent.edu/catalog/diversity) for course list.

#### Writing-Intensive Course Requirement

Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.00) grade. Visit [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic) for course list.

#### Upper-Division Requirement

Students must complete a minimum 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.