

[CT-BS-AERN-ATC]
College of Technology
Catalog Year: 2010-2011

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 Division	Min. Grade	Important Notes	
Semester One: [15 Credit Hours]					
TECH 15000 Introduction to Aeronautics	3				
TECH 15250 FAA Orientation	3				
TECH 15740 Elements of Flight Theory	5				
MATH 11010 Algebra for Calculus	3			Fulfills Kent Core Mathematics and Critical Reasoning	
US 10097 Destination Kent State: FYE	1			Not required for transfer students with 25 cred	
Semester Two: [14 Credit Hours]					
MATH 11022 Trigonometry	2				
TECH 10001 Information Technology	3				
TECH 20002 Materials and Processes	3				
TECH 25250 Elements of Aviation Weather	3				
Kent Core Requirement	3			See Kent Core Summary on page 2	
Semester Three: [18 Credit Hours]					
COMM 15000 Introduction to Human Communication	3			Fulfils Kent Core Additional	
ECON 22060 Principles of Microeconomics	3			Fulfills Kent Core Social Sciences	
PHY 13011 College Physics I	2			Fulfills Kent Core Basic Sciences;	
PHY 13021 General College Physics Laboratory I	1			courses must be taken together	
TECH 13580 Engineering Graphics I	3				
Kent Core Requirement	6			See Kent Core Summary on page 2	
Semester Four: [16 Credit Hours]					
TECH 25350 Fundamentals of Air Traffic Control	2			Courses must be taken together; offered in	
TECH 25351 Fundamentals of Air Traffic Control Laboratory I	1			spring only	
Laboratory I  ENG 20002 Introduction to Technical Writing	3			spring only	
Laboratory I				Fulfills Kent Core Social Sciences and global	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography	3			Fulfills Kent Core Social Sciences and global diversity course requirement	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography	3			Fulfills Kent Core Social Sciences and global	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II	3 3 2			Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences;	
Laboratory I ENG 20002 Introduction to Technical Writing GEOG 17063 World Geography PHY 13012 College Physics II	3 3 2 1			Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences;	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II  TECH 21021 Survey of Electricity and Electronics  Semester Five: [15 Credit Hours]	3 3 2 1			Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences;	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II  TECH 21021 Survey of Electricity and Electronics  Semester Five: [15 Credit Hours]  MATH 11012 Intuitive Calculus	3 3 2 1 4			Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II  TECH 21021 Survey of Electricity and Electronics	3 3 2 1 4			Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II  TECH 21021 Survey of Electricity and Electronics  Semester Five: [15 Credit Hours]  MATH 11012 Intuitive Calculus  TECH 35020 Aircraft Propulsion Systems  TECH 35340 Airport Management	3 3 2 1 4 3 3			Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II  TECH 21021 Survey of Electricity and Electronics  Semester Five: [15 Credit Hours]  MATH 11012 Intuitive Calculus  TECH 35020 Aircraft Propulsion Systems  TECH 35340 Airport Management  TECH 35341 Air Transportation Systems	3 3 2 1 4 3 3 3			Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together	
ENG 20002 Introduction to Technical Writing GEOG 17063 World Geography PHY 13012 College Physics II PHY 13022 General College Physics Lab II TECH 21021 Survey of Electricity and Electronics Semester Five: [15 Credit Hours] MATH 11012 Intuitive Calculus TECH 35020 Aircraft Propulsion Systems TECH 35340 Airport Management TECH 35341 Air Transportation Systems TECH 35342 Air Traffic Control	3 3 2 1 4 3 3 3 3	=		Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II  TECH 21021 Survey of Electricity and Electronics  Semester Five: [15 Credit Hours]  MATH 11012 Intuitive Calculus  TECH 35020 Aircraft Propulsion Systems  TECH 35340 Airport Management  TECH 35341 Air Transportation Systems  TECH 35342 Air Traffic Control  Semester Six: [15 Credit Hours]	3 3 2 1 4 3 3 3 3	=		Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together	
ENG 20002 Introduction to Technical Writing GEOG 17063 World Geography PHY 13012 College Physics II PHY 13022 General College Physics Lab II TECH 21021 Survey of Electricity and Electronics Semester Five: [15 Credit Hours] MATH 11012 Intuitive Calculus TECH 35020 Aircraft Propulsion Systems TECH 35340 Airport Management TECH 35341 Air Transportation Systems TECH 35342 Air Traffic Control Semester Six: [15 Credit Hours] TECH 35343 En Route Air Traffic Control	3 3 2 1 4 3 3 3 3 3	•		Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together  Fulfills Kent Core Additional	
ENG 20002 Introduction to Technical Writing GEOG 17063 World Geography PHY 13012 College Physics II PHY 13022 General College Physics Lab II TECH 21021 Survey of Electricity and Electronics Semester Five: [15 Credit Hours] MATH 11012 Intuitive Calculus TECH 35020 Aircraft Propulsion Systems TECH 35340 Airport Management TECH 35341 Air Transportation Systems TECH 35342 Air Traffic Control Semester Six: [15 Credit Hours] TECH 35343 En Route Air Traffic Control	3 3 2 1 4 3 3 3 3 3	-		Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together  Fulfills Kent Core Additional  Courses must be taken together; offered in	
Laboratory I  ENG 20002 Introduction to Technical Writing  GEOG 17063 World Geography  PHY 13012 College Physics II  PHY 13022 General College Physics Lab II  TECH 21021 Survey of Electricity and Electronics  Semester Five: [15 Credit Hours]  MATH 11012 Intuitive Calculus  TECH 35020 Aircraft Propulsion Systems	3 3 2 1 4 3 3 3 3 3 2 1	-		Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together  Fulfills Kent Core Additional  Courses must be taken together; offered in	
ENG 20002 Introduction to Technical Writing GEOG 17063 World Geography PHY 13012 College Physics II PHY 13022 General College Physics Lab II TECH 21021 Survey of Electricity and Electronics Semester Five: [15 Credit Hours] MATH 11012 Intuitive Calculus TECH 35020 Aircraft Propulsion Systems TECH 35340 Airport Management TECH 35341 Air Transportation Systems TECH 35342 Air Traffic Control Semester Six: [15 Credit Hours] TECH 35343 En Route Air Traffic Control TECH 35344 En Route Air Traffic Control Laboratory MIS 24163 Principles of Management	3 3 2 1 4 3 3 3 3 3 2 1 3	•		Fulfills Kent Core Social Sciences and global diversity course requirement  Fulfills Kent Core Basic Sciences; courses must be taken together  Fulfills Kent Core Additional  Courses must be taken together; offered in	



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Critical requirements are boldface in shaded areas

Course Subject and Title	Credit Hours	Upper Division	Min. Grade	Important Notes	
Semester Seven: [15 Credit Hours]					
TECH 45343 En Route Air Traffic Control II	2	•		Courses must be taken together; offered in fall	
TECH 45344 En Route Air Traffic Control II Laboratory	1			only	
TECH 45250 Aviation Law and Safety	3				
TECH 45350 Avionics	3				
Kent Core Requirement	3			See Kent Core Summary on page 2	
General Elective (lower or upper division)	3			Should fulfill domestic diversity requirement if not satisfied earlier	
Semester Eight: [16 Credit Hours]					
TECH 45320 Air Traffic Control II	2	•		Courses must be taken together; offered in spring only	
TECH 45321 Air Traffic Control II Laboratory	1				
TECH 45150 Applied Flight Dynamics	3				
TECH 45291 Aerospace Senior Seminar	1				
TECH 45791 Aviation Security and Policy Seminar	3		С	Fulfills writing-intensive requirement	
General Elective (lower or upper division)	6			Should fulfill domestic diversity requirement if not satisfied earlier	

**Graduation Requirements Summary** 

Minimum	Minimum Upper-	Minimum	Diversity Course	Mriting Intensity	Minimum	
Total Hours	Division Hours	Kent Core Hours	Global / Domestic	Writing-Intensive	Major GPA	Overall GPA
124	39	36	GEOG 17063 / Kent Core or General Elective	TECH 45791	2.25	2.0

**Kent Core Summary** 

Kent Core Categories	Important Notes	Remaining Credit Hours
Additional (6 credit hours) Must be selected from two Kent Core categories	Fulfilled in this major with COMM 15000, MATH 11012	0
Basic Sciences (6-7 credit hours) Must include one laboratory	Fulfilled in this major with PHY 13011, PHY 13012, PHY 13021 and PHY 13022	0
Composition (6-8 credit hours) ENG 11002, 11011, 21011; HONR 10197, 10297	Enrollment based on placement test	6-8
Humanities and Fine Arts (9 credit hours)  Minimum one course from humanities in Arts and Sciences category and minimum one course from fine arts category	May fulfill domestic diversity requirement	9
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 11010.	0
Social Sciences (6 credit hours)  Must be selected from two curricular areas	Fulfilled in this major with ECON 22060 and GEOG 17063	0

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 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 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 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.