

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: [16 Credit Hours]</b>					
<b>MATH 11010 Algebra for Calculus</b>	<b>3</b>				<b>Fulfills Kent Core Mathematics and Critical Reasoning</b>
<b>TECH 10001 Information Technology</b>	<b>3</b>			■	
<b>TECH 20002 Materials and Processes</b>	<b>3</b>			■	
TECH 13580 Engineering Graphics I	3			■	
US 10097 Destination Kent State: First Year Experience	1				Not required for transfer students with 25 credits
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Two: [16 Credit Hours]</b>					
<b>MATH 11022 Trigonometry</b>	<b>3</b>				<b>Fulfills Kent Core Additional</b>
<b>TECH 21021 Survey of Electricity and Electronics</b>	<b>4</b>			■	
<b>TECH 23581 Computer-Aided Engineering Graphics</b>	<b>3</b>			■	
COMM 15000 Introduction to Human Communication	3				Fulfills Kent Core Additional
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Three: [17 Credit Hours]</b>					
<b>MIS 24056 Fundamentals of Business Statistics</b>	<b>3</b>			■	
<b>PHY 13001 General College Physics I</b>	<b>4</b>				<b>Fulfills Kent Core Basic Sciences</b>
<b>PHY 13021 General College Physics Laboratory I</b>	<b>1</b>				
<b>TECH 20001 Energy/Power</b>	<b>3</b>			■	
<b>TECH 31016 Manufacturing Technology</b>	<b>3</b>	■		■	
ENG 20002 Introduction to Technical Writing	3			■	
<b>Semester Four: [17 Credit Hours]</b>					
<b>PHY 13002 General College Physics II</b>	<b>4</b>				<b>Fulfills Kent Core Basic Sciences</b>
<b>PHY 13022 General College Physics Laboratory II</b>	<b>1</b>				
<b>TECH 31065 Cast Metals</b>	<b>3</b>	■		■	
<b>TECH 33031 Programmable Logic Controllers</b>	<b>3</b>	■		■	
<b>TECH 33033 Hydraulics/Pneumatics</b>	<b>3</b>	■		■	
ECON 22060 Principles of Microeconomics	3				Fulfills Kent Core Social Sciences
<b>Semester Five: [15 Credit Hours]</b>					
PSYC 11762 General Psychology	3				Fulfills Kent Core Social Sciences and domestic diversity requirement
TECH 31000 Cultural Dynamics of Technology	3	■	C	■	Fulfills writing-intensive and domestic diversity requirement
TECH 31020 Automated Manufacturing	3	■		■	
TECH 33700 Quality Techniques	3	■		■	
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Six: [15 Credit Hours]</b>					
PSYC 31773 Industrial Psychology	3	■			
TECH 33870 Facility Design and Material Handling	3	■		■	
TECH 36620 Project Management in Engineering and Technology	3	■		■	
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
<b>Semester Seven: [12 Credit Hours]</b>					
TECH 43060 Management of Technology Innovation	3	■		■	
TECH 43550 Computer-Aided Manufacturing	3	■		■	
General Electives (lower or upper division)	6				

**Critical requirements are boldface in shaded areas**

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
<b>Semester Eight: [13 Credit Hours]</b>					
TECH 43080 Industrial and Environmental Safety	3	■		■	
TECH 43800 Applied Engineering Technology Seminar	2	■		■	
General Electives (lower or upper division)	8				Number of credits required depends on meeting minimum 121 credit hours and 39 upper-division credit hours

**Graduation Requirements Summary**

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Global / Domestic Diversity Course	Writing-Intensive	Experiential Learning	Minimum	
						Major GPA	Overall GPA
121	39	36	Kent Core / PSYC 11762 or TECH 31000	TECH 31000	Visit <a href="http://www.kent.edu/catalog/elr">www.kent.edu/catalog/elr</a>	2.250	2.000

**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 this 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 global diversity requirement; recommended: HIST 12071 and PHIL 21001	9
<b>Social Sciences (6 credit hours)</b> <i>Must be selected from two curricular areas</i>	Fulfilled in this major ECON 22060 and PSYC 11762	0
<b>Basic Sciences (6-7 credit hours)</b> <i>Must include one laboratory</i>	Fulfilled in this major with PHY 13001, 13002, 13021 and 13022	0
<b>Additional (6 credit hours)</b>	Fulfilled in this major with COMM 15000 and MATH 11022	0

**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 (2.000) grade. Visit [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic) for course list.

**Experiential Learning Requirement**

To provide students with direct engagement in learning experiences that promote academic relevance, meaning and an understanding of real-world issues, students must complete this requirement at Kent State, either as a for-credit course or as a non-credit, non-course experience approved by the appropriate faculty member. Visit [www.kent.edu/catalog/elr](http://www.kent.edu/catalog/elr) 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.