KENT STATE UNIVERSITY

Roadmap: Applied Engineering –
Applied Engineering and Technology Management – Bachelor of Science
[AT-BS-AENG-AETM]
College of Applied Engineering, Sustainability and Technology
Catalog Year: 2012-2013

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
Semester One: [16 Credit Hours]					
MATH 11010 Algebra for Calculus	**3**				**Fulfills Kent Core Mathematics and Critical Reasoning**
TECH 10001 Information Technology	**3**			■	
TECH 20002 Materials and Processes	**3**			■	
TECH 13580 Engineering Graphics I	3			■	
US 10097 Destination Kent State: FYE	1				Not required for transfer students with 25 credits
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Two: [16 Credit Hours]					
MATH 11022 Trigonometry	**3**				**Fulfills Kent Core Additional**
TECH 21021 Survey of Electricity and Electronics	**4**			■	
TECH 23581 Computer-Aided Engineering Graphics	**3**			■	
COMM 15000 Introduction to Human Communication	3				Fulfills Kent Core Additional
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Three: [17 Credit Hours]					
MIS 24056 Fundamentals of Business Statistics	**3**			■	
PHY 13001 General College Physics I	**4**				**Fulfills Kent Core Basic Sciences**
PHY 13021 General College Physics Laboratory I	**1**				
TECH 20001 Energy/Power	**3**			■	
TECH 31016 Manufacturing Technology	**3**	■		■	
ENG 20002 Introduction to Technical Writing	3			■	
Semester Four: [17 Credit Hours]					
PHY 13002 General College Physics II	**4**				**Fulfills Kent Core Basic Sciences**
PHY 13022 General College Physics Laboratory II	**1**				
TECH 31065 Cast Metals	**3**	■		■	
TECH 33031 Programmable Logic Controllers	**3**	■		■	
TECH 33033 Hydraulics/Pneumatics	**3**	■		■	
ECON 22060 Principles of Microeconomics	3				Fulfills Kent Core Social Sciences
Semester Five: [15 Credit Hours]					
PSYC 11762 General Psychology	3				Fulfills Kent Core Social Science and domestic diversity requirement
TECH 31000 Cultural Dynamics of Technology	3	■		■	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
Semester Six: [15 Credit Hours]					
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
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Semester Seven: [12 Credit Hours]					
TECH 43060 Management of Technology Innovation	3	■		■	
TECH 43550 Computer-Aided Manufacturing	3	■		■	
General Elective	6				

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Critical requirements are boldface in shaded areas

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Semester Eight: [13 Credit Hours]					
TECH 43080 Industrial and Environmental Safety	3	■		■	
TECH 43800 Applied Engineering Technology Seminar	2	■		■	
General Elective	8				Number of credits required depends on meeting minimum 122 credit hours and minimum 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	PSYC 11762, TECH 31000 and Kent Core	TECH 31000	Visit www.kent.edu/catalog/elr	2.250	2.000

Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (6-8 credit hours) *ENG 11002, 11011, 21011; HONR 10197, 10297*	Enrollment based on placement test	6-8
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 11010.	0
Humanities and Fine Arts (9 credit hours) *Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts*	May fulfill global diversity requirement; recommended: HIST 12071 and PHIL 21001	9
Social Sciences (6 credit hours) *Must be selected from two curricular areas*	Fulfilled in this major ECON 22060 and PSYC 11762	0
Basic Sciences (6-7 credit hours) *Must include one laboratory*	Fulfilled in this major with PHY 13001, 13002, 13021 and 13022	0
Additional (6 credit hours) *Must be selected from two Kent Core categories*	Fulfilled in this major with COMM 15000 and MATH 11022	0

Note: A minimum C grade must be earned in either TECH 31000 or MIS 44150 in order to fulfill the writing-intensive requirement.

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 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 (2.000) grade. Visit www.kent.edu/catalog/wic for course list.

Experiential Learning Requirement (ELR)
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 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.