

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.

Critical	Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Type	Term Taken
Semester One [17 Credits]							
Note: Students who have earned an associate degree will have 34 credits of technical coursework articulate to the bachelor's degree program and will not have to take the electives for a minor or individualized specialization.							
	CS 10061 Introduction to Computer Programming <i>or</i> DSCI 15310 Computational Thinking and Programming <i>or</i> EERT 22003 Technical Computing	3			■		
	MATH 11010 Algebra for Calculus	3				KMC	
	US 10097 Destination Kent State: First Year Experience ¹	1					
	Kent Core Requirement	3					
	Applied Courses from Associate Degree, Minor or Individualized Specialization ²	7					
Semester Two [18 Credits]							
	MATH 11012 Intuitive Calculus	3				KMC	
	MATH 11022 Trigonometry	3				KMC	
	Kent Core Requirement	3					
	Applied Courses from Associate Degree, Minor or Individualized Specialization ²	9					
Semester Three [15 - 17 Credits]							
	ENG 20002 Introduction to Technical Writing <i>or</i> ITAP 26638 Business Communications	3			■		
	PHY 12201 Technical Physics I (3) <i>or</i> PHY 13001 General College Physics I (4) <i>and</i> PHY 13021 General College Physics Laboratory I (1)	3 - 5				KBS	
	Applied Courses from Associate Degree, Minor or Individualized Specialization ²	9					
Semester Four [18 - 19 Credits]							
	EERT 21010 Engineering and Professional Ethics <i>or</i> TECH 31010 Engineering and Professional Ethics	3			■		
	PHY 12202 Technical Physics II (4) <i>or</i> PHY 13012 College Physics II (2) <i>and</i> PHY 13022 General College Physics Laboratory II (1)	3 - 4				KBS	
	Kent Core Requirement	3					
	Applied Courses from Associate Degree, Minor or Individualized Specialization ²	9					
Semester Five [13 Credits]							
!	TECH 31020 Automated Manufacturing	3	■		■		
	ECON 22060 Principles of Microeconomics	3				KSS	
	ITAP 26636 Project Management for Administrative Professionals	1					
	Mechanical/Systems Electives ³	3			■		
	Kent Core Requirement	3					
Semester Six [12 Credits]							
!	TECH 36620 Project Management in Engineering and Technology	3	■		■		
!	TECH 33363 Metallurgy and Materials Science	3	■		■		
	Mechanical/Systems Electives ³	6			■		
Semester Seven [12 Credits]							
!	TECH 32002 Materials and Processes II	3	■		■		
	Mechanical/Systems Electives ³	6			■		
	Kent Core Requirement	3					
Semester Eight [14 - 15 Credits]							
!	TAS 47900 Technical and Applied Studies Capstone	3	■	C	■	ELR	
!	TECH 31000 Cultural Dynamics of Technology ⁴ <i>or</i> TECH 33092 Cooperative Education - Professional Development ⁴	2-3	■	C	■	DD/WIC ELR/WIC	
	TECH 43080 Industrial and Environmental Safety	3	■		■		
	Kent Core Requirement	3					
	Mechanical/Systems Electives ³	3			■		
	General Elective ⁵	0 - 1					

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum	
			Major GPA	Overall GPA
120	39	36	2.000	2.000

1. US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.

2. Applied Courses from Associate Degree, Minor or Individualized Specialization (34 credit hours)

Choose from the following:

CADT 22003 Solid Modeling (2)	EERT 22014 Microprocessors and Robotics (3)
IERT 22006 Economic Decision Analysis (3)	Any MERT course
Others by program director approval	

3. Mechanical/Systems Electives (9 credits from group 1 and 9 credits from group 2)

Group 1 (9 credits) choose from the following:	Group 2 (9 credits) choose from the following:
GAE 32000 Fuel Cell Technology (3)	EERT 32005 Instrumentation (3)
MERT 42000 Thermodynamics for Engineering Technology (3)	GAE 42003 Lean Manufacturing, Six Sigma and Operations Technology (3)
MERT 43001 Dynamics for Engineering Technology (3)	TECH 32101 Polymers I (3)
TECH 31032 Power Technology (3)	TECH 34002 Advanced CAD II (3)
TECH 31067 Machining Technology I (3)	
TECH 33016 PC/Network Engineering and Troubleshooting (3)	
TECH 33033 Hydraulics/Pneumatics (3)	
TECH 33700 Quality Techniques (3)	
TECH 34002 Advanced CAD II (3)	
TECH 43220 Electrical Machinery (3)	
TECH 43550 Computer-Aided Manufacturing (3)	

4. To fulfill the writing-intensive requirement, either TECH 31000 or TECH 33056 must be earned with minimum C (2.000) grade.

5. Credits required depends on meeting minimum 120 credit hours and minimum 39 upper-division credit hours.

University Requirements Summary

Type	Categories	Course(s) Satisfying Category	Remaining Requirements
KCM	Kent Core I. Composition Enrollment based on placement test	visit www.kent.edu/catalog/kent-core	6
KMC	Kent Core II. Mathematics and Critical Reasoning Enrollment based on placement test	MATH 11010	fulfilled
KHU	Kent Core III. Humanities Minimum one course from humanities in Arts and Sciences; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KFA	Kent Core IV. Fine Arts Minimum one course from the fine arts; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KFH	Kent Core V. Humanities or Fine Arts One additional course from either the humanities or fine arts category, may fulfill diversity requirement.	visit www.kent.edu/catalog/kent-core	3
KSS	Kent Core VI. Social Sciences Must be selected from two curricular areas; may fulfill diversity requirement	ECON 22060	3
KBS	Kent Core VII. Basic Sciences Must include one laboratory	Fulfilled with Physics Sequences	fulfilled
KAD	Kent Core VIII. Additional May fulfill diversity requirement	MATH 11012, MATH 11022	fulfilled
DD	Domestic Diversity Course Requirement Either domestic or global diversity must be from Kent Core	TECH 31000	fulfilled
DG	Global Diversity Course Requirement Either domestic or global diversity must be from Kent Core	visit www.kent.edu/catalog/diversity	one course
ELR	Experiential Learning Requirement Either course or non-course experience approved by the appropriate faculty member	TAS 47900, TECH 33092	fulfilled
WIC	Writing-Intensive Course Requirement Minimum C (2.000) grade	TECH 31000, TECH 33092	fulfilled