

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	Min. Grade	Major GPA	Attribute	Notes
Semester One [15 Credits]						
!	MATH 12002 Analytic Geometry and Calculus I	5			KMC	
!	TECH 10001 Information Technology	3		■		
!	TECH 13580 Engineering Graphics I	3		■		
	US 10097 Destination Kent State: First Year Experience ¹	1				
	Kent Core Requirement	3				
Semester Two [16 Credits]						
!	MATH 12003 Analytic Geometry and Calculus II	5				
!	TECH 23581 Computer-Aided Engineering Graphics	3		■		
!	PHY 23101 General University Physics I	5			KBS	
	COMM 15000 Introduction to Human Communication	3			KAD	
Semester Three [14 Credits]						
!	PHY 23102 General University Physics II	5			KBS	
!	TECH 20002 Materials and Processes	3		■		
	ECON 22060 Principles of Microeconomics	3			KSS	
	Kent Core Requirement	3				
Semester Four [16 Credits]						
!	TECH 21021 Survey of Electricity and Electronics	4		■		
	TECH 31000 Cultural Dynamics of Technology	3	C ²	■	DD/WIC	
	TECH 33033 Hydraulics/Pneumatics	3		■		
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Five [15 Credits]						
!	TECH 33031 Programmable Logic Controllers	3		■		
!	TECH 33111 Strength of Materials	3		■		
	TECH 33092 Cooperative Education - Professional Development	3	C ²	■	ELR/WIC	
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Six [15 Credits]						
!	TECH 33032 Programmable Logic Controllers II	3		■		
!	TECH 33040 Motors and Controllers	3		■		
!	TECH 34002 Advanced CAD II	3		■		
	TECH 31010 Engineering and Professional Ethics	3		■		
	Kent Core Requirement	3				
Semester Seven [15 Credits]						
!	TECH 33222 Digital Design for Computer Engineering	3		■		
!	TECH 43030 Mechatronics	3		■		
!	TECH 46330 Visual Basic Programming in Engineering Technology	3		■		
	TECH 33700 Quality Techniques	3		■		
	TECH 43060 Management of Technology Innovation	3		■		
Semester Eight [14 Credits]						
!	TECH 43031 Mechatronics II	3		■		
!	TECH 43080 Industrial and Environmental Safety	3		■		
!	TECH 43222 Computer Hardware Engineering and Architecture	3		■		
!	TECH 43580 Computer-Aided Machine Design	3		■		
	General Elective	2				

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours 30000 – 40000 level course	Minimum Kent Core Hours	Minimum	
			Major GPA	Overall GPA
120	39	36	2.250	2.000

1. US 10097 is not required of transfer students with 25 credits (excluding College Credit Plus and dual-enrollment credit) or students age 21+ at time of admission.
2. A minimum C grade must be earned in either TECH 31000 or TECH 33092 to fulfill the writing-intensive requirement.

University Requirements: Bachelor's degree-seeking students must meet Kent Core (general education requirements), diversity, writing-intensive and experiential learning requirements. For more information about these requirements, please read the following sections in the University Catalog: Kent Core – www.kent.edu/catalog/kent-core; Diversity Course Requirement – www.kent.edu/catalog/diversity; Writing-Intensive Course Requirement – www.kent.edu/catalog/wic; Experiential Learning Requirement – www.kent.edu/catalog/elr.

Attribute Legend: **DD** Diversity–Domestic; **DG** Diversity–Global; **ELR** Experiential Learning; **KAD** Kent Core Additional; **KBS** Kent Core Basic Sciences; **KCM** Kent Core Composition; **KFA** Kent Core Fine Arts; **KHU** Kent Core Humanities; **KMC** Kent Core Mathematics and Critical Reasoning; **KSS** Kent Core Social Sciences; **WIC** Writing Intensive