

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
<b>Semester One [19 Credits]</b>						
!	<b>CS 10061 Introduction to Computer Programming or DSCI 15310 Computational Thinking and Programming or EERT 22003 Technical Computing</b>	3				
!	<b>MERT 12000 Engineering Drawing</b>	3		■		
!	<b>MERT 12004 Manufacturing Processes</b>	3		■		
	MATH 11010 Algebra for Calculus	3			KMC	
	US 10097 Destination Kent State: First Year Experience <sup>1</sup>	1				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
<b>Semester Two [18 Credits]</b>						
!	<b>MERT 12001 Computer-Aided Drafting</b>	3		■		
!	<b>MERT 12005 Properties of Materials</b>	3		■		
!	<b>MERT 22012 Fluid Power</b>	3		■		
	COMM 15000 Introduction to Human Communication	3			KAD	
	MATH 11012 Intuitive Calculus	3		■	KMC	
	MATH 11022 Trigonometry	3			KMC	
<b>Semester Three [15-17 Credits]</b>						
!	<b>MERT 22003 Computer-Aided Tool Design</b>	3		■		
!	<b>MERT 22005 Statics</b>	3		■		
!	<b>MERT 22007 Strength of Materials</b>	3		■		
!	<b>EERT 22014 Microprocessors and Robotics</b>	3		■		
	PHY 12201 Technical Physics I (3) <sup>2</sup> or PHY 13001 General College Physics I (4) and PHY 13021 General College Physics Laboratory I (1)	3-5			KBS	
<b>Semester Four [19-21 Credits]</b>						
!	<b>CADT 22003 Solid Modeling</b>	2		■		
!	<b>MERT 22004 Mechanics and Machine Design</b>	3		■		
!	<b>MERT 22009 Engineering Technology Project</b>	2		■		
	EERT 21010 Engineering and Professional Ethics (3) or IERT 22006 Economic Decision Analysis (3) or TECH 31010 Engineering and Professional Ethics (3)	3		■		
	ENG 20002 Introduction to Technical Writing or ITAP 26638 Business Communications	3				
	PHY 12202 Technical Physics II (4) <sup>2</sup> or PHY 13002 General College Physics II (4) and PHY 13022 General College Physics Laboratory II (1) or PHY 13012 College Physics II (2) and PHY 13022 General College Physics Laboratory II (1)	3-5			KBS	
	Kent Core Requirement	3				

### Graduation Requirements Summary

Minimum Total Hours	Minimum	
	Major GPA	Overall GPA
72	2.000	2.000

1. US 10097 is not required of transfer students with 25 credits (excluding College Credit Plus and dual-enrollment) or students age 21+ at time of admission.
2. Students who take PHY 12201 should complete the physics sequence with PHY 12202.



**University Requirements:** Applied and technical associate degree-seeking students must fulfill selected Kent Core (general education requirements). For more information about this requirement, please read the following section in the University Catalog: Kent Core – [www.kent.edu/catalog/kent-core](http://www.kent.edu/catalog/kent-core).

**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