

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 [19 Credits]							
!	EERT 2200 Electricity/Electronics With Applications	3			■		
!	MERT 12000 Engineering Drawing	3			■		
	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					
	Kent Core Requirement	3					
Semester Two [17 Credits]							
!	EERT 22002 Industrial Controls	3			■		
!	MERT 12001 Computer-Aided Drafting	3			■		
!	MERT 12005 Properties of Materials	3			■		
!	MFGT 12010 Safety in the Workplace	2			■		
	COMM 15000 Introduction to Human Communication	3				KAD	
	MATH 11022 Trigonometry	3				KMC	
Semester Three [19 Credits]							
!	IERT 12005 Applications in Computer-Aided Design	2			■		
!	IERT 22010 Computer Integrated Manufacturing	3			■		
!	MERT 22012 Fluid Power	3			■		
	ENG 20002 Introduction to Technical Writing	3					
	PHY Series ²	5				KBS	
	Automated Machining or Industrial Automation Option ³	3			■		
Semester Four [16 Credits]							
!	MERT 12004 Manufacturing Processes	3			■		
!	MFGT 21001 Standard Design Practice for Manufacturing Technology	3			■		
	IERT 22000 Statistical Process Control	4					
	PHY Series ²	0 - 2				KBS	
	Automated Machining or Industrial Automation Option ³	3			■		
	Kent Core Requirement	3					

Graduation Requirements Summary

Minimum Total Hours	Minimum	
	Major GPA	Overall GPA
71	2.000	2.000

- US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
- Science Series – choose from one of the following options (5-7 credit hours)

Physics Option I

PHY 13001 General College Physics I *(4) and
PHY 13012 College Physics II *(2) and
PHY 13021 General College Physics Laboratory I (1)

Physics Option II

or PHY 13002 General College Physics II *(4) and
PHY 13022 General College Physics Laboratory II (1)

*Students who successfully completed PHY 13001 and 13002 will have met the requirement for PHY 13011 and 13012. PHY 13012 will be taken in Semester 4

- Automated machining or industrial automation option (6 credit hours), choose one option:

Automated Machining Option (6 credits)

MFGT 13001 Computer Numerical Control Programming (3)
MFGT 23001 Computer-Aided Manufacturing (3)

Industrial Automation Option (6 credits)

EERT 22007 Industrial Motor Control and Application (3)
MFGT 22014 Advanced Industrial Electronics (3)

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	3
KMC	Kent Core II. Mathematics and Critical Reasoning Enrollment based on placement test	MATH 11010	fulfilled
KFH	Kent Core III. Humanities and Fine Arts	visit www.kent.edu/catalog/kent-core	3
KSS	Kent Core IV. Social Sciences	visit www.kent.edu/catalog/kent-core	3
KBS	Kent Core V. Basic Sciences	Fulfilled with Science Series selection	fulfilled