KENT STATE UNIVERSITY

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	Min. Grade	Major GPA	Important Notes
Semester One: [19 Credit Hours]				
EERT 22000 Electricity/Electronics with Applications	**3**		■	
MERT 12000 Engineering Drawing	**3**		■	
EERT 22003 Technical Computing	3			
MATH 11010 Algebra for Calculus	3			Fulfills Kent Core Mathematics and Critical Reasoning
US 10097 Destination Kent State: First Year Experience	1			Not required of transfer students with 25 credits
Kent Core Requirement	3			See Kent Core Summary
Kent Core Requirement	3			See Kent Core Summary
Semester Two: [17 Credit Hours]				
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			Fulfills Kent Core Additional for bachelor's degrees
MATH 11022 Trigonometry	3			Fulfills Kent Core Additional for bachelor's degrees
Semester Three: [19 Credit Hours]				
IERT 12005 Applications in Computer-Aided Drafting	**2**		■	
IERT 22010 Computer Integrated Manufacturing	**3**		■	
MERT 22012 Fluid Power	**3**		■	
ENG 20002 Introduction to Technical Writing	3			
Science series	5			Fulfills Kent Core Basic Sciences; see note 2
Automated Machining or Industrial Automation Option	3		■	See note 1
Semester Four: [16-18 Credit Hours]				
MERT 12004 Manufacturing Processes	**3**		■	
MFGT 21001 Standard Design	**3**		■	
IERT 22000 Statistical Process Control	4			
PHY 13012 College Physics II	0-2			See note 2
Automated Machining or Industrial Automation Option	3		■	See note 1
Kent Core Requirement	3			See Kent Core Summary

Graduation Requirements Summary

Minimum Total Hours	Minimum	
	Major GPA	Overall GPA
71	2.000	2.000

Kent Core Summary (visit www.kent.edu/catalog/kent-core for course list)

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (3 credit hours) *ENG 11002, 11011, 21011; HONR 10197, 10297*	Enrollment based on placement test	3
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 11010 or 11022	0
Humanities and Fine Arts (3 credit hours)		3
Social Sciences (3 credit hours)		3
Basic Sciences (3 credit hours)	Fulfilled in this major with Science Series selection (see note 2)	0

Note 1:   Automated machining or industrial automation option (6 credit hours), choose one option:

Automated Machining Option

MFGT 13001 Computer Numerical Control Programming	3
MFGT 23001 Computer-Aided Manufacturing I	3

Industrial Automation Option

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

Note 2: Science Series-choose from the following:

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

OR

PHY 13002 General College Physics II	4
PHY 13022 General College Physics Laboratory II	1

*PHY 13012 will be taken in Semester 4

Students who successfully completed PHY 13001 and 13002 will have met the requirement for PHY 13011 and 13012.