Roadmap: Applied Engineering - Mechatronics - Bachelor of Science







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	Туре	Term Taken
Semest	er 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					
	er Two [15 Credits]						
	MATH 12003 Analytic Geometry and Calculus II	5					
	TECH 21021 Survey of Electricity and Electronics	4					
!	TECH 23581 Computer-Aided Engineering Graphics	3					
	COMM 15000 Introduction to Human Communication	3				KAD	
Semest	er Three [14 Credits]						
	PHY 23101 General University Physics I	5				KBS	
	TECH 20002 Materials and Processes	3					
	ECON 22060 Principles of Microeconomics	3				KSS	
	Kent Core Requirement	3					
	er Four [17 Credits]						
	PHY 23102 General University Physics II	5				KBS	
!	TECH 33111 Strength of Materials	3					
	TECH 33033 Hydraulics/Pneumatics	3					
	Kent Core Requirement	3					
	Kent Core Requirement	3					
	er Five [15 Credits]						
!	TECH 33031 Programmable Logic Controllers	3					
	TECH 31000 Cultural Dynamics of Technology ²	3	•			DD/WIC	
	TECH 33092 Cooperative Education - Professional Development ²	3				ELR/WIC	
	Kent Core Requirement	3					
	Kent Core Requirement	3					
	er 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					
Semest	er 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					
	er 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					

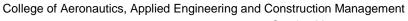
Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum		
Willing Total Flours	Millimum opper-bivision hours	Willimani Kent Core Hours	Major GPA	Overall GPA	
120	39	36	2.250	2.000	

- 1. US 10097 is not required of transfer students with 25 credits 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.

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Catalog Year: 2014-2015

University Requirements Summary

Туре	Categories	Course(s) Satisfying Category	Remaining Requirements
	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 12002	fulfilled
	Kent Core III. Humanities Minimum one course from humanities in Arts and Sciences; may fulfill diversity requirement	visit <u>www.kent.edu/catalog/kent-core</u>	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
NDO	IMust include one laboratory	PHY 23101, PHY 23102	fulfilled
KAD	Kent Core VIII. Additional May fulfill diversity requirement	COMM 15000	3
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	TECH 33092	fulfilled
	Writing Intensive Course Paguirement	TECH 31000, TECH 33092	fulfilled