Roadmap: Manufacturing Engineering Technology - Associate of Applied Science
RE-AAS-MFET
Regional College
Catalog Year: 2016-2017

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 [19 Credits]						
!	**EERT 22000 Electricity/Electronics With Applications**	**3**		■		
!	**MERT 12000 Engineering Drawing**	**3**		■		
	EERT 22003 Technical Computing	3				
	MATH 11010 Algebra for Calculus	3			KMC	
	UC 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]						
!	**ENGT 12005 Applications in Computer-Aided Design**	**2**		■		
!	**ENGT 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 [16-18 Credits]						
!	**MERT 12004 Manufacturing Processes**	**3**		■		
!	**MFGT 21001 Standard Design Practice for Manufacturing Technology**	**3**		■		
	ENGT 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

1. UC 10097 is not required of transfer students with 25 credits (excluding College Credit Plus) or students age 21+ at time of admission.

2. Physics Series – choose from one of the following options (5-7 credit hours)

Physics Option I		**Physics Option II**
PHY 13001 General College Physics I *(4) ***and***	***or***	PHY 13002 General College Physics II * (4) ***and***
PHY 13012 College Physics II * (2) ***and***		PHY 13022 General College Physics Laboratory II (1)
PHY 13021 General College Physics Laboratory I (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

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

Automated Machining Option (6 credits)	**Industrial Automation Option (6 credits)**
MFGT 13001 Computer Numerical Control Programming (3)	EERT 22007 Industrial Motor Control and Application (3)
MFGT 23001 Computer-Aided Manufacturing (3)	MFGT 22014 Advanced Industrial Electronics (3)

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.

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