

Major: Mechatronics Engineering Technology (Effective Fall 2021)

FIRST YEAR	Fall Semester		Spring Semester	
	EGT 116 Intro to Industrial materials & processes	3	EGT 265: Manufacturing Processes and Tolerancing OR Track Course 1	3
MAT 119 Pre-Calculus Mathematics	3	EGT 161 D.C. Circuit Analysis	3	
ENG 101 College Writing (Gen Ed Written Communication I)	3	CHE 130 & 130L Chemistry, an Engineering Approach with lab (Gen Ed Natural Science 1 of 2)	4	
EGT 212 Computer Aided Drafting & Design	3	CMST 101: Public Speaking (Gen Ed Oral Communication)	3	
Gen Ed Self & Society (Cultural Pluralism 1 of 1)	3	SOC 100: Introduction to Sociology (Gen Ed Individual and Society 1 of 2)	3	
Total	15	Total	16	
SECOND YEAR	Fall Semester		Spring Semester	
	PHY 211 General Physics with laboratory I (Gen Ed Sciences 2 of 2)	4	EGT 301 Cooperative Education	3
STA 205 Intro to Statistical Methods	3	MAT 129 Calculus I (Gen Ed Math & Stat)	4	
EGT 243 AC Circuit Analysis	3	EGT 310 Project Management & problem Solving	3	
EGT 291W Writing in Eng. technology (Gen Ed Written Communication II)		EGT 245 Digital Electronics	3	
EGT 267 Programming for Engineering Applications	3	EGT 365: CNC & Manufacturing Proc. Planning or Track Course 2	3	
Total	16	Total	16	
THIRD YEAR	Fall Semester		Spring Semester	
	EGT 261 Engineering Materials	3	EGT 386: Electromechanical Instrumentation and Control	3
EGT 300 Statics and Strength of Materials	3	PHY 213 General Physics with Laboratory II	4	
EGT 361 Fluid Power	3	EGT 340 Applied Dynamics	3	
Gen Ed Self & Society (Indiv. & Soc. 2 of 2)	3	EGT 367 Microprocessors	3	
EGT 320 Robotic Systems or EGT Track 3	3			
Total	15	Total	13	
FOURTH YEAR	Fall Semester		Spring Semester	
	EGT 480 Machine Design OR Track Course 4	3	EGT 417 Capstone II	3
EGT 416 Capstone I	1	EGT 402: Control Systems	3	
EGT 408 mechatronics Topics	3	EGT Track 6 OR EGT Elective	3	
EGT 465 Automated Manufacturing Systems OR Track Course 5	3	Gen Ed Culture & Creativity (2 of 2)	3	
Gen Ed Culture & Creativity (1 of 2)	3	Gen Ed Global Viewpoints (1 of 1)	3	
Elective	1			
Total	14	Total	15	
Grand Total		120		

Mechatronics Tracks		
Default Track		
Automated Systems Track (18 credits)		
EGT 265	Manufacturing Processes and Metrology	3
EGT 320	Robotic Systems and Material Handling	3
EGT 365	CNC & Manufacturing Process Planning	3
EGT 465	Automated Manufacturing Systems	3
EGT 480	Machine Design	3
Select 3 additional credit hours of EGT and/or EMET(*) courses		3
Total Track Credits		18
Alternative Energy Track (18 credits)		
EMET 150(*)	Introduction to Controls and Robotics	2
EMET 210(*)	Energy Efficiency and Audits	3
EMET 225(*)	Solar and Renewable Energy	3
EGT 450	Thermodynamics and Heat Transfer	3
PSET 140(*)	Power Systems Foundations	1
Select 6 additional credit hours of EGT and/or EMET(*) courses		6
Total Track Credits		18
Laser Technology Track (18 credits)		
EMET 150(*)	Introduction to Controls and Robotics	2
EMET 245(*)	Laser Foundations and Safety	3
EMET 246 (*)	Laser 2	3
EMET 275(*)	Electric Drive Mechanisms	4
Select 6 additional credit hours of EGT and/or EMET(*) courses		6
Total Track Credits		18
Computer Science Track (18 credits)		
INF 120	Elementary Programming	3
CSC 260	Object Oriented Programming I	3
CSC 360	Object Oriented Programming II	3
CSC 362	Computer Systems	3
CSC 407	Concepts of Programming Languages	3
CSC 462	Computer Architecture	3
Total Track Credits		18

Students are required to select one of the MET tracks listed above. Courses for “Default Track: Automated Systems” are incorporated in the 4-year plan but marked by a suffix “OR Track ...”. Students who would like to select alternative tracks will replace Default Track” courses with those of their desired track.

* Courses in the “Alternative Energy” and “Laser Technology” tracks are offered by Cincinnati State Community College.