

BS: Robotics Engineering Technology (with MET AAS)

The Robotics Engineering Technology major is a baccalaureate completion program that prepares graduates to design solutions to address problems in areas such as factory automation, building automation, motion control and robotics. Graduates are engineers prepared to fill positions in areas directly related to the design and development of robotics systems and robotics systems engineering.

Department of Engineering Technology
513-785-7706
ent@MiamiOH.edu

Office of Advising
513-727-3440
regadvising@MiamiOH.edu

Tutoring and Learning Center (TLC)
513-785-3139
REGTLC@MiamiOH.edu

Career Services & Professional Development
513-727-3390
miamiregionalscareer@MiamiOH.edu

Plan Recommendation Chart

	Hours	Course Number or Related Information
Perspectives Area: Formal Reasoning and Communication	9	
Mathematics and Formal Reasoning	3	MTH151 Calculus
English Composition	3	ENG111 English Composition (or ENG 109)
Advanced Writing	3	EGS215 Workplace Writing or ENG313 Technical Writing
Perspectives Area: Science and Society	15-16	
Social Sciences #1	3	ECO201 Microeconomics or ECO202 Macroeconomics
Social Sciences #2	3	APC/STC136 Intro to Interpersonal Communication
Natural Science #1	4	PHY161 Physics for Life Science I or PHY181 College Physics I
Lab	2	CM144 College Chemistry Lab
Natural Science #2	3-4	CHM141/CHM 141R College Chemistry
Perspectives Area: Arts and Humanities	6	
Creative Arts	3	Choice
Humanities	3	Choice
Perspectives Area: Global Citizenship	12	
Ethical Citizenship and Leadership	3	Choice
Intercultural Consciousness	3	Choice
Global Inquiry	3	Choice
Intercultural or Global	3	Choice – any Miami Plan Global Inquiry OR Intercultural Consciousness
Signature Inquiry	9	
Signature Inquiry #1	3	Choice
Signature Inquiry #2	3	Choice
Signature Inquiry #3	3	Choice
Knowledge in Action	3+	
Senior Capstone	3	ENT497/498 Senior Design Project
Experiential Learning	0+	ENT497 Senior Design Project

2025-26 Robotics ENT Plan of Study (w/MET. AAS)

An ENT AAS is a requirement for the Bach. degree and built into the 4 year plan. There may be AAS courses here that are only on the AAS DAR.

Year One

Fall Semester	Hours	Spring Semester	Hours
ENG111 College Composition	3	APC/STC136 Intro to Interpersonal Communication	3
ENT135 Computer-Aided Drafting	3	ENT152 Computer-Aided Manufacturing I	3
ENT151 Engineering Materials	3	ENT271 Mechanics I: Statics	3
MTH124 Trigonometry	3	MTH151 Calculus	4
PA Humanities	3	CIT163 Intro to Computer Programming or CIT153 Intro to C/C++ Programming	3
ENT 137 Introduction to Engineering Technology	1	PA Global Citizenship	3
Total	16	Total	16

Year Two

Fall Semester	Hours	Spring Semester	Hours
ENT235 Computer-Aided Design	3	ENT192 Circuit Analysis I	3
ENT252 Computer-Aided Manufacturing II	3	ENT278 Mechanics III: Analysis of Machine Components	3
PHY161 Physics for Life Science I OR PHY181+183 General Physics I	4-5	PHY162 Physics for Life Science II OR PHY182+184 General Physics II (Note: if taking PHY 182+184 you will need to take the co-requisite MTH 251 now)	4-5
EGS215 Workplace Writing or ENG313 Technical Writing	3	PA Global Citizenship	3
ENT272 Mechanics II: Strength of Materials	3	ECO201 Principles of Microeconomics or ECO202 Principles of Macroeconomics	3
Total	16-17	Total	16-17

Year Three

Fall Semester	Hours	Spring Semester	Hours
ENT271 Mechanics I: Statics	3	ENT272 Mechanics II: Strength of Materials	3
ENT311 Process Control Interface Design	3	ENT316 Project Management	3
ENT313 Intro to Robotics Systems	3	ENT413 Industrial Robotics Lab	3
MTH251 Calculus II	4	STA301 Applied Statistics or STA261 Statistics	3
ENT301 Dynamics	3	PA Global Citizenship	3
Total	16	Total	15

Year Four

Fall Semester	Hours	Spring Semester	Hours
ENT401 Computer Instrumentation	3	ENT407 Modern Manufacturing Systems	3
ENT417 Integrated Robotics System Design	3	ENT418 Electro-Mechanical Control Systems	3
ENT497 Senior Design Project I	2	ENT498 Senior Design Project	2
CHM141/R+CHM144 College Chemistry w/Lab	5-6	PA Global Citizenship	3
MTH245 Differential Equations for Engineers	3	PA Creative Arts	3
Total	16-17	Total	14

There is a minimum of 124 hours required to graduate. To finish in eight semesters, take Major or PA courses that also complete the Signature Inquiry (SI) requirement.



COLLEGE OF LIBERAL ARTS
AND APPLIED SCIENCE

For advising questions, please contact your assigned advisor or Regional Academic Advising at regadvising@MiamiOH.edu or 513-727-3440