Department of Engineering Technology
Bachelor of Science in Applied Science—Completion Program
Major: Mechanical Engineering Technology
For students entering Fall 2023 and after from
Sinclair Community College

Catalog Year: Fall 2023

Miami University and Sinclair Community College are parties to an agreement titled INSTITUTIONAL ARTICULATION AGREEMENT BETWEEN MIAMI UNIVERSITY AND SINCLAIR COMMUNITY COLLEGE entered into on January 1, 2024 (the "Agreement"). This Pathway is entered into pursuant to the terms and conditions of the Agreement, and is hereby incorporated into the Agreement by this reference. Except as otherwise set forth, the Agreement is unaffected and shall continue in full force and effect in accordance with its terms.

This Bachelor of Science in Applied Science Completion Program is designed for students who have completed an associate degree in Mechanical, Electro-Mechanical or similarly titled engineering technology programs. Graduates from other Engineering Technology programs will also receive favorable credit transfer. Graduates from other Engineering Technology programs will also receive favorable credit transfer. Through this program you can complete your BS degree by completing two-years of additional credit hours beyond your associate degree. Further information is available through the Department of Engineering Technology.

To graduate with the Bachelor of Science in Applied Science degree, students must first meet all Miami University admission requirements noted on this website. Students must also meet Miami's general requirements for graduation, including: (1) completion of 124 credit hours; (2) completion of a minimum of 30 credit hours at Miami of which the final 12 credit hours must be taken at Miami; and (3) attainment of a minimum of a 2.00 cumulative grade point average at the time of graduation.

The plan of study below illustrates: 1) how courses completed at Sinclair Community College transfer to Miami University, and (2) what courses the student needs to complete at Miami in order to earn the Bachelor of Science in Applied Science degree with a major in Mechanical Engineering Technology. Please note the matches in this document indicate specific courses you may be awarded after successfully completing those courses and transferring to Miami University.

Students completing the OT36 through their General Education credits will have completed most requirements for Miami Plan Perspectives Areas and Signature Inquiries. Students entering Miami having completed the OT36 must complete 9 credits of Signature Inquiry, however this may be met by matching equivalent Perspectives courses that have a Signature Inquiry designation. Students will also need to complete coursework in Global Citizenship (Intercultural Consciousness or Global Inquiry for 3 credits), Knowledge in Action: Experiential Learning (0 credits), and a Senior Capstone (3 credits).

Courses that do not have a Miami University equivalent will be recorded as "T" courses on the student's Miami University academic record. With the assistance of an academic advisor, students can petition for some "T" courses to count toward Miami University degree requirements.

Foundation Requirements

* Included in the Ohio Transfer Module (OTM)

Required Course from Miami	Acceptable Sinclair Community College Transfer Credit**
ENG 111, One year of Freshman English College I Composition or ENG 109 College Composition for Second Language Writers	ENG 1101* English Composition I
ECO 201 Microeconomics or ECO 202 Macroeconomics	ECO 2180* Microeconomics or ECO 2160* Macroeconomics
STC 135 Intro to Public Expression and Critical Inquiry or STC 136 Intro to Interpersonal Communication	COM 2211* Public Speaking or COM 2206 Interpersonal Communication
ENG 215 Workplace Writing or ENG 313 Technical Writing	ENGL 1131 Business Writing
PHY 161 Physics for Life Sciences I with Lab OR PHY 181 General Physics I **and** PHY 183 Lab	PHY 1141* College Physics I
PHY 162 Physics for Life Sciences II with Lab OR PHY 182 General Physics II **and** PHY 184 Lab	PHY 1142* College Physics II
CHM 141 College Chemistry (3) and CHM 144 College Chemistry Lab (2)	CHE 1211* General Chemistry I and CHE 1251* Lab for General Chemistry I
MTH 151 Calculus I	MAT 2270* Calculus I
MTH 251 Calculus II	MAT 2280 Calculus II
Approved Intercultural Perspectives **if admitted to Miami prior to Fall 2023** or Intercultural Consciousness Elective **if admitted to Miami on or after Fall 2023** (Online Options)	PSY 1160 Black Psychology Or Take from Miami

Complete Engineering Technology (ENT) core courses listed below. You should have taken some of these in your associate degree program. Calculus I must be completed prior to starting Miami courses.

Engineering Technology Core Courses

Required Course from Miami	Acceptable Sinclair Community College Transfer Credit**
ENT 135 Computer-Aided Drafting	MET 1371 CAD concepts using AutoCAD
CSE 153 Introduction to C/C++ Programming or similar course	CIS 1111 C++ Programming or similar course or take CIS 1202 Visual Basic (requires Sinclair prerequisite of CIS111) or take EGR 2261 Engineering Problem Solving Using C++
ENT 151 Engineering Materials	MET 2151 Material Science
ENT 152 Computer Aided Manufacturing I	CAM 1109 Fundamentals of Tooling & Machining
ENT 192 Circuit Analysis I (3) [OET001 DC Circuits]	EET 1150 D.C. Circuits or EET 1120
ENT 235 Computer Aided Design	MET 1201 Introduction to Engineering Design Using Inventor
ENT 252 Computer Aided Manufacturing II	CAM 1116 Fundamentals of Computer Numerical Control Operations
ENT 271 Mechanics I – Statics [OET007 Statics]	MET 2201 Statics
ENT 272 Strength of Materials	MET 2251 Strength of Materials
ENT 278 Mechanics III: Analysis of Machine Components	MET 2401 Machine Design
Technical Electives	

Required Course from Miami	Acceptable Sinclair Community College Transfer Credit**
Take ONE of the following technical electives from Miami: ENT313 - Introduction to Robotics ENT311 - Process Control Interface Design ENT413 - Industrial Robotics Lab ENT296 - Programmable Logic Controllers	Take from Miami
MTH 245 Differential Equations	MAT 2310 Elementary Differential Equations
STA 261 or STA 301 Applied Statistics ***	MAT 1450 Introductory Statistics or Take from Miami
ENT 301 Dynamics ***	Take from Miami or MET 2351 B or Better
ENT 310 Fluid Mechanics	Take from Miami or MET 2301 B or Better
ENT 312 Thermodynamics and Heat Power	Take from Miami
ENT 314 Mechanisms for Mechanical Design	Take from Miami
ENT 316 Project Management	Take from Miami
ENT 355 Introduction to Finite Element Analysis	Take from Miami
ENT 404 Experimentation Techniques	Take from Miami
ENT 415 Heat Transfer with Applications	Take from Miami
ENT 478 Product Development	Take from Miami
ENT 497 Senior Design I	Take from Miami
ENT 498 Senior Design II	Take from Miami

***Distance Courses Offered Via WebEx from Miami.

Calculus I must be completed prior to starting Miami courses.

****Transfer Equivalencies within ENT program ONLY**

SPECIAL NOTES

1. When applying to Miami University Regionals, please apply early for best course availability. For Fall applicants, we suggest applying in the Spring semester.
2. Application Deadlines: Fall Admission – August 1st. Spring Admission – January 1st.
3. Transfer Scholarship Deadlines: Fall Admission – June 1. Spring Admission – December 1. See the Miami Regionals scholarship page for more information: https://www.miamioh.edu/regionals/tuition-financial-aid/scholarships/index.html

Link to Miami degree program

http://www.miamioh.edu/regionals/ent

Miami Contact Name and Information:

Sarah Wooten sarah.wooten@miamioh.edu 513-785-1977 Distance Coordinator
Professor Rob Speckert speckere@miamioh.edu 513-785-1810 Chief Departmental Advisor
Engineering Technology Office 513-785-3132 or 513-727-3241