

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

**Catalog Year: Fall 2023**

Miami University and Columbus State Community College are parties to an agreement titled INSTITUTIONAL ARTICULATION AGREEMENT BETWEEN MIAMI UNIVERSITY AND COLUMBUS STATE COMMUNITY COLLEGE entered into on April 15, 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 the [Miami Admission and Aid 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 Columbus State 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 Columbus State Community College Transfer Credit**
ENG 111, One year of Freshman English College I Composition or ENG 109 College Composition for Second Language Writers	ENG 112* English Composition I
ECO 201 Microeconomics or ECO 202 Macroeconomics	ECON 105* Microeconomics or ECON 110* Macroeconomics
STC 135 Intro to Public Expression and Critical Inquiry or STC 136 Intro to Interpersonal Communication	SPCH 205* Public Speaking OR SPCH 100 Fundamentals of Communication
ENG 215 Workplace Writing or ENG 313 Technical Writing	ENG 208 Workplace Writing
PHY 161 Physics for Life Sciences I with Lab OR PHY 181 General Physics I <b>and</b> PHY 183 Lab	PHYS 110* Physics with Lab I
PHY 162 Physics for Life Sciences II with Lab OR PHY 182 General Physics II <b>and</b> PHY 184 Lab	PHYS 111* Physics with Lab II
CHM 141 College Chemistry (3) and CHM 144 College Chemistry Lab (2)	CHEM 110* Chemistry I
MTH 151 Calculus I	MATH 200* Calculus I
MTH 251 Calculus II	MATH 210* Calculus II
Approved Intercultural Perspectives <b>if admitted to Miami prior to Fall 2023</b> or Intercultural Consciousness Elective <b>if admitted to Miami on or after Fall 2023</b> (Online Options)	SOC 2380 American Race & Ethnic Relations SCM 1190 International Commerce

**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 Columbus State Community College Transfer Credit**
ENT 135 Computer-Aided Drafting	MECH 1145 CAD I or MECH 2215
CSE 153 Introduction to C/C++ Programming or similar course	CSCI 1620 Visual Basic I or CSCI 2521 C++ Programming
ENT 151 Engineering Materials	MECH 1150 Manufacturing Materials and Processes
ENT 152 Computer Aided Manufacturing I	MECH 2299 Machine Design CAM
ENT 192 Circuit Analysis I (3) [OET001 DC Circuits]	EET 1105 Basic DC Electronic Systems
ENT 235 Computer Aided Design	
ENT 252 Computer Aided Manufacturing II	
ENT 271 Mechanics I – Statics [OET007 Statics]	MECH 1130 Statics
ENT 272 Strength of Materials	Take from Miami
ENT 278 Mechanics III: Analysis of Machine Components	

Required Course from Miami	Acceptable Columbus State Community College Transfer Credit**
Technical Electives 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	MTH 2255 Elementary Differential Equations or Take from Miami
STA 261 or STA 301 Applied Statistics ***	STAT 1350 or STAT 1450 or Take from Miami
ENT 301 Dynamics ***	Take from Miami
ENT 310 Fluid Mechanics	Take from Miami
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 Spring semester.
2. Application Deadlines: Fall Admission – August 1<sup>st</sup>. Spring Admission – January 1<sup>st</sup>.
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](mailto:sarah.wooten@miamioh.edu) 513-785-1977 Distance Coordinator  
 Professor Rob Speckert [speckere@miamioh.edu](mailto:speckere@miamioh.edu) 513-785-1810 Chief Departmental Advisor  
 Engineering Technology Office 513-785-3132 or 513-727-3241

### Columbus State Community College Contact Information:

Justin Mulinex [jmulinex@csc.edu](mailto:jmulinex@csc.edu) 614-2875350