

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

**Catalog Year: Fall 2023**

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 [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.

*Note: Neither Miami University nor Terra State Community College shall use the name, logo, likeness, trademarks, image or other intellectual property of either of the other parties for any advertising, marketing, endorsement or any other purposes without the specific prior written consent of an authorized representative of the other party as to each such use. Terra State Community College may refer to the affiliation with Miami University in public information materials regarding the relevant program. Miami University reserves the right to review and request modification of Terra State Community College's reference to Miami University as necessary. Terra State Community College may refer to the affiliation with Miami in its brochures and other public information materials having to do with the program.*

The plan of study below illustrates: 1) how courses completed at Terra 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 Terra 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 1050* English Composition I
ECO 201 Microeconomics or ECO 202 Macroeconomics	ECO2010 Macroeconomics or ECO 2020* Microeconomics
STC 135 Intro to Public Expression and Critical Inquiry or STC 136 Intro to Interpersonal Communication	SPE 2010* Effective Speaking
ENG 215 Workplace Writing or ENG 313 Technical Writing	ENG1900 Technical Writing
PHY 161 Physics for Life Sciences I with Lab OR PHY 181 General Physics I <b>and</b> PHY 183 lab	PHY1310* and PHY 1315* Physics I
PHY 162 Physics for Life Sciences I with Lab OR PHY 182 General Physics I <b>and</b> PHY 184 Lab	PHY1320* and PHY1325* Physics II
CHM 141 College Chemistry (3) and CHM 144 College Chemistry Lab (2)	CHM 1010* and CHM 1015* General Chemistry
MTH 151 Calculus I	MTH 2510* Calculus I
MTH 251 Calculus II	MTH 2520* 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)	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 Terra State Community College Transfer Credit**
ENT 135 Computer-Aided Drafting	CAD 1110 Introduction to CADD
CSE 153 Introduction to C/C++ Programming or similar course	CIT 1210 Visual Programming
ENT 151 Engineering Materials	MFG 1080 Materials
ENT 152 Computer Aided Manufacturing I	MET 2500 Computer-Aided Manufacturing
ENT 192 Circuit Analysis I (3) [OET001 DC Circuits]	EET 1050 Electricity I
ENT 235 Computer Aided Design	
ENT 252 Computer Aided Manufacturing II	
ENT 271 Mechanics I – Statics [OET007 Statics]	MET 2110 Statics
ENT 272 Strength of Materials	MET 2150 Strength of Materials
ENT 278 Mechanics III: Analysis of Machine Components	
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 2630 Differential Equations
STA 261 or STA 301 Applied Statistics ***	MTH 2010 Statistics
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

Required Course from Miami	Acceptable Terra State Community College Transfer Credit**
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
<ol style="list-style-type: none"> <li>1. When applying to Miami University Regionals, please apply early for best course availability. For Fall applicants, we suggest applying in Spring semester.</li> <li>2. Application Deadlines: Fall Admission – August 1<sup>st</sup>. Spring Admission – January 1<sup>st</sup>.</li> <li>3. Transfer Scholarship Deadlines: Fall Admission – June 1. Spring Admission – December 1. See the Miami Regionals scholarship page for more information: <a href="https://www.miamioh.edu/regionals/tuition-financial-aid/scholarships/index.html">https://www.miamioh.edu/regionals/tuition-financial-aid/scholarships/index.html</a></li> </ol>

**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