Department of Engineering Technology Bachelor of Science in Applied Science—Completion Program

Major: Mechanical Engineering Technology For students entering Fall 2023 and after from Edison 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 <u>Admission and Aid Website</u>. Students must also meet Miami's <u>general requirements</u> <u>for graduation</u>, 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 Edison 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. Edison 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 Edison State Community College's reference to Miami University as necessary. Edison 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 Edison 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 Edison State Community College Transfer Credit**
ENG 111, One year of Freshman English College I Composition or	ENG 121S* English Composition I
ENG 109 College Composition for Second Language Writers	
ECO 201 Microeconomics or ECO 202 Macroeconomics	ECO 221S* Microeconomics
	or ECO 222S* Macroeconomics
STC 135 Intro to Public Expression and Critical Inquiry or	COM 121S* Fundamentals of Communication
STC 136 Intro to Interpersonal Communication	
ENG 215 Workplace Writing or	ENG 125S Technical Writing
ENG 313 Technical Writing	
PHY 161 Physics for Life Sciences I with Lab OR	PHY 121S* Physics I
PHY 181 General Physics I and PHY 183 Lab	
PHY 162 Physics for Life Sciences II with Lab OR	PHY 122S* Physics II
PHY 182 General Physics II and PHY 184 Lab	
CHM 141 College Chemistry (3) and	CHEM 121S* General Chemistry
CHM 144 College Chemistry Lab (2)	
MTH 151 Calculus I	MTH 221S* Calculus I
MTH 251 Calculus II	MTH 222S* Calculus II
Approved Intercultural Perspectives if admitted to Miami prior to	SOC 224 Race and Ethnicity
Fall 2023 or Intercultural Consciousness Elective if admitted to	SSV 113 Introduction to Social Welfare
Miami on or after Fall 2023 (Online Options)	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 Edison State Community College Transfer Credit**
ENT 135 Computer-Aided Drafting	EGR 110S Print reading and Sketching or MET 130S AutoCAD I
CSE 153 Introduction to C/C++ Programming or similar course	CIS 223S C++ Programming
ENT 151 Engineering Materials	MFG 120S Materials Technology
ENT 152 Computer Aided Manufacturing I	MFG 114S Survey of Manufacturing Processes
ENT 192 Circuit Analysis I (3) [OET001 DC Circuits]	ELT 110S Circuits I
ENT 235 Computer Aided Design	MET 245S Design w/ SolidWorks I or MET 247S Design w/ Inventor I
ENT 252 Computer Aided Manufacturing II	MFG 234S CNC Programming
ENT 271 Mechanics I – Statics [OET007 Statics]	MET 125S Applied Engineering Statics
ENT 272 Strength of Materials	MET 212S Applied Strength of Materials
ENT 278 Mechanics III: Analysis of Machine Components	MET 225S Machine Design
Technical Electives	
Take ONE of the following technical electives from Miami: ENT313 - Introduction to Robotics ENT311 - Process Control Interface Design ENT413 - Industrial Robotics Lab	Take from Miami

Required Course from Miami	Acceptable Edison State Community College Transfer Credit**
ENT296 - Programmable Logic Controllers	
MTH 245 Differential Equations	MTH 231S Differential Equations or take from Miami
STA 261 or STA 301 Applied Statistics ***	MTH 125S or Take from Miami
ENT 301 Dynamics ***	MET 211S Dynamics
ENT 310 Fluid Mechanics	MET 214S Fluid Mechanics
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.

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

Edison State Community College Contact Information:

Tom Looker <u>tlooker@edisonohio.edu</u> 937-778-7943

^{***}Transfer Equivalencies within ENT program ONLY