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

Catalog Year: Fall 2023

Miami University and Gateway Community & Technical College are parties to an agreement titled Institutional Articulation Agreement between Miami University and Kentucky Community & Technical College System entered into on July 28, 2022 (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 Gateway Community & Technical 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.

Category 4: Miami University Courses to be completed (After Associate's degree is awarded from Gateway)

Gateway Course Number	Course Title	Credits	Miami University Course	Completed
General Education Courses from Associates Degree or as Bridge Courses to Bachelor's Completion				
ECO 201 or ECO 202	Principles of Microeconomics (SB) or Principles of Macroeconomics (SB)	3	ECO 201 or ECO 202	Take from Gateway
ENG 101	Writing I	3	ENG 111	Take from Gateway
ENG 203	Business Writing	3	ENG 313	Take from Gateway
MAT 175	Calculus I (QR)	5	MTH 151	Take from Gateway
MAT 185	Calculus II (QR)	5	MTH 251	Take from Gateway
PHY 201/202	College Physics I w/Lab (NS)	5	PHY 181/161	Take from Gateway
PHY 203/204	College Physics II w/Lab (NS)	5	PHY 182/162	Take from Gateway
COM 252	Introduction to Interpersonal Communication (OC)	3	STC 136	Take from Gateway
CHE 170/175	General College Chemistry I w/Lab	5	CHM 141/144	Take from Gateway
Technical Courses from Associates Degree or as Bridge Courses to Miami Bachelor's Completion				
CIT 144	Python I	3	CSE 163	Take from Gateway
ELT 110	Circuits I	5	ENT 192	Take from Gateway
ELT 201	Statics and Strength of Materials	4	ENT 271	Take from Gateway
STA 220	Statistics	3	STA 261	Take from Gateway
CAD 100	Introduction to Computer Aided Design	3	ENT 135	Take from Gateway
CMM 110	Fundamentals of Machine Tools-A	3	ENT 152	Take from Gateway
CMM 112	Fundamentals of Machine Tools-B	3	ENT 152	Take from Gateway
Miami University Major Requirements for the Bachelor Completion in Electrical and Computer Engineering Technology				
CAD 100	Computer-Aided Drafting	3	ENT 135	Take from Gateway
CMM 110 **and** CMM 112	Computer Aided Manufacturing I	3	ENT 152	Take from Gateway
CAD 200	Computer Aided Design	3	ENT 235	Take from Gateway
CMM 130 **and** CMM 134	Manual Programming	3	ENT 252	Take from Gateway
MAT 285	Differential Equations	3	MTH 245	Take from Miami

Gateway Course Number	Course Title	Credits	Miami University Course	Completed
ENT 272	Strength of Materials	3		Take from Miami
ENT 278	Mechanics III-Analysis of Machine Components	3		Take from Miami
Miami Technical Elective	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	3		Take from Miami
ENT 301	Dynamics	3		Take from Miami
ENT 310	Fluid Mechanics	3		Take from Miami
ENT 312	Thermodynamics and Heat Power	3		Take from Miami
ENT 314	Mechanisms for Mechanical Design	3		Take from Miami
ENT 316	Project Management	3		Take from Miami
ENT 355	Introduction to Finite Element Analysis	3		Take from Miami
ENT 407	Modern Manufacturing Systems	3		Take from Miami
ENT 404	Experimentation Techniques	3		Take from Miami
ENT 415	Heat Transfer with Applications	3		Take from Miami
ENT 478	Product Development	3		Take from Miami
ENT 497	Senior Design I	2		Take from Miami
ENT 498	Senior Design II	2		Take from Miami

*Total number of general electives needed at Miami depends on the total number of hours transferred from Gateway Community & Technical College. Students must complete a minimum of 30 hours at Miami University and earn a total of 124 hours for the bachelor's degree.

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

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