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

Catalog Year: Fall 2023

Miami University and Washington State Community College are parties to an agreement **INSTITUTIONAL ARTICULATION AGREEMENT BETWEEN MIAMI UNIVERSITY AND WASHINGTON STATE COLLEGE OF OHIO** 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.

The Electrical and Computer Engineering Technology bachelor completion program is designed for students who have completed an associate degree in electrical/electronic, electrical and computer engineering technology. The degree is also open to students with associate degrees in mechanical, electro-mechanical, robotics, or related fields, potentially requiring additional credit hours for the latter group. Through this program students can complete their bachelor's degree by completing two-years of additional credit hours beyond their associate degree. Additional 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 Washington 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 Electrical and Computer 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 Washington 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 1510* English Composition I
ECO 201 Microeconomics or ECO 202 Macroeconomics	ECO 2130* Microeconomics or ECO 2120* Macroeconomics
STC 135 Intro to Public Expression and Critical Inquiry or STC 136 Intro to Interpersonal Communication	SPCH 1510* Speech or SPCH 2060 Interpersonal Communication
ENG 215 Workplace Writing or ENG 313 Technical Writing	ENG 1515* Technical Writing
PHY 161 Physics for Life Sciences I with Lab OR PHY 181 General Physics I **and** PHY 183 lab	PHYS 2510* Introduction to Physics I and PHYS 251L* Introduction to Physics I Lab
PHY 162 Physics for Life Sciences I with Lab OR PHY 182 General Physics I **and** PHY 184 Lab	PHYS 2530* Introduction to Physics II and PHYS 253L* Introduction to Physics II Lab
CHM 141 College Chemistry (3) and CHM 144 College Chemistry Lab (2)	CHEM 1510* Fundamentals of Chemistry I and CHEM 151L* Fundamentals of Chemistry I Lab
MTH 151 Calculus I	MATH 2263* Analytical Geometry & Calculus I
MTH 251 Calculus II	Take from Miami
Approved Intercultural Perspectives **if admitted to Miami <u>prior</u> to Fall 2023** or Intercultural Consciousness Elective **if admitted to Miami <u>on or after</u> Fall 2023** (Online Options)	SOSV1140 American Social Welfare Institution or SOCI 2250 The Sociology of Race and Ethnicity in America 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 Washington State Community College Transfer Credit
CSE 153/163 Introduction to C/C++ Programming or similar course	DTWP 2600 .NET Programming
ENT 192 Circuit Analysis I (3) [OET001 DC Circuits]	ELET 1110 DC Fundamentals
ENT 193 Circuit Analysis II (3) [OET003 AC Circuits]	ELET 1130 AC Fundamentals
ENT 196 Electronics (3) [OET005 Electronics]	ELET 2210 Electronics or INDT 1310 Basic Electricity
ENT 271 Mechanics I – Statics [OET007 Statics]	ENGR 2210 Statics
ENT 293 Digital Systems [OET002 Digital]	ELET 1310 Digital Controls I
ENT 294 Local area Networks	ELEC 1950 Cisco Introduction to Networks
ENT 295 Microprocessor Technology I [OET004 Microprocessors]	ELEC 2330 Microprocessors
MTH 245 Differential Equations	MATH 2270 Differential Equations

Technical Electives
 	
Take ONE of the following technical electives from Miami:
    ENT313 - Introduction to Robotics
    ENT413 - Industrial Robotics Lab
	Take from Miami

Required Course from Miami	Acceptable Washington State Community College Transfer Credit
STA 261 or STA 301 Applied Statistics ***	MATH 2110 Statistics or Take from Miami
ENT 301 Dynamics ***	Take from Miami
ENT 302 Fundamentals of Signals & Systems ***	Take from Miami
ENT 303 Digital Signal Processing for Tech. ***	Take from Miami
ENT 311 Process Control Interface Design	Take from Miami
ENT 316 Project Management	Take from Miami
ENT 387 Embedded Microcontrollers	Take from Miami
ENT 401 Computerized instrumentation	Take from Miami
ENT 402 Industrial Automation Lab	Take from Miami
ENT 403 Wireless Communication & Networks	Take from Miami
ENT 418 Electromechanical Control Systems	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 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
Roger Seifried seifrirc@MiamiOH.edu 513-785-1815
Engineering Technology Office 513-785-3132 or 513-727-3241

Washington State Community College Contact Information:
Chris Carpenter ccarpenter1@wscc.edu 740-885-5707