# 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 Zane State College

**Catalog Year: Fall 2023** 

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 <a href="Department of Engineering Technology">Department of Engineering Technology</a>.

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 Zane State 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. Zane State 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 Zane State College's reference to Miami University as necessary. Zane State 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 Zane State 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 Zane State College Transfer Credit
ENG 111, One year of Freshman English College I Composition or ENG 109 College Composition for Second Language Writers	ENGL 1500* Composition I
ECO 201 Microeconomics or ECO 202 Macroeconomics	BUSM 1510* Microeconomics or BUSM 1520* Macroeconomics
STC 135 Intro to Public Expression and Critical Inquiry or STC 136 Intro to Interpersonal Communication	COMM 2610* Public Speaking
ENG 215 Workplace Writing or ENG 313 Technical Writing	ENGL 2800 Professional Writing
PHY 161 Physics for Life Sciences I with Lab OR PHY 181 General Physics I <b>and</b> PHY 183 Lab	PHYS 2010* Physics I
PHY 162 Physics for Life Sciences II with Lab OR PHY 182 General Physics II <b>and</b> PHY 184 Lab	PHYS 2020* Physics II
CHM 141 College Chemistry (3) and CHM 144 College Chemistry Lab (2)	CHEM 1010* Chemistry or CHEM 1210
MTH 151 Calculus I	MATH 2510* Calculus I
MTH 251 Calculus II	MATH 2520* Calculus II
Approved Intercultural Perspectives <b>if admitted to Miami <u>prior</u> to Fall 2023</b> or Intercultural Consciousness Elective <b>if admitted to Miami <u>on or after</u> Fall 2023</b> (Online Options)	SOCI 2060 Race and Ethnicity 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 Zane State College Transfer Credit
CSE 153/163 Introduction to C/C++ Programming or similar	ITCS 1210 Visual Basic or ITCS 1410 Intro to C++
course	TICS 1210 Visual basic of TICS 1410 little to C++
ENT 192 Circuit Analysis I (3) [OET001 DC Circuits]	EEET 1110 DC Circuit Analysis
ENT 193 Circuit Analysis II (3) [OET003 AC Circuits]	EEET 1230 AC Circuit Analysis
ENT 196 Electronics (3) [OET005 Electronics]	EEET 1130 Electronic Devices
ENT 271 Mechanics I – Statics [OET007 Statics]	MECH 2200 Statics
ENT 293 Digital Systems [OET002 Digital]	EEET 2150 Digital Circuits
ENT 294 Local area Networks	ITCS 2510 Cisco Routers I
ENT 295 Microprocessor Technology I [OET004 Microprocessors]	Take from Miami
MTH 245 Differential Equations	Take from Miami
Technical Electives	
Take ONE of the following technical electives from Miami:	Take from Miami
ENT313 - Introduction to Robotics	
ENT413 - Industrial Robotics Lab	
STA 261 or STA 301 Applied Statistics ***	MATH 2270 or Take from Miami
ENT 301 Dynamics ***	Take from Miami
ENT 302 Fundamentals of Signals & Systems ***	Take from Miami

Required Course from Miami	Acceptable Zane State College Transfer Credit
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.

#### **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: <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>

#### Link to Miami degree program

http://www.miamioh.edu/regionals/ent

#### **Miami Contact Name and Information:**

Sarah Wooten <a href="mailto:sarah.wooten@miamioh.edu">sarah.wooten@miamioh.edu</a> 513-785-1977 Distance Coordinator Roger Seifried <a href="mailto:seifrirc@MiamiOH.edu">seifrirc@MiamiOH.edu</a> 513-785-1815 Engineering Technology Office 513-785-3132 or 513-727-3241

#### **Zane State Community College Contact Information:**

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<sup>\*\*\*</sup>Transfer Equivalencies within ENT program ONLY