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 Edison State Community 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 <u>Department of Engineering Technology</u>.

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> for <u>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 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 Edison 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 121S* English Composition I |
| ECO 201 Microeconomics or ECO 202 Macroeconomics | ECO 221S* Microeconomics or ECO 222S* Macroeconomics |
| STC 135 Intro to Public Expression and Critical Inquiry or STC 136 Intro to Interpersonal Communication | COM 121S* Fundamentals of Communication |
| ENG 215 Workplace Writing or ENG 313 Technical Writing | ENG 125S Technical Writing |
| PHY 161 Physics for Life Sciences I with Lab OR PHY 181 General Physics I and PHY 183 Lab | PHY 121S* Physics I |
| PHY 162 Physics for Life Sciences II with Lab OR PHY 182 General Physics II and PHY 184 Lab | PHY 122S* Physics II |
| CHM 141 College Chemistry (3) and CHM 144 College Chemistry Lab (2) | CHEM 121S* General Chemistry |
| MTH 151 Calculus I | MTH 221S* Calculus I |
| MTH 251 Calculus II | MTH 222S* Calculus II |
| 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) | SOC 224 Race and Ethnicity SSV 113 Introduction to Social Welfare 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 |
|--|--|
| CSE 153/163 Introduction to C/C++ Programming or similar course | CIS 223S C++ Programming |
| ENT 192 Circuit Analysis I (3) [OET001 DC Circuits] | ELT 110S Circuits I |
| ENT 193 Circuit Analysis II (3) [OET003 AC Circuits] | ELT 210S Circuits II |
| ENT 196 Electronics (3) [OET005 Electronics] | ELT 121S Electronic Devices |
| ENT 271 Mechanics I – Statics [OET007 Statics] | MET 125S Applied Engineering Statics |
| ENT 293 Digital Systems [OET002 Digital] | ELT 141S Digital Electronics |
| ENT 294 Local area Networks | CIT 214S Networking Essentials |
| ENT 295 Microprocessor Technology I [OET004 Microprocessors] | ELT 241S Microprocessors |
| MTH 245 Differential Equations | MTH 231S Differential Equations or take from Miami |
| Technical Electives | |
| Take ONE of the following technical electives from Miami: ENT313 - Introduction to Robotics ENT413 - Industrial Robotics Lab | Take from Miami |
| STA 261 or STA 301 Applied Statistics *** | MTH 125S or Take from Miami |
| ENT 301 Dynamics *** | MET 211S Dynamics |
| ENT 302 Fundamentals of Signals & Systems *** | Take from Miami |
| ENT 303 Digital Signal Processing for Tech. *** | Take from Miami |

| Required Course from Miami | Acceptable Edison State Community College Transfer Credit |
|---|--|
| 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 the Spring semester.
- 2. Application Deadlines: Fall Admission August 1st. Spring Admission January 1st.
- Transfer Scholarship Deadlines: Fall Admission June 1. Spring Admission December 1. See the Miami Regionals scholarship page for more information: <u>https://www.miamioh.edu/regionals/tuition-financial-aid/scholarships/index.html</u>

Link to Miami degree program

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

Miami Contact Name and Information:

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