

BS: Electro-Mechanical Engineering Technology

(with ECET AAS)

Graduates of the Electro-Mechanical Engineering Technology program are engineering technologists prepared to fill industrial positions in areas directly related to process control, electronic instrumentation, testing, manufacturing, sales and service.

Department of Engineering Technology

513-785-7706

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Office of Advising

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Tutoring and Learning Center (TLC)

513-785-3139

REGTLC@MiamiOH.edu

Career Services & Professional Development

513-727-3390

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Plan Recommendation Chart

| | Hours | Course Number or Related Information |
|--|--------------|--|
| Perspectives Area: Formal Reasoning and Communication | 9 | |
| Mathematics and Formal Reasoning | 3 | MTH151 Calculus |
| English Composition | 3 | ENG111 English Composition (or ENG 109) |
| Advanced Writing | 3 | EGS215 Workplace Writing or ENG313 Technical Writing |
| Perspectives Area: Science and Society | 15-16 | |
| Social Sciences #1 | 3 | ECO201 Microeconomics or ECO202 Macroeconomics |
| Social Sciences #2 | 3 | APC/STC136 Intro to Interpersonal Communication |
| Natural Science #1 | 4-5 | PHY161 Physics for Life Science I or PHY181 College Physics I |
| Lab | 2 | CHM144 College Chemistry Lab |
| Natural Science #2 | 3-4 | CHM141/CHM 141R College Chemistry |
| Perspectives Area: Arts and Humanities | 6 | |
| Creative Arts | 3 | Choice |
| Humanities | 3 | Choice |
| Perspectives Area: Global Citizenship | 12 | |
| Ethical Citizenship and Leadership | 3 | Choice |
| Intercultural Consciousness | 3 | Choice |
| Global Inquiry | 3 | Choice |
| Intercultural or Global | 3 | Choice – any Miami Plan Global Inquiry OR Intercultural Consciousness |
| Signature Inquiry | 9 | |
| Signature Inquiry #1 | 3 | Choice |
| Signature Inquiry #2 | 3 | Choice |
| Signature Inquiry #3 | 3 | Choice |
| Knowledge in Action | 3+ | |
| Senior Capstone | 3 | ENT497/498 Senior Design Project |
| Experiential Learning | 0+ | ENT497 Senior Design Project |

2025-26 Electro-Mechanical ENT Plan of Study (w/ECET AAS)

An ENT AAS is a requirement for the Bach. degree and built into the 4 year plan. There are AAS courses here that are only on the AAS DAR.

Year One

| Fall Semester | Hours | Spring Semester | Hours |
|--|-----------|---|-----------|
| ENG111 College Composition | 3 | ENT193 Circuit Analysis II | 3 |
| ENT135 Computer-Aided Drafting | 3 | ENT151 Engineering Materials | 3 |
| ENT192 Circuit Analysis I | 3 | CIT163 Intro to Computer Programming or CIT153 Intro to C/C++ Programming | 3 |
| MTH124 Trigonometry | 3 | APC/STC136 Intro to Interpersonal Communication | 3 |
| PA Humanities | 3 | PA Global Citizenship | 3 |
| ENT 137 Introduction to Engineering Technology | 1 | | |
| Total | 16 | Total | 15 |

Year Two

| Fall Semester | Hours | Spring Semester | Hours |
|---|--------------|--|--------------|
| ENT196 Electronics | 3 | ENT295 Microcontrollers | 3 |
| ENT293 Digital Systems | 3 | ENT296 Programmable Logic Controllers I | 4-5 |
| ENT294 Local Area Networks (AAS) | 3 | PHY162 Physics for Life Science II OR PHY182+184 General Physics II (Note: PHY 182+184 means taking MTH 251 now, & MP in the upcoming fall, 5 semesters for AAS) | 3 |
| PHY161 Physics for Life Science I OR PHY181+183 General Physics I | 4-5 | ECO201 Principles of Microeconomics or ECO202 Principles of Macroeconomics | 3 |
| MTH151 Calculus | 3 | EGS215 Workplace Writing or ENG313 Technical Writing | 3 |
| Total | 16-17 | Total | 16-17 |

Year Three

| Fall Semester | Hours | Spring Semester | Hours |
|---|-----------|--|--------------|
| ENT271 Mechanics I: Statics | 3 | STA301 Applied Statistics or STA261 Statistics | 3-4 |
| ENT301 Dynamics | 3 | ENT272 Mechanics II: Strength of Materials | 3 |
| ENT311 Process Control Interface Design | 3 | ENT310 Fluid Mechanics | 3 |
| MTH251 Calculus II | 4 | ENT316 Project Management | 3 |
| PA Global Citizenship | 3 | PA Global Citizenship | 3 |
| Total | 16 | Total | 15-16 |

Year Four

| Fall Semester | Hours | Spring Semester | Hours |
|--------------------------------------|--------------|---|-----------|
| ENT401 Computerized Instrumentation | 3 | ENT402 Industrial Automation Lab | 3 |
| ENT497 Senior Design Project | 2 | ENT407 Modern Manufacturing Systems | 3 |
| CHM141/R+144 College Chemistry w/Lab | 5-6 | ENT418 Electro-Mechanical Control Systems | 3 |
| PA Creative Arts | 3 | ENT498 Senior Design Project | 2 |
| PA Global Citizenship | 3 | MTH245 Differential Equations for Engineers | 3 |
| Total | 16-17 | Total | 14 |

There is a minimum of 124 hours required to graduate. To finish in eight semesters, take Major or PA courses that also complete the SI Signature Inquiry requirement



COLLEGE OF LIBERAL ARTS
AND APPLIED SCIENCE

For advising questions, please contact your assigned advisor or Regional Academic Advising at regadvising@MiamiOH.edu or 513-727-3440