

Cleveland State University
Washkewicz College of Engineering
Bachelor of Science in Mechanical Engineering and Electrical Engineering-Integrated Degree (Effective Fall 2025)

| First Year | | | | | | | |
|---|---------|-------|-----|---------------------------------------|---------|-------|-------------|
| Fall Semester | Credits | Major | CC | Spring Semester | Credits | Major | CC |
| ENG 100 Intensive College Writing OR ENG 101 College Writing I | 3 | | FYV | MTH 182 Calculus II | 4 | | FQR/ DDL |
| MTH 181 Calculus I | 4 | | FQR | PHY 241 University Physics I | 5 | | SI/SIL |
| ESC 151 C Program OR ESC 152 MATLAB | 3 | X | | MCE 181 Computer Aided Engineering II | 2 | | |
| MCE 180 Computer Aided Engineering I | 2 | X | | MCE 276 Materials & Manufacturing* | 3 | X | |
| INQ 170 Engineering Launch ^a | 3 | | IL | MCE 286 Manufacturing Processing Lab* | 1 | X | |
| Semester Total | 15 | | | Semester Total | 15 | | |

| Second Year | | | | | | | |
|--|---------|-------|-----|-------------------------------|---------|-------|-----|
| Fall Semester | Credits | Major | CC | Spring Semester | Credits | Major | CC |
| ESC 250 Differential Equations | 3 | X | | ESC 202 Dynamics | 3 | X | |
| ESC 201 Statics | 3 | X | | ESC 301 Fluid Mechanics | 3 | X | |
| ESC 102 Technical Writing or ENG 102 College Writing II | 3 | | RPW | EEC 310 Electric Circuits I** | 4 | X | |
| CHM 261 General Chemistry I | 3 | | SI | EEC 312 Circuits Lab | 2 | X | |
| ESC 350 Linear Algebra for Engineers | 3 | X | | American Civic Literacy (CC) | 3 | | ACL |
| Semester Total | 15 | | | Semester Total | 15 | | |

| Third Year | | | | | | | |
|------------------------------------|---------|-------|----|---------------------------------------|---------|-------|-----|
| Fall Semester | Credits | Major | CC | Spring Semester | Credits | Major | CC |
| EEC 313 Electronics I*** | 3 | X | | EEC 384 Digital Systems Lab | 2 | X | |
| ESC 211 Strength of Materials | 3 | X | | MCE 371 Vibrations | 3 | X | |
| EEC 383 Digital Systems | 3 | X | | MCE 362 Machine Analysis | 3 | X | |
| ESC 321 Engineering Thermodynamics | 3 | X | | MCE 470 Eng Measurements [§] | 3 | X | |
| EEC 315 Electronics Lab | 2 | X | | MCE 480 Measurements Lab | 1 | X | |
| EEC Technical Elective | 3 | | | Society and Human Behavior | 3 | | SHB |
| Semester Total | 17 | | | Semester Total | 15 | | |

| Fourth Year | | | | | | | |
|--|---------|-------|-----|---|---------|-------|-----|
| Fall Semester | Credits | Major | CC | Spring Semester | Credits | Major | CC |
| MCE 450 or EEC 493 Design Project I [¶] | 2 | X | WAC | MCE 451 or EEC 494 Design Project II [¶] | 3 | X | |
| MCE 441 Intro Linear Controls | 3 | X | | PHL 215 Technology Ethics | 3 | | HCC |
| Global Human Perspectives | 3 | | GHP | MCE Lab Elective | 3 | X | |
| ESC 282 Engineering Economy | 3 | X | | Complexities of a Pluralistic Society (CC) | 3 | | CPS |
| MCE or EEC Technical Elective | 3 | X | | General Elective | 3 | | WAC |
| Semester Total | 14 | | | Semester Total | 15 | | |
| Total Degree Hours: 121 | | | | | | | |

^a INQ 170 is required for all engineering, technology, and computer science majors, and meets the Core Curriculum requirement for Inquiry Launch. ESC 120 is required in place of INQ 170 in the following cases: (a) transfer students; however, those who have had co-op experience in engineering/computer science and/or have transferred 12 credits of engineering/computer science courses can petition to waive ESC 120; (b) students who, as freshmen at CSU, started in another major and completed an Inquiry Launch course different from INQ 170; (c) Honors students who take the Honors Inquiry Launch course. Neither INQ 170 nor ESC 120 is required for transfer students with an Associates of Applied Science degree.

Specifically for ME+EE integrated degree majors:

* MCE 181 is a co-requisite and not a pre-requisite of MCE 276 and MCE 286.

** EEC 310 pre-requisites: INQ 170, ESC 250, and ESC 350.

*** EEC 311 is not a pre-requisite or co-requisite of EEC 313.

§ MCE 324 and ESC 315 are not pre-requisites of MCE 470.

¶ Students who choose MCE 450 must also take MCE 451; similarly, students who choose EEC 493 must also take EEC 494.

Assumption: University Requirement of Foreign Language has been met by either successfully completing two (2) years of the same language in high school; or two (2) semesters of the same language in college; or passing CSU's language placement test in reading, writing, and speaking of a second language other than English.

College/Program Notes: The plan above is a suggested guide to ensure that all Core Curriculum, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Core Curriculum courses, although some requirements need to be completed during the first year.

Students must have a **minimum of 120 total credit hours**.

Core Curriculum Key:

IL = Inquiry Launch
FYV = Finding Your Voice
RPW = Research & Professional Writing
ACL = American Civic Literacy
FQR = Formal & Quantitative Literacy

HCC = Human Culture and Creativity
GHP = Global Human Perspectives
WAC = Writing Across the Curriculum Req
CAP = Capstone Requirement
SHB = Society & Human Behavior

SI = Scientific Inquiry
SIL = Scientific Investigations Lab
CPS = Complexities of Pluralistic Society
DDL = Data & Digital Literacy

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