Cleveland State University
Washkewicz College of Engineering
Bachelor of Computer Engineering (CE)
Fall 2022
CE Degree Map for students immediately eligible for College Writing I, General Chemistry I, and Calculus I

First Year

Fall Semester	Credits	Major	Gen. Ed.	Spring Semester	Credits	Major	Gen. Ed.
ENG 100 Intensive Writing or ENG 100 Writing I	3		W/C	ESC 102 Tech. Writing or ENG 102 College Writing II	3		W/C
MTH 181 Calculus I	4	X	M	MTH 182 Calculus II	4	X	M
CHM 261 General Chemistry I	3	X	NS	PHY 243 University Physics I (Writing)	5	X	NS&WAC
CHM 266 General Chemistry I Lab	1	X		ESC 151 C Programming	3	X	
ESC 120 Introduction to Engineering Design	2	X		General Education Elective	3		AA DIV
ESC 100 New Student Orientation	1						
Semester Total	**14**			**Semester Total**	**18**		

Second Year

Fall Semester	Credits	Major	Gen. Ed.	Spring Semester	Credits	Major	Gen. Ed.
EEC 383 Digital Systems	3	X		EEC 384 Digital Systems Laboratory	2	X	
CIS 260 Introduction to Programming	4	X		CIS 265 Data Structures & Algorithms	4	X	
ESC 250 Differential Equations for Engineers	3	X		PHY 244 University Physics II (Writing)	5	X	NS&WAC
EEC 310 Circuits I	4	X		EEC 311 Circuits II	4	X	
MTH 220 Discrete Mathematics	3	X		ESC 130 Engineering Co-op Orientation*	1		
Semester Total	**17**			**Semester Total**	**16**		

Third Year

Fall Semester	Credits	Major	Gen. Ed.	Spring Semester	Credits	Major	Gen. Ed.
EEC 313 Electronics I	3	X		EEC 316 Electronics Devices Lab	1	X	
EEC 487 Advanced Digital Systems	3	X		EEC 483 Computer Organization	3	X	
CIS 340 Systems Programming	3	X		EEC 414 Technical Communication	2	X	WAC
PHL 215 Engineering Ethics	3	X	A&H+WAC	CIS 345 Operating Systems	3	X	
MTH 284 Matrices for Engineers	2	X		ESC 282 Engineering Economy	3	X	SS
General Education Elective	3		US DIV	ESC 310 Engineering Statistics & Probability	3	X	
Semester Total	**17**			**Semester Total**	**15**		

Fourth Year

Fall Semester	Credits	Major	Gen. Ed.	Spring Semester	Credits	Major	Gen. Ed.
EEC 493 Senior Design I	2	X		EEC 494 Senior Design II	3	X	
EEC 488 Hardware-Software Co-design	3	X		EEC Technical Elective	3	X	
CIS 454 Computer Networks	3	X		EEC Technical Elective	3	X	
EEC Technical Elective	3	X		EEC Technical Elective	3	X	
General Education Elective**	3		SS	General Education Elective**	3		A&H
Semester Total	**14**			**Semester Total**	**15**		

Degree Total Hours: 125 or 126 with ESC 130

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 General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of General Education courses, although the M and W/C requirements need to be completed during the first year of study. General Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a **minimum of 125 total credit hours**, of which a **minimum of 42 credit hours** must be upper division (300 or 400-level courses). Depending upon other elective choices made, students may not need as many general electives as indicated above or may need additional electives. For information about acquiring a Math Minor by substituting solely **ESC 250** Differential Equations with **MTH 286** Differential Equations: visit CE Math Minor or email: impt.engr.info@csuohio.edu to request guidance.

University Notes:

General Education Key + Notes	
General Ed. Electives can be taken in any order except ESC 282 (Engineering Economy) after MTH 182 (Calculus II) as well as PHL 215 (Engineering Ethics) after ESC 102 /ENG 102 (Tech. Writing/College Writing II.	
Intro = Introduction to University Life Requirement (one course required)	**SS** = Social Sciences Requirement (2 courses required, one of which must be focused outside the US)
W/C = Writing/Composition Requirement (two courses, each C or better required)	**A&H** = Arts & Humanities Requirement (2 courses required, one of which must be focused outside the US)
M = Mathematics (two courses required, each C or better)	**DIV** = Social Diversity Requirement (2 courses required, one US Diversity and one African American Experience)
NS = Natural Sciences (two courses required, one of which must have a lab – NS&LAB)	**WAC/SPAC** = Writing/Speaking Across the Curriculum Requirement (3 courses required, one in the major)
ESC 100 = waived for transfer students with 60 credits or more	**CAP** = Capstone Requirement
* Introduction to Co-op Orientation is highly recommended, yet not required.	**of the SS and A&H courses, at least one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)

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