Cleveland State University
Washkewicz College of Engineering

Bachelor of Civil Engineering

NEW FALL 2025

First Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
ENG 100 or ENG 101 College Writing I (Finding Your Voice)	3		X	ESC 102 Technical Writing or ENG 201 (Research and Professional Writing)	3		X
MTH 181 Calculus I (Quantitative and Formal Reasoning)	4	X	X	MTH 182 Calculus II (Data & Digital Literacy/Quantitative and Formal Reasoning)	4	X	X
CHM 261 General Chemistry I	3	X		PHY 241 University Physics I (Scientific Inquiry + Scientific Investigation)	5	X	X
CHM 266 General Chemistry Lab I	1	X		ESC 151 C Programming OR ESC 152 Programming w/MATLAB	3	X	
ESC 110 Engineering Launch (Inquiry Launch)	3	X	X	CVE 170 Civil Engineering Graphics Lab	2	X	
Semester Total	*14*			*Semester Total*	*17*		

Second Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
ESC 201 Statics	3	X		ESC 211 Strength of Materials	3	X	
ESC 250 Differential Equations for Engrs.	3	X		CVE 310 Strength of Material Lab	2	X	
MTH 283 Multivariable Calculus for Engrs.	2	X		CVE 360 Mechanics of Fluids and Basic Thermal Systems for Civil Engineers	4	X	
PHY 242 Univ. Physics II (Scientific Inquiry)	5	X	X	GEO 100 Introduction to Geology	3	X	
CVE 211 Surveying	2	X		GEO 101 Geology Lab	1	X	
CVE 212 Surveying lab	1	X		ESC 310 Engineering Stats/ Probability	3	X	
Semester Total	*16*			*Semester Total*	*16*		

Third Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
ESC 202 Dynamics	3	X		ESC 282 Engineering Economy (Society & Human Behavior)	3	X	X
CVE 312 Structural Analysis I	3	X		CVE 322 Structural Steel Design	3	X	
CVE 361 Hydraulic Engineering	3	X		CVE 331 Intro. To Geotechnical Engineering	3	X	
CVE 362 Hydraulics Lab OR CVE 363 Hydraulics Lab (Writing) (WAC)	2	X		CVE 332 Geotechnical Engineering Lab OR CVE 333 Geotechnical Engineering Lab (Writing) (WAC)	2	X	
CVE 371 Environmental Engineering I	3	X		CVE 461 Hydrologic Analysis	3	X	
CVE 374 Environmental Engineering Lab	2	X		CVE 422 Reinforced Concrete Design	3	X	
Semester Total	*16*			*Semester Total*	*17*		

Fourth Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
CVE 426 Preliminary Design (WAC)	2	X		CVE 403 Construction Planning and Estm	3	X	
PHL 215 Engineering Ethics (Human Culture & Creativity)	3	X		CVE 427 Capstone Design (SPAC)	2	X	
CVE 446 Transportation Engineering	3	X		CVE Tech Elective	3	X	
CVE 429 Foundation Engineering	3	X		Core (African-American History & Culture)	3		X
CVE Tech Elective	3	X		Core (Diversity in Society)	3		X
Core – Global Human Perspectives	3		X				
Semester Total	*17*			*Semester Total*	*14*		

Degree Total: 128 hours

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 must have a **minimum of 128 total credit hours**, of which a **minimum of 42 credit hours** must be upper division (300 or 400-level courses) This information is provided solely for the convenience of the reader, and the University expressly disclaims any liability which may otherwise be incurred. This publication is neither a contract nor an offer to make a contract. While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.