Cleveland State University
Washkewicz College of Engineering and College of Arts & Sciences
Bachelor of Science in Computer Science and Design (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	ENG 102 College Writing II or ESC 102 Technical Writing	3		RPW
MTH 148 Business Math I OR MTH 181 Calculus I	3 or 4		FQR	MTH 149 Business Math II or MTH 182 Calculus II	4		DDL/FQR
CIS 151 Invitation to Computing	3	X		CIS 260 Introduction to Programming	4	X	
ART 244 Introduction to Visual Technology	3	X		ART 242 Introduction to Typography	3	X	
Inquiry Launch (CC)	3		IL				
Semester Total	15 or 16			Semester Total	14		

Second Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
CIS 265 Data Structures & Algorithms	4	X		CIS 340 Systems Programming	3	X	
ART 346 Human Centered Graphic Design	3	X		CIS 390 Introduction to Algorithms	3	X	
ART 347 Intermediate Visual Technology-Web	3	X		PHL 215 Technology Ethics (OR) PHL 216 AI & Data Ethics	3		HCC
MTH 220 Intro to Discrete Math	3			ART 342 Advanced Typography	3	X	
American Civic Literacy (CC)	3		ACL	ESC 282 Engineering Economy	3	X	
ESC 130 Engineering & Computer Science Career Preparation*	1						
Semester Total	17			Semester Total	15		

Third Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
CIS 345 Operating Systems	3	X		CIS 430 Database Concepts	3	X	
CIS 424 Comparative Program Language	3	X		CIS 434 Software Engineering	3	X	
ART 447 User Experience/User Interface Design (UX/UI)	3	X		CIS 454 Data Communication & Networking	3	X	
CIS 402 CS Technical Writing	2	X	WAC	ART 348 Intermediate Visual Technology-Motion	3		
Science Inquiry (CC)	3		SI	Society and Human Behavior (CC)	3		SHB
Science Investigations (CC)	1		SIL				
Semester Total	15			Semester Total	15		

Fourth Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
ART 343 Data Visualization & Info Design	3	X		Senior Capstone ART 450 or CIS 492	3	X	CAP
Global Human Perspectives (CC)	3		GHP	General Elective	3	X	
Science Inquiry (CC)	3		SI	Complexities of Pluralistic Society (CC)	3		CPS
General Elective	3			General Elective	3		WAC
General Elective	3			General Elective	3		
Semester Total	15			Semester Total	15		

Total Degree Hours: 121-122 including optional 1 credit ESC 130 course

*ESC 130 Engineering & Computer Science Career Preparation is an optional course for the interested students

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 121 (or 122 including ESC 130) total credit hours**.

Core Curriculum Key:		
IL = Inquiry Launch	HCC = Human Culture and Creativity	SI = Scientific Inquiry
FYV = Finding Your Voice	GHP= Global Human Perspectives	SIL = Scientific Investigations Lab
RPW = Research & Professional Writing	WAC = Writing Across the Curriculum Req	CPS = Complexities of Pluralistic Society
ACL = American Civic Literacy	CAP = Capstone Requirement	DDL= Data & Digital Literacy
FQR = Formal & Quantitative Literacy	SHB = Society & Human Behavior	

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