Cleveland State University
College of Arts & Sciences and Washkewicz College of Engineering
Bachelor of Science Computer Science and Physics
Computer Science + Physics Degree Map (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	ESC 102 Technical Writing or ENG 102 College Writing II	3		RPW
MTH 181 Calculus I	4	X	FQR	MTH 181 Calculus II	4	X	DDL/FQR
CIS 151 Invitation to Computing	3	X		PHY 241 University Physics I	5	X	SI/SIL
Society & Human Behavior (CC)	3		SHB	CIS 260 Introduction to Programming	4	X	
Inquiry Launch (CC)	3		IL				
Semester Total	16			Semester Total	16		

Second Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
CIS 265 Data Structures & Algorithms	4	X		CIS 340 Systems Programming	3		
PHY 242 University Physics II	5	X	SI/SIL	MTH 288 Linear Algebra	3	X	
PHL 216 AI & Data Ethics	3	X	HCC	CIS 335 Language Processors	3	X	
MTH 220 Intro to Discrete Mathematics	3	X		African American History and Culture (CC)	3		AAHC
ESC 130 Engineering & Computer Science Career Preparation*	1			General Elective	3		
Semester Total	15 or 16			Semester Total	15		

Third Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
CIS 390 Introduction to Algorithms	3	X		CIS 300/400 Elective	3	X	
CIS 402 CS Technical Writing	2	X	WAC	CIS 300/400 Elective	3	X	
PHY 320 Introduction to Computation	3	X		PHY 335 or PHY 461 or PHY 455	3	X	
PHY 330 Introduction to Modern Physics	3	X		PHY 300/400 Elective	3	X	
PHY 300/400 Elective	3	X		Global Human Perspectives (CC)	3		GHP
Semester Total	14			Semester Total	15		

Fourth Year

Fall Semester	Credits	Major	CC	Spring Semester	Credits	Major	CC
PHY 493 Advance Topics in Physics	2	X		PHY 498 Capstone	1	X	CAP
PHY 482 Optical Materials	3	X	WAC	PHY 493 Advance Topics in Physics	2		
PHY 300/400 Elective	3	X		Diversity in Society (CC)	3		DS
CIS 300/400 Elective	3	X		General Elective	3		
General Elective	3			General Elective	3		
General Elective	1			General Elective	3		
Semester Total	15			Semester Total	15		
Total Degree Hours: 121 or 122 including 1 credit optional ESC 130 course							

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

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 Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year.

General Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a **minimum of 120 total credit hours**. Depending upon elective choices made, students may not need as many electives as indicated above or may need additional electives.

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	DS = Diverse Society
AAHC = African-American History and Culture	CAP = Capstone Requirement	DDL= Data & Digital Literacy
FQR = Formal & Quantitative Literacy	SHB = Society & Human Behavior	

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