Cleveland State University
College of Arts and Sciences and Washkewicz College of Engineering
Bachelor of Science in Physics + Computer Science

First Year

Fall Semester	Credits	Major	Core	Spring Semester	Credits	Major	Core
Inquiry Launch Elective	3		IL	Research & Professional Writing Elective	3		RPW
MTH 181 Calculus I	4	X	QFR	MTH 182 Calculus II	4	X	QFR
Society & Human Behavior Elective	3		SHB	CIS 260 Intro to Programming	4	X	
CIS 151 Invitation to Computing	3	X		PHY 241 University Physics I	5	X	SI
Finding Your Voice Elective	3		FYV				
Semester Total	16			Semester Total	16		

Second Year

Fall Semester	Credits	Major	Core	Spring Semester	Credits	Major	Core
CIS 265 Data Structures & Algorithms	4	X		CIS 340 Systems Programming	3	X	
PHY 242 University Physics II	5	X	SI	MTH 288 Linear Algebra	3	X	
Human Culture & Creativity Elective	3		HCC	American Civic Literacy Elective	3		ACL
ESC 130 Eng & Comp Sci Career Prep* (OPTIONAL)	1			CIS 335 Language Processors	3	X	
MTH 220 Intro to Discrete Math	3	X		General Elective	3		
Semester Total	16			Semester Total	15		

Third Year

Fall Semester	Credits	Major	Core	Spring Semester	Credits	Major	Core
CIS 390 Introduction to Algorithms	3	X		CIS 300/400 Elective	3	X	
PHY 320 Intro to Computational Physics	3	X		PHY 335, 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 Elective	3		GHP
CIS 402 CS Technical Writing (as CIS 300/400 Elective)	2	X	WAC	General Elective	2		
Semester Total	14			Semester Total	14		

Fourth Year

Fall Semester	Credits	Major	Core	Spring Semester	Credits	Major	Core
PHY 493 Advanced Topics in Physics	2	X		PHY 498 Capstone Senior Project	1	X	
PHY 482 Optical Materials (as PHY 300/400 Elective)	3	X	WAC	PHY 493 Advanced Topics in Physics	2	X	
PHY 300/400 Elective	3	X		Complexities of a Pluralistic Society	3		CPS
CIS 300/400 Elective	3	X		General Elective	3		
General Elective	3			General Elective	3		
				General Elective	3		
Semester Total	14			Semester Total	15		
Degree Total hours: 120 hours							

Core Curriculum Key:	
IL = Inquiry Launch (one course)	QFR = Quantitative & Formal Reasoning (one course)
FYV = Finding Your Voice (one course, C or better required)	RPW = Research & Professional Writing (one course, C or better required)
SHB = Society & Human Behavior (one course)	HCC = Human Culture & Creativity (one course)
SI = Scientific Inquiry (two courses, one lab credit)	WAC/SPAC = Writing/Speaking Across the Curriculum Req (2 courses, one in the major)
GHP = Global Human Perspectives (one course)	ACL = American Civic Literacy (one course)
** Inquiry Launch requirement is waived for transfer students.	CPS = Complexities of a Pluralistic Society (one course)
	DDL = Data & Digital Literacy (one course, can be satisfied by a second QFR course)

*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a **minimum of 120 total credit hours**, of which a **minimum of 36 credit hours** must be upper division (300 or 400-level courses). *Students taking the optional ESC 130 Career Preparation will need fewer elective hours to reach 120.*

^CIS 402 and PHY 482 are suggested as 300/400 level CIS and PHY electives in order to meet WAC requirements.