Cleveland State University – Washkewicz College of Engineering
Bachelor of Science in Computer Science
Effective Fall 2025

Name _____   **I.D. No.**_____

First Year

Fall Semester	Credits	Grade	CC	Spring Semester	Credits	Grade	CC
ENG 101 English I	3		FYV	ESC 102 Tech. Writing or ENG 102 English II	3		RPW
MTH 181 Calculus I	4		FQR	MTH 182 Calculus II	4		DDL/FQR
CIS 151 Invitation to Computing	3			PHY 241 University Physics I	5		SI/SIL
INQ 170 Inquiry Launch to Engineering*	3		IL	CIS 260 Introduction to Programming	4		
Semester Total	13			Semester Total	16		

Second Year

Fall Semester	Credits	Grade	CC	Spring Semester	Credits	Grade	CC
CIS 265 Data Structures	4			CIS 335 Language Processors	3		
PHY 242 University Physics II	5		SI/SIL	MTH 288 Linear Algebra	3		
ESC 310 Engineering Probability & Statistics	3			PHL 215 Technology Ethics (OR) PHL 216 AI & Data Ethics	3		HCC
MTH 220 Intr. to Discrete Mathematics	3			Society and Human Behavior (A&H)	3		SHB
				ESC 282 Engineering Economy	3		
Semester Total	15			Semester Total	15		

Third Year

Fall Semester	Credits	Grade	CC	Spring Semester	Credits	Grade	CC
CIS 340 Systems Programming	3			CIS 345 Operating Systems	3		
CIS 390 Introduction to Algorithms	3			CIS 430 Database Concepts	3		
CS Major Elective	3			CIS 434 Software Engineering	3		
CIS 402 Technical Communication	2		WAC	CIS 454 Computer Networks	3		
CIS 480 Introduction to Computer Architecture	3			Global Human Perspectives (A&H)	3		GHP
American Civic Literacy	3		ACL				
Semester Total	17			Semester Total	15		

Fourth Year

Fall Semester	Credits	Grade	CC	Spring Semester	Credits	Grade	CC
CIS 493 Senior Design I	2		WAC	CIS 494 Senior Design II	3		CAP
CIS 475 Computer Security	3			CS Major Elective	3		
CS Major Elective	3			CS Major Elective	3		
CS Major Elective	3			CS Major Elective	3		
CS Major Elective	3			Complexities of Pluralistic Society	3		CPS
Semester Total	14			Semester Total	15		

Degree Total hours: 120 hours

* INQ 170 is required for all engineering, technology, and computer science majors, and meets the Core Curriculum requirement for Inquiry Launch. ESC 120 is required in place of INQ 170 in the following cases: (a) transfer students; however, those who have had co-op experience in engineering/computer science and/or have transferred 12 credits of engineering/computer science courses can petition to waive ESC 120; (b) students who, as freshmen at CSU, started in another major and completed an Inquiry Launch course different from INQ 170; (c) Honors students who take the Honors Inquiry Launch course. Neither INQ 170 nor ESC 120 is required for transfer students with an Associates of Applied Science degree.

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 5 years of study. Students may deviate from the suggested placement of General Education courses, although the M/QL and W/C requirements should 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 120 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 declaring a Math Minor with the courses you already need for the CS major, email: impt.engr.info@csuohio.edu.

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	

Cleveland State University – Washkewicz College of Engineering
Bachelor of Science in Computer Science
Co-op version
Curriculum Sheet (Effective Fall 2025)

Name:_____   I.D. No:_____

Fall Semester	Credits	CC	Spring Semester	Credits	CC		Summer Semester	Credits	CC
ENG 101 English I	3	FYV	ENG 102 English II or ESC 102 Tech Writing	3	RPW				
MTH 181 Calculus I	4	FQR	MTH 182 Calculus II	4	DDL/FQR				
CIS 151 Invitation to Computing	3		PHY 241 University Physics I	5	SI/SIL				
INQ 170 Inquiry Launch to Engineering*	3	IL	CIS 260 Introduction to Programming	4					
			ESC 130 Engineering & Comp Science Career Prep	1					
Semester Total	13		Semester Total	17			Semester Total		

Second Year

Fall Semester	Credits	CC	Spring Semester	Credits	CC		Summer Semester	Credits	CC
CIS 265 Data Structures	4		CIS 335 Languages Processors	3			ESC 300/400 Fenn Co-op Education Experience	1	
PHY 242 University Physics II	5	SI/SIL	MTH 288 Linear Algebra	3					
ESC 310 Eng. Stat & Probability	3		PHL 215 Technology Ethics (OR) PHL 216 AI & Data Ethics	3	HCC				
MTH 220 Intr. To Discrete Mathematics	3		Society & Human Behavior (A&H)	3	SHB				
			ESC 282 Engineering Economy	3					
Semester Total	15		Semester Total	15					

Third Year

Fall Semester	Credits	CC	Spring Semester	Credits	CC		Summer Semester	Credits	CC
CIS 340 Systems Programming	3		ESC 300/400 Fenn Co-op Education Experience	1			American Civic Literacy	3	ACL
CIS 390 Introduction to Algorithms	3								
CIS 424 Programming Languages	3								
CIS 402 Technical Communication	2	WAC							
CIS 480 Introduction to Comp Architecture	3								
Semester Total	14		Semester Total				Semester Total	3	

Fourth Year

Fall Semester	Credits	CC	Spring Semester	Credits	CC		Summer Semester	Credits	CC
ESC 300/400 Fenn Co-op Education Experience	1		CIS 345 Operating Systems	3			ESC 300/400 Fenn Co-op Education Experience	1	
			CIS 430 Database Concepts	3					
			CIS 434 Software Engineering	3					
			CIS 454 Computer Networks	3					
			Global Human Perspectives (A&H)	3	GHP				
Semester Total			Semester Total	15			Semester Total		

Fifth Year

Fall Semester	Credits	CC	Spring Semester	Credits	CC		Summer Semester	Credits	CC
CIS 493 Senior Design I	2	WAC	CIS 494 Senior Design II	3	CAP				
CIS 475 Computer Security	3		CS Major Elective	3					
CS Major Elective	3		CS Major Elective	3					
CS Major Elective	3		CS Major Elective**	3					
CS Major Elective	3		Complexities of Pluralistic Society	3	CPS				
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Semester Total	14		Semester Total	15			Semester Total		
Degree Total: 121 hours (excludes ESC 300/400)									

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** Students who complete three semesters of co-op (ESC 300/400) can substitute one CS major elective course with these three co-op credits

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 5 years of study. Students may deviate from the suggested placement of General Education courses, although the M/QL and W/C requirements should 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 120 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 declaring a Math Minor with the courses you already need for the CS major, email: impt.engr.info@csuohio.edu