

Cleveland State University  
Washkewicz College of Engineering  
Bachelor of Science in Computer Science

Name \_\_\_\_\_

I.D. No. \_\_\_\_\_

**Curriculum Sheet (Effective Fall 2025)**

<b>First Year</b>								
<b>Fall Semester</b>	Credits	Grade	CC	<b>Spring Semester</b>	Credits	Grade	CC	
ENG 101 English I	3		FVY	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			
<b>Semester Total</b>	<b>13</b>			<b>Semester Total</b>	<b>16</b>			

<b>Second Year</b>								
<b>Fall Semester</b>	Credits	Grade	CC	<b>Spring Semester</b>	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			
<b>Semester Total</b>	<b>15</b>			<b>Semester Total</b>	<b>15</b>			

<b>Third Year</b>								
<b>Fall Semester</b>	Credits	Grade	CC	<b>Spring Semester</b>	Credits	Grade	CC	
CIS 340 Systems Programming	3			CIS 345 Operating Systems	3			
CIS 390 Introduction to Algorithms	3			CIS 430 Database Concepts	3			
CIS 424 Programming Languages	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	
African-American History & Culture	3		AAHC					
<b>Semester Total</b>	<b>17</b>			<b>Semester Total</b>	<b>15</b>			

<b>Fourth Year</b>								
<b>Fall Semester</b>	Credits	Grade	CC	<b>Spring Semester</b>	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			Diversity in Society	3		DS	
<b>Semester Total</b>	<b>14</b>			<b>Semester Total</b>	<b>15</b>			

**Degree Total hours: 120 hours**

\* ESC 120 is required in the following cases: (a) for students with an Associate of Science degree; (b) for transfer students with over 60 credits completed before transferring to CSU (those who have had co-op experience in engineering/computer science and/or 12 credits of engineering/computer science courses can petition to waive ESC 120); and (c) students who, as freshmen at CSU started in another major and completed an Inquiry Launch course different from INQ 170 or Honors students who take the Honors Inquiry Launch course.

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](mailto:impt.engr.info@csuohio.edu).

<b>Core Curriculum Key:</b>		
IL = Inquiry Launch	HCC = Human Culture and Creativity	SI = Scientific Inquiry
FVY = 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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**Curriculum Sheet (Effective Fall 2025)**

Fall Semester			Spring Semester			Summer Semester		
Credits	CC		Credits	CC		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 Co-Op Orientation	1				
<i>Semester Total</i>	<i>13</i>		<i>Semester Total</i>	<i>17</i>		<i>Semester Total</i>		

<b>Second Year</b>								
Fall Semester			Spring Semester			Summer Semester		
Credits	CC		Credits	CC		Credits	CC	
CIS 265 Data Structures	4		CIS 335 Languages Processors	3		ESC300 or ESC400 Co-Op	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				
<i>Semester Total</i>	<i>15</i>		<i>Semester Total</i>	<i>15</i>				

<b>Third Year</b>								
Fall Semester			Spring Semester			Summer Semester		
Credits	CC		Credits	CC		Credits	CC	
CIS 340 Systems Programming	3		ESC300 or ESC400 Co-Op	1		African-American History & Culture	3	AAHC
CIS 390 Introduction to Algorithms	3							
CIS 424 Programming Languages	3							
CIS 402 Technical Communication	2	WAC						
CIS 480 Introduction to Comp Architecture	3							
<i>Semester Total</i>	<i>14</i>		<i>Semester Total</i>			<i>Semester Total</i>	<i>3</i>	

<b>Fourth Year</b>								
Fall Semester			Spring Semester			Summer Semester		
Credits	CC		Credits	CC		Credits	CC	
ESC300 or ESC400 Co-Op	1		CIS 345 Operating Systems	3		ESC300 or ESC400 Co-Op	1	
			CIS 430 Database Concepts	3				
			CIS 434 Software Engineering	3				
			CIS 454 Computer Networks	3				
			Global Human Perspectives (A&H)	3	GHP			
<i>Semester Total</i>			<i>Semester Total</i>	<i>15</i>		<i>Semester Total</i>		

<b>Fifth Year</b>								
Fall Semester			Spring Semester			Summer Semester		
Credits	CC		Credits	CC		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		Diversity in Society	3	DS			
<i>Semester Total</i>	<i>14</i>		<i>Semester Total</i>	<i>15*</i>		<i>Semester Total</i>		

**Degree Total: 120 hours (excluding ESC130)**

**College Notes:**

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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

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