

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

Name _____

I.D. No. _____

Curriculum Sheet (Effective Fall 2023)

First Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
ENG 101 English I	3		W/C	ESC 102 Tech. Writing or ENG 102 English II	3		W/C
MTH 181 Calculus I	4		M/QL	MTH 182 Calculus II	4		M/QL
CIS 151 Invitation to Computing	3			PHY 243 University Physics I (Writing)	5		NS/WAC
ESC 120 Introduction to Engineering Design	2			CIS 260 Introduction to Programming	4		
ESC 100 Orientation*	1		INTRO				
Semester Total	13			Semester Total	16		

Second Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
CIS 265 Data Structures	4			CIS 335 Language Processors	3		
PHY 244 University Physics II (Writing)	5		NS/WAC	MTH 288 Linear Algebra	3		
ESC 310 Engineering Probability & Statistics	3		M/QL	PHL 215 Engineering Ethics**	3		A&H/WAC
MTH 220 Intr. to Discrete Mathematics	3			Social Diversity African-American	3		DIV
				ESC 282 Engineering Economy**	3		SS
Semester Total	15			Semester Total	15		

Third Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
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		
EEC 414 Technical Communication	2		WAC	CIS 454 Computer Networks	3		
CIS 480 Introduction to Computer Architecture	3			Arts & Humanities**	3		A&H
Social Science**	3		SS				
Semester Total	17			Semester Total	15		

Fourth Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
CIS 493 Senior Design I	2			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			U.S. Diversity	3		DIV
Semester Total	14			Semester Total	15		

Degree Total hours: 120 hours

Gen Ed Key:

INTRO = Introduction to University Life Requirement (one course)
W/C = Writing/Composition Requirement (two courses; **C or better** required)
M/QL = Mathematics/Quantitative Literacy Requirement (two courses)
NS = Natural Sciences (two courses, one of which must have a lab)
* ESC 100 is waived for transfer students.

SS = Social Sciences Req (2 courses, one of which must be focused outside the US**)
A&H = Arts & Humanities Requirement (2 courses, one must be focused outside the US**)
DIV = Social Diversity Req (2 courses; one US Diversity and one African American Exp.)
WAC/SPAC = Writing/Speaking Across the Curriculum Req (3 courses, one in the major)
CAP = Capstone Requirement

** of the SS and A&H courses, at least one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)

Cleveland State University
Washkewicz College of Engineering
Bachelor of Science in Computer Science (Co-Op Program)

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MTH 181 Calculus I	4		M/QL	MTH 182 Calculus II	4		M/QL
CIS 151 Invitation to Computing	3		NS	PHY 243 University Physics I (Writing)	5		NS/WAC
ESC 130 Engineering Co-op Orientation	1		NS	CIS 260 Introduction to Programming	4		
ESC 100 Orientation*	1		INTRO				
ESC 120 Introduction to Engineering Design	2						
Semester Total	14			Semester Total	16		

Second Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
CIS 265 Data Structures	4			CIS 335 Language Processors	3		
PHY 244 University Physics II (Writing)	5		NS/WAC	MTH 288 Linear Algebra	3		
ESC 310 Engineering Probability & Statistics	3		M/QL	PHL 215 Engineering Ethics**	3		A&H/WAC
MTH 220 Intr. to Discrete Mathematics	3			Social Diversity African-American	3		DIV
				ESC 282 Engineering Economy**	3		SS
Semester Total	15			Semester Total	15		

Third Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
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		
EEC 414 Technical Communication	2		WAC	CIS 454 Computer Networks	3		
CIS 480 Introduction to Computer Architecture	3			Arts & Humanities**	3		A&H
Social Science**	3		SS				
Semester Total	17			Semester Total	15		

Fourth Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
EEC 493 Senior Design I	2			EEC 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			U.S. Diversity	3		DIV
Semester Total	14			Semester Total	15		

Degree Total hours: 121 hours

Gen Ed Key:

INTRO = Introduction to University Life Requirement (one course)
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