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

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

Curriculum Sheet (Effective Fall 2015)

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
CHM 261 General Chemistry	3		NS	PHY 243 University Physics I (Writing)	5		NS/WAC
CHM 266 General Chemistry Lab 1	1		NS	CIS 151 Invitation to Computing	3		
ESC 100 Orientation	1		INTRO				
ESC 120 Introduction to Engineering Design	2						
Semester Total	14			Semester Total	15		

Second Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
CIS 260 Introduction to Programming	4			CIS 265 Data Structures	4		
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 Diveristy African-American	3		DIV
				ESC 282 Engineering Economy	3		SS
Semester Total	15			Semester Total	16		

Third Year

Fall Semester	Credits	Grade	Gen Ed	Spring Semester	Credits	Grade	Gen Ed
CIS 335 Language Processors	3			CIS 345 Operating Systems	3		
CIS 340 Systems Programming	3			CIS 480 Computer Architecture	3		
CIS 390 Introduction to Algorithms	3			CIS 434 Software Engineering	3		
EEC 414 Technical Communication	2		WAC	CIS 430 Database Concepts	3		
CIS 424 Programming Languages	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
CS Core Choice _____	3			CS Core Choice _____	3		
CS Core Choice _____	3			CS Major Elective _____	3		
CS Core Choice _____	3			CS Major Elective _____	3		
CS Major Elective _____	3			U.S. Diversity	3		DIV
CS Major Elective _____	3						
Semester Total	17			Semester Total	15		

Degree Total: 124 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 not required for transfer students.

SS = Social Sciences Req (2 courses)
A&H = Arts & Humanities Requirement (2 courses)
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

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

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

Curriculum Sheet (Effective Fall 2015)

Fall Semester	Credits	Grade	Spring Semester	Credits	Grade	Summer Semester	Credits	Grade
ENG 101 English I	3		ENG 102 or ESC 102 Writing	3				
MTH 181 Calculus I	4		MTH 182 Calculus II	4				
CHM 261 General Chemistry I	3		PHY 243 University Physics I (Writing)	5				
CHM 266 General Chemistry I Lab	1		CIS 151 Invitation to Computing	3				
ESC 100 New Student Orientation	1		ESC 130 Engineering Co-Op Orientation	1				
ESC 120 Intro to Engineering Design	2							
Semester Total	14		Semester Total	16		Semester Total		

Second Year								
Fall Semester	Credits	Grade	Spring Semester	Credits	Grade	Summer Semester	Credits	Grade
PHY 244 University Physics II	5		CIS 265 Data Structures	4		ESC300 or ESC400 Co-Op	1	
CIS 260 Introduction to Programming	4		MTH 288 Linear Algebra	3				
ESC 310 Eng. Stat & Probability	3		General Education Elective	3				
MTH 220 Intr. To Discrete Mathematics	3		General Education Elective	3				
			PHL 215 Engineering Ethics	3				
Semester Total	15		Semester Total	16				

Third Year								
Fall Semester	Credits	Grade	Spring Semester	Credits	Grade	Summer Semester	Credits	Grade
CIS 335 Languages Processors	3		ESC300 or ESC400 Co-Op	1		General Education Elective	3	
CIS 340 Systems Programming	3					General Education Elective	3	
CIS 390 Introduction to Algorithms	3					ESC 282 Engineering Economy	3	
CIS 424 Programming Languages	3							
EEC 414 Technical Communication	2							
Semester Total	14		Semester Total	1		Semester Total	9	

Fourth Year								
Fall Semester	Credits	Grade	Spring Semester	Credits	Grade	Summer Semester	Credits	Grade
ESC300 or ESC400 Co-Op	1		CIS 480 Computer Architecture	3		ESC300 or ESC400 Co-Op	1	
			CIS 434 Software Engineering	3				
			CIS 430 Database Concepts	3				
			CIS 345 Operating Systems	3				
Semester Total	1		Semester Total	12		Semester Total		

Fifth Year								
Fall Semester	Credits	Grade	Spring Semester	Credits	Grade	Summer Semester	Credits	Grade
EEC 493 Senior Design I	2		EEC 494 Senior Design II	3				
CS Core Choice	3		CS Core Choice	3				
CS Core Choice	3		CS Core Choice	3				
CS Major Elective	3		CS Major Elective	3				
CS Major Elective	3		CS Major Elective	3				
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Semester Total	14		Semester Total	15		Semester Total		
Degree Total: 124 hours (excluding ESC130 and ESC300/400)								