

Bachelor of Science in Computer Science

Software Engineering Cognate

2018-2019 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2018 through summer 2019. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations or cognates.

GENERAL EDUCATION/

Course	MPETENCY REQUIREMENTS (46-	Hrs	Sem	Grade	Course		Hrs	Sem	Grad
Communica	tion (6 hours) ¹				Major Found	lational Courses (4-15 hours) ⁴			
ENGL 101 Composition & Rhetoric		3			ENGR 270	Technical Communication	3		
	Communications Elective	3			MATH 131	Calculus & Analytical Geometry I ⁵	4		-
					MATH 132	Calculus & Analytical Geometry II ⁵	4		-
Math. Scien	ce & Technology (9-12 hours) ¹				PHYS 231	University Physics I	4		
MATH	Math Elective (MATH 114 or higher)	4				Jane			
	Natural Science Elective	4			MAJOR				
	Technology Competency ²	0-3			11110011	Core (39 hours)			
UNIV 101	University Core Competencies	1			CSIS 100	Intro. to Information Sciences & Systems	3		
	conversity core competences	-			CSIS 110	Introduction to Computing Sciences	-		
Information Literacy (7 hours) ¹					CSIS 111	Introduction to Programming			
INQR 101	Inquiry 101	1			CSIS 112	Advanced Programming	3		-
1101	Composition Elective	3			CSIS 215	Algorithms & Data Structures			-
	Information Literacy Elective	3			CSIS 326	Database System Concepts			
	information Energy Elective	3			CSIS 342	Computer Architecture & Organization			-
Critical Thi	nking (12 hours)¹				CSIS 355	Network Architecture & Protocols			-
RSCH 201	Research 201	3			CSIS 434	Theory of Programming Languages			-
K3C11 201	Literature OR Philosophy Elective	3			CSIS 443	Operating Systems			
	Social Science Elective	3			CSIS 471	Software Engineering			
	Cultural Studies Elective	3			CSIS 471 CSIS 481	CS Capstone I			-
	Cultural Studies Elective	3			CSIS 481 CSIS 482	CS Capstone II			
Cl	2fo 9 Thomak4 (12 harras)13				CSIS 462	C3 Capstone II	3		-
C hrisuan L i BIBL 105	ife & Thought (12 hours) ^{1,3} Old Testament Survey	2				Cognate (12 hours)			
BIBL 103	New Testament Survey	2			BUSI 240	Organizational Behavior I	2		
EVAN 101	Evangelism & Christian Life	2			BUSI 427	Team Dynamics			
RLGN 105	Intr Bwvw/Contemp Moral Issues	2			CSIS 375	Introduction to Human-Computer			-
	Theology Survey I	2			CSIS 461	Technical Aspects of Computer Security	3		-
THEO 201		2					2		
THEO 202	Theology Survey II	2			<u>or</u> CSIS 463	Modern Cryptography	3		
						Quantitative Studies Courses (10 hours)			
					ENCD 122	Calculus with MATLAB			
					ENGR 133	Calculus with Mathematica Lab			
					or MATH 133			4	-
					MATH 211	Introduction to Statistical Analysis			
					MATH 250	Introduction to Discrete Mathematics			
					MATH 350	Discrete Mathematics	3		
						Lab Sciences Courses (8 hours)			
						Natural Science Elective ⁶	4		
						Lab Science Elective ⁷	-		-
						=	-		
						Technical Elective Courses (12-13 hours) ⁸	3		
					CRST 290	History of Life	2		
							_		
							_		
							_		-
							_		

Graduation Requirements

131 Total Hours

2.0 Overall grade point average

32.75 Hours must be upper-level courses (300-400 level)

Grade of 'C' Minimum required for <u>all</u> courses in the Major, Quantitative Studies, Lab Sciences and Technical Electives

50% Of major, core, and cognate taken through Liberty University

32.75 Hours must be completed through Liberty University

Grad App Submission of Graduation Application must be completed within the last semester of a student's anticipated graduation date

CSER All requirements must be satisfied before a degree will be awarded

Notes

All applicable prerequisites must be met

¹Refer to the list of approved general education electives at www.liberty.edu/gened before enrolling in core competency requirements

²All students must pass the Computer Assessment OR complete applicable INFT course; refer to www.liberty.edu/computerassessment for more information

³Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 & EVAN 101 waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 & THEO 202 waived

⁴Major Foundational Courses can also fulfill General Education/Core Competency requirements as applicable

Minimum grade of "C" is required

⁶Choose from BIOL 213 and 214, BIOL 225, CHEM 105, 107, 122, ENVR 220 and 221,

PHYS 101 and 103, PHYS 201, 202, or 232

⁷Choose from BIOL 101 and 103, 102 and 104, BIOL 224 or CHEM 121

⁸Choose a minimum of 10 credits from Approved Computer Science Courses

Suggested Course Sequence on second page

Revised: 05.19.2018 Effective: Catalog Term 2018-40

SUGGESTED COURSE SEQUENCE

FRESHMAN YEAR

First Semester		Second Semester									
ENGL 101	3	EVAN 101		2							
MATH 131 ¹	4	INQR 101		1							
UNIV 101	1	RLGN 105		2							
Technology Competency ²	0-3	Communications Elective ³ [ENGR 270]		3							
CSIS 100	3	Composition Elective ³		3							
CSIS 110	3	Math Elective ³ [MATH 132 ¹]		4							
MATH 133 or ENGR 133	1	CSIS 111		3							
CSER	<u>0</u>	CSER		0							
	Total 15-18		Total	18							
SOPHOMORE YEAR											
BIBL 105	2	BIBL 110		2							
Natural Science Elective ³ [PHYS 231]	4	RSCH 201		3							
Social Science Elective ³	3	Literature/Philosophy Elective ³		3							
CRST 290	2-3	CSIS 215		3							
CSIS 112	3	MATH 250		3							
MATH 211	3	Lab Science Elective ⁴		4							
CSER	<u>0</u>	CSER		0							
	Total 17-18		Total	18							
JUNIOR YEAR											
THEO 201	2	THEO 202		2							
Natural Science Elective ⁵	4	Cultural Studies Elective ³		3							
CSIS 326	3	CSIS 434		3							
CSIS 342	3	CSIS 443		3							
CSIS 355	3	CSIS 461 or 463		3							
MATH 350	3	CSIS 471		3							
CSER	<u>0</u>	CSER		0							
	Total 18		Total	17							
	SENIOR Y	EAR									
Information Literacy Elective ³	3	BUSI 427		3							
Social Science Elective ³	3	CSIS 375		3							
BUSI 240	3	CSIS 482		3							
CSIS 481	3	Technical Elective ⁶		3							
Technical Elective ⁶	3	Technical Elective ⁶		3							
Technical Elective ⁶	3	CSER		0							
CSER	<u>0</u>		Total	15							
	Total 18										

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 $^{^5 \}text{Choose}$ from BIOL 213 and 214, BIOL 225, CHEM 105, 107, 122, ENVR 220 and 221

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