UNIVERSITY. ONLINE

Bachelor of Science in Computer Science Cybersecurity

2024-2025 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2024 through summer 2025. 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/

FOUNDAT	IONAL SKILLS REQUIREMENTS ((41-44	hours)					
Course		Hrs	Sem	Grade	Course		Hrs	Sem	Grade
Communica	ation & Information Literacy (12 hour	rs) ¹			Major Foun	dational Courses (0-11 hours)			
ENGL 101	Composition & Rhetoric	3			CSIS 110	Introduction to Computer Science ^{3,4}	3		
	Communications Elective	3			MATH 128	Precalculus with Trigonometry ^{3,4}	4		
	Information Literacy Elective	3			PHYS 201	General Physics I ^{3,4}	4		
	Information Literacy Elective	3							
					MAJOR				
Technologic	cal Solutions & Quantitative Reasonin	ig (4-7	hours)1		Core (51 hours)			
UNIV 104	Instructional Tech. for Online Learning	0-3		· 	CSIS 100	Intro. to Information Systems & Info Tech	1 3		
MATH	Math Elective (MATH 114 or higher)	4			CSIS 111	Introduction to Programming Using C++	3		
					CSIS 112	Advanced Programming Using C++	3		
Critical Thi	inking (7 hours) ¹				CSIS 215	Algorithms & Data Structures	3		
RLGN 104	Christian Life & Biblical Worldview ²	4			CSIS 325	Database Management Systems	3		
	Critical Thinking Elective	3			CSIS 340	Studies in Information Security	3		
					CSIS 342	Computer Architecture & Organization	3		
Civic & Global Engagement (3 hours) ¹					CSIS 345	Introduction to Linux	3		
	Cultural Studies Elective	3			CSIS 352	System Administration	3		
					CSIS 355	Network Architecture & Protocols	3		
Social & Scientific Inquiry (7 hours) ¹					CSIS 434	Theory of Programming Languages	3		
	Natural Science Elective	4			CSIS 443	Operating Systems	3		
	Social Science Elective	3			CSIS 461	Technical Aspects of Computer Security	3		
					CSIS 463	Modern Cryptography	3		
Christianity	y & Contexts (8 hours) ¹				CSIS 471	Software Engineering	3		
BIBL 104	Survey of Old & New Testament	4			CSIS 485	Cybersecurity Capstone I	3		
THEO 104	Introduction to Theology Survey ²	4			CSIS 486	Cybersecurity Capstone II	3		
						Quantitative Studies Courses (13 hours)			
					MATH 131	Calculus & Analytic Geometry I	4		
					MATH 211	Introduction to Statistical Analysis	3		
					MATH 250	Introduction to Discrete Mathematics	3		
					MATH 350	Discrete Mathematics	3		

Lab Sciences Courses (4 hours) Lab Science Elective⁵

3	
4	

Technical Elective Courses (12-15 hours)6,7

Notes All applicable prerequisites must be met Refer to the list of approved general education electives at <u>www.liberty.edu/gened</u> before enrolling in foundational skills requirements Students transferring in 45 or more UG credit hours will have the requirement of RLGN 104 waived; Students transferring in 60 or more UG credit hours will also have the Graduation Requirements requirement of THEO 104 waived 121 Total Hours Courses may also fulfill select General Education Requirements. Please refer to the list of 2.0 Overall grade point average approved general education electives at www.liberty.edu/gened 30.25 Hours must be upper-level courses (300-400 level) Minimum grade of 'C' required ⁵Choose from BIOL 101 and BIOL 103, OR PHSC 210 and 211, OR any other Lab Science Grade of 'C' Minimum required for all courses in the major, quantitative studies, lab science, and technical electives Course and its associated Lab 25% Of major taken through Liberty University Choose a minimum of 12 credits from any CSIS course not already required in the degree, 30.25 Hours must be completed through Liberty University OR any ENG (Engineering) course Grad App Submission of Degree Completion Application must be completed A 300-400 level Computer Science Information Systems internship is strongly recommended within the last semester of a student's anticipated graduation date Suggested Course Sequence on second page

SUGGESTED COURSE SEQUENCE

FRESHMAN YEAR

First Semester		Second Semester		
Math Elective ¹ [MATH 128] [A Term]	4	MATH 131 [A Term]	4	
CSIS 100 [B Term]	3	Technical Elective ^{2,3} [B Term]	3	
UNIV 104 [B Term]	0-3	CSIS 111 [D Term]	3	
Info. Lit. Elective ¹ [CSIS 110] [D Term]	3	Communications Elective ¹ [B or D Term]	<u>3</u>	
ENGL 101 [B or D Term]	<u>3</u>	Total	13	
Total 13-16				

SOPHOMORE YEAR

MATH 211 [B Term]		3	CSIS 340 [B Term]	3
Technical Elective ^{2,3} [B Term]		3	MATH 350 [B Term]	3
CSIS 112 [D Term]		3	CSIS 215 [D Term]	3
MATH 250 [D Term]		3	Nat. Sci. Elective ¹ [PHYS 201] [D Term]	4
BIBL 104 [B or D Term]		4	Info. Lit. Elective ¹ [B or D Term]	<u>3</u>
	Total	16	Total	16

JUNIOR YEAR

CSIS 345 [B Term]	3	CSIS 342 [B Term]	3
THEO 104 [B Term]	4	CSIS 352 [B Term]	3
CSIS 325 [D Term]	3	CSIS 355 [D Term]	3
Cultural Studies Elective ¹ [B or D Term]	3	CSIS 434 [D Term]	3
Lab Science Elective ⁴ [B or D Term]	4	Social Sciences Elective ¹ [B or D Term]	3
Total	16	Total	15

SENIOR YEAR

CSIS 463 [B Term]		3	CSIS 485 [B Term]	3
CSIS 443 [B Term]		3	Technical Elective ^{2,3} [B Term]	3
CSIS 461 [D Term]		3	CSIS 486 [D Term]	3
CSIS 471 [D Term]		3	Technical Elective ^{2,3} [D Term]	3
RLGN 104 [B or D Term]		4	Critical Thinking Elective ¹ [B or D Term]	3
	Total	16	Total	15

Notes ¹Refer to the list of approved general education electives at <u>www.liberty.edu/gened</u> before enrolling in foundational skills requirements ²Choose from: any CSIS course³ not already required in the degree, or any ENGx (Engineering) course. A total of 12 credits are required Technical Electives.

³A 300-400 level Computer Science Information Systems internship is strongly recommended ⁴Choose from BIOL 101 and BIOL 103, OR PHSC 210 and 211, OR any other Lab Science course and its associated Lab