UNIVERSITY. ONLINE

Bachelor of Science in Computer Science Cybersecurity

2022-2023 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2022 through summer 2023. 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/ EQUINDATIONAL SKILLS REQUIREMENTS (41-44)

Course		Hrs	Sem	Grade	Course		Hrs	Sem	Grade
Communica	Communication & Information Literacy (12 hours) ¹			Major Foundational Courses (0-11 hours)					
ENGL 101	Composition & Rhetoric	3			CSIS 110	Introduction to Computer Science ^{3,4}	3		
	Communications Elective	3			MATH 128	Elem. Functions & Coordinate Geo.3,4	4		
	Information Literacy Elective	3			PHYS 201	General Physics I ^{3,4}	4		
	Information Literacy Elective	3							
					MAJOR				
Technologie	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	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 & Glo	obal 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 & Sc	cientific 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 MATH 350	Introduction to Discrete Mathematics Discrete Mathematics	3 3	
	<u>Lab Sciences Courses</u> (4 hours) Lab Science Elective ⁵	4	

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

Notes

All applicable prerequisites must be met

¹Refer to the list of approved general education electives at <u>www.liberty.edu/gened</u> before enrolling in foundational skills requirements ²Students transferring in 45 or more UG credit hours will have the requirement of RLGN

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 requirement of THEO 104 waived

³Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at <u>www.liberty.edu/gened</u>

⁴Minimum grade of 'C' required

⁵Choose from BIOL 101 and BIOL 103, OR PHSC 210 and 211, OR any other Lab Science Course and its associated Lab

⁶Choose a minimum of 12 credits from any CSIS course not already required in the degree, OR any ENGx (Engineering) course

⁷A 300-400 level Computer Science Information Systems internship is strongly recommended Suggested Course Sequence on second page

Graduation Requirements 121 Total Hours

- **2.0** Overall grade point average
- **30.25** 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 science, and technical electives
 - 25% Of major taken through Liberty University
 - 30.25 Hours must be completed through Liberty University
 - Grad App Submission of Degree Completion Application must be completed
 - within the last semester of a student's anticipated graduation date

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]		<u>4</u>	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]	<u>4</u>	Social Sciences Elective ¹ [B or D Term]	<u>3</u>
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]	<u>3</u>
	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