

Bachelor of Science in Computer Science Cybersecurity

2021-2022 Degree Completion Plan

ONLINE

Important: This degree plan is effective for those starting this degree program in fall 2021 through summer 2022. 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	IONAL SKILLS REQUIREMENTS	Hrs		Grade	Course		Hrs	Sem	Grade
Communica	ation & Information Literacy (12 hou	rs) ¹				dational Courses (0-11 hours)			
ENGL 101		3			CSIS 110	Introduction to Computer Sciences ^{3,4}	3		
	Communications Elective	3			MATH 128	Elem. Functions & Coordinate Geo. ^{3,4}	4		
		3			PHYS 201	General Physics I ^{3,4}	4		
	•	3				7			
					MAJOR				
Technologic	cal Solutions & Quantitative Reasonin	ıg (4-7	hours	0^1	1,1110011	Core (51 hours)			
UNIV 104					CSIS 100	Intro. to Information Systems & Info Tech	ı 3		
MATH		4			CSIS 111	Introduction to Programming Using C++	3		
	· · · · · · · · · · · · · · · · · · ·				CSIS 112	Advanced Programming Using C++	3		
Critical Thi	mmunication & Information Literacy (12 hours) GL 101 Composition & Rhetoric 3 Communications Elective 3 Information Literacy Elective 3 Information Literacy Elective 3 Information Literacy Elective 3 chnological Solutions & Quantitative Reasoning (4-7 RIV 104 Instructional Tech. for Online Learning 0-3 ATH Math Elective (MATH 114 or higher) 4 citical Thinking (7 hours) GN 104 Christian Life & Biblical Worldview Critical Thinking Elective 3 vic & Global Engagement (3 hours) Cultural Studies Elective 3 cial & Scientific Inquiry (7 hours) Natural Science Elective 4 Social Science Elective 3 mristianity & Contexts (8 hours) BL 104 Survey of Old & New Testament 4				CSIS 215	Algorithms & Data Structures	3		
RLGN 104		4			CSIS 325	Database Management Systems	3		
	Critical Thinking Elective	3		<u> </u>	CSIS 340	Studies in Information Security	3		
	č			<u> </u>	CSIS 342	Computer Architecture & Organization	3		
Civic & Global Engagement (3 hours) ¹			CSIS 345	Introduction to Linux	3				
		3			CSIS 352	System Administration	3		
				<u> </u>	CSIS 355	Network Architecture & Protocols	3		
Social & Scientific Inquiry (7 hours) ¹			CSIS 434	Theory of Programming Languages	3				
		4			CSIS 443	Operating Systems	3		
	Social Science Elective	3			CSIS 461	Technical Aspects of Computer Security	3		
					CSIS 463	Modern Cryptography	3		
Christianity & Contexts (8 hours) ¹			CSIS 471	Software Engineering	3				
BIBL 104		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		
						<u>Lab Sciences Courses</u> (4 hours)			
						Lab Science Elective ⁵	4		
						Technical Elective Courses (12-15 hours)	5,7		
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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

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

Notes

All applicable prerequisites must be met

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

²Students 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

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

Minimum 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

Revised: 03.25.2021 Effective: Catalog Term 2021-40

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									

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Notes

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

²Choose from: any CSIS course on a lready required in the degree, or any ENGx (Engineering) course. A total of 12 credits are required to the list of approved general education electives at www.liberty.edu/gened before enrolling in foundational skills requirements

²Choose from: any CSIS course on a lready required in the degree, or any ENGx (Engineering) course. A total of 12 credits are required to the list of approved general education electives at www.liberty.edu/gened before enrolling in foundational skills requirements

²Choose from: any CSIS course on the large of 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