

FOUNDATIONAL SKILLS REQUIREMENTS (42-45 hours)

Bachelor of Science in Computer Science

Web and Mobile Programming Cognate

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/

Course	ONAL SKILLS REQUIREMENTS (42-2	Hrs	Sem	Grade	Course		Hrs	Sem	Grad
Communicat	tion & Information Literacy (12 hours) ¹				Major Foundational Courses (0-20 hours)				
ENGL 101	Composition & Rhetoric	3			BUSI 240	Organizational Behavior & Management ⁴	3		
	Communications Elective	3			CSCN 110	Introduction to Computer Sciences ⁴	3		
	Information Literacy Elective	3			CSCN 111	Programming in C++ Beginner ⁴	3		-
	Information Literacy Elective	3			ENGR 270	Technical Communication ⁴	3		-
	·				MATH 131	Calculus & Analytical Geometry I4	4		-
Technological Solutions & Quantitative Reasoning (5-8 hours) ¹					PHYS 201	General Physics I ⁴	4		
UNIV 101	Foundational Skills	1							
MATH	Math Elective (MATH 114 or higher)	4			MAJOR				
		0-3				Core (42 hours)			
					CSCN 112	Programming in C++ Advanced ⁵	3		
Critical Thir	iking (5 hours) ¹				CSCN 215	Data Structures & Algorithms Using C++ ⁵	3		-
RLGN 105	Intr Bwvw/Contemp Moral Issues ³	2			CSCN 230	Business Data Communications & Networks	5 3		
		3			CSCN 326	Database Design & Management ⁵	3		
	C				CSCN 340	Information Security Concepts & Principles ⁵	3		
Civic & Glob	oal Engagement (5 hours) ¹				CSCN 342	Computer Architecture ⁵	3		
EVAN 101		2			CSCN 345	Linux Operating Systems ⁵	3		
		3			CSCN 352	Windows System Administration ⁵	3		
					CSCN 355	Network Architecture, Protocols, & Theory ⁵	3		
Social & Scientific Inquiry (7 hours) ¹ Natural Science Elective 4				CSCN 434	Program Language Design & Comp Theory ⁵				
Social Co Seri	Natural Science Elective	4			CSCN 443	Operating Systems Design ⁵	3		-
	Social Science Elective	3			CSCN 471	Software Engineering Management ⁵	3		-
					CSCN 481	Computer Science Practicum I ⁵	3		-
Christianity	& Contexts (8 hours) ¹				CSCN 482	Computer Science Practicum II ⁵	3		-
BIBL 105		2				r			
BIBL 110	-					Cognate (12 hours)			
THEO 201		2			CSCN 310	Web Programming in HTML ⁵	3		
THEO 202		2			CSCN 315	Front-end Programming in JavaScript ⁵	3		-
		_			CSCN 316	Server-Side Programming ⁵	3		
					CSCN 408	Mobile Programming ⁵	3		
					eber 100	naone i regramming			-
						Quantitative Studies Courses (13 hours)			
					MATH 128	Precalculus with Trigonometry ⁶	4		
					MATH 211	Introduction to Statistical Analysis	3		-
					MATH 250	Introduction to Discrete Mathematics	3		-
					MATH 350	Discrete Mathematics	3		
					141A111 330	Discrete Wathernaues	5		-
						<u>Lab Sciences Courses</u> (4 hours)			
						Lab Science Elective ⁷	Δ		
						Lau Science Elective	4		
						Technical Elective Courses (7 hours) ⁸			
						Technical Dicetive Courses (7 Hours)			
Notes	ATH Math Elective (MATH 114 or higher)						_		

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

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

⁴Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at www.liberty.edu/gened

5Students are required to take these courses residentially in support of ABET accreditation. Exceptions are on a case-by-case basis and require ABET coordinator review and Department Chair approval.

⁶Any student entering the major directly into MATH 131 will require a 4 credit MATH Elective to substitute in place of MATH 128 (for example, MATH 132 may sub for credit)
⁷Choose any science course which includes a lab component. If choosing a Physics course, it must be PHYS 202 and 202L, or a higher level Physics course. PHYS 101 and 103 are not allowable

⁸Choose from: BUSI 300, 301, 313, 424, 427, any 200-400 level Computer Science course, any 200-400 level Engineering course (except ENGR 210), or any Advanced Math course (must be MATH 132 or higher) not already required by the degree.

Suggested Course Sequence on second page

Graduation Requirements

120 Total Hours

 ${\bf 2.0}$ Overall grade point average

30 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, technical elective, and major foundational sections

25% Of major, core, and cognate taken through Liberty University

30 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

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

Revised: 04.26.2024 Effective: Catalog Term 2024-40

SUGGESTED COURSE SEQUENCE

FRESHMAN YEAR

First Semester		Second Semester								
ENGL 101	3	BIBL 105	2							
EVAN 101	2	UNIV 101	1							
RLGN 105	2	Information Literacy Elective ¹ [CSCN 111]								
Information Literacy Elective ¹ [CSCN 110]	3	Math Elective ¹ [MATH 131]	4							
Technology Competency ²	0-3	CSCN 230	3							
MATH 128 ³	4	Communications Elective ¹ [ENGR 270]	3							
CSER	<u>0</u>	CSER	<u>0</u>							
Total	14-17		Total 15							
SOI	РНОМО	RE YEAR								
BIBL 110	2	Social Science Elective ¹ [BUSI 240]	3							
THEO 201	2	CSCN 215	3							
CSCN 112	3	CSCN 352	3							
CSCN 345	3	CSCN 355	3							
MATH 250	3	MATH 350	3							
CSER	0	CSER	<u>0</u>							
Tota	_		Total 15							
JUNIOR YEAR										
Natural Science Elective ¹ [PHYS 201]	4	CSCN 310	3							
CSCN 315	3	CSCN 316	3							
CSCN 340	3	CSCN 326	3							
CSCN 342	3	CSCN 471	3							
MATH 211	3	Lab Science Elective ⁴	4							
CSER	<u>0</u>	CSER	<u>0</u>							
Tota	l 16		Total 16							
	SENIOR									
CSCN 408	3	THEO 202	2							
CSCN 434	3	Critical Thinking Elective ¹	3							
CSCN 443	3	Cultural Studies Elective ¹	3							
CSCN 481	3	CSCN 482	3							
Technical Elective ⁵	4	Technical Elective ⁵	3							
CSER	<u>0</u>	CSER	<u>0</u>							
Tota	I 16		Total 14							

Notes

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ENGR 210), or any Advanced Math course (must be MATH 132 or higher) not already required by the degree.