LIBERTY UNIVERSITY

Bachelor of Science in Computer Science

General Cognate

2023-2024 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2023 through summer 2024. 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/ FOUNDATIONAL SKILLS REQUIREMENTS (46-49 hours)

Course		Hrs	Sem	Grade
Communication & Information Literacy (13 hours)[1]				
ENGL 101	Composition & Rhetoric	3		
INQR 101	Inquiry 101	1		
_____	Communications Elective	3		
_____	Information Literacy Elective	3		
_____	Information Literacy Elective	3		
Technological Solutions & Quantitative Reasoning (5-8 hours)[1]				
UNIV 101	Foundational Skills	1		
MATH ____	Math Elective (MATH 114 or higher)	4		
_____	Technology Competency[2]	0-3		
Critical Thinking (8 hours)[1]				
RLGN 105	Intr Bwvw/Contemp Moral Issues[3]	2		
RSCH 201	Research 201	3		
_____	Critical Thinking Elective	3		
Civic & Global Engagement (5 hours)[1]				
EVAN 101	Evangelism & Christian Life[3]	2		
_____	Cultural Studies Elective	3		
Social & Scientific Inquiry (7 hours)[1]				
_____	Natural Science Elective	4		
_____	Social Science Elective	3		
Christianity & Contexts (8 hours)[1]				
BIBL 105	Old Testament Survey	2		
BIBL 110	New Testament Survey	2		
THEO 201	Theology Survey I[3]	2		
THEO 202	Theology Survey II[3]	2		

Course		Hrs	Sem	Grade
Major Foundational Courses (0-20 hours)				
BUSI 240	Organizational Behavior & Management[4]	3		
CSCN 110	Introduction to Computer Sciences[4]	3		
CSCN 111	Programming in C++ Beginner[4]	3		
ENGR 270	Technical Communication[4]	3		
MATH 131	Calculus & Analytical Geometry I[4]	4		
PHYS 201	General Physics I[4]	4		
MAJOR				
	Core (42 hours)			
CSCN 112	Programming in C++ Advanced[5]	3		
CSCN 215	Data Structures & Algorithms Using C++[5]	3		
CSCN 230	Business Data Communications & Networks[5]	3		
CSCN 326	Database Design & Management[5]	3		
CSCN 342	Computer Architecture[5]	3		
CSCN 345	Linux Operating Systems[5]	3		
CSCN 352	Windows System Administration[5]	3		
CSCN 355	Network Architecture, Protocols, & Theory[5]	3		
CSCN 434	Program Language Design & Comp Theory[5]	3		
CSCN 443	Operating Systems Design[5]	3		
CSCN 461	Aspects of Computer Security - Defensive[5]	3		
CSCN 471	Software Engineering Management[5]	3		
CSCN 481	Computer Science Practicum I[5]	3		
CSCN 482	Computer Science Practicum II[5]	3		
	Cognate (12 hours)			
CSCN 354	Fundamentals of Distributed Systems[5]	3		
CSCN ____	CSCN Elective[5,6]	3		
CSCN ____	CSCN Elective[5,6]	3		
CSCN ____	CSCN Programming Language Elective[5,7]	3		
	Quantitative Studies Courses (13 hours)			
MATH 128	Elem. Functions & Coordinate Geometry[8]	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 Elective[9]	4		
	Technical Elective Courses (3 hours)[10]			
_____	_____	_		

Notes

All applicable prerequisites must be met

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

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

[3]Students 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

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

[5]Students 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.

[6]Choose any 300-400 level CSCN course not already required by the degree

[7]Choose one of the following Programming Language courses: CSCN (or CSIS) 209, 212, 244, 312, 315, 316, or 354, or BMIT 212. Other languages may be approved by the department chair.

[8]Any 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)

[9]Choose any science course which includes a lab component. If choosing a Physics course, it must be PHYS 201 *and* 202L, or a higher level Physics course. PHYS 101 and 103 are not allowable.

[10]Choose 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
2.0	Overall grade point average
30	Hours must be upper-level courses (300-400 level)
Grade of 'C'	Minimum required for **all** 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

SUGGESTED COURSE SEQUENCE

FRESHMAN YEAR

First Semester		Second Semester	
ENGL 101	3	BIBL 105	2
EVAN 101	2	RSCH 201	3
INQR 101	1	UNIV 101	1
RLGN 105	2	Information Literacy Elective[1] [CSCN 111]	3
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	CSER	0
CSER	0	Total	16
Total	15-18		

SOPHOMORE YEAR

BIBL 110	2	Social Science Elective[1] [BUSI 240]	3
Communications Elective[1] [ENGR 270]	3	CSCN 215	3
CSCN 112	3	CSCN 352	3
CSCN 345	3	CSCN 355	3
MATH 250	3	MATH 350	3
CSER	0	CSER	0
Total	14	Total	15

JUNIOR YEAR

Natural Science Elective[1] [PHYS 201]	4	CSCN 326	3
CSCN 342	3	CSCN 354	3
CSCN 461	3	CSCN 471	3
MATH 211	3	Computer Science Elective[5]	3
Computer Science Programming Elective[4]	3	Lab Science Elective[6]	4
CSER	0	CSER	0
Total	16	Total	16

SENIOR YEAR

THEO 201	2	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
Computer Science Elective[5]	3	Technical Elective[7]	3
CSER	0	CSER	0
Total	14	Total	14

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[3]Any 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)

[4]Choose one of the following Programming Language courses: CSCN (or CSIS) 209, 212, 244, 312, 315, 316, or 354, or BMIT 212. Other languages may be approved by the department chair.

[5]Choose any 300-400 level CSCN course not already required by the degree.

[6]Choose any science course which includes a lab component. If choosing a Physics course, it must be PHYS 201 *and* 202L, or a higher level Physics course. PHYS 101 and 103 are not allowable.

[7]Choose 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.