

Bachelor of Science in Computational Mathematics

Information Systems Cognate

2022-2023 Degree Completion Plan

ONLINE

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/

	ONAL SKILLS REQUIREMENTS ((39-42							
Course		Hrs	Sem Grade	Course		Hrs	Sem	Grade	
Communication & Information Literacy (12 hours) ¹			Major Foundational Courses (0-7 hours)						
ENGL 101	Composition & Rhetoric	3		CSIS 110	Introduction to Computer Science ³	3			
	Communications Elective	3		MATH 131	Calculus & Analytic Geometry I ³	4			
	Information Literacy Elective	3							
	Information Literacy Elective	3		MAJOR	Core (40 hours)				
Technological Solutions & Quantitative Reasoning (3-6 hours) ¹			hours) ¹	INDS 400	Knowledge Synth. For Prof. & Pers. Dev. 4	3			
UNIV 104	Instructional Tech. for Online Learning	0-3		MATH 132	Calculus & Analytic Geometry II	4			
MATH	Math Elective (MATH 114 or higher)	3		MATH 211	Introduction to Statistical Analysis	3			
				MATH 250	Introduction to Discrete Mathematics	3			
Critical Thinking (7 hours) ¹				MATH 410	Matrix & Linear Algebra	3			
RLGN 104	Christian Life & Biblical Worldview ²	4		MATH 423	Abstract Algebraic Structures	3			
	Critical Thinking Elective	3		MATH 430	Multivariable Calculus	3			
	•			MATH 432	Applied Differential Equations	3			
Civic & Global Engagement (3 hours) ¹			MATH 441	Probability I	3				
	Cultural Studies Elective			MATH 460	Mathematical Modeling & Simulation	3			
					Natural Science Elective ^{5,6}				
Social & Scientific Inquiry (6 hours) ¹					Natural Science Elective ^{5,6}	_			
Social & Sci	Natural Science Elective	3			Natural Science Elective ^{5,6}				
	Social Science Elective	3				_			
					Cognate (15 hours)				
Christianity	& Contexts (8 hours) ¹			CSIS 100	Intro. to Information Sciences & Systems	3			
BIBL 104	Survey of Old & New Testament	4		CSIS 208	Application Programming	3			
THEO 104	Introduction to Theology Survey ²	4		CSIS 310	Web Architecture & Development	3			
	2, ,			CSIS 330	Business Data Communication Systems	3			
				CSIS 340	Studies in Information Security	3			
				FREE ELECTIVES (16-26 hours)					
						_			
						_			
						_			
						_			
						_			

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 major foundational courses and all upper-level courses in the major
 - 25% Of major 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

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

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

⁴INDS 400 should be taken in the final semester.

⁵Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree: a minimum of 9 hours total required⁶

*Important: The Natural Science Electives required in the Major must be chosen from the same discipline (BIOL, CHEM, PHSC, or PHYS)

Suggested Course Sequence on second page

Revised: 06 28.2022 Effective: Catalog Term 2022-40

SUGGESTED COURSE SEQUENCE

FIRST YEAR

First Semester		Second Semester	
BIBL 104	4	RLGN 104	4
ENGL 101	3	Critical Thinking Elective ¹	3
UNIV 104	0-3	Information Literacy Elective ¹ [CSIS 110]	3
Communications Elective ¹	3	MATH 132	4
Math Elective ¹ [MATH 131]	<u>4</u>	MATH 250	3
	Total 14-17	Tot	al 17
	SECOND		
Information Literacy Elective ¹	3	THEO 104	4
Natural Science Elective ¹	3	Cultural Studies Elective ¹	3
CSIS 100	3	CSIS 208	3
MATH 211	3	Natural Science Elective ²	3
MATH 430	<u>3</u>	Social Science Elective ¹	<u>3</u>
	Total 15	Tot	al 16
	THIRD	VE A D	
CSIS 310	3	CSIS 330	2
MATH 410	3	MATH 423	3
Natural Science Elective ²		Natural Science Elective ²	
	3		3
Elective	3	Elective	3
Elective	<u>3</u>	Elective	<u>3</u>
	Total 15	Tot	al 15
	FOURTH	YEAR	
CSIS 340	3	INDS 400	3
MATH 432	3	MATH 460	3
MATH 441	3	Elective	3
Elective	3	Elective	3
Elective	1	Elective	3
	Total 13	Tot	al 15

Notes

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