

Bachelor of Science in Computational Mathematics

Information Systems Cognate

2020-2021 Degree Completion Plan

ONLINE

Important: This degree plan is effective for those starting this degree program in fall 2020 through summer 2021. 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 (39-42 hours)												
Course		Hrs Sen	n 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 Computing Sciences ³	3						
	Communications Elective	3		MATH 131	Calculus & Analytic Geometry I ³	4						
	Information Literacy Elective	3	<u> </u>									
	Information Literacy Elective	3	<u> </u>	MAJOR								
					Core (40 hours)							
Technological Solutions & Quantitative Reasoning (3-6 hours) ¹			INDS 400	Knowledge Synth. For Prof. & Pers. Dev. 4	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 Thin	king (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	<u> </u>	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	3	<u> </u>	MATH 460	Mathematical Modeling & Simulation	3						
					Natural Science Elective ^{5,6}							
Social & Scientific Inquiry (6 hours) ¹					Natural Science Elective ^{5,6}	_		<u> </u>				
	Natural Science Elective	3			Natural Science Elective ^{5,6}							
	Social Science Elective	3				_		·				
					Cognate (15 hours)							
Christianity of	& 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						
				CSIS 330	Business Data Communication Systems	3						
				CSIS 340	Studies in Information Security	3						
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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
 - ${\bf 30}$ 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

6Important: 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: 05.10.2021 Effective: Catalog Term 2021-20

SUGGESTED COURSE SEQUENCE

FIRST YEAR

First Semester			Second Semester										
BIBL 104		4	RLGN 104										
ENGL 101		3	Critical Thinking Elective ¹										
UNIV 104		0-3	Information Literacy Elective ¹ [CSIS 110]		3								
Communications Elective ¹		3	Social Science Elective ¹		3								
Math Elective ¹ [MATH 131]		<u>4</u>	MATH 132		<u>4</u>								
	Total	14-17	Tota	ıl	17								
SECOND YEAR													
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	MATH 250		3								
Elective		<u>3</u>	Natural Science Elective ²		3								
	Total	15	Tota	ıl	16								
THIRD YEAR													
CSIS 310		3	CSIS 330		3								
MATH 410		3	MATH 423		3								
Natural Science Elective ²		3	MATH 430		3								
Elective		3	Natural Science Elective ²		3								
Elective		<u>3</u>	Elective		<u>3</u>								
	Total	15	Tota	ıl	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		<u>1</u>	Elective		3								
	Total	13	Tota	ıl	_								

Notes

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²Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree³

³Important: The Natural Science Electives required in the Major must be chosen from the same discipline (BIOL, CHEM, PHSC, or PHYS)