UNIVERSITY. ONLINE

Bachelor of Science in Computational Mathematics

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.

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GENERAL EDUCATION/ EQUINDATIONAL SKILLS DEQUIDEMENTS (20.42 h

FOUNDAT Course	IONAL SKILLS REQUIREMENTS	(39-42 hours) Hrs Sem	Grade	Course		Hrs Ser	n Grade
			Grade			<u>nis</u> <u>sei</u>	<u>II</u> <u>Grade</u>
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				MATH 132	Calculus & Analytic Geometry II	4	
UNIV 104	Instructional Tech. for Online Learning	0-3		MATH 211	Introduction to Statistical Analysis	3	
MATH	Math Elective (MATH 114 or higher)	3		MATH 250	Introduction to Discrete Mathematics	3	
				MATH 345	Intro. to the History of 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 & Glo	bal Engagement (3 hours) ¹			MATH 441	Probability I	3	
	Cultural Studies Elective	3		MATH 460	Mathematical Modeling & Simulation	3	
				MATH 491	Computational Mathematics Capstone	3	
Social & Sci	ientific Inquiry (6 hours) ¹			STAT 420	Regression & Forecasting I	3	
	Natural Science Elective	3			4		
	Social Science Elective	3					
				FREE ELEC	CTIVES (31-41 hours) ⁵		
Christianity	& Contexts (8 hours) ¹						
BIBL 104	Survey of Old & New Testament	4					
THEO 104	Introduction to Theology Survey ²	4					

	Notes
	All applicable prerequisites must be met
	¹ Refer to the list of approved general education electives at <u>www.liberty.edu/gened</u> before
	enrolling in foundational skills requirements
Graduation Requirements	² Students transferring in 45 or more UG credit hours will have the requirement of RLGN
120 Total Hours	104 waived; Students transferring in 60 or more UG credit hours will also have the
2.0 Overall grade point average	requirement of THEO 104 waived
30 Hours must be upper-level courses (300-400 level)	³ Courses may also fulfill select General Education Requirements. Please refer to the list of
Grade of 'C' Minimum required for all major foundational courses and all upper-level	approved general education electives at www.liberty.edu/gened
courses in the major	⁴ Choose any MATH, PHYS, or STAT course not already applying to the degree
25% Of major taken through Liberty University	⁵ May need up to 3 hours of 300-400 level electives to fulfill upper-level requirement; this is
30 Hours must be completed through Liberty University	dependent upon courses chosen for the Core Elective. Student should contact academic
Grad App Submission of Degree Completion Application must be completed	advisor for more information
within the last semester of a student's anticipated graduation date	Suggested Course Sequence on second page

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]	4	MATH 250	3
	Total 14-17	Tota	ul 17

SECOND YEAR						
Information Literacy Elective ¹		3	THEO 104		4	
Natural Science Elective ¹		3	Cultural Studies Elective ¹		3	
MATH 211		3	Social Science Elective ¹		3	
MATH 430		3	Elective		3	
Elective		<u>3</u>	Elective		<u>3</u>	
	Total	15		Total	16	

THIRD YEAR					
MATH 410		3	MATH 345		3
STAT 420		3	MATH 423		3
Elective ³		3	Core Elective ²		3
Elective		3	Elective		3
Elective		<u>3</u>	Elective		<u>3</u>
	Total	15		Total	15

FOURTH YEAR						
MATH 432		3	MATH 460		3	
MATH 441		3	MATH 491		3	
Elective		3	Elective		3	
Elective		3	Elective		3	
Elective		<u>1</u>	Elective		<u>3</u>	
	Total	13		Total	15	

Notes

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

²Choose any MATH, PHYS, or STAT course not already applying to the degree

³May need up to 3 hours of 300-400 level electives to fulfill upper-level requirement; this is dependent upon courses chosen for the Core Elective. Student should contact academic advisor for more information