

Bachelor of Science in Computational Mathematics

2024-2025 Degree Completion Plan

ONLINE

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/

FOUNDATION	ONAL SKILLS REQUIREMENTS (39-42 hours)				
Course		Hrs Sem Grade	Course		Hrs Sem	Grade
Communication & Information Literacy (12 hour		$(s)^1$	Major Foun	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	<u>MAJOR</u>			
				Core (40 hours)		
Technological Solutions & Quantitative Reasonin		g (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 & Global 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 & Scientific Inquiry (6 hours) ¹			STAT 420	Regression & Forecasting I	3	
	Natural Science Elective	3		4		
	Social Science Elective	3	_			
			FREE ELE	CTIVES (31-41 hours) ⁵		
Christianity of	& Contexts (8 hours) ¹			· · · · · · · · · · · · · · · · · · ·		
BIBL 104	Survey of Old & New Testament	4				
THEO 104	Introduction to Theology Survey ²	4				

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

⁴Choose any MATH, PHYS, or STAT course not already applying to the degree

⁵May 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

Suggested Course Sequence on second page

Revised: 02.02.2024 Effective: Catalog Term 2024-40

SUGGESTED COURSE SEQUENCE

FIRST YEAR

First Semester		Second Semester	
BIBL 104	4	RLGN 104 4	
ENGL 101		Critical Thinking Elective ¹ 3	
UNIV 104		Information Literacy Elective ¹ [CSIS 110] 3	
Communications Elective ¹		MATH 132 4	
Math Elective ¹ [MATH 131]	<u>4</u>	MATH 250 <u>3</u>	
	Total 14-	7 Total 17	,
	SECO	ND 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	,
	ТНІ	RD 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	í
	FOUI	TH YEAR	
MATH 432	3	MATH 460 3	
MATH 441	3	MATH 491 3	
Elective	3	Elective 3	
Elective	3	Elective 3	
Elective	1	Elective <u>3</u>	
	Total 13	Total 15	;

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