LIBERTY UNIVERSITY ONLINE

Bachelor of Science in Computational Mathematics
Actuarial Concentration

2024-2025 Degree Completion Plan

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/ FOUNDATIONAL SKILLS REQUIREMENTS (39-42 hours)

Course		Hrs	Sem	Grade
Communication & Information Literacy (12 hours)[1]				
ENGL 101	Composition & Rhetoric	3		
	Communications Elective	3		
	Information Literacy Elective	3		
	Information Literacy Elective	3		
Technological Solutions & Quantitative Reasoning (3-6 hours)[1]				
UNIV 104	Instructional Tech. for Online Learning	0-3		
MATH ____	Math Elective (MATH 114 or higher)	3		
Critical Thinking (7 hours)[1]				
RLGN 104	Christian Life & Biblical Worldview[2]	4		
	Critical Thinking Elective	3		
Civic & Global Engagement (3 hours)[1]				
	Cultural Studies Elective	3		
Social & Scientific Inquiry (6 hours)[1]				
	Natural Science Elective	3		
	Social Science Elective	3		
Christianity & Contexts (8 hours)[1]				
BIBL 104	Survey of Old & New Testament	4		
THEO 104	Introduction to Theology Survey[2]	4		

Course		Hrs	Sem	Grade
Major Foundational Courses (0-7 hours)				
CSIS 110	Introduction to Computer Science[3]	3		
MATH 131	Calculus & Analytic Geometry I[3]	4		
MAJOR				
	Core (40 hours)			
MATH 132	Calculus & Analytic Geometry II	4		
MATH 211	Introduction to Statistical Analysis	3		
MATH 250	Introduction to Discrete Mathematics	3		
MATH 345	Intro. to the History of Mathematics	3		
MATH 410	Matrix & Linear Algebra	3		
MATH 423	Abstract Algebraic Structures	3		
MATH 430	Multivariable Calculus	3		
MATH 432	Applied Differential Equations	3		
MATH 441	Probability I	3		
MATH 460	Mathematical Modeling & Simulation	3		
MATH 491	Computational Mathematics Capstone	3		
STAT 420	Regression & Forecasting I	3		
_____	_____[4]			
	Concentration (18 hours)			
ACCT 211	Financial Principles	3		
ACCT 212	Managerial Principles	3		
BUSI 320	Finance Principles	3		
ECON 213	Principles of Microeconomics	3		
ECON 214	Principles of Macroeconomics	3		
MATH 442	Probability II	3		

FREE ELECTIVES (13-23 hours)

		Hrs	Sem	Grade
_____	_____			
_____	_____			
_____	_____			
_____	_____			

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] Students 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

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

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

Suggested Course Sequence on second page

SUGGESTED COURSE SEQUENCE

FIRST YEAR

First Semester		Second Semester	
BIBL 104	4	RLGN 104	4
ENGL 101	3	Information Literacy Elective[1] [CSIS 110]	3
UNIV 104	0-3	MATH 132	4
Communications Elective[1]	3	MATH 211	3
Math Elective[1] [MATH 131]	4	MATH 250	3
	Total 14-17		Total 17

SECOND YEAR

Critical Thinking Elective[1]	3	Cultural Studies Elective[1]	3
Information Literacy Elective[1]	3	Social Science Elective[1]	3
Natural Science Elective[1]	3	ACCT 212	3
ACCT 211	3	ECON 214	3
Elective	3	MATH 430	3
	Total 15		Total 15

THIRD YEAR

THEO 104	4	BUSI 320	3
MATH 410	3	ECON 213	3
MATH 441	3	MATH 423	3
STAT 420	3	MATH 442	3
Elective	3	Core Elective[2]	3
	Total 16		Total 15

FOURTH YEAR

MATH 345	3	MATH 460	3
MATH 432	3	MATH 491	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	1	Elective	3
	Total 13		Total 15

Notes

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