LIBERTY UNIVERSITY ONLINE

Bachelor of Science in Computational Mathematics
Actuarial Concentration

2022-2023 Degree Completion Plan

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/
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)			
INDS 400	Knowledge Synth. For Prof. & Pers. Dev.[4]	3		
MATH 132	Calculus & Analytic Geometry II	4		
MATH 211	Introduction to Statistical Analysis	3		
MATH 250	Introduction to Discrete 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		
_____	Natural Science Elective[5,6]	_		
_____	Natural Science Elective[5,6]	_		
_____	Natural Science Elective[5,6]	_		
	Concentration (18 hours)			
ACCT 211	Financial Principles	3		
ACCT 212	Managerial Principles	3		
BUSI 320	Corporate Finance	3		
ECON 213	Principles of Microeconomics	3		
ECON 214	Principles of Macroeconomics	3		
MATH 442	Probability II	3		

FREE ELECTIVES (13-23 hours)[7]

		Hrs	Sem	Grade
_____	_____	_		
_____	_____	_		
_____	_____	_		
_____	_____	_		

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

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	Natural Science Elective[2]	3
Information Literacy Elective[1]	3	Social Science Elective[1]	3
Natural Science Elective[1]	3	ACCT 212	3
ACCT 211	3	MATH 441	3
MATH 430	3	MATH 442	3
	Total 15		Total 16

THIRD YEAR

THEO 104	4	Cultural Studies Elective[1]	3
Natural Science Elective[2]	3	Natural Science Elective[2]	3
ECON 213	3	BUSI 320	3
MATH 410	3	ECON 214	3
Elective	3	MATH 423	3
	Total 15		Total 15

FOURTH YEAR

MATH 432	3	INDS 400	3
Elective[4]	3	MATH 460	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	1	Elective	3
	Total 13		Total 15

Notes

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

[2]Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree[3]

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

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