LIBERTY UNIVERSITY ONLINE

Bachelor of Science in Computational Mathematics

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]	_		
FREE ELECTIVES (31-41 hours)[7]				
_____	_____	_		
_____	_____	_		
_____	_____	_		
_____	_____	_		

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

[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] INDS 400 should be taken in the final semester.

[5] Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree: a minimum of 9 hours total required[6]

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

[7] May need up to 9 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

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		Total 17

SECOND YEAR

Information Literacy Elective[1]	3	THEO 104	4
Natural Science Elective[1]	3	Cultural Studies Elective[1]	3
MATH 211	3	Natural Science Elective[2]	3
MATH 430	3	Social Science Elective[1]	3
Elective	3	Elective	3
	Total 15		Total 16

THIRD YEAR

MATH 410	3	MATH 423	3
Natural Science Elective[2]	3	Natural Science Elective[2]	3
Elective[4]	3	Elective[4]	3
Elective	3	Elective	3
Elective	3	Elective	3
	Total 15		Total 15

FOURTH YEAR

MATH 432	3	INDS 400	3
MATH 441	3	MATH 460	3
Elective[4]	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 9 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