

## **Bachelor of Science in Computational Mathematics**

**Actuarial Concentration** 

2020-2021 Degree Completion Plan

# ONLINE

This degree plan is effective for those starting this degree program in fall 2020 through summer 2021. This degree plan will remain in Important: effect for students who do not break enrollment or who do not change degree programs, concentrations or cognates.

#### GENERAL EDUCATION/

Course	ONAL SKILLS REQUIREMENTS	Hrs	Sem	Grade	Course		Hrs	Sem	Grade
Communicat	tion & Information Literacy (12 hour	$(s)^1$			Major Foun	dational Courses (0-7 hours)			
ENGL 101	Composition & Rhetoric	3			CSIS 110	Introduction to Computing Sciences <sup>3</sup>	3		
	Communications Elective	3			MATH 131	Calculus & Analytic Geometry I <sup>3</sup>	4		
	Information Literacy Elective	3							
	Information Literacy Elective	3			<b>MAJOR</b>				
						Core (40 hours)			
Technological Solutions & Quantitative Reasoning (3-6 hours) <sup>1</sup>				INDS 400	Knowledge Synth. For Prof. & Pers. Dev.	.4 3			
UNIV 104	Instructional Tech. for Online Learning	0-3			MATH 132	Calculus & Analytic Geometry II	4		
MATH	Math Elective (MATH 114 or higher)	3			MATH 211	Introduction to Statistical Analysis	3		
					MATH 250	Introduction to Discrete Mathematics	3		
Critical Thinking (7 hours) <sup>1</sup>				MATH 410	Matrix & Linear Algebra	3			
RLGN 104	Christian Life & Biblical Worldview <sup>2</sup>	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) <sup>1</sup>				MATH 441	Probability I	3			
	Cultural Studies Elective	3			MATH 460	Mathematical Modeling & Simulation	3		
						Natural Science Elective <sup>5,6</sup>	_		
Social & Scientific Inquiry (6 hours) <sup>1</sup>				Natural Science Elective <sup>5,6</sup>	_				
	Natural Science Elective	3				Natural Science Elective <sup>5,6</sup>	_		
	Social Science Elective	3							
						Concentration (18 hours)			
Christianity	& Contexts (8 hours) <sup>1</sup>				ECON 213	Principles of Microeconomics	3		
BIBL 104	Survey of Old & New Testament	4			ECON 214	Principles of Macroeconomics	3		
THEO 104	Introduction to Theology Survey <sup>2</sup>	4			ACCT 211	Financial Accounting	3		
					ACCT 212	Managerial Accounting	3		
					BUSI 320	Corporate Finance	3		
					MATH 442	Probability II	3		
					FREE ELECTIVES (13-23 hours) <sup>7</sup>				
							_		
							_		
							_		

### 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

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

<sup>2</sup>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

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

<sup>4</sup>INDS 400 should be taken in the final semester.

Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree: a minimum of 9 hours total required6

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

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 Suggested Course Sequence on second page

Revised: 05.10.2021 Effective: Catalog Term 2020-40

# SUGGESTED COURSE SEQUENCE

#### FIRST YEAR

First Semester		Second Semester				
BIBL 104	4	RLGN 104	4			
ENGL 101	3	Information Literacy Elective <sup>1</sup> [CSIS 110]				
UNIV 104	0-3	Social Science Elective <sup>1</sup>	3			
Communications Elective <sup>1</sup>	3	MATH 132	4			
Math Elective <sup>1</sup> [MATH 131]	<u>4</u>	MATH 211	<u>3</u>			
	Total 14-17	Total	17			
	SECON	ND YEAR				
Critical Thinking Elective <sup>1</sup>	3	Natural Science Elective <sup>2</sup>	3			
Information Literacy Elective <sup>1</sup>	3	ACCT 212	3			
Natural Science Elective <sup>1</sup>	3	MATH 250	3			
ACCT 211	3	MATH 441	3			
MATH 430	<u>3</u>	MATH 442	<u>3</u>			
	Total 15	Total	16			
	THIR	D YEAR				
THEO 104	4	Cultural Studies Elective <sup>1</sup>	3			
Natural Science Elective <sup>2</sup>	3	Natural Science Elective <sup>2</sup>	3			
ECON 213	3	BUSI 320	3			
MATH 410	3	ECON 214	3			
Elective	<u>3</u>	MATH 423	3			
	Total 15	Total	15			
	FOURT	TH YEAR				
MATH 432	3	INDS 400	3			
Elective <sup>4</sup>	3	MATH 460	3			
Elective	3	Elective	3			
Elective	3	Elective	3			
Elective	<u>1</u>	Elective	<u>3</u>			
	Total 13	Total	15			

## Notes

Revised: 05.10.2021 Effective: Catalog Term 2020-40

<sup>&</sup>lt;sup>1</sup>Refer to the list of approved general education electives at <a href="www.liberty.edu/gened">www.liberty.edu/gened</a> before enrolling in foundational skills requirements

<sup>&</sup>lt;sup>2</sup>Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>Important: The Natural Science Electives required in the Major must be chosen from the same discipline (BIOL, CHEM, PHSC, or PHYS)

<sup>&</sup>lt;sup>4</sup>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