

MATHEMATICS (B.S.) - RESIDENT

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

Code	Title	Hours
Communication & Information Literacy ¹		
ENGL 101	Composition and Rhetoric	3
	Communications Elective	3
	Information Literacy Elective	3
	Information Literacy Elective	3
Technological Solutions & Quantitative Reasoning ¹		
UNIV 101	Foundational Skills	1
	Math Elective MATH 114 or higher	3
	Technology Competency ²	0-3
Critical Thinking ¹		
RLGN 105	Introduction to Biblical Worldview ³	2
	Critical Thinking Elective	3
Civic & Global Engagement ¹		
EVAN 101	Evangelism and the Christian Life ³	2
	Cultural Studies Elective	3
Social & Scientific Inquiry ¹		
	Natural Science Elective	3
	Social Science Elective	3
Christianity & Contexts ¹		
BIBL 105	Old Testament Survey	2
BIBL 110	New Testament Survey	2
THEO 201	Theology Survey I ³	2
THEO 202	Theology Survey II ³	2
Total Hours		40-43

¹ Refer to the list of approved general education electives before enrolling in foundational skill requirements
² All students must pass the Computer Assessment OR complete applicable INFT course
³ Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 and EVAN 101 waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 and THEO 202 waived

Major Requirements

Code	Title	Hours
Major Foundational Courses		
CSIS 110	Introduction to Computer Science ¹	3
CSIS 111	Introduction to Programming Using C++ ¹	3
MATH 131	Calculus and Analytic Geometry I ¹	4

Code	Title	Hours
PHYS 231	University Physics I ¹	4
Total Hours		14

¹ Courses may also fulfill select general education courses.

Code	Title	Hours
Major Core		
MATH 132	Calculus and Analytic Geometry II	4
MATH 133	Calculus with Mathematica Lab	1
MATH 200	Introduction to Mathematical Reasoning	3
MATH 221	Applied Linear Algebra	3
MATH 231	Calculus and Analytical Geometry III	4
MATH 311	Probability and Statistics I	3
MATH 321	Linear Algebra	3
MATH 331	Complex Variables	3
MATH 421	Elementary Abstract Algebra I	3
MATH 431	Real Analysis	3
MATH 450	Mathematics Capstone Seminar	2
	Math Elective ¹	3
	Math Elective ²	3
	Math Elective ³	3
Total Hours		41

¹ Choose from MATH 305 or MATH 307
² Choose from MATH 411 or MATH 422
³ Choose from MATH 301, MATH 302, MATH 332, MATH 334, or MATH 352

Code	Title	Hours
Free Electives		
	Choose 18-35 credit hours of Free Electives ¹	18-35
Total Hours		18-35

¹ May need 4 hours of upper-level electives

All applicable prerequisites must be met

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 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
- **CSER** All requirements must be satisfied before a degree will be awarded

Course Sequence

Course	Title	Hours
First Year		
First Semester		
BIBL 105	Old Testament Survey	2
ENGL 101	Composition and Rhetoric	3
RLGN 105	Introduction to Biblical Worldview	2
UNIV 101	Foundational Skills	1
MATH Elective (MATH 131) ¹		4
Technology Competency ²		0-3
MATH 133	Calculus with Mathematica Lab	1
CSER		0
Hours		13-16
Second Semester		
BIBL 110	New Testament Survey	2
Communications Elective ¹		3
Information Literacy Elective (CSIS 110) ¹		3
Natural Science Elective (PHYS 231) ¹		4
MATH 132	Calculus and Analytic Geometry II	4
CSER		0
Hours		16
Second Year		
First Semester		
EVAN 101	Evangelism and the Christian Life	2
MATH 200	Introduction to Mathematical Reasoning	3
MATH 221	Applied Linear Algebra	3
MATH 231	Calculus and Analytical Geometry III	4
Elective		3
CSER		0
Hours		15
Second Semester		
THEO 201	Theology Survey I	2
Critical Thinking Elective ¹		3
Cultural Studies Elective ¹		3
MATH 311	Probability and Statistics I	3
MATH 321	Linear Algebra	3
Elective		1
CSER		0
Hours		15
Third Year		
First Semester		
THEO 202	Theology Survey II	2
Information Literacy Elective (CSIS 111) ¹		3
MATH 331	Complex Variables	3
Elective ³		3
Elective ³		3
Elective		3
CSER		0
Hours		17
Second Semester		
Social Science Elective ¹		3

Course	Title	Hours
MATH Elective ⁴		3
Elective		3
Elective		3
Elective		3
CSER		0
Hours		15
Fourth Year		
First Semester		
MATH 421	Elementary Abstract Algebra I	3
MATH Elective ⁵		3
Elective		3
Elective		3
Elective		3
CSER		0
Hours		15
Second Semester		
MATH 431	Real Analysis	3
MATH 450	Mathematics Capstone Seminar	2
MATH Elective ⁶		3
Elective		3
Elective		3
CSER		0
Hours		14
Total Hours		120-123

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

² All students must pass the Computer Assessment OR complete applicable INFT course; refer to www.liberty.edu/computerassessment for more information.

³ May need 4 hours of upper-level electives.

⁴ Choose from MATH 305 or MATH 307.

⁵ Choose from MATH 411 or MATH 422.

⁶ Choose from MATH 301, MATH 302, MATH 332, MATH 334, or MATH 352.