APPLIED MATHEMATICS & STATISTICS (B.S.) - ACTUARIAL - RESIDENT

Important: This degree plan is effective for those starting this degree program in fall 2025 through summer 2026. 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

Code	Title	Hours
MATH 131	Calculus and Analytic Geometry I [1]	4
PHYS 231	University Physics I [1]	4
Total Hours		**14**

[1] Course may fulfill select general education requirements

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 302	Introduction to Experimental Design in Statistics	3
MATH 311	Probability and Statistics I	3
MATH 321	Linear Algebra	3
MATH 352	Numerical Analysis	3
MATH 402	Linear Regression	3
MATH 411	Probability and Statistics II	3
MATH 450	Mathematics Capstone Seminar	2
Mathematics Elective [1]		3
Mathematics Elective [2]		3
Total Hours		**41**

[1] Choose one of the following courses: MATH 421 or MATH 431

[2] Choose one of the following courses: MATH 301, MATH 304, MATH 334, or MATH 350

Code	Title	Hours
Cognate		
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
Total Hours		**15**

Code	Title	Hours
Free Electives		
Choose 3-20 credit hours of Free Electives [1]		3-20
Total Hours		**3-20**

[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
Freshman 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
INQR 101	Inquiry	1
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	**17**
Sophomore Year		
First Semester		
EVAN 101	Evangelism and the Christian Life	2
RSCH 201	Research	3
ACCT 211	Financial Principles	3
MATH 231	Calculus and Analytical Geometry III	4
MATH Elective [3]		3
CSER		0
	Hours	**15**
Second Semester		
THEO 201	Theology Survey I	2
ACCT 212	Managerial Principles	3
MATH 200	Introduction to Mathematical Reasoning	3
MATH 221	Applied Linear Algebra	3
MATH 311	Probability and Statistics I	3
CSER		0
	Hours	**14**
Junior Year		
First Semester		
THEO 202	Theology Survey II	2
Critical Thinking Elective [1]		3
Information Literacy Elective (CSIS 111) [1]		3
ECON 213	Principles of Microeconomics	3

Course	Title	Hours
MATH 302	Introduction to Experimental Design in Statistics	3
MATH 411	Probability and Statistics II	3
CSER		0
	Hours	**17**
Second Semester		
Cultural Studies Elective [1]		3
Social Science Elective [1]		3
ECON 214	Principles of Macroeconomics	3
MATH 321	Linear Algebra	3
MATH 402	Linear Regression	3
CSER		0
	Hours	**15**
Senior Year		
First Semester		
BUSI 320	Finance Principles	3
MATH 352	Numerical Analysis	3
MATH Elective [4]		3
Elective [5]		3
Elective [5]		3
CSER		0
	Hours	**15**
Second Semester		
MATH 450	Mathematics Capstone Seminar	2
Elective		3
Elective		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] Choose from MATH 301, MATH 304, MATH 334, or MATH 350.

[4] Choose from MATH 421 and MATH 431.

[5] May need 4 hours of upper-level electives.