



Applied Mathematics

Degree Awarded: Bachelor of Arts

Requirements for the Major: 45 credits

The major in Applied Mathematics is designed to prepare students for positions in business and industry, e.g. actuarial science, geophysics; graduate study in mathematical sciences, business, physical sciences, or engineering; or teaching secondary school mathematics.

Prerequisite courses for the major: Placement in MATH 231, Calculus with Analytic Geometry I, 5 credits.

Required courses for the major:

Essential Competencies-Outcome Iterations

****Transfer courses do not receive outcome iterations****

				CI	IL	W	O	Q	GA	V
	MATH 231	Calculus with Analytic Geometry I	5					x		
	MATH 232	Calculus with Analytic Geometry II	5							
	STAT 261	Applied Statistics	3					x	x	
	MATH/PHIL 300	Introduction to Mathematical Reasoning	3					x		
	MATH 310	Introduction to Mathematical Modeling	3	x	x	x	x	x		
	MATH 327	Multivariable Calculus	4							
	MATH 331	Linear Algebra	3							
	MATH 450	Senior Seminar	3	x	x	x	x	x		x
	CPSC 155 or BSAD/CPSC 241	Programming Using Visual Basic or Computer Science I	3 or 3							

Plus 13 credits from:

Essential Competencies-Outcome Iterations

****Transfer courses do not receive outcome iterations****

				CI	IL	W	O	Q	GA	V
	MATH 301	Modern Geometries	3							
	MATH 322	Introduction to Differential Equations	3							
	MATH 335	Introduction to Abstract Algebra	3							
	MATH 350	Introduction to Real Analysis	4							
	MATH 351	Introduction to Numerical Analysis	4							
	STAT 361	Intro to Probability Theory	4							
	MATH 399	Internship	3							
	MATH 430	Topics in Mathematics	1-3							
	MATH 340	Discrete Computational Structures	3							
	MATH/PHYS 250	Statics and Properties of Materials	3							

These courses will be counted in computing the 2.2 GPA required for this major.

A student seeking the Iowa Teaching Endorsement #143 is required to take MATH 301, Modern Geometries, 3 credits, MATH 331, Linear Algebra, 3 credits, or MATH 335, Introduction to Abstract Algebra, 3 credits, and MATH 340, Discrete Computational Structures, 3 credits.

A student in the Pre-Engineering program is required to take MATH 322, Introduction to Differential Equations, 3 credits, MATH 351, Introduction to Numerical Analysis, 4 credits, and MATH/PHYS 250, Statics and Properties of Materials, 3 credits.

This information must be used in conjunction with the 2020-2021 Grand View University Catalog and does not reflect a student's official record of progress. Students are expected to use the Progress tool found on myView > GV Self Service when monitoring and planning coursework. Other available resources include: Course Planning Documents (found on myView under Academics) and the faculty and staff who work with academic requirements.