Bachelor of Arts - Mathematics

School of Arts and Sciences

Mathematics is becoming more necessary in our technological world. Through mathematical modeling and critical thinking, problems in business, ecology, science, government and social sciences can be solved. Employers look for individuals who can think critically, problem-solve and write their results in a comprehensive and coherent fashion. The mathematics curriculum, the Ursuline Studies Program, small classes that encourage questions and participation, and the interdisciplinary studies that constitute the liberal arts core work together to this end.

Course Requirements

Students seeking a degree in mathematics are required to complete the Ursuline Studies Program, the writing intensive core curriculum. These 49 semester hours include mathematics, science, sociology, psychology, history, the arts, philosophy and religious studies. An additional 32 hours are needed to fill the requirements for a mathematics major. Students take elective courses to complete the remaining hours of the 128 required for their bachelor of arts degree in mathematics. Students desiring practical experience are encouraged to participate in the internship and/or cooperative education program. Students are welcome to explore test-out opportunities to earn credits.

Required Coursework

MAT 221 Calculus I 4
MAT 222 Calculus II 4
MAT 420 History of Math 3

Electives; Choose 21 credits from the following:

MAT 212 Statistics 3
MAT 223 Calculus III 4
MAT 310 Number Theology 3
MAT 313 Linear Algebra 3
MAT 311 Abstract Algebra 3
MAT 312 Higher Geometrics 3
MAT 324 Differential Equations 3
MAT 412 Advanced Statistics 3
MIS 260 Programming in Basic 3
PY 201 General Physics I 4
PY 202 General Physics II 4

Total Credits 32

Career Opportunities

Because mathematics emphasizes problem-solving and critical thinking, math majors are well-equipped for many jobs in science and business. In particular, those with an interest in statistics can enter the field with 15 hours of mathematics, including beginning and advanced statistics.

Those with an interest in computers, with some additional computer courses, can become a computer programmer or systems analyst. Those interested in teaching can become certified in elementary or secondary education, with a concentration in mathematics.