Programs

Mathematics, B.A.

(32 credits)

The Bachelor of Arts in Mathematics, under the Department of Biology, Chemistry and Mathematics, is designed to provide a sound foundation to pursue careers and/or advanced study in a variety of fields including data analytics, statistics, operations research, optimization, applied mathematics, pure mathematics, actuarial science, and teaching. Fields of application include sports, healthcare, environmental work, finance, insurance, economics, logistics, government, and education.

This major meets the Connecticut State Department of Education requirements for those students enrolled in the initial teacher preparation program at Albertus Magnus College and are seeking a middle or secondary level teacher certification with a mathematics endorsement. Contact the Department of Education and Teacher Preparation for additional information.

Upon completing the program of study in Mathematics, students will develop:

- Proficient knowledge base and breadth (introductory courses supplemented by upper-level courses).
- Proficient critical thinking skills (data interpretation/presentation especially in upper level courses e.g., MA 391).
- Proficiency in written/oral communication skills (lab reports, research papers in introductory & advanced courses, oral presentations and in-class discussions).
- Proficiency in mathematical modeling/experimental design (present both in introductory & advanced levels; should include a degree of creativity especially in the appropriate choice, design, application and interpretation of mathematical models/experimental design).
- Proficiency in information literacy (some courses include a “library component” for research projects/papers).
- Proficiency in quantitative analysis (data interpretation & presentation; covered in both introductory and upper-levels courses).

MAJOR REQUIREMENTS

REQUIRED CORE (32 credits)

MA 121	Calculus I
MA 122	Calculus II
MA 215	Differential Equations
MA 230W	History of Mathematics

MA 233	Linear Algebra
MA 242	Linear Optimization
MA 315	Geometry
MA 345	Probability
MA 351	Statistical Methods
MA 391	Senior Seminar