

## Contact

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## Admission Requirements

(In years as established by the college)

A high school diploma with the following specific courses:

- 4 English
- 2 Algebra I & II
- 1 Geometry
- 1 Trigonometry
- 3 Lab Science (*including chemistry & physics*)
- 2 History/Social Studies
- 2 Foreign Language (*same language or two years of American Sign Language-ASL*)
- Academic electives (*to equal at least 17 total credits*)

*To ensure current mathematical skills, students should take a mathematics course during their senior year of high school.*

## Major Requirements

- 31 credits Core Mathematics Courses
- 12 credits Upper-level Mathematics Courses
- 18 credits Concentration outside of Mathematics (or two 12 - credit concentrations)

*120 Minimum total credit hours required for graduation*

## College of Liberal Arts & Sciences

### Program Description

The program for the Mathematics major, leading to the Bachelor of Arts degree, requires the student to successfully complete 43 credit hours of approved courses in the department as well as at least 72 credit hours in courses from other departments. The Mathematics program combines three chief features:

- a broad and solid foundation of core Mathematics courses spread over the four years of the program.
- an upper-level Mathematics program of 12 credit hours of courses, chosen by the student and his/her advisor, usually completed in the junior and senior years,
- an approved 18 - credit hour concentration or two approved 12 - credit hour concentrations of courses chosen from outside the department.

Qualified students may earn credit for approved internships in research, industry, and government.

### Career Opportunities

Career opportunities for graduates exist in business, industry, government and education. Some graduates subsequently enroll in our Master of Arts in Mathematics degree program, while others pursue advanced degrees elsewhere.

Some recent graduates of the Mathematics program have accepted positions as: Mathematician, National Security Agency; Scientific Research Assistant, Woods Hole Oceanographic Institute; Underwriter, Metropolitan Life Insurance Company; Programmer/Analyst, Central Maine Power Company; Software Engineer, Itek Optical/Division of Itek Corporation; Actuarial System and Research Analyst, Blue Cross/Blue Shield; Intelligence Research Analyst, U.S. Government; Programmer/Analyst, Palette Systems, Inc.; Data Analyst, Tropicana Products, Inc.; Technical Manager, New England Telephone, Division of NYNEX Corporation; Systems Engineer, Electronic Data Systems; Secondary Teacher, Presque Isle High School; Secondary Teacher, Bangor High School.

### General Education Requirements\*

- ENG 101 College Composition
- 18 credits Human Values & Social Context area (*a single course may satisfy more than 1 sub-category, but a total of 18 credits must be completed*)
  - Western Cultural Tradition
  - Social Context & Institutions
  - Cultural Diversity & International Perspectives
  - Population & the Environment
  - Artistic & Creative Expression
- 2 courses Designated Writing Intensive (*1 must be within the major*)
- 2 courses Biological or Physical Sciences (*must include at least 1 laboratory course*)
- 1 course Ethics (*emphasis on discussion of ethical issues in 1 course or series of courses*)
- 6 credits Mathematics (*including statistics & some computer science, only 3 credits in computer science can count toward this requirement*)
- 1 capstone An approved experience in which the student integrates the components of his or her undergraduate training to perform at a professional level. The capstone experience is usually completed during the senior year in consultation with the student's academic advisor.

*\*All UMaine students must complete these general education requirements, which are counted in the total credit hours required for graduation and may be contained in the Major Requirements previously listed.*

## **Specialized Information**

The Department of Mathematics and Statistics offers a minor in Mathematics. The minor is open to all undergraduate, degree-seeking University of Maine students and requires the completion of seven courses in Mathematics and Statistics.

## **Graduate Study**

The department offers work leading to the degree of Master of Arts in Mathematics. Courses are given in the following general areas—pure mathematics, interdisciplinary applied mathematics, and statistics.

The department also offers support and advising for the Master of Science in Teaching degree program administered in the College of Liberal Arts & Sciences.

### **Academic Programs 2008-2009**

Please refer to the web site (<http://factsheets.umaine.edu/>) for the most updated version of the fact sheets.

This fact sheet is intended for informational purposes only and is subject to change.