

Mathematics (BA, BS)



DISCOVER YOUR OPPORTUNITIES

The Mathematical Sciences Department offers a broad-based selection of courses and programs for students who wish to pursue a career or need to increase their knowledge in mathematics, computer science, or statistics. The well-trained mathematician has job opportunities in many sectors of the community, including business, finance, education, computing, and engineering.

Educational Pathway Options

Recommended Preparation

High School

- Algebra I & II: 2 years
- Geometry: 1 year
- Trigonometry: ½ year
- Pre-calculus: ½ year

If necessary, Mathematics majors may take preparatory coursework at UAA to meet program prerequisites.

Associate of Arts (AA)

2-3 Years

The General Program may fulfill the first two years of some baccalaureate degrees with appropriate course placement and choices.

Bachelor Degrees

4-5 Years

Mathematics

- Bachelor of Arts (BA)
- Bachelor of Science (BS)

Options:

- Traditional
- Secondary Teaching Preparation

CAREER CONNECTIONS • Business, Management, & Administration
• Information Technology • Education & Training
• Science, Mathematics, Engineering, & Research

APPLICATION PROCESS

ENROLLMENT SERVICES

- 1 Apply for admission at www.uaa.alaska.edu/admissions.
- 2 Review admission requirements for your student type.
- 3 Submit required documents to UAA Enrollment Services.
- 4 Take the SAT, ACT, or Accuplacer test for English and math course placement. Call the UAA Advising & Testing Center at 907.786.4500 for testing information.
- 5 Make an appointment for academic advising at 907.786.1357 or 907.786.1356 and meet regularly with an advisor.
- 6 Access the Future Student Checklist online at <http://www.uaa.alaska.edu/prospective/checklist.cfm> to stay on track.

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PROGRAM HIGHLIGHTS

- Preparation for:
 - ▶ Teaching secondary school mathematics
 - ▶ Admission into graduate degrees
 - ▶ Public sector careers in local, state, and federal government agencies
- Previous majors have received the Goldwater Scholarship, a premier undergraduate award for outstanding scientists, mathematicians, and engineers
- Minor in Statistics
- Math Tutoring Lab and Learning Resource Center
- Opportunities to:
 - ▶ Conduct undergraduate research
 - ▶ Study with faculty who have received grants for professional teacher development
 - ▶ Volunteer at the Sonia Kovalevsky Mathematics Day—a program for high school women interested in mathematics

MATHEMATICS (BA, BS)

The Mathematical Sciences Department is part of the Division of Mathematical and Natural Sciences in the College of Arts and Sciences.

Students are strongly recommended to consult with an advisor prior to course selection. Please check with a College of Arts and Sciences advisor before you contact a faculty advisor in the Mathematical Sciences Department.

▶ COMPLETE GENERAL UNIVERSITY REQUIREMENTS

▶ COMPLETE GENERAL EDUCATION REQUIREMENTS (36 credits)

The GERs provide a breadth of exposure to traditional academic disciplines and help students to understand and respond to evolving local and international issues. Examples of courses include: oral and written communication, humanities, mathematics, natural sciences, fine arts, and social sciences.

▶ COMPLETE COLLEGE OF ARTS AND SCIENCES COURSE REQUIREMENTS

Bachelor of Arts (27-29 credits)

A liberal arts degree designed to provide a broad knowledge base. Examples of courses include: comparative cultures, history, introduction to literature, philosophy, sociology, and languages.

Bachelor of Science (24-28 credits)

A degree designed to equip students with technical competencies needed in scientific disciplines. Examples of courses include: mathematics, statistics, languages, computer programming, chemistry, and biology.

▶ COMPLETE MAJOR COURSE REQUIREMENTS (41-47 credits)

Sample of courses available in Mathematics:

- Calculus
- Proofs
- Real Analysis
- Complex Analysis
- Abstract Algebra
- Ordinary Differential Equations
- Partial Differential Equations
- Linear Algebra
- Discrete Mathematics
- Geometrics
- History of Mathematics
- Probability and Statistics

For a complete list of available courses, see the UAA catalog.

Some courses may be used to satisfy more than one requirement in a degree program.

A total of 120 credits will be required to graduate, 42 of which must be at the upper division (300 or 400) level.

The programs within the University Honors College may satisfy some of the degree requirements while providing challenging opportunities to excel. To find out more, go to www.uaa.alaska.edu/honors or call 907.786.1086.

COLLEGE OF ARTS AND SCIENCES: 907.786.1761
CAS ADVISOR: 907.786.1357 or 907.786.1356
WEBSITE: cas.uaa.alaska.edu
EMAIL: casadvise@uaa.alaska.edu
MATHEMATICS: 907.786.1744, math.uaa.alaska.edu

UAA ENROLLMENT SERVICES: 907.786.1480
ADDRESS: P.O. Box 141629, Anchorage, AK 99514-1629



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