INTRODUCTION TO THE MAJOR

The Applied Mathematics major prepares students to use mathematical concepts to formulate, analyze, and solve real-world problems. Students in the major learn:

- Research, communication, analytical, and modeling skills to develop their mathematical reasoning skills.
- Techniques and procedures to formulate and solve problems in mathematical notation.
- To identify real-world problems as subject to mathematical reasoning and to abstract general principles from the examples.

Visit the Berkeley Academic Guide for more information.

AMPLIFY YOUR MAJOR

- Add a Teaching Concentration to your major and join CalTeach to prepare for a career in education.
- Build community through MPS Scholars.
- Test your problem-solving skills in the prestigious Putnam Competition.
- Apply to a Research Experience for Undergraduates Summer Program.
- Work alongside a grad student mentor via the Directed Reading Program.
- Write an honors thesis or execute an independent study project.

MAJOR CLUSTERS

The Applied Mathematics major provides students with the opportunity to customize their learning by selecting a cluster pathway. A cluster is an approved concentration of courses in a specific field of applied mathematics. There are more than 15 approved clusters with the most popular being:

- Actuarial Science
- Computer Science
- Economics
- Statistics

More information on approved clusters can be found at math.berkeley.edu. Students can also design their own cluster with the guidance and approval of faculty.

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**APPLIED MATHEMATICS**

**Bachelor of Arts**

**EXPLORE YOUR MAJOR**
- Review your major and college requirements, and map out a 4+ year plan on CalCentral.
- Get tutoring help from the Student Learning Center or individual tutors.
- Check out the Math peer advisor blog.
- Learn how to plan your major, select courses, use LaTeX, and more at MUSA workshops.

**CONNECT AND BUILD COMMUNITY**
- Find community with Math student groups.
- Get mentoring with Berkeley Connect, MPS Scholars, and L&S Mentors Program.
- Enroll in MPS 1: Navigating the Mathematical and Physical Sciences.
- Find study groups, tutoring, and academic support at the Student Learning Center.

**DISCOVER YOUR PASSIONS**
- Discover new interests in a Freshman Seminar (Math 24), L&S 1, or DeCal course.
- Visit the Office of Undergraduate Research and Scholarships.
- Compete in the Putnam Competition. Take MATH 191 to elevate your success.
- Connect with faculty to discuss their work and research in Mathematics.
- Work closely with a graduate student through the Directed Reading Program.
- Enroll in a Sophomore Seminar, Big Ideas, or Discovery Course.

**ENGAGE LOCALLY AND GLOBALLY**
- Discover hundreds of organizations at the Calpalooza student activities fair.
- Explore study abroad options now, so you can start planning your upcoming semesters.
- Check out volunteer opportunities on campus.
- Deepen your knowledge of applied mathematics by attending workshops and conferences.
- Study abroad as a sophomore, junior, or senior with Berkeley Study Abroad.
- Take classes at another UC or college through a visitor and exchange program.

**REFLECT AND PLAN YOUR FUTURE**
- Develop a plan for getting career ready.
- Join Handshake to find Berkeley-specific internship opportunities and career development workshops.
- Explore career fields in the Career Connections Series or a winter externship.
- Conduct informational interviews to learn more about different career fields.
- Attend internship fairs to find internship opportunities. MATH 197 Field Study can be taken for study (internships) in off-campus organizations.
- Learn about graduate and professional school. See Step-by-Step for planning help.

**WHAT CAN I DO WITH MY MAJOR?**

**Jobs and Employers**
- Actuarial Analyst, Aon Risk Services
- AI Research Director, Numerate
- Analyst, Kohl’s
- Applications Engineer, Revotivate
- Business Analyst, Wayfair
- Data Analyst, Tribe Dynamics
- Data Scientist, Oracle
- Digital Analyst, McKinsey & Company
- Energy Analyst, CA Energy Financial Consultant, Deloitte
- Research Assistant, IMF
- Software Develop. Engineer, Amazon
- Software Engineer, PayPal
- SW Engineer Intern, City & Cty. of SF
- Software Quality Associate, Waymo

**Graduate Programs**
- Accounting
- Actuarial Science
- Artificial Intelligence and Robotics
- Applied Mathematics
- Biomedical Sciences
- Business
- Computational Mathematics
- Computer Graphics
- Computer Science
- Economics
- Electrical Engineering
- Finance
- International Studies
- Neurobiology
- Physics
- Secondary Education
- Statistics

Examples gathered from the First Destination Survey of recent Berkeley graduates.