INTRODUCTION TO THE MAJOR

The Mathematics major provides students excellent preparation for advanced study in math, physical sciences, economics, and industrial engineering, as well as graduate study in business, education, law, and medicine. The major also prepares students for post-baccalaureate positions in business, technology, industry, teaching, government, and finance. Students majoring in Mathematics may choose to major with a teaching concentration.

Visit the Berkeley Academic Guide for more information.

STUDY OPTIONS

- Students majoring in Mathematics may choose to major with a teaching concentration. The teaching concentration is designed to increase the number and quality of math teachers.
- Interested in using math to solve real-world problems? Check out the Applied Mathematics major.
- Already have an intended major? Consider adding Mathematics as a minor.

“...the major builds a strong analytical and logical mind and provides the skills necessary to learn almost anything technical."

– Pure Math Major

AMPLIFY YOUR MAJOR

- Prepare for a career in education with CalTeach.
- Build community through MPS Scholars.
- Test your problem-solving skills in the 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.
# Mathematics

**Bachelor of Arts**

## Design Your Journey

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<th><strong>FIRST YEAR</strong></th>
<th><strong>SECOND YEAR</strong></th>
<th><strong>THIRD YEAR</strong></th>
<th><strong>FOURTH YEAR</strong></th>
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<tr>
<td><strong>Explore your major</strong></td>
<td>Review major and college requirements, and map out a 4-year plan on CalCentral. Visit the peer advisor blog and talk with Mathematics peer advisors to learn about undergraduate life in the department. Learn how to plan your major, select courses, use LaTeX, and more at MUSA workshops.</td>
<td>Meet with your major and college advisor to discuss your academic plans. Complete the prerequisites and declare Mathematics as your major. Consider taking Honors sections of courses. Consider a minor or a summer minor. Review major guidelines for study abroad.</td>
<td>Focus on upper division requirements and electives. Review your degree progress with your major and college advisors. Learn more about the Honors Program with help from the Program Major Advisors. Do a degree check to ensure you are on track to graduate. Finish remaining major, college, and campus requirements. Complement your major with a certificate or course thread. Register for the department and campus-wide commencement ceremonies.</td>
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<td><strong>Connect and build community</strong></td>
<td>Get mentoring with Berkeley Connect, MPS Scholars and L&amp;S Mentors Program. Find study groups, tutoring, and academic support at the Student Learning Center. Enroll in MPS 1: Navigating the Mathematical and Physical Sciences. Find community with Math student groups.</td>
<td>Attend a lecture or workshop hosted by the Math department. Connect with instructors during office hours. Work with a graduate student mentor in the Directed Reading Program. Consider MATH 74, a course which teaches skills for transitioning to upper division math.</td>
<td>Connect with faculty to discuss research opportunities. Join a career-oriented group like Data Scholars or a research-oriented group like the Berkeley Scientific Journal. Hear guest speakers talk about interesting math topics at Math Mondays. Become a Mathematics Peer Advisor. Help other students with Mathematics at the Student Learning Center or independently. Connect with alumni groups and build your network as you prepare to graduate. Become a Golden Bear Orientation Leader and welcome new students to Berkeley.</td>
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<td><strong>Discover your passions</strong></td>
<td>Discover new interests in a Freshman Seminar (Math 24), L&amp;S 1, or a DeCal course. Visit the Office of Undergraduate Research and Scholarships.</td>
<td>Enroll in a Sophomore Seminar, Big Ideas or Discovery Course. Assist faculty and graduate students in their research through URAP and SURF-SMART. Explore a career in education with CalTeach. Check out math-related classes such as PHIL 12A. Intro to Logic.</td>
<td>Apply to a Research Experience for Undergraduates Summer Program or the MSRI Undergraduate Program. Compete in the Putnam Competition. Take MATH 191 to elevate your success. Planning a senior thesis or project? Apply to the Haas Scholars Program or SURF. Teach your own DeCal course. Write an honors thesis or execute an independent study under faculty supervision. Keep pursuing your interests through a fellowship or gap year after graduation. Apply for a leadership position within your student organization.</td>
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<td><strong>Engage locally and globally</strong></td>
<td>Attend the Calapalooza student activities fair and get involved with a student organization. Find service opportunities through the Public Service Center. Explore study, internship, and research abroad options with Berkeley Study Abroad.</td>
<td>Deepen your knowledge of mathematics by attending workshops and conferences. Experience life at another UC or college on a visitor and exchange program. Contribute to a community organization with an American Cultures Engaged Scholarship course. Study Mathematics abroad through Berkeley Study Abroad or Budapest Semesters in Mathematics. Engage in STEM education and mentorship with Bridging Berkeley, Expand Your Horizons, or SENDForC. Study and intern in Washington D.C. with UCDC or Cal in the Capital.</td>
<td>Study Mathematics abroad through Berkeley Study Abroad or Budapest Semesters in Mathematics. Engage in STEM education and mentorship with Bridging Berkeley, Expand Your Horizons, or SENDForC. Study and intern in Washington D.C. with UCDC or Cal in the Capital. Hone your leadership skills with the Peter E. Haas Public Service Leaders program. Explore service opportunities after graduation, such as Peace Corps, Teach for America, or U.S. Department of State. Go on a service-learning trip with the Alternative Breaks Program.</td>
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## What Can I Do with My Major?

### Jobs and Employers

- Application Programmer, Wells Fargo
- Data Analyst, Descena
- Planner, KNT Manufacturing
- Product Technician, Esurance
- Research Assistant, Microsoft
- Research Fellow, Howard Hughes Inst.
- Software Developer, Salesforce
- Software Engineer, Airbnb
- Software Engineer, Google
- Software Engineer, Intuit
- Teacher, Oakland Unified School Dist.

### Graduate Programs

- Algebra & Number Theory
- Analysis & Functional Analysis
- Business
- Computer Science
- Electrical Engineering
- Epidemiology
- Geometric Analysis
- Linguistics
- Mathematical Statistics & Probability
- Medicine
- Neurobiology
- Physics
- Statistics
- Topology & Foundations

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