The department offers the doctor of philosophy degree with a major in mathematics and a master of arts degree in mathematics.

The Ph.D. degree requires proficiency in basic and advanced graduate mathematics and the completion of a dissertation containing a significant piece of original research in some area of mathematics. The scope of the research program in mathematics is broad. The Ph.D. specialty and dissertation may be in any area of mathematics, including but not limited to algebra, algebraic geometry, applied mathematics, combinatorics, computational mathematics, complex analysis, differential equations, differential geometry, dynamical systems, harmonic analysis, logic, mathematical biology, number theory, probability, and topology. A complete list of faculty and their areas of expertise is available through the department website (https://www.math.wisc.edu/graduate).

Students in the Ph.D. program also have the option to earn a master of arts degree.

The M.A. degree is available with the named option titled foundations of advanced mathematics. It is designed to strengthen the student’s mathematics background and enhance the opportunities for applications to Ph.D. programs and for employment as a mathematician in nonacademic environments.

### DEGREES/MAJORS, DOCTORAL MINORS, GRADUATE/PROFESSIONAL CERTIFICATES

- Mathematics, Doctoral Minor (http://guide.wisc.edu/graduate/mathematics/mathematics-doctoral-minor)
- Mathematics, M.A. (http://guide.wisc.edu/graduate/mathematics/mathematics-ma)
- Mathematics, Ph.D. (http://guide.wisc.edu/graduate/mathematics/mathematics-phd)

### PEOPLE

**Faculty:** Professors Angenent, Assadi, Bolotin, Boston, Căldăraru, Craciun, Denissov, Ellenberg, Feldman, Gong, Jin, Lemp, Mari Beffa (chair), Miller, Mitchell, Paul, Seege, Seppäläinen, Smith, Terwilliger, Thiffeault, Vlaclovsky, Waleffe, Yang, Zlatoš; Associate Professors Anderson, Arinkin, Gurevich, Maxim, Yeh, Stechmann, Valkó; Assistant Professors Andrews, Dymarz, Erman, Kent, Kim, Li, Marshall, Sam, Spagnolie, Stovall, Street, Tran, B. Wang, L. Wang, M. Wood, P. Wood, Yin; Affiliate Faculty Bach, Cai, Del Pia, Ferris, Ron, Sifakis.