Applied Mathematics, Doctor of Philosophy

College of Letters & Science

Graduate Study

Students prepare for careers where mathematics is applied to problems in the physical and life sciences, engineering, and management. The degree requirements consist of rigorous training in applied mathematics, including course work and a research dissertation under the direction of a member of the Graduate Group in Applied Mathematics. The M.S. degree provides preparation for further study in applied mathematics or an application area, or for a career in industry or public service. The Ph.D. degree provides preparation for a career in research and/or teaching, or in industrial or national research laboratories. For further information, please contact gradadvisor@math.ucdavis.edu or 530-754-0823.

New applicants are admitted to the fall quarter only.

Preparation

The program admits qualified students with a bachelor’s degree in mathematics, physics, chemistry, engineering, economics, the life sciences and related fields. General and Subject GRE scores are required, and applicants should display evidence of strong quantitative skills. Undergraduate courses should include calculus (including vector calculus), linear algebra, and ordinary differential equations. Advanced calculus (introduction to real analysis) is strongly recommended. Additional background in probability, partial differential equations, and/or numerical analysis is a plus. The ability to program in a high-level computer programming language (e.g., C, MATLAB, Python, R, etc.) is assumed.

Graduate Advisor

Contact the Student Services Office at 530-754-0823 or at gradadvisor@math.ucdavis.edu.

Courses

For a list of the courses in applied mathematics and mathematics, see Mathematics (https://catalog.ucdavis.edu/departments-programs-degrees/mathematics/).