The University of Louisville has a research-oriented Department of Mathematics, which is dedicated to giving first-rate instruction. Our ever-expanding facilities and wide range of courses can prepare you for a career in mathematics or statistics.

Ph.D. in Applied and Industrial Mathematics

This comprehensive program prepares you for a career in industry, government or academia by blending advanced mathematical and statistical information with real world experience. The program is designed to help students view mathematics as an integrated whole, to meet applied and industrial needs. Coursework, specialization in one of several application areas and an industrial internship combine to meet this goal.

Master of Arts

The master of arts degree offers intensive, yet flexible training by emphasizing applicable mathematics. Up to 12 of the 30 hours of required coursework may be taken in an approved minor. The program can include an industrial internship. This degree leaves you with many career options, including actuary, statistician, systems analyst, teacher, a job in industry or government, or further graduate study.

Interdisciplinary Opportunities

Both the Ph.D. and M.A. degrees allow you to design a program of study that includes courses offered outside the Department of Mathematics in such areas as biostatistics, physics and engineering. Arrangements also can be made for interdisciplinary M.S. degrees.

Actuarial Science

We offer in-depth courses and valuable review sessions covering most of the material required for the examinations leading to an Associateship in the Society of Actuaries. Courses can be taken as part of a degree program or on a post-baccalaureate basis.

Financial Aid

The Department of Mathematics offers several options that make it easy to fund your education, including graduate teaching assistantships and some research assistantships. Assistantships include tuition remission, a stipend and health insurance.

Facilities

The University of Louisville library system holds nearly 2 million volumes and subscriptions to more than 200 mathematics journals. The Department of Mathematics has a microcomputer lab and many workstations. Students can also obtain accounts for the Cardinal Research Cluster, the largest and fastest academic supercomputer in Kentucky.

Admissions

Admission to the University of Louisville is through the Graduate School. For additional information about graduate degree programs, admission requirements, graduate teaching assistantships or other financial aid, e-mail gradadmit@erdos.math.louisville.edu or write to:

Director of Graduate Studies
Department of Mathematics
University of Louisville
Louisville, KY 40292

Additional information can also be obtained on the Web at http://www.math.louisville.edu/

FACULTY

Beth Bradley
Differential Equations

Patricia Cerrito
Applied Statistics, Health Outcomes Research

Udayan Darji
Measure Theory, Topological Dynamics, Permutations

Manav Das
Fractal Geometry, Measure Theory

Lee Gibson
Probability Theory, Social Choice Theory, Biological Models

Ryan Gill
Change-Point Problems, Generalized Linear Models

Changbing Hu
Partial Differential Equations, Fluid Mechanics, Control Theory

Andre Kezdy
Graph Theory, Combinatorics

Jon-Lark Kim
Coding Theory, Combinatorics

Ewa Kubicka
Graph Theory, Combinatorics

Grzegorz Kubicki
Graph Theory, Combinatorial Geometry, Optimal Stopping

Hamid Kulosman
Commutative Algebra

Lee Larson
Real Analysis

Kiseop Lee
Financial Mathematics, Stochastic Analysis, Market Microstructure

Bingtuan Li
Differential Equations, Mathematical Biology

Jiaxu Li
Ordinary and Functional Equations, Dynamical Systems, Mathematical Biology and Medicine

Alica Miller
Topological Dynamics

Robert Powers
Mathematical Social Choice

Thomas Riedel
Functional Equations, Probabilistic Metric Spaces, Partially Ordered Sets

Prasanna Sahoo
Functional Equations and Inequalities on Algebraic Structures, Mathematical Statistics, Image Processing

Steven Seif
Complexity on Algebraic Structures, Universal Algebra, Semigroup Theory

David Swanson
Real Analysis, Partial Differential Equations

Jake Wildstrom
Combinatorics, Logistics

Wiley Williams
Topology, Matrix Analysis, Fractals, Semigroups

Yongzhi Xu
Applied Partial Differential Equations, Inverse Scattering Problems, Acoustic Imaging, Cancer Modeling

Wei-Bin Zeng
Probability and Statistics, Functional Equations, Wavelet Analysis