Ph.D. IN APPLIED MATHEMATICS

Department of Applied Mathematics • Illinois Institute of Technology

Learn cutting-edge mathematics through a carefully designed curriculum
Explore and develop research projects with a diverse range of applications
Enjoy personal attention from faculty dedicated to your future growth and success

Computational Mathematics

Meshfree methods, approximation theory, integration, moving-boundary problems for PDEs.

High-dimensional problems, interfacial dynamics in materials science and complex fluids.

Discrete Mathematics

Graph theory, discrete optimization, computational algebraic geometry.

Network science, combinatorial search, operations research, randomized algorithms for hypergraphs and algebra, discrete method in statistics.

Statistics

Design of experiments, Monte Carlo, algebraic statistics, UQ, networks, Bayesian statistics.

Statistical methodologies for engineering, social science, biology, neuroscience, business, management.

Stochastics

Stochastic analysis and control, structured dependence, stochastic dynamical systems and SPDEs.

Mathematical finance and insurance, Monte Carlo, random sequences, mitigation of random phenomena, calibration of stochastic systems.

College of Science
ILLINOIS INSTITUTE OF TECHNOLOGY

Science
at Illinois Tech

Department of Applied Mathematics
10 W 32nd St., Room 208
CHICAGO, IL 60616
Phone 312.567.8980 Fax 312.567.3135
Email: amath@iit.edu
Web: science.iit.edu/applied-mathematics