## Graduate Study in Mathematical Sciences

This webpage is for prospective graduate students. If you are looking for information on our undergraduate program, please click here. For those who are in a hurry, feel free to look at the department's graduate program flyer which gives a concise overview of our program and its benefits.

The Department of Mathematical Sciences offers a program of instruction and research leading to the Master of Science, Master of Science in Teaching, and Doctor of Philosophy degrees. Students have the opportunity to take classes in a wide variety of subjects including applied mathematics, complex analysis, differential equations, differential geometry, functional analysis, group theory, mathematics education, matrix computations, number theory, numerical analysis, optimization, probability theory, ring theory, statistics, and topology. Small classes and a high degree of interaction with the research faculty promote a strong learning environment.

The doctoral program is nontraditional in that all students work with an application (typically with a heavy computing component) of current mathematics in another academic discipline or industry. This culminates in a semester interning at a governmental or industrial research facility as part of the degree requirements. The result is a perspective of the mathematical sciences as an integrated whole with appropriate roles for both pure and applied mathematics. The required combination of course work, experience, and research enables a graduate of the program to pursue a career in either academic or non-academic settings.

The Master of Science degree in Mathematics offers specializations in Pure Mathematics, Mathematics Education, Applied Mathematics and Computational Mathematics. The Master of Science degree in Teaching combines mathematics study with advancing teaching skills in preparation for working with students in secondary school, leading to an endorsement to teach mathematics and a teacher-leader endorsement.

The Mathematical Sciences Department has approximately 20 graduate faculty members and 40 graduate students. Our faculty are actively conducting research in a wide array of sub-disciplines and include outstanding scholars with an international reputation and award-winning teachers.

About half of our graduate students receive significant financial assistance. Fellowships and graduate teaching assistantships carry a full tuition-waiver scholarship. Experienced graduate students have the opportunity to teach a section of calculus, with full responsibility and an enhanced stipend. In addition, the Graduate School offers assistantships and fellowships, some specifically designated for minorities and women in areas in which they are underrepresented. Information on these awards can be obtained from the department or directly from the Graduate School.

Our library holdings are excellent, including over 250 research journals and serials, and 10,000 research monographs. Computer resources in the department are constantly and rapidly evolving. This distributed environment supports faculty, staff, and graduate students alike. In addition, the university supports a network of microcomputer laboratories, equipped with Macintosh and IBM-compatible PCs.

### The University

Northern Illinois University is a large and diverse institution. Through the Colleges of Business, Education, Engineering and Engineering Technology, Health and Human Sciences, Law, Liberal Arts and Sciences, and Visual and Performing Arts, the university offers a large array of undergraduate and graduate degree programs. The main campus is located in DeKalb, a pleasant residential community of 35,000 located 65 miles west of Chicago via Interstate 88. The university's location within 60 miles of some 8,000,000 people offers many cultural, recreational, and economic opportunities. The well-known Schools of Art and Music present a variety of exhibits and programs every year.

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Further information on the master's programs in mathematics and the doctoral program in mathematical sciences is available from

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## Helpful Links

- Graduate School
- Admission
- International Students
- Deadlines for Masters and Doctoral applicants
- Graduate Catalog
- Financial Support
- PhD in Math
- MS in Math
- MS in Teaching
- MS in Stat
- Recent PhD's
- Getting Here