

Master of Science in Mathematics



The graduate program in the Department of Mathematics & Philosophy at Western Illinois University prepares students for careers in business, industry and government, as well as trains mathematicians who would pursue further study toward a doctoral degree. The program offers an alternative to traditional graduate programs by offering a flexible structure. Students receive solid graduate-level training in both the theoretical framework and the applications of the fundamental methods of mathematics. Graduates from the master's program has been highly successful, entering reputable Ph.D. programs and the job market.

The program is appropriate for anyone who wishes to:

- Continue to a Ph.D. program in mathematics, applied mathematics and computational science, or statistics
- Improve their mathematics background for Ph.D. programs such as economics and physics.
- Prepare for teaching mathematics at the community college level
- Enhance their preparation to become a computational scientist, statistician, systems analyst, operations research analyst, data scientist or post-secondary teacher

Admission Requirements

- You are a mathematics major or
- You have completed three semesters of calculus, a linear algebra course, an introductory statistics course, a proof writing course* and some advanced quantitative courses (such as modeling and computation, regression analysis, probability and statistics, classical mechanics, magnetism, econometrics or finance).

All students must meet the general admission requirements of the WIU School of Graduate Studies, having a cumulative undergraduate GPA of at least 2.75 or a GPA of 3.0 or higher for the last two years of undergraduate work.

*Students entering the Master of Science in Mathematics degree program are required to have sufficient competence in mathematics coursework (as determined by the Department Graduate Committee) to be considered for admission. If you have not completed the prerequisites, your application may be considered for conditional admission. Admission of students who do not

fulfill the coursework requirements is usually conditioned upon filling specified deficiencies. These may include Logic and Sets (Math 341), Introduction to Real Variables (Math 435G), and Introduction to Mathematical Statistics (Stat 471G) during their first year of study.

Degree Requirements

- 18 semester hours of core courses
- 6 semester hours of directed electives
- 12 semester hours of focus area courses

Focus courses may be in a single area in mathematics, or in another area of study outside the WIU Department of Mathematics, as sanctioned by the Department Graduate Committee. For example, the focus area courses may be in applied mathematics, PhD pursuit, statistics, teaching of mathematics, biology, business, chemistry, computer science, decision sciences, economics, environmental science, finance or physics.

Integrated Baccalaureate and Master's Degree in Mathematics

The integrated baccalaureate and master's degree program provides an opportunity for academically strong undergraduate Mathematics majors to complete both the bachelor's and master's degrees in five years. The program is designed to provide an accelerated alternative to traditional programs by preparing students who would pursue a career in business, industry, or government, as well as to train mathematicians who would pursue further study toward a doctoral degree in mathematics. The applicant must have a cumulative GPA of 3.25 or higher and a major GPA of 3.25 or higher and must complete 60 SH of college coursework with at least 21 SH of Mathematics to include MATH

Program Location:
Macomb

Contact Information

Questions about the program:

Department of Mathematics
Graduate Coordinator
(309) 298-1054
wiu.edu/mathematics

General admission questions:

School of Graduate Studies
(309) 298-1806 or (877) WIU GRAD
Grad-Office@wiu.edu
wiu.edu/grad



**Western Illinois
University**

231, 311, and 341 with grades of no less than “B,” before applying for admission to the integrated program. For more information, visit wiu.edu/graduate_studies/catalog/mathematics.php.

Faculty Expertise

All of the 21 tenured and tenure-track graduate faculty members have a Ph.D. in an area of mathematics or statistics. They teach graduate courses, conduct and publish research in their areas of specialization, and serve on various committees in the WIU Department of Mathematics. The graduate faculty members have expertise in the following areas: algebra and combinatorics; applied mathematics; geometry, topology, and analysis; logic; mathematics education; and statistics.

Assistantship Opportunities

All graduate students in mathematics who have a cumulative undergraduate GPA of 3.0 or above are eligible to apply for a graduate assistantship or a teaching assistantship. Assistantship applicants are strongly encouraged to take the general part of the Graduate Record Examination (GRE). Priority for assistantships is given to applicants with high quantitative GRE scores. Students with assistantships receive a monthly stipend and a waiver of tuition. All full-time graduate assistants are required to work up to 20 hours per week; all two-thirds time graduate assistants work 13 hours per week. Teaching assistants are required to teach up to 6 semester hours (SH) per semester. Probationary students are not eligible for assistantships.

All graduate and teaching assistants must enroll for a required minimum number of coursework hours, which apply toward their degree programs. Graduate assistants must enroll in at least 9 SH, and teaching assistants for at least 6 SH. If it is the student’s last semester and they have filed a degree plan, they may enroll for only the number of semester hours needed to complete their degree requirements. Graduate and teaching assistants must maintain a 3.0 GPA and exhibit satisfactory progress toward their degrees in order to retain an assistantship.

Western Illinois University is an Affirmative Action and Equal Opportunity employer with a strong commitment to diversity. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including, but not limited to, minorities, women, and individuals with disabilities. WIU has a non-discrimination policy that includes sex, race, color, sexual orientation, gender identity and gender expression, religion, age, marital status, national origin, disability, and veteran status.



Featured Alumni

Our alumni continue their academic career in pursuit of doctoral programs, teach in colleges or universities or secure jobs in business institutions across the country.

“My experience as a graduate student at WIU was a rewarding one. I have acquired a well-rounded education that combines mathematics theory with research fundamentals. I improved my ability to communicate ideas effectively and gained a greater understanding of, and appreciation for, mathematics. Further, I had many opportunities to enhance my teaching abilities.”

– Dinuka Sewwandi de Silva, MS, 2019

“Through the program, I gained a lot of knowledge in mathematics, as well as in working with software, such as MATLAB and Mathematica. The faculty members are welcoming and helpful, which makes the program enjoyable. My advice is to not limit yourself to the classroom—also seek out independent study with the faculty. That is when you learn the most!”

– Franck Njeunje, MS, 2013

“The faculty was great in helping me with my studies, scheduling, preparation and job search. I was able to get the specific education I wanted with the applied orientation and worked in the Physics department, as well as the Math department. The courses were well-planned, and the professors were outstanding.”

– Scott T. Zuehlke, MS, May 2010

“My experience in the WIU MS program has been challenging and extremely rewarding. My professors have pushed me to gain a deeper understanding of mathematics, while providing great support and encouragement to succeed. Overall, it has been a wonderful experience I will never forget, and I am happy I chose to attend WIU.”

– Erika Hodgson, MS, 2013