SAINT LOUIS UNIVERSITY

GRADUATE EDUCATION

COLLEGE OF ARTS AND SCIENCES

Mathematics

Saint Louis University is a Catholic, Jesuit institution that values academic excellence, life-changing research, compassionate health care, and a strong commitment to faith and service.

Founded in 1818, the University fosters the intellectual and character development of nearly 14,000 students on two campuses in St. Louis, Missouri, and Madrid, Spain. Building on a legacy of nearly 200 years, Saint Louis University continues to move forward with an unwavering commitment to a higher purpose, a greater good.

OVERVIEW

The department of mathematics and computer science at Saint Louis University offers graduate programs of advanced study and research leading to Master of Arts and Doctor of Philosophy degrees in mathematics. Due to the high faculty-student ratio, graduate students receive extensive individualized instruction. Ph.D. students work closely with faculty on individually tailored research programs. The department is engaged in undergraduate curriculum reform using cutting-edge technology, and graduate students participate in this reform.

M.A.:
The master's program prepares students for further study toward the Ph.D. or for a career in teaching or industry. This degree requires 30 credit hours of coursework, with at least seven courses at the 5000-level or higher, including two full-year 5000-level core courses. The successful master's student must either write and defend a master's thesis or pass an oral exam covering three areas of graduate-level mathematics.

Ph.D.:
The Ph.D. program prepares students for research and/or teaching careers in colleges, universities or industry. Requirements for the degree include 36 credit hours beyond the M.A. All Ph.D. students must complete the 5000-level sequences in algebra, analysis and topology, as well as the 6000-level sequence in differential geometry. The student must pass written exams in three major fields of mathematics, plus a language exam that tests the student's ability to read mathematical works in French, German or Russian. The capstone is to write and defend a dissertation presenting the results of the student's research.

Career Paths:
Possible careers for graduates include university faculty, actuary, cryptographer and market research analyst.

APPLICATION CRITERIA

• Transcript(s)
• Three letters of recommendation
• GRE G scores
• Résumé
• Professional goal statement

DEGREES OFFERED

• Master of Arts (M.A.) in Mathematics
• Doctor of Philosophy (Ph.D.) in Mathematics

COURSES AVAILABLE

DAYS ✔ NIGHTS ✔ WEEKENDS ✔ ONLINE ✔

APPLICATION DEADLINE

FALL | July 1 | July 1
SPRING | Nov. 1 | Nov. 1
SUMMER | N/A | N/A

Deadlines for assistantships are listed online.

CONTACT INFORMATION

Mathematics Department

EMAIL | mathgrad@slu.edu
PHONE | 314-977-2444
WEB | mathcs.slu.edu/graduate-programs

GOOD TO KNOW

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Career Paths:
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M.A.:
A bachelor's degree in mathematics or the equivalent.

Ph.D.:
A master's degree in mathematics
(Exceptionally well-qualified applicants with a bachelor's degree may be admitted directly into the Ph.D. program).
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FACULTY

Tae-Hyuk (Ted) Ahn, Ph.D.: Bioinformatics, high-performance computing, big data analytics, computational science
Anneke Bart, Ph.D.: Geometric topology, low dimensional topology, deformation theory
Russell Blyth, Ph.D.: Group theory
Erin Wolf Chambers, Ph.D.: Computational geometry and topology, combinatorial algorithms
Bryan Clair, Ph.D.: Spectral graph theory, geometric topology
Bradley Currey, Ph.D.: Harmonic analysis and representation theory
Kimberly Druschel, Ph.D.: Algebraic topology, orbifolds, cobordism
Daniel Freeman, Ph.D.: Functional analysis
Jason Fritts, Ph.D.: Computer science
James Gill, Ph.D.: Analysis
Michael Goldwasser, Ph.D.: Algorithm design and analysis
Hajjun Gong, Ph.D.: Bioinformatics, statistics
Steven Harris, Ph.D.: Differential geometry, relativity: global structures of spacetimes
James Hebd, Ph.D.: Riemannian geometry, differential geometry of knots
Benjamin Hutz, Ph.D.: Number theory and dynamical systems
Brody Johnson, Ph.D.: Applied harmonic analysis
John Kalliongis, Ph.D.: Topology
Michael Lamar, Ph.D.: Computational linguistics, statistics, machine learning
David Letscher, Ph.D.: Computational topology and 3-manifold algorithms
Greg Marks, Ph.D.: Noncommutative ring theory
Michael May, S.J., Ph.D.: Algebra, using technology in teaching
Julianne Rainbolt, Ph.D.: Group representation theory
Nirina Lovasoa Randrianarivony, Ph.D.: Functional analysis, metric geometry
Kevin P. Scanell, Ph.D.: Natural language processing, hyperbolic 3-manifolds, hyperbolic geometry, Lorentzian geometry
Darrin Speegle, Ph.D.: Applied harmonic analysis, functional analysis
Ashish K. Srivastava, Ph.D.: Noncommutative ring theory
Jacob Sukhodolsky, Ph.D.: Computer science
Michael Tsau, Ph.D.: Geometric topology, knot theory
Dennis Wacker, D. Sc.: Statistics, applied mathematics

APPLICATION REQUIREMENTS

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Applications should be submitted by Jan. 1 for assistantship consideration review. A master’s student can receive a total of up to two years of support from SLU as a teaching assistant. A Ph.D. student can receive a total of up to five years of support from SLU as a teaching assistant, including support received while in the master’s and the doctoral program. Most M.A. and Ph.D. students are supported by teaching assistantships, which include a stipend, full tuition remission and medical benefits. Students who are awarded teaching assistantships normally teach one course per semester.

FINANCIAL SUPPORT

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Higher purpose. Greater good.™

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