

# Mathematics, MS, MMath

**Department:** Mathematics and Statistics Department

**College:** College of Science

## Overview

### About This Degree

The **master of mathematics** degree differs from the MS degree in that it is intended specifically for teachers at the secondary and community college levels who want to broaden their background in mathematics. Applicants come from undergraduate math education, math, or statistics programs. The MMath is also open to students who have earned a Utah Level 4 teaching certification in mathematics or its equivalent.

The **MS** degree is for students who wish to earn a master's degree in mathematics and then pursue a doctoral degree in mathematics or statistics.

The Mathematics and Statistics Department's excellent ratio of graduate students to faculty permits close personal guidance for each student. Students are able to tailor their programs of study to match their interests in specific areas of mathematics and statistics as well as interdisciplinary research.

## Career Options

Students who receive the **MS** commonly go on to pursue doctoral degrees in mathematics or statistics. Graduates can also work in industrial jobs and teach at the college level.

With the **MMath** degree, students are prepared for careers in high school and middle school education as well as teaching at two- and four-year colleges.

## What it takes

### Admissions Requirements

While applicants are not required to have undergraduate degrees in mathematics or statistics, they must have strong backgrounds in these areas. The graduate committee will evaluate each transcript to determine if the applicant's undergraduate work in mathematics and statistics is sufficient.

#### Application Requirements:

- Complete the [online application](#)
- Pay the \$55 application fee
- Score at or above the 40<sup>th</sup> percentile on the GRE (score of 700 out of 800 on the quantitative section)
- Have a 3.0 or higher GPA on your last 60 semester or 90 quarter credits
- Provide transcripts of all college/university credits
- Provide three contacts for letters of recommendation

International students have [additional admissions requirements](#).

### Admissions Deadlines

The department has the following application deadline:

- Fall semester - February 1

### Master's Degree Plan Options

Students can receive the **MS** or the **MMath** by pursuing one of three options:

- In the **Plan A** option, students complete graduate-level coursework and must write a thesis.

- The **Plan B** option requires the production of a paper or creative work of art and is expected to reflect equivalent scholarship standards as a thesis.

## Financial Assistance

A majority of students receive major financial assistance with their studies via [teaching or research assistantships](#). All students that meet the qualifications may receive [tuition awards](#) and subsidized [health insurance](#) as well.

A variety of additional funding opportunities are available, including [fellowships](#), [scholarships](#), and [travel support](#).

## Program Requirements

[Click here](#) to see course requirements for the **Master of Science**.

[Click here](#) to see course requirements for the **Master of Mathematics**.

All students in the **MS** and **MMath** programs must pass a written qualifying examination. Students may take these exams before beginning formal coursework in the program but must take them at or before the end of the first full year of matriculation.

## Contact

### Advisor(s)

**Piotr Kokoszka**

Professor

**Office:** LUND 321

**Phone:** (435) 797-0746

**Email:** [piotr.kokoszka@usu.edu](mailto:piotr.kokoszka@usu.edu)

### Faculty

**Ian Anderson**, PhD, University of Arizona

Professor

**Area:** Differential geometry, global analysis

**Office:** LUND 318

**Phone:** (435) 797-2822

**Email:** [ian.anderson@usu.edu](mailto:ian.anderson@usu.edu)

**LeRoy Beasley**, PhD, University of British Columbia

Professor

**Area:** Matrix theory, linear algebra, combinatorics

**Office:** LUND 203

**Phone:** (435) 797-3248

**Email:** [leroy.b.beasley@usu.edu](mailto:leroy.b.beasley@usu.edu)

**David Brown**, PhD, University of Colorado - Denver

Associate Professor

**Area:** Discrete mathematics, graph theory

**Office:** LUND 202

**Phone:** (435) 797-3224

**Email:** [david.e.brown@usu.edu](mailto:david.e.brown@usu.edu)

**James Cangelosi**, PhD, Louisiana State University

Professor

**Area:** Constructivism in mathematics education, psychometrics, behavior management

**Office:** LUND 325 C  
**Phone:** (435) 797-1415  
**Email:** [jim.cangelosi@usu.edu](mailto:jim.cangelosi@usu.edu)

**Lawrence Cannon**, PhD, University of Utah  
Professor  
**Area:** Topology, algebra  
**Office:** LUND 316  
**Phone:** (435) 797-2829  
**Email:** [larry.cannon@usu.edu](mailto:larry.cannon@usu.edu)

**Chris Corcoran**, ScD, Harvard University  
Associate Professor  
**Area:** Epidemiology, biostatistics, statistical genetics, categorical data, permutation methods  
**Office:** LUND 204  
**Phone:** (435) 797-4012  
**Email:** [chris.corcoran@usu.edu](mailto:chris.corcoran@usu.edu)

**Daniel Coster**, PhD, University of California - Berkeley  
Professor  
**Area:** Optimal design, computational statistics  
**Office:** LUND 310  
**Phone:** (435) 797-2815  
**Email:** [dan.coster@usu.edu](mailto:dan.coster@usu.edu)

**Adele Cutler**, PhD, University of California - Berkeley  
Professor  
**Area:** Statistical computing, statistics  
**Office:** LUND 302  
**Phone:** (435) 797-2761  
**Email:** [adele.cutler@usu.edu](mailto:adele.cutler@usu.edu)

**Richard Cutler**, PhD, University of California - Berkeley  
Department Head, Professor  
**Area:** Environmental and ecological statistics, experimental design  
**Office:** LUND 215  
**Phone:** (435) 797-2810  
**Email:** [richard.cutler@usu.edu](mailto:richard.cutler@usu.edu)

**Mark Fels**, PhD, McGill University  
Professor  
**Area:** Differential geometry, differential equations  
**Office:** LUND 320  
**Phone:** (435) 797-0774  
**Email:** [mark.fels@usu.edu](mailto:mark.fels@usu.edu)

**Nathan Geer**, PhD, University of Oregon  
Assistant Professor  
**Area:** Low-dimensional topology, lie theory  
**Office:** LUND 206  
**Phone:** (435) 797-0755  
**Email:** [nathan.geer@usu.edu](mailto:nathan.geer@usu.edu)

**E. Robert Heal**, PhD, University of Utah  
Professor  
**Area:** Analysis, statistics  
**Office:** LUND 320 C

**Phone:** (435) 797-2853  
**Email:** [robert.heal@usu.edu](mailto:robert.heal@usu.edu)

**Peg Howland**, PhD, University of Minnesota  
Assistant Professor  
**Area:** Numerical linear algebra  
**Office:** LUND 303  
**Phone:** (435) 797-3302  
**Email:** [peg.howland@usu.edu](mailto:peg.howland@usu.edu)

**Joseph Koebbe**, PhD, University of Wyoming  
Associate Professor  
**Area:** Applied mathematics, computational fluid dynamics  
**Office:** LUND 301 C  
**Phone:** (435) 797-2825  
**Email:** [joe.koebbe@usu.edu](mailto:joe.koebbe@usu.edu)

**Brynja Kohler**, PhD, University of Utah  
Assistant Professor  
**Area:** Mathematics education, mathematical biology  
**Office:** LUND 220  
**Phone:** (435) 797-2826  
**Email:** [brynja.kohler@usu.edu](mailto:brynja.kohler@usu.edu)

**Piotr Kokoszka**, PhD, Boston University  
Professor  
**Area:** Statistics, time series analysis  
**Office:** LUND 321  
**Phone:** (435) 797-0746  
**Email:** [piotr.kokoszka@usu.edu](mailto:piotr.kokoszka@usu.edu)

**Nghiem Nguyen**, PhD, University of Illinois - Chicago  
Assistant Professor  
**Area:** Partial differential equations, nonlinear analysis  
**Office:** LUND 306  
**Phone:** (435) 797-2819  
**Email:** [nghiem.nguyen@usu.edu](mailto:nghiem.nguyen@usu.edu)

**James Powell**, PhD, University of Arizona  
Professor  
**Area:** Applied mathematics, mathematical biology, nonlinear evolution equations  
**Office:** LUND 304  
**Phone:** (435) 797-1953  
**Email:** [jim.powell@usu.edu](mailto:jim.powell@usu.edu)

**Kady Schneider**, PhD, Utah State University  
Assistant Professor  
**Area:** Statistics, mathematics education  
**Office:** LUND 221  
**Phone:** (435) 797-2820  
**Email:** [kady.schneider@usu.edu](mailto:kady.schneider@usu.edu)

**John Stevens**, PhD, Purdue University  
Assistant Professor  
**Area:** Bioinformatics, applied statistics, meta-analysis  
**Office:** LUND 202 C  
**Phone:** (435) 797-2818

**Email:** [john.r.stevens@usu.edu](mailto:john.r.stevens@usu.edu)

**Jurgen Symanzik**, PhD, Iowa State University

Associate Professor

**Area:** Dynamic statistical graphics, geographic information systems, virtual reality and statistics, web-based applications in statistics

**Office:** LUND 325

**Phone:** (435) 797-0696

**Email:** [juergen.symanzik@usu.edu](mailto:juergen.symanzik@usu.edu)

**Kathryn Turner**, PhD, Rice University

Associate Professor

**Area:** Numerical analysis

**Office:** LUND 217

**Phone:** (435) 797-2817

**Email:** [kathryn.turner@usu.edu](mailto:kathryn.turner@usu.edu)

**Zhi-Qiang Wang**, PhD, Institute of Mathematics - Beijing

Professor

**Area:** Differential equations, variational and topological methods

**Office:** LUND 312

**Phone:** (435) 797-3529

**Email:** [zhi-qiang.wang@usu.edu](mailto:zhi-qiang.wang@usu.edu)

**Dariusz Wilczynski**, PhD, Indiana University

Associate Professor

**Area:** Geometric and algebraic topology

**Office:** LUND 218

**Phone:** (435) 797-0747

**Email:** [dariusz.wilczynski@usu.edu](mailto:dariusz.wilczynski@usu.edu)

**Stanley Williams**, PhD, North Texas State University

Professor

**Area:** Measure theory, analysis

**Office:** LUND 323

**Phone:** (435) 797-2833

**Email:** [stanley.williams@usu.edu](mailto:stanley.williams@usu.edu)

## Get Involved

### Professional Organizations, Honor Societies, and Clubs

**American Mathematical Society:** AMS is the largest organization of research mathematicians. The society's programs and services for its members and the global mathematical community include professional programs, publications, meetings and conferences, support for young scholars programs, tools for researchers and authors, and a public awareness office that provides resources to members, students, teachers, the media, and the general public.

**Mathematical Association of America:** MAA is the largest professional society that focuses on mathematics accessible at the undergraduate level. Its members include university, college, and high school teachers; graduate and undergraduate students; pure and applied mathematicians; computer scientists; statisticians; and many others in academia, government, business, and industry. MAA is focused on teaching particularly at the high school and college levels.

**National Council on the Teaching of Mathematics:** The NCTM is the largest and most prestigious organization focused on teaching mathematics in elementary and secondary schools. It serves as a public voice of mathematics education, supporting teachers to ensure equitable mathematics learning of the highest quality for all students through vision, leadership, professional development, and research.

**Journal Club:** The purpose of the Journal Club is to introduce participants to mathematics and statistics education research by providing an opportunity to read, present, and discuss noteworthy papers in the field. The primary intended audiences are graduate students and faculty members interested in starting research on education topics, and needing familiarity with the education literature.

## **Labs, Centers, Research**

**Center for Integrated BioSystems:** The CIB leads a progressive, interdisciplinary effort in research, core services, and education serving agriculture and life sciences. The CIB is where the first hybrid animal, a mule, was cloned, and was named one of “30 Awesome College Labs” by Popular Science magazine. The CIB has a research program with several active projects in diverse areas of life science that encompass plant, animal, and microbe functional genomics.