Mathematics Graduate Programs

Mathematics Graduate Programs

The Mathematics Graduate Programs are in the College of Science. To find the most up-to-date information, including Program Learning Outcomes for the Mathematics Graduate Programs, visit their website.

Mathematics Graduate Programs

Degrees & Programs

Master of Science - Mathematics Education, M.S.

UVU strives to ensure the accessibility of our catalogs. However, if individuals with disabilities need this document in a different format than provided, you may contact the Assistive Technology Center at ACCESSIBLETECH@uvu.edu or 801-863-6788.

Requirements

The Master of Science in Mathematics Education (MS-MEd) is designed for individuals interested in strengthening their understanding of mathematics, statistics, and educational theory and practice in order to enrich their own teaching of mathematics and statistics. Completion of the program will also qualify individuals to teach concurrent enrollment courses and to teach at some community colleges and universities. For college-level academic concurrent enrollment (dual-credit) courses, the Utah Valley University Mathematics Department requires that instructors have a master's or doctoral degree with 18 graduate hours in mathematics or statistics. However, the MS-MEd does not lead to a teaching license. The program is flexible to serve the needs of in-service teachers.

Total Program Credits: 30

Matriculation Requirements:	
1. Admission to the Graduate Program. 2. A bachelor's degree from a regionally accredited institution, equivalent undergraduate coursework to the Mathematics Endorsement 4, and at least two years of teaching experience. 3. A passing score on the Entrance Exam or MATH 6000 Mathematics Core Review.	

Discipline Core Requirements:		30 Credits	
STAT 6010	Theory of Statistics I	3	
MATH 6100	Topics in Geometry and Topology	3	
MATH 6210	Real Analysis	3	
MATH 6310	Modern Algebra	3	
MATH 6330	Advanced Linear Algebra	3	
EDUC 6100	Research Methodology	3	
EDUC 6200	Masters Project	3	
EDUC 6320	21st Century Instruction and Assessment	3	
EDUC 691R	Project I	1	
EDUC 692R	Project II	1	
EDUC 693R	Project III	1	
	Complete One of the following courses for a total of 3 credits	3	
STAT 6020	Theory of Statistics II (3)		
MATH 6410	Topics in Ordinary Differential Equations (3)		
MATH 6610	Numerical Methods and Modeling (3)		
MATH 6620	Topics in Numerical Analysis (3)		
MATH 6700	Applications of Mathematics (3)		

Graduation Requirements:

1. Completion of a minimum of 30 credits.
2. Overall grade point average of 3.0 (B) or above.
3. Residency hours -- minimum of 21 credit hours through course attendance at UVU.
4. Courses and project requirements must be finished within a five-year period. No courses will apply toward graduation which are older than five years.
5. Individual grade of C or higher in all coursework applied toward the degree.

Master of Science - Mathematics Education, M.S. *Careers*

1. Offer improved math instruction based on a solid foundation of graduate mathematics content and best practices for teaching strategies and technologies.
2. Implement problem-based, technology-intensive and student focused instruction by achieving the necessary breadth of expertise, skills, and professional disposition.
3. Teach mathematical concepts moreeffectively to secondary students from varied backgrounds and with diverse goals, from the broader, deeper, and more advanced perspectives provided by their course and project work.
4. Solve problems arising from a variety of other disciplines using mathematical methods of formulation, computation, and analysis.
5. Design learning environments and curricula that can be immediately incorporated in classroom lessons, based on the expert knowledge they have gained.

Related Careers

- Mathematical Science Teachers, Postsecondary
- Education Teachers, Postsecondary
- Middle School Teachers, Except Special and Career/Technical Education
- Secondary School Teachers, Except Special and Career/Technical Education

Mathematics, Graduate Certificate

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Requirements

The Graduate Certificate in Mathematics aims to improve mathematics education and student achievement by focusing on two specific research-supported areas. First, by delivering high-quality content-based knowledge critical to student achievement, and second, by targeting in-service teachers who desire to teach dual credit in high school, given that dual-credit/dual-enrollment students are more likely to persist in college and are more likely to complete a bachelor's degree in less time than those who did not attempt college credits in high school. Graduate courses for this program will be available to match in-service teacher's schedules—evenings and during summer sessions—taught on the main campus and live-interactive by Utah Valley University's full-time faculty.

Total Program Credits: 18

Mathematics Graduate Programs

Matriculation Requirements:	
1. Admission to the Graduate Program 2. A bachelor's degree from a regionally accredited institution, equivalent undergraduate coursework to the Mathematics Endorsement 4 or *Secondary Mathematics Endorsement*, and at least ten years of teaching experience. 3. A passing score on the Entrance Ecam or MATH 6000 Mathematics Core Review.	

Discipline Core Requirements:		18 Credits
Complete Six of the following courses for a total of 18 credits		18
	MATH 6100	Topics in Geometry and Topology (3.0)	
	MATH 6210	Real Analysis (3)	
	MATH 6310	Modern Algebra (3)	
	MATH 6330	Advanced Linear Algebra (3)	
	MATH 6350	Introduction to Combinatorics (3)	
	MATH 6410	Topics in Ordinary Differential Equations (3)	
	MATH 6610	Numerical Methods and Modeling (3)	
	MATH 6620	Topics in Numerical Analysis (3)	
	MATH 6700	Applications of Mathematics (3)	
	STAT 6010	Theory of Statistics I (3)	
	STAT 6020	Theory of Statistics II (3)	
	or other approved courses		

Graduation Requirements:

1. Completion of a minimum of 18 credits.
2. Overall grade point average of 3.0 (B) or above.
3. Residency hours -- minimum of 12 credit hours through course attendance at UVU.
4. Courses and project requirements must be finished within a five-year period. No courses will apply toward graduation which are older than five years.

Mathematics, Graduate Certificate
Careers

1. Offer improved math instruction based on a solid foundation of graduate mathematics content and best practices for teaching strategies and technologies.
2. Implement problem-based, technology-intensive and student focused instruction by achieving the necessary breadth of expertise, skills, and professional disposition.
3. Teach mathematical concepts more effectively to secondary students from varied backgrounds and with diverse goals, from the broader, deeper, and more advanced perspectives provided by their course and project work.
4. Solve problems arising from a variety of other disciplines using mathematical methods of formulation, computation, and analysis.

Related Careers

- Mathematical Science Teachers, Postsecondary
- Education Teachers, Postsecondary
- Middle School Teachers, Except Special and Career/Technical Education
- Secondary School Teachers, Except Special and Career/Technical Education