



MASTER OF SCIENCE IN MATHEMATICS

DOMESTIC STUDENTS (US citizens) interested in applying for admission for **Summer Semester 2011, Fall Semester 2011, or Spring Semester 2012** will need to submit a completed application packet to the Graduate School at least 20 days prior to the beginning of the semester you intend to enroll.

INTERNATIONAL STUDENTS interested in applying for admission for **Summer Semester 2011** need to submit a completed International Student Application Packet to the Graduate School by February 7, 2011; for **Fall Semester 2011** the application deadline is **June 6, 2011**; and for **Spring Semester 2012** the application deadline is **October 3, 2011**.

Classes started on **January 5, 2011** for **Spring Semester 2011**; classes begin on **May 16, 2011** (Session I), **June 6, 2011** (Sessions II & III), & **July 1, 2011** (Session IV) for **Summer Semester 2011**; and classes begin on **August 22, 2011** for **Fall Semester 2011**

- ✓ Completed [application](#) for admission to the UWG Graduate School
- ✓ Non-refundable \$30.00 application fee (one time only)
- ✓ One official transcript from each college or university attended
- ✓ Earned Bachelor of Science in mathematics (or related field) from an accredited institution (Individuals without a degree in mathematics are expected to complete undergraduate and/or graduate course work to compensate for deficiencies. Completion of the calculus sequence (equivalent of UWG courses MATH 1634, MATH 2644, MATH 2654) plus at least 12 hours of mathematics courses at the advanced undergraduate level (3000 level or higher or the equivalent) is required.)
- ✓ 2.7 cumulative undergraduate GPA (4.0 scale)
- ✓ A minimum Graduate Record Examination – (GRE) score of 1030. The Miller Analogies Test (MAT) is acceptable only for those seeking the [MS in Mathematics degree with an option in Teaching](#). Please see page 2 for more information about test score requirements.
- ✓ Three [letters of recommendation](#) from individuals knowledgeable of your professional and academic abilities
- ✓ Satisfactory [certificate of immunization](#) (if you are a new student)
- ✓ [Academic Honor Form](#)

Please be advised that applicants who do not have an undergraduate degree in mathematics must complete the required prerequisite courses, MATH 1634, MATH 2644, and MATH 2654 plus 12 hours of advanced mathematics courses at the undergraduate level (3000-level or higher courses or the equivalent).

Please send all documents, except the [Certificate of Immunization](#) (see form for instructions), directly to the Graduate School, University of West Georgia, Carrollton, Georgia 30118-4160. Please allow 7-10 business days for processing your application. CHECK YOUR APPLICATION STATUS online by clicking on [HOW TO APPLY](#) (Item #9).

IMPORTANT PHONE NUMBERS

Dept of Mathematics
Graduate School
Financial Aid
Registrar

678-839-6489
678-839-6419 678-839-5949 (FAX)
678-839-6421
678-839-6438

www.westga.edu/~math/
gradsch@westga.edu
www.westga.edu/finaid/
www.westga.edu/registrar/

THE IMPORTANCE OF ADMISSION TEST SCORES

All individuals applying for admissions to graduate programs at the University of West Georgia must take the appropriate test. For graduate programs in the sciences and mathematics, prospective students must submit an official Graduate Record Examination (GRE) score.

REGULAR ADMISSION

- 2.7 cumulative grade point average on all undergraduate work
- A GRE score of at least 1030 (no score lower than 400 on the verbal and quantitative tests) and a minimum Analytical Writing score of 3.5. The GRE mathematics subject test is not a requirement for admission into the MS in Mathematics program.
- Applicants interested in the **MS in Mathematics with an option in Teaching** may submit an official GRE score or new Miller Analogies Test (MAT) score. The new MAT score requirement for regular admission is 401-405 (percentile rank of 53-60). The Graduate School will accept scores for the New MAT taken after October 1, 2004 only.

*** These criteria represent minimal admissions standards. Specific graduate programs may establish higher standards if they so choose. Therefore, meeting minimal grade point average and test score criteria are no guarantee for admission.**

PROVISIONAL ADMISSION

Applicants applying to a masters degree program in the arts/humanities, sciences, social sciences, or education with less than the required GPA and GRE or new MAT scores may be considered for provisional admission. They must submit official GRE test scores and must also have a grade point average of at least 2.2. In no event may the grade point average be less than 2.2. Programs may have higher grade point average and/or test score requirements. Applicants may also be admitted provisionally for reasons other than, or in addition to, grade point average and GRE test scores. **Meeting departmental test score and grade point average requirements is no guarantee of admission. Provisional admission is ultimately subject to departmental approval and the Dean of the Graduate School.** These criteria do not apply to applicants to Education Specialists or doctoral programs.

ADMISSION TEST INFORMATION

Computer-based testing is available throughout the year by calling **1-800-GRE-CALL** or via the Internet at www.gre.org/gentest.html. Information about the MAT is available at www.milleranalogies.com. The MAT is administered here at UWG. For more information, contact the Graduate School at 678-839-6419 or gradsch@westga.edu.

IMPORTANT NOTICE

No more than 9 hours taken as a post-baccalaureate or non-degree student may subsequently be applied to a degree. In most situations, students will not be allowed to take the full 9 hours. Therefore, students attempting to gain admittance to a degree program should make every effort to take the appropriate admissions test and submit the necessary materials required to complete the application process as soon as possible.

For more information about the College of Sciences & Mathematics, please visit online at www.westga.edu/cosm/. The Graduate School's web page (www.westga.edu/~gradsch/) has links to all graduate programs.

PROGRAM INFORMATION

A. Teaching Option

This program is designed for teachers and aspiring teachers with an undergraduate degree in Mathematics or Mathematics Education who wish to obtain an advanced degree that will make them more qualified and marketable as mathematics teachers at the high school and junior college level. This would also be appropriate for those seeking to enroll in a doctoral program in Mathematics Education or Mathematics. The major elements of the program are (i) mathematics education courses that are specifically designed to address current needs of teachers of secondary mathematics in Georgia and (ii) advanced mathematics courses which promote a greater depth of understanding of concepts relevant to in-class teaching. The Department of Mathematics has graduate faculty with expertise in Mathematics Education and Mathematics who will lead the students in these areas.

This program does not lead to initial certification (level T-4 certification), but it will lead to level T-5 certification in Secondary Education – Mathematics.

Degree Requirements

A candidate for the MS in Mathematics degree with Concentration in Teaching must complete a minimum of 36 semester hours of graduate work approved by the Department of Mathematics graduate committee. These include:

Required Courses: 24 semester hours

Electives: 12 semester hours

Comprehensive Examination:

Each candidate for the Concentration in Teaching must perform satisfactorily on a final comprehensive examination.

Courses	Credits
Required Mathematics Education Courses	9
MATH 6713 – Strategies for Teaching Mathematics	3
MATH 6723 – Assessment and Classroom Management in Mathematics Education	3
MATH 6733 – Research in Mathematics Education	3
Required Mathematics Courses	15
MATH 6743 – Advanced Perspectives on Secondary Mathematics	3
MATH 6253 – Mathematical Analysis I	3
MATH 6263 – Mathematical Analysis II	3
MATH 6233 – Geometry	3
MATH 6513 – Applied Linear Algebra	3
Electives (Choose 4)	12
MATH 6043 – Theory of Numbers	3
MATH 6203 – Applied Probability	3
MATH 6213 – Statistical Methods	3
MATH 6413 – Advanced Modern Algebra I	3
MATH 6423 – Advanced Modern Algebra II	3
MATH 6473 – Combinatorial Analysis	3
MATH 6483 – Theory of Graphs	3
Total Program	36

Sample Course of Study

First Year:

Fall Semester: MATH 6253 – Mathematical Analysis I
MATH 6513 – Applied Linear Algebra

Spring Semester: MATH 6263 – Mathematical Analysis II
MATH 6743 – Advanced Perspectives on Secondary Education

Summer: MATH 6473 – Combinatorial Analysis
MATH 6713 – Strategies for Teaching Mathematics

Second Year:

Fall Semester: MATH 6233 – Geometry
MATH 6203 – Applied Probability

Spring Semester: MATH 6723 – Assessment & Classroom Management in Mathematics Education
MATH 6213 – Statistical Methods

Summer: MATH 6483 – Theory of Graphs
MATH 6733 – Research in Mathematics Education

B. Applied Option.

This program is designed for those who seek enhanced employment opportunities in industry, government, or two-year college teaching, as well as those who desire to enter a doctoral program. Mathematics has always played an important role in understanding and predicting real-world phenomena, and that role has increased rapidly as many areas of technology and science have advanced in recent years. There has also been an increase in new areas of mathematics used to model these phenomena. A wealth of applications can be found in areas such as economics, biology, computation, social and management sciences, and engineering. The Department of Mathematics at the University of West Georgia has a strong contingent of faculty in applied areas. The program is designed to expose students to a broad range of mathematical subjects that are important in applied fields. The program includes (i) a set of core courses fundamental to the study of applied mathematics, (ii) a broad range of elective courses in several applied areas, and (iii) a research project class.

Degree Requirements

A candidate for the MS in Mathematics degree with Concentration in Applied Mathematics must complete a minimum of 36 semester hours of graduate work approved by the Department of Mathematics graduate committee.

Required Courses: 24 semester hours
Electives: 9 semester hours
Research Project: 3

All candidates for the Concentration in Applied Mathematics are required to complete an independent project under the supervision of a member of the graduate faculty. The project could involve a specific application to a concrete problem of techniques identified in the literature or studied in other courses.

Comprehensive Examination:

Each candidate for the Concentration in Applied Mathematics must perform satisfactorily on a final comprehensive examination.

Courses	Credits
Required Mathematics Courses	27
MATH 6253 – Mathematical Analysis I	3
MATH 6263 – Mathematical Analysis II	3
MATH 6203 – Applied Probability	3
MATH 6213 – Statistical Methods	3
MATH 6513 – Applied Linear Algebra	3
MATH 6503 – Numerical Methods in Applied Mathematics	3
MATH 6363 – Theory of Partial Differential Equations	3
MATH 6003 – Dynamical Systems and Applications	3
MATH 6733 – Research Project	3
Electives (Choose one sequence and one additional course)	12
MATH 6103 – Discrete Optimization	3

MATH 6303 – Introduction to Mathematical Control Theory	3
MATH 6903 – Bio-Mathematics	3
Sequence I: MATH 6473 – Combinatorial Analysis	3
MATH 6483 – Theory of Graphs	3
Sequence II: MATH 6403 – Signal Processing	3
MATH 6413 – Inverse Problems	3
Total Program	36

Sample Course of Study

First Year:

Fall Semester: MATH 6253 – Mathematical Analysis I
MATH 6513 – Applied Linear Algebra

Spring Semester: MATH 6263 – Mathematical Analysis II
MATH 6103 – Numerical Methods in Applied Mathematics

Summer: MATH 6473 – Combinatorial Analysis
MATH 6003 – Dynamical Systems and Applications

Second Year:

Fall Semester: MATH 6203 – Applied Probability
MATH 6363 – Theory of Partial Differential Equations

Spring Semester: MATH 6213 – Statistical Methods
MATH 6903 – Bio-Mathematics

Summer: MATH 6483 – Theory of Graphs
MATH 6023 – Introduction to Mathematical Control Theory