

MATHEMATICS, B.A.

Overall Requirements

- 122 credit hours, to include at least 36 credits at or above the 300 course level
- Minimum grade of C (2.0) required for all CSC, MAT, and STA courses to count toward the major.

Degree Program Requirements

Code	Title	Credit Hours
	University Requirements (https://catalog.uncg.edu/academic-regulations-policies/undergraduate-policies)	
	General Education Core Requirements (GEC) (https://catalog.uncg.edu/academic-regulations-policies/undergraduate-policies/general-education-program/#generaleducationcorerequirementstext)	
	College of Arts and Sciences Additional Requirements (LEC) (https://catalog.uncg.edu/arts-sciences/#additionalundergraduateresultstext)	

Major Requirements

Code	Title	Credit Hours
Core Courses		33
MAT 191	Calculus I [†]	
MAT 253	Discrete Mathematical Structures	
MAT 292	Calculus II	
MAT 293	Calculus III	
MAT 310	Elementary Linear Algebra	
MAT 311	Introduction to Abstract Algebra	
MAT 390	Ordinary Differential Equations	
MAT 394	Calculus IV	
MAT 395	Introduction to Mathematical Analysis	
MAT 490	Senior Seminar in Mathematics	
STA 290	Introduction to Probability and Statistical Inference	
Select		3
Select one 500-level MAT course. *		

* *The courses listed below are not eligible.*

- MAT 503 Problem Solving in Mathematics
- MAT 504 Foundations of Geometry for Teachers
- MAT 505 Foundations of Mathematics for Teachers
- MAT 513 Historical Development of Mathematics

[†] *Counts toward GEC GMT requirement.*

High School Teaching Licensure Concentration Requirements

Admission to the Concentration

A student who seeks admission to the Mathematics major with High Teaching Licensure concentration is expected to achieve:

1. A minimum grade point average (GPA) of 3.0 overall and 2.50 in the major
2. Completion of all courses needed to fulfill the General Education Requirements; and
3. Satisfactory scores on the Praxis I (ACT or SAT—See Praxis I Substitution Table for ACT, SAT, and Praxis I).

Students interested in the High School Teaching Licensure concentration must consult the coordinator of the Secondary Licensure in Mathematics Program upon admittance to UNCG for early discussion of all requirements. Additionally, students must request Admission to the Teacher Education Program from the School of Education Office of Student Services. Candidates should apply for admission to the School of Education Office of Student Services at the end of their sophomore year and be admitted no later than the first semester of their junior year. Please review requirements on their Web page. Consult the Teacher Education Handbook for details. A criminal background check is a required part of the admission process.

Admission to Student Teaching

During the junior year, students already admitted to the Teacher Education Program must apply for admission to student teaching. Admission includes:

1. Completion of requirements specific to the major with the possible exception of the 500-level MAT course.
2. Eligibility to enter student teaching requires maintaining an overall GPA of 3.0 or better and a major GPA of 2.50 or better after being admitted to the concentration, and achieving a grade of C or better in each major course and in each professional course. After admission to the concentration, if a student fails to maintain an overall GPA of 3.0, the student has one semester to improve his or her grade point average. If a student receives a C- or lower in a professional course, the student is eligible to retake the course at its next offering. After admission to the concentration, if a student fails to maintain a major GPA of 2.50, the student has one semester to improve his or her grade point average. If a student receives a C- or lower in a major course, the student is eligible to retake the course at its next offering.

Application to student teaching forms are available online at <http://oss.uncg.edu/formsapplications>. Forms must be submitted by February 15 for student teaching in the spring of the following year. Student teaching assignments are usually made in schools within commuting distance of UNC Greensboro. Teacher Education students are individually responsible for expenses incurred during student teaching, including transportation. Note: Student Teaching is offered only in the spring semester.

Application for Teacher Licensure

An application for licensure should be filed with the School of Education Office of Student Services within two weeks of graduation. Students should be aware that the licensure process will take six weeks or longer after graduation to be completed. UNC Greensboro recommends for a teacher's licensure those students who have completed the appropriate teacher education program, attained acceptable competencies, and whose work has been approved by the appropriate department.

Passing scores on the Praxis II (subject-area exams) are no longer required by the state to be recommended for licensure in secondary mathematics; however, successful completion of the Praxis II is required within three years of licensure. The Department of Mathematics and Statistics recommends that a student intending to be licensed take the Praxis II before graduation upon completion of their major courses.

(Lateral-entry teachers are required to take the Praxis II.) To be licensed in North Carolina, students must meet the specific state requirements for licensure in effect at the time of their application for licensure, including demonstration of technology competencies.

Teacher Licensure Requirements

Code	Title	Credit Hours
Professional Education		23
ERM 401	Assessment I: Accountability in Our Nation's Schools	
ERM 402	Assessment II: Standardized Tests	
ERM 403	Assessment III: Classroom Assessment	
LIS 120	Introduction to Instructional Technology for Educational Settings	
MAT 330	Axiomatic Foundations of Geometry	
MAT 405	Foundations of Mathematics for Teaching I	
MAT 406	Foundations of Mathematics for Teaching II	
SES 401	Understanding and Teaching Students with Disabilities in Inclusive Settings	
TED 445	Human Diversity, Teaching, and Learning	
TED 535	Literacy in the Content Area	
TED 401	Child and Adolescent Development and Learning	
TED 403	Teaching English Learners with Diverse Abilities	
Student Teaching and Seminar		12
MAT 465	Student Teaching and Seminar-Secondary Mathematics *	

* Two-hour weekly seminar and full-time student teaching—offered only in the spring—no other courses may be taken during student teaching.

Electives

Electives sufficient to complete the 122 credit hours required for degree.

Mathematics as a Second Major

Requirements for a Second Major in Mathematics are the same as for the Mathematics Major (B.A. or B.S. degree).

Mathematics, B.A., as a Second Academic Concentration

The second academic concentration in Mathematics is designed specifically for Elementary Education Majors and Special Education Majors.

- Minimum of 18 credit hours

Code	Title	Credit Hours
Core Courses		9
MAT 191	Calculus I	
MAT 292	Calculus II	
STA 271	Fundamental Concepts of Statistics	
Select		3
Select one from the following:		
MAT 220	Plane and Solid Analytic Geometry	
MAT 253	Discrete Mathematical Structures	

MAT 293	Calculus III	
MAT 310	Elementary Linear Algebra	
Additional Electives		6
Select 6 credits from the following:		
MAT 220	Plane and Solid Analytic Geometry	
MAT 253	Discrete Mathematical Structures	
MAT 293	Calculus III	
MAT 310	Elementary Linear Algebra	
MAT 311	Introduction to Abstract Algebra	
MAT 353	Introduction to Discrete Mathematics	
MAT 390	Ordinary Differential Equations	
MAT 394	Calculus IV	
MAT 503	Problem Solving in Mathematics	
MAT 504	Foundations of Geometry for Teachers	
MAT 513	Historical Development of Mathematics	
MAT 514	Theory of Numbers	
MAT 519	Intuitive Concepts in Topology	
MAT 531	Combinatorial Analysis	

Accelerated B.A. to B.S. to M.A.

Application and Admission

Qualified UNCG undergraduate students who are pursuing the B.A. or B.S. in Mathematics may apply for admission to the Accelerated Degree and the M.A. in Mathematics program. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants are also required to take the Graduate Record Examination. All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the M.A. program in Mathematics.

Admitted students may apply up to 12 semester hours of graduate-level coursework toward completion of both the undergraduate and graduate degree, provided that they earn a grade of "B" (3.0) or better in the course and fulfill graduate-level requirements. The graduate courses the student will take within the Accelerated Degree Program in Mathematics must be approved by the Director of Graduate Study, must be specified on the Request for Accelerated Degree Program, and must be chosen from among the following courses:

Code	Title	Credit Hours
MAT 595	Mathematical Analysis	3
MAT 596	Mathematical Analysis	3
STA 551	Introduction to Probability	3
STA 552	Introduction to Mathematical Statistics	3
STA 661	Advanced Statistics in the Behavioral and Biological Sciences I	3
STA 662	Advanced Statistics in the Behavioral and Biological Sciences II	3

Degree Program Requirements

Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor's degree program.

All degree requirements for the M.A. in Mathematics will remain the same.