TEACHERS OF MATHEMATICS 7-12 (MA)

Department Website (https://steinhardt.nyu.edu/departments/teaching-and-learning/)

NYSED: 30272 **HEGIS:** 1701.01 **CIP:** 13.1311

Program Description

Designed for those who already hold initial certification in teaching secondary mathematics, the MA program in Teachers of Mathematics for grades 7-12 combines core subjects in mathematics pedagogy, such as teaching data analysis, algebra, and geometry, with topical issues in mathematics education, including educational design for the web and issues of gender and ethnicity in mathematics education. Students have the option to take classes in modern mathematics at NYU's Courant Institute of Mathematical Sciences. Students learn strategies for teaching mathematics to students in middle and high school; curriculum development and learning assessment in secondary school mathematics; and approaches for adapting math curricula, assessments, and learning environments to meet the needs of students with disabilities in general education settings.

Careers and Outcomes

This program leads to eligibility for New York State professional teaching certification in Teaching Mathematics, Grades 7–12. Graduates are prepared to advance their career as a teacher of mathematics and related subjects, including computer science, in middle and high schools; mathematics curriculum specialist, coordinator, or evaluator in schools and school districts; researcher or teacher educator in colleges and universities; and trainer or specialist in applied mathematics in corporate or other private sector settings.

Accreditation (AAQEP)

The New York University Teacher Education Program, which is designed to prepare students to meet the challenges of teaching and leadership in today's demanding educational environment, is granted accreditation by the Association for Advancing Quality Educator Programs (AAQEP) for a period of seven years, from April 2020 to June 2027. This accreditation certifies that the fore-named professional education program has provided evidence that the program adheres to AAQEP's quality principles.

Admissions

Admission to graduate programs in the Steinhardt School of Culture, Education, and Human Development requires the following minimum components:

- Résumé/CV
- Statement of Purpose
- Letters of Recommendation
- Transcripts
- Proficiency in English

See NYU Steinhardt's Graduate Admissions website (https://steinhardt.nyu.edu/admissions/how-apply/graduate-students/) for additional information on school-wide admission. Some programs may require additional components for admissions.

See How to Apply (https://steinhardt.nyu.edu/degree/ma-teaching-mathematics-grades-7-12-professional-certification/how-apply/) for admission requirements and instructions specific to this program.

Program Requirements

Course	Title	Credits
Major Requirements		
Content Core Mathematical Courses		
MTHED-GE 2102	Modern and Abstract Algebra for Teachers	3
MTHED-GE 2103	Statistics for Teachers	4
MATH-GA XXXX	Mathematics Elective, by advisement	4
Pedagogical Content Knowledge Courses		
MTHED-GE 2033	Teaching of Secondary School Mathematics	3
MTHED-GE 2036	Geometry for Teachers	4
MTHED-GE 2034	Educational Technology in Secondary School Mathematics	2
MTHED-GE 2035	Teaching of Algebra and Rational Numbers, Grades 5-12	3
Additional Courses (by advisement)		*1-5*
MTHED-GE 2080	Teaching of Computer Science	
MTHED-GE 2110	Introduction to Computer Science Education	
MTHED-GE 2300	Independent Study	
Current Issues in Education		
Select 6 credits, by advisement		6
Total Credits		**30**

[1] By advisement; approval required.

Additional Program Requirements

Culminating Experience

Students must complete a paper on some current issue relating to adolescent mathematics education. The topic of this paper will be negotiated with the project advisor.

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
MTHED-GE 2033	Teaching of Secondary School Mathematics	3
MTHED-GE 2035	Teaching of Algebra and Rational Numbers, Grades 5-12	3
Mathematics Content Course or Education Elective		3-4
Mathematics Content Course or Education Elective		3-4
Mathematics Content Course or Education Elective		3-4
	Credits	**15**
2nd Semester/Term		
MTHED-GE 2034	Educational Technology in Secondary School Mathematics	2
MTHED-GE 2036	Geometry for Teachers	4
MTHED-GE 2050	Mathematical Proof and Proving	2
Mathematics Content Course or Education Elective		3-4

Mathematics Content Course or Education Elective	3-4
Credits	**15**
Total Credits	**30**

Learning Outcomes

Upon successful completion of the program, graduates will be able to:

1. Build relationships with students and families with the goal of fostering student learning, engagement and well-being.
2. Integrate theory/research with pedagogical and classroom practice.
3. Develop and implement discipline-based curricula, unit plans and lessons that are coherent, use culturally relevant pedagogies, and foster experiential learning.
4. Create and apply classroom strategies that are explicit, innovative, appropriate for a specific context, and use technology to support student learning.
5. Develop a practice that is equitable and inclusive and acquire the skills of a professional educator.

Policies

Department of Teaching and Learning

Policy on Academic Progress

Students are expected to maintain satisfactory progress each semester per Steinhardt's policy on academic progress. The minimum required GPA for satisfactory academic progress is a 3.0 (equivalent to a B) for Master's and Advanced Certificate students in the Department of Teaching and Learning. A grade minimum of B- in student teaching seminar courses is required for students in teacher certification track programs.

Students with a grade point average below this will be considered not making satisfactory progress and will be reviewed by the Steinhardt Committee on Student Progress. Please review Steinhardt's Academic Policies and Procedures (https://steinhardt.nyu.edu/current-students/academic-policies-and-procedures/) page for more information.

Pass/Fail Grading Option

MA and Advanced Certificate students in the Department of Teaching and Learning are not permitted to take required courses Pass/Fail. Elective courses may be taken Pass/Fail with program approval. The Pass/Fail option must be chosen by the fifth week of classes for the Fall and Spring semesters and the fifth day of Summer session classes.

NYU Policies

University-wide policies can be found on the New York University Policy pages (https://bulletins.nyu.edu/nyu/policies/).

Steinhardt Academic Policies

Additional academic policies can be found the Steinhardt academic policies page (https://bulletins.nyu.edu/graduate/culture-education-human-development/academic-policies/).