Mathematics and Instruction
Master of Arts

The Department of Mathematics and Computer Science offers courses designed to meet the needs of students who are interested in increasing their skills in mathematics and teaching. This program is a master's program leading to New York State professional certification, developed for those holding New York State initial teacher certification in mathematics, grades 7-12.

ADMISSIONS REQUIREMENTS

- A bachelor's degree from an accredited college or university
- Official transcripts from all post-secondary institutions attended
- A minimum undergraduate graduate average of 3.0
- An initial New York State Teacher Certification on Mathematics Education, Grades 7-12
- Have completed the following math prerequisites with a minimum average of B-
    - 3-4 credit course in vector calculus
    - 3-4 credit course in linear algebra
    - 3-4 credit course in discrete mathematics
- Have completed or be in the process of completing one year of supervised teaching and two or more years of teaching in content area
- An essay outlining career goals
- Resume or Curriculum Vitae
- Two letters of recommendation
- Have completed a course equivalent to ESC 506: Special Needs Education in TESOL and Secondary Settings and Secondary Settings or EDS 701: Understanding Individuals with Disabilities

    NOTE: Applicants who have to taken such a course may be accepted, but must take a stand alone 3 credit course in teaching students with disabilities in addition to the program requirements.

Questions about the program?
Prof. Celia Cruz
celia.cruz@lehman.cuny.edu

Questions about admissions?
The Office of Graduate Admissions
http://www.lehman.edu/admissions

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DEGREE REQUIREMENTS

- 21-24 credits in MAT 600 courses and above including MAT 601 (Secondary School Mathematics from an Advanced Standpoint) and at least one course in each mathematical area: Analysis, Algebra, & Geometry.

Courses in Math Education

MAT 601	Secondary School Mathematics from an Advanced Standpoint
MAT 602	Introduction to Number Theory and Abstract Algebra I
MAT 602	Introduction to Number Theory and Abstract Algebra II
MAT 604	Application of the Real and Complex Number System

Courses in Mathematics

MAT 582	Statistics for Students in Biological, Health, and Social Sciences
MAT 613	Theory of Numbers
MAT 615	Modern Algebra
MAT 630	Advanced Euclidean Geometry
MAT 631	Views of Geometry
MAT 634	Transformation Geometry
MAT 636	Non-Euclidean Geometrics
MAT 637	Topics in Discrete Mathematics
MAT 640	Topology and Analysis I
MAT 641	Topology and Analysis II
MAT 655	Exploring Mathematics Using Technology
MAT 661	History of Mathematics
MAT 670	Foundations of Mathematics
MAT 681	Probability
MAT 711	Topics in Algebra
MAT 715	Advanced Linear Algebra
MAT 719	Special Topics in Algebra
MAT 733	Differential Geometry
MAT 734	Calculus on Manifolds
MAT 739	Special Topics in Geometry
MAT 741	Topology
MAT 742	General Topology
MAT 743	Algebraic Topology
MAT 751	Theory of Functions of Real Variable
MAT 753	Theory of Functions of a Complex Variable I
MAT 754	Theory of Functions of a Complex Variable II
MAT 755	Ordinary Differential Equations
MAT 756	Partial Differential Equations
MAT 759	Special Topics in Analysis
MAT 771	Mathematical Logic I
MAT 772	Mathematical Logic II
MAT 775	Set Theory
MAT 782	Mathematical Statistics
MAT 785	Introduction to Applied Mathematics
MAT 786	Computer Applications to Mathematics and Science I
MAT 787	Computer Applications to Mathematics and Science II
MAT 789	Special Topics in Applied Mathematics

- 9 credits (as follows) from the School of Education with a GPA of 3.0 or better:
  - ➢ ESC 740: Teaching Math, Grades 7-10
  - ➢ ESC 748: Teaching Problem Solving in Mathematics in Middle and High School
  - ➢ ESC 749: Teaching Math in Grades 11 and 12
- Comprehensive exams based on four mathematics courses (3-4 credits each)