

MATHEMATICS—TEACHER CERTIFICATION, B.A.

Completion of this major program prepares one for a career as a math teacher in elementary, middle, and high schools, in which math is taught as a separate subject. Continued study may include a master's degree in mathematics, mathematics education, computer science, environmental science, business administration, or other related fields. A grade of C or better is required for admission to the Mathematics major program.

THE REQUIREMENTS FOR ADMISSION TO THIS TEACHER CERTIFICATION PROGRAM ARE:

- A minimum cumulative undergraduate grade point average (CGPA) of 3.0.
- A minimum of B- or better on all education courses
- Passing scores on the Praxis CORE, or minimal SAT score as shown below by year, or 23 or higher on the ACT, or 155 verbal, 156 quantitative on the GRE.
 - 2016: Math 540 Read/Write 550
 - 2017: Math 530 Read/Write 540
 - 2018: Math 530 Read/Write 540
 - 2019: Math 530 Read/Write 530
 - 2020: Math 520 Read/Write 530
 - 2021: Math 520 Read/Write 530
 - 2022: Math 520 Read/Write 530

Passing scores on the Praxis CORE Academic Skills for Educators Tests, as of 9/1/19:

- Math Test #5733 Passing Score 150
- Reading Test #5712 Passing Score 156
- Writing Test #5722 Passing Score 162

Students who meet the score levels below are not required to take the Praxis CORE:

SAT Scores

- If taken before 4/1/1995: Math 520, Reading 480
- If taken between 4/1/1995 to 2/28/2016: Math 540, Reading 560
- If taken on or after 3/1/2016: Math 570, 610 Evidence-Based Reading and Writing or 30 Reading Section

ACT Scores

- If taken before 8/28/1989: Math 23, English 20
- If taken on or after 8/28/1989: Math 23, English 23

GRE Scores

- If taken before 8/1/2011: Quantitative 720, Verbal 530
- If taken on or after 8/1/2011: Quantitative 156, Verbal 155

For more information on Praxis exams: <https://www.ets.org/praxis/nj/requirements> (<https://www.ets.org/praxis/nj/requirements/>)

THE REQUIREMENTS FOR COMPLETION OF THIS DEGREE TRACK ARE:

- Completion of NJCU General Education requirements or equivalent
- Successful completion of major in intended content area
- Passing scores on appropriate Praxis II Exam
- A minimum cumulative GPA of 3.0
- Successful completion of clinical experience and clinical practice (student teaching)

This includes successful submission of the performance assessment, as required by the New Jersey Department of Education.

Note: For the most updated information on this teaching certification program, students are directed to contact the College of Education as changes may have occurred since publication.

Code	Title	Credits
Required		
MATH 192	Calculus and Analytic Geometry I	4
MATH 193	Calculus and Analytic Geometry II	4
MATH 292	Calculus & Analytical Geometry III	4
MATH 260	Linear Algebra	3
MATH 295	Survey of Modern Mathematics	3
MATH 311	Differential Equations for Engineers	4
MATH 330	Mathematical Statistics I	3
MATH 370	Abstract Algebra	3
Math electives		
9 MATH credits among:		
MATH 307	Finite Mathematics I	3
MATH 320	Modern Geometry I	3
MATH 321	Modern Geometry II	3
MATH 331	Mathematical Statistics II	3
MATH 350	Elements of Numerical Analysis	3
MATH 371	Abstract Algebra II	3
MATH 380	Real Analysis	3
MATH 385	Reading in Mathematics	3
MATH 407	Teaching Mathematics in Secondary Schools	3
MATH 410	History of Mathematics	3
MATH 430	Topology	3
MATH 440	Number Theory	3
MATH 445	Complex Variables	3
MATH 450	Advanced Calculus I	3
MATH 451	Advanced Calculus II	3
MATH 503	Computers in Mathematics	3
MATH 508	Professionalized Subject Matter in Arithmetic	3
MATH 510	Professionalized Subject Matter in Algebra	3
MATH 511	Professionalized Subject Matter in Middle School Mathematics	3
MATH 512	Professionalized Subject Matter in Geometry	3

MATH 514	Professionalized Subject Matter in Pre-Calculus Mathematics	3
MATH 515	Math Manipulatives I	3
MATH 516	Mathematics Manipulative II	3
MATH 517	Calculators in the K-8 Classroom	3
MATH 518	Calculators in the Secondary Classroom	3
MATH 526	Algorithmic Number Theory	3
MATH 531	Numerical Analysis	3
MATH 536	Mathematical Modeling	3
MATH 540	Graph Theory	3
MATH 598	Mathematical Principles of Computer Graphics	3

Required General Education Program Courses

BIOL 225	Human Sexual Biology	3
or BIOL 224	The Human Body	
or BIOL 106	Practical Nutrition	
LTED 160	Languages of Power and Social Justice ¹	3

Other required courses

MATH 140	Statistics I ⁰	3
MATH 215	Problem Solving in Mathematics ²	3

Required Education Courses**Phase I (May be taken separately and in any order):**

EDU 280	Challenges in Urban Education	3
LTED 230	Focus: Reading Language & Literacy	3

Phase II (May be taken separately or with Phase III): ³

EDU 330	Focus: Development, Behavior and Learning	3
EDU 371	Grades 7-12 Methods/Materials	3
or EDU 315	Differentiating Instruction: Mtng Needs of Urban Stdnts from Cultrly, Ling., & Academic Diverse Bckgrnds	

Phase III (Taken concurrently and offered fall semesters only):

LTED 370	Secondary: Reading & Language Workshop	2
EDU 2372	Methods and Materials of Teaching Mathematics in Middle and Secondary Schools	3
EDU 331	Clinical Practice I	2

Phase IV (Taken concurrently):

EDU 470	Concurrent Student Teaching Seminar	2
EDU 480	Clinical Practice II	8
EDU 485	Classroom Management and Assessment Internship Seminar	2

⁰ Prerequisite for Math 330¹ Strongly recommended for students who have yet to meet Praxis Core Writing and Reading requirements.² Required of students who have yet to meet Praxis Core Math requirement³ Passing scores on the Praxis Core are required before continuing into Phase II.