

# 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 560 verbal, 540 Math on the SAT, or 23 or higher on the ACT, or 155 verbal, 156 quantitative on the GRE.

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, edTPA, 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
<b>Required</b>		
MATH 140	Statistics I	3
MATH 166	Elementary Functions	3
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 320	Modern Geometry I	3
or MATH 512	Professionalized Subject Matter in Geometry	
MATH 330	Mathematical Statistics I	3
MATH 370	Abstract Algebra	3
<b>Required General Education Program Courses</b>		
BIOL 225	Human Sexual Biology	3
or BIOL 224	The Human Body	
or BIOL 106	Practical Nutrition	
MATH 215	Problem Solving in Mathematics <sup>2</sup>	3
LTED 160	Languages of Power and Social Justice <sup>3</sup>	3
<b>Required Education Courses</b>		
<b>Phase I (May be taken separately and in any order):</b>		
EDU 280	Challenges in Urban Education	3
LTED 230	Focus: Reading Language & Literacy	3
<b>Phase II (May be taken separately or with Phase III): <sup>1</sup></b>		
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	
<b>Phase III (Taken concurrently and offered fall semesters only):</b>		
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
<b>Phase IV (Taken concurrently):</b>		
EDU 470	Concurrent Student Teaching Seminar	2
EDU 480	Clinical Practice II	8
EDU 485	Classroom Management and Assessment Internship Seminar	2

<sup>1</sup> Passing scores on the Praxis Core are required before continuing into Phase II.

<sup>2</sup> Required of students who have yet to meet Praxis Core Math requirement

<sup>3</sup> Strongly recommended for students who have yet to meet Praxis Core Writing and Reading requirements.

<b>Freshman</b>		
<b>Semester 1</b>		
ENGL 101 or ESL 101	English Composition I or English Composition I for English as a Second Language Students	4
INTD 101	Orientation to College <sup>*First time freshman only</sup>	1
MATH 175	Enhanced Precalculus	4
BIOL 225 or BIOL 224 or BIOL 106	Human Sexual Biology or The Human Body or Practical Nutrition	3
MATH 140	Statistics I	3
Credits		15
<b>Semester 2</b>		
ENGL 102 or ESL 102	English Composition II or	4
MATH 166	Elementary Functions	3
MATH 215	Problem Solving in Mathematics	3
MATH 192	Calculus and Analytic Geometry I	4
Credits		14
<b>Sophomore</b>		
<b>Semester 1</b>		
MATH 193	Calculus and Analytic Geometry II	4
LTED 160	Languages of Power and Social Justice	3
MATH 295	Survey of Modern Mathematics	3
EDU 280	Challenges in Urban Education	3
LTED 230	Focus: Reading Language & Literacy	3
Credits		16
<b>Semester 2</b>		
MATH 292	Calculus & Analytical Geometry III	4
MATH 370	Abstract Algebra	3
General Education Tier I Course		3
General Education Tier I Course		3
General Education Tier I Course		3
Credits		16
<b>Junior</b>		
<b>Semester 1</b>		
EDU 330	Focus: Development, Behavior and Learning	3
MATH 320 or MATH 512	Modern Geometry I or Professionalized Subject Matter in Geometry	3
EDU 371 or EDU 315	Grades 7-12 Methods/Materials or Differentiating Instruction: Mtng Needs of Urban Stdnts from Cultrly,Ling.,&Academic Diverse Bckgrnds	3
MATH 260	Linear Algebra	3
General Education Tier II Course		3
General Education Tier II Course		3
Credits		18

<b>Semester 2</b>		
MATH 330	Mathematical Statistics I	3
MATH 311	Differential Equations for Engineers	4
General Education Tier II Course		3
General Education Tier II Course		3
Elective Course		3
Credits		16
<b>Senior</b>		
<b>Semester 1</b>		
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
General Education Tier III Capstone Course		3
Elective Course		3
Credits		13
<b>Semester 2</b>		
EDU 470	Concurrent Student Teaching Seminar	2
EDU 480	Clinical Practice II	8
EDU 485	Classroom Management and Assessment Internship Seminar	2
Credits		12
Total Credits		120