

## **MATHEMATICS EDUCATION (K-12)** **Five-Year Teacher Education Program**

Revised August, 2016 -- For students earning a bachelor's degree in May, 2018 or later

Students who complete this program successfully will receive an Ed.M. in Mathematics Education from the GSE as well as a recommendation to the New Jersey Department of Education for **Teacher of Mathematics( K-12) Certificate of Eligibility with Advanced Standing (CEAS)**.

**I. PROGRAM DESCRIPTION:** The five-year teacher education program in mathematics education (K-12) leads to a bachelor's degree, a master's degree, and initial teacher certification. Rutgers undergraduates do preliminary coursework and field placements as assigned during the sophomore and junior years, are admitted to the program during the spring semester of the junior year, and enter the professional education sequence in the summer between junior and senior years. Students then qualify to have their bachelor's degree awarded by the undergraduate liberal arts college.

Students continue with the professional sequence the summer after graduation. They return in the fall to complete a student-teaching internship with related coursework and continue with full-time graduate study, including a field-based research project, in the spring. The Ed.M. degree is conferred upon the completion of all five-year program requirements.

After the master's degree is awarded, the GSE will make a recommendation to the New Jersey State Department of Education on behalf of the student to receive a CEAS as a teacher.

**II. MAJOR:** Every candidate for certification in Mathematics Education must complete a full major in mathematics, or one of the following majors from the School of Engineering: mechanical engineering, electrical engineering, civil and environmental engineering, industrial and systems engineering, or materials science and engineering.

**III. APPLICATION REQUIREMENTS:** To be considered for admission to the program, applicants must provide the following before the February 1<sup>st</sup> deadline:

1. Personal statement
2. Three letters of recommendation
3. Passing Praxis Core test scores
  - a. **or**, minimum SAT scores of:
    - i. 560 Reading, 540 Math (if taken 2/28/16 or earlier) or
    - ii. 610 Reading & Writing or 30 Reading, 570 Math (if taken on or after 3/1/16)
  - b. **or**, minimum ACT scores of: 23 English, 23 Math
  - c. **or**, minimum GRE scores of: 155 Verbal, 156 Quantitative  
(Any test scores submitted must be less than five years old as of the application deadline. Scores must be official, not self-reported.)
4. Undergraduate transcripts - the New Jersey Department of Education requires a minimum GPA of **2.75** to be admitted to a teacher education program.

Praxis Core – see [ets.org/praxis/about/core](https://ets.org/praxis/about/core)  
Combined test code: 5752  
Reading: 5713, minimum score 156/200  
Writing: 5723, minimum score 162/200  
Math: 5733, minimum score 150/200  
NOTE: Praxis Core test codes were updated on 9/1/19. Passing test scores taken before 9/1/19 are still valid.

(NOTE: Admission to the GSE Teacher Education Programs is competitive. Meeting the minimum requirements above does not guarantee admission.)

**IV. HOW TO APPLY:** Applications are submitted online at the Graduate Admissions website:

<http://gradstudy.rutgers.edu/>

1. Click on "Apply Now" and follow the instructions given.
2. Choose "Degree Application", for Application Type.
3. For Program Name choose "Education: Mathematics" from the drop down menu.
4. Across from "Education: Mathematics 5-Year Program 15254T", click the link for the Summer semester.
5. For Enrollment Year, select the year when you'll be graduating with your bachelor's degree. For example, if you will be graduating with your bachelor's degree in May 2018, you should apply for Summer 2018.
6. Complete the application by providing the requested information.
7. Supporting materials must be submitted online or mailed to the Graduate Admissions office at Office of Graduate and Professional Admissions (New Brunswick), Rutgers, The State University of New Jersey, 65 Davidson Road, Room 200L, Piscataway, NJ 08854-5602, U.S.A.
8. Enter payment information for the non-refundable application fee.
9. Submit your application and authorize payment for the non-refundable application fee.

**V. GENERAL EDUCATION REQUIREMENTS:** Students must complete coursework in each of the following areas by completion of the program; fulfillment of these courses is not required for admission into the program. It is highly recommended that you coordinate the elements of this list with those of the general distribution requirements of your undergraduate college to make the most efficient use of your time.

General Education Requirements	Course Number—Course Title—Term/Year—Grade
<b>1. Math: two courses</b> Follow SAS Core Quantitative and Formal Reasoning requirement (QQ, QR)	<b>1a.</b> _____ <b>1b.</b> _____
<b>2. Science: two courses</b> Follow SAS Core Natural Science requirement	<b>2a.</b> _____ <b>2b.</b> _____
<b>3. Educational Technology: one course</b> 05:300:350 Education and Computers <b>or</b> 15:255:503 Introduction to Teaching with Digital Tools	<b>3.</b> _____
<b>4. Human Development: one course</b> 05:300:307 Human Development: Birth through the Transition to Adulthood	<b>4.</b> _____

**VI. LIBERAL ARTS:** Students must complete a minimum of **60 credits** in liberal arts to earn the Master's degree. Neither Education courses, nor any other performance-based or vocationally-oriented coursework (accounting, engineering, human resource management, public health, social work, etc.) may be counted toward the 60 liberal arts credits; no School 05, School 15, or E-credit courses may be included.

**VII. PORTFOLIO:** Students will archive artifacts from various GSE courses via an online instructional and evaluation system as directed by faculty. Details of this portfolio are specified in the *Student Policy and Procedures Handbook*.

**VIII. GSE COMMUNITY-SCHOOL PARTNERSHIP NETWORK (GSE-CSPN):** All field experiences will take place in a GSE-CSPN school.

**IX. HIB TRAINING:** All candidates for teacher certification must complete pre-service training in the prevention of harassment, intimidation, and bullying (HIB) prior to Clinical Practice II.

**X. PROFESSIONAL EDUCATION REQUIREMENTS: Mathematics Education Five Year Teacher Education Program**

Phase/ Semester	Course Number	Course Name	Credits			
			Under- grad	Grad	Total	
Pre- Admission Sophomore or Junior Year	05:300:200	Introduction to Education	3		12.5	
	05:300:201	Introduction to Education Field Based Lab - Clinical Experience	.5			
	05:300:306	Educational Psychology: Principles of Classroom Learning	3			
	Junior Year Fall	05:300:341	High School Mathematics Content: Teaching and Assessment	3		
	Junior Year Spring	05:300:342	Supervised Undergraduate Tutoring in Mathematics	3		
Phase 1 Summer before Senior Year	n/a	Working with Minors Online Training	NC		0	
	n/a	School Law Module	NC			
Phase 1 Senior Fall	05:300:498	Clinical Experience Phase 1	.5		6.5	
	05:300:450	Urban Education 1	1.5			
	05:300:452	Teaching Emerging Bilinguals in PK-12 Classrooms 1	1.5			
	05:300:442	Mathematical Practices: Doing and Teaching Mathematics	3			
Phase 2 Senior Spring	05:300:499	Clinical Practice Phase 2	4		10	
	05:300:451	Urban Education 2	1.5			
	05:300:453	Teaching Emerging Bilinguals in PK-12 Classrooms 2	1.5			
	05:300:443	Methods of Teaching and Assessing Secondary Mathematics	3			
Phase 3 Fifth Year Summer	15:293:534	Classroom Organization for Inclusive and Special Classrooms		3	6	
	15:254:548	Technology in Mathematics Teaching		3		
Phase 3 Fifth Year Fall	15:255:535	Clinical Practice Phase 3		9	15	
	15:255:532	Clinical Practice Phase 3 Seminar		6		
Phase 4 Fifth Year Spring	05:300:406 <sup>G</sup>	Community-Based Language Learning; <b>or</b>		3	12	
	15:253:540	Teaching English Language Learners; <b>or</b>				
	15:255:539	Students, Communities, and Social Justice				
	15:293:523	Inclusive Teaching in Education		3		
	01:640:468 <sup>G</sup>	Connecting Advanced Mathematics to High School Content		3		
	15:254:540	Understanding School-Aged Students' Mathematical Learning <b>or</b>		3		
	15:254:541	Critical Thinking and Reasoning				
<b>Total Credits</b>			29	33	62	

<sup>G</sup> Course must be 300-level or above to count towards graduate credits. 300- and 400-level courses must be registered for with a **G-prefix**.

**XI. PRAXIS II TESTS:** Students seeking certification in mathematics must achieve a passing score on the Mathematics: Content Knowledge Praxis II examination (code 5161). **Students must pass the Praxis II prior to the start of full-time Clinical Practice Phase 3.**

**XII. edTPA PERFORMANCE BASED ASSESSMENT:** Students must pass a performance based assessment of their teaching practice during the full-time Clinical Practice II semester. Details of this assessment are specified in the *Student Policy and Procedures Handbook*.

**XIII. PHYSIOLOGY, HYGIENE, AND SUBSTANCE ABUSE ISSUES:** The Office of Student and Academic Services administers this New Jersey Department of Education exam during the final semester of the program.

**XIV. COMPREHENSIVE EXAMINATION:** No comprehensive examination is required.