

## Mathematics, Teacher Education Concentration

### Recommended Four-Year Plan (Fall 2021)

The recommended four-year plan is designed to provide a blueprint for students to complete their degrees within four years. These plans are the recommended sequences of courses. Students must meet with their Major Advisor to develop a more individualized plan to complete their degree and with their Teacher Education Advisor to ensure appropriate sequencing and timing of courses to meet State of New Jersey teacher certification requirements. This plan assumes that no developmental courses are required. If developmental courses are needed, students may have additional requirements to fulfill which are not listed in the plan.

**NOTE:** This recommended Four-Year Plan is applicable to students admitted into the major during the 2021-2022 academic year.

First Year**					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
Gen Ed: INTD 101 - First Year Seminar	4		CMPS 130 - Scientific Problem Solving with Python OR CMPS 147 - Computer Science I	4	
Gen Ed: CRWT 102 - Critical Reading and Writing II	4		Gen Ed: AIID 201 - Studies in Arts & Humanities	4	
Gen Ed: Quantitative Reasoning - MATH 121 - Calculus I *	4		MATH 237 - Discrete Structures <b>WI</b> OR MATH 205 - Mathematical Structures <b>WI</b>	4	
Gen Ed: Historical Perspectives	4		MATH 122 - Calculus II	4	
			TAS Pathways Module 1: (PATH-TS1) Career Assessment/ Advising	<b>Degree Rqmt.</b>	
<b>Total:</b>	16		<b>Total:</b>	16	

Summer Session***	HRS	✓
Certification Requirement: BIOL 101- Intro to Biology (recommended for Physiology/Hygiene requirement)	4	
Gen Ed: Global Awareness	4	

Second Year****					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
EDUC 211 - Student Literacy Corps <sup>CE1</sup> (Urban)	4		MATH Elective numbered above 237 (not MATH 370 – Applied Statistics)	4	
MATH 225 - Multivariable Calculus	4		MATH 253 - Probability	4	
MATH 262 - Linear Algebra <b>WI</b>	4		MATH 282 - Number Theory	4	
PHYS 116 - Physics I w/ Calculus Lecture and PHYS 116L - Introductory Physics I Lab	4+1		Gen Ed: Culture & Creativity OR Systems Sustainability & Society	4	
TAS Pathways Module 2: (PATH-TS2) Resume/CV Writing	<b>Degree Rqmt.</b>		TAS Pathways Module 3: (PATH-TS3) Interview Preparation	<b>Degree Rqmt.</b>	
<b>Total:</b>	17		<b>Total:</b>	16	

Summer Session (both online)	HRS	✓
Gen Ed: Distribution & Certification Requirement: EDUC 221 - Social Context of Education (1 <sup>st</sup> session)	4	
Certification Requirement: EDUC 241 - Instructional Technology (2 <sup>nd</sup> session)	4	

Third Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
Certification Requirement: EDUC 222 - Teaching: Principles and Practices <sup>CE2</sup>	4		Certification Requirement: EDUC 360 - Introduction to Special Education <sup>CE3</sup> EDUC 301 - Meeting the Needs of All Learners (co-req.)	4	
PSYC 101 - Introduction to Psychology	4		Certification Requirement: PSYC 215 - Learning, Cognition, & Teaching	4	
MATH 432 - Abstract Algebra <b>WI</b>	4		MATH 416 - Introduction to Analysis	4	
MATH 353 - Statistics	4		MATH 321 - Geometry	4	
<b>Total:</b>	16		<b>Total:</b>	16	

Summer Session	HRS	✓
Gen Ed: SOSC 110 Social Science Inquiry	4	

Fourth Year					
Fall Semester: EDUC courses are Co-Requisites.	HRS	✓	Spring Semester	HRS	✓
<b>Certification Requirement:</b> EDUC 310 - Methods in Content Areas: Math/Science <sup>CP1*****</sup>	4		<b>Certification Requirement:</b> EDUC 495 - Clinical Practice Capstone: Content <sup>CP3*****</sup>	12	
<b>Certification Requirement:</b> EDUC 350 - Reading and Writing in the Content Areas <sup>CP2*****</sup>	4				
MATH 441 - History of Math <b>WI</b>	4				
<b>Total:</b>	12		<b>Total:</b>	12	

**Total Credits Required for Graduation: 128**

**Total Credits in This Plan: 145**

**Major GPA Required for Graduation: 2.0**

**CUM GPA Required for Certification AT TIME OF GRADUATION/DEGREE COMPLETION: 3.0**

**WI: Writing Intensive - 3 courses required in the major** \_\_\_\_\_

\* See the course catalog for prerequisites for Calculus I. One of the ways to enter Calculus I is to place into it via the Accuplacer Calculus placement test called Accuplacer Advanced Algebra and Functions Test (AAF Test) at the RCNJ Testing Center. The Testing Center is open all year round. If the placement test results for a given student indicate that developmental courses are required (for instance, Precalculus, or Elementary Algebra Topics followed by Precalculus), such developmental courses may be taken as early as during the summer session(s) preceding the student's freshman year [Summer Session I (late May – late June) or Summer Session II (mid July – mid August)]. See the RCNJ Testing Center website for more details on the Calculus placement test.

\*\*Ideally, native Ramapo students should be fully admitted into the TE program **by the end of their first year at Ramapo.**

**Transfer students should be directed to the TE Program office immediately upon their arrival on campus,** and earlier if possible.

All students should be directed early to the TE program for admissions requirements.

Students will complete Clinical Experience (CE) and Clinical Practice (CP) courses during the time in the Teacher Education Program. It is recommended that students complete EDUC 211 and EDUC 222, both of which require CE, in different semesters.

\*\*\*Any of the courses listed in summer sessions on this plan may be taken in any regular academic semester (fall and/or spring), even as an overload, to maximize tuition dollars. Individual plans for/time to graduation should be developed with your major and TE advisors. It might be possible to take all courses that are listed during the summer sessions above in an online format.

\*\*\*\*Students **must be fully admitted** into TE program before registering for EDUC 222, which on this plan is presented **in the absolute last semester** in which a student could take it **and expect to complete both the major and certification requirements within 4 years.** Please see faculty or staff in the Teacher Education Program for admission requirements and appropriate timing/planning. This course is a prerequisite to EDUC 360, which is a prerequisite to EDUC 310 and 350, which are co-requisites.

\*\*\*\*\***Only offered fall semester. EDUC 310 and EDUC 350 are co-requisites and must be taken the semester prior to Clinical Practice Capstone to meet state mandates for a full year of Clinical Practice.**

\*\*\*\*\***Only offered spring semester.** No other course may be taken with this course.

Clinical Experience Hours Required:

<sup>CE1</sup>EDUC 211 – 10 hours

CE<sup>2</sup>EDUC 222 – 20 hours

CE<sup>3</sup>EDUC 360 – 60 hours

Clinical Practice Hours Required:

CP<sup>1</sup>EDUC 310—170 hours

CP<sup>2</sup>EDUC 350—10 hours

CP<sup>3</sup>EDUC 4XX—525 hours

**PLEASE NOTE:**

**Transportation to and from off-campus clinical experience and clinical practice placements (in K-12 schools) is the responsibility of individual students. Please plan accordingly. If transportation is or may be an issue, please visit the TE program offices BEFORE you register for a course which requires a K-12/off campus school placement.**