

## Earth Science, Teacher Education Concentration

### Recommended Graduation Plan (Fall 2025)

The recommended graduation 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 Graduation Plan is applicable to students admitted into the major during the 2025-2026 academic year.

Items labeled [1] through [9] are explained in the footnotes on the bottom of this file.

CRWT Placement
CRWT 101 to CRWT 102
CRWT 101S to CRWT 102S

Math Placement
MATH 021/022 to MATH 108-121

**NOTE:** CRWT and MATH courses are determined by [placement testing](#) and should be taken following the sequence above.

First Year [2]					
Fall Semester F24	HRS	✓	Spring Semester S25	HRS	✓
Gen Ed: INTD 101 - First Year Seminar	4		ENSC 103 Intro to Env Science	4	
Gen Ed: CRWT 102 - Critical Reading and Writing II	4		General Education Requirement	4	
Gen Ed: Quantitative Reasoning	4		General Education Requirement [3]	4	
GEOL 106 Funds. Of Earth science lec {WI}	4		Certification Requirement: PSYC 101 - Introduction to Psychology	4	
			TAS Pathways Module 1: (PATH-TS1) Career Assessment/ Advising	<b>Degree Rqmt.</b>	
<b>Total:</b>	16		<b>Total:</b>	16	

Summer Session [3]	HRS	✓
BIOL 111/111L Funds. Biol I lec/lab	4+1	
General Education Requirement	4	

Second Year [4]					
Fall Semester F25	HRS	✓	Spring Semester S26	HRS	✓

EDUC 211 - Student Literacy Corps CE1 (Urban)	4		BIOL 315 Field Biol & Ecology	4	
GEOL 106L Funds. Earth Science lab	2		CHEM117/117L Gen Chem II lec/lab	4+1	
Gen Ed Scientific Reasoning and ENSC Major Requirement: CHEM 116/116L General Chem I lec/lab	4+1		ENSC 230 Sustainable Natural Resources	4	
BIOL 221 General Ecology	4		Certification Requirement & Gen Ed Systems and Society: EDUC 241 - Instructional Technology	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>	15		<b>Total:</b>	17	

Third Year					
Fall Semester F26	HRS	✓	Spring Semester S27	HRS	✓
Certification Requirement: EDUC 222 - Teaching: Principles and Practices CE2	4		GEOL 327 Geol. Of NJ (major elective 1)	4	
Certification Requirement & Gen Ed Values and Ethics: EDUC 221 - Social Context of Education	4		Certification Requirement: PSYC 215 - Learning, Cognition, & Teaching	4	
ENSC 343/343L Enviro Chem lec/lab	4+2		GEOL 328/328L Paleontology lec/lab {WI}	4+1. 5	
ENSC 225 GIS for Enviro Sciences	4		ENSC 345 Research Design & Stats	4	

Summer Session [3]	HRS	✓
PHYS 103 Intro to Astronomy	4	
Certification Requirement: EDUC 360 - Introduction to Special Education CE3 EDUC 301 - Meeting the Needs of All Learners (co-req.)	4	

Fourth Year					
Fall Semester: EDUC courses are Co-Requisites. F27	HRS	✓	Spring Semester S28	HRS	✓
<b>Certification Requirement:</b> EDUC 310 - Methods in Content Areas: Math/Science CP1 [5]	4		<b>Certification Requirement:</b> EDUC 495 - Clinical Practice Capstone: Content CP3 [6]	12	

<b>Certification Requirement:</b> EDUC 350 - Reading and Writing in the Content Areas CP2 [5]	4		ENSC 303 Models and Methods	4	
ENSC 417/417L Ecological field research lec/lab {WI}	4+2				
ENSC 305: Climate Change Science (major elective 2)	4				
Strongly Suggested: EDUC 395: Topics [9]	2				
<b>Total:</b>	18-20		<b>Total:</b>	16	

**Total Credits Required for Graduation:** 128

**Total Credits in This Plan:**

**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**

**General Education courses** can be done in any order with the exception of INTD 101, CRWT and MATH. Those three general education courses will need to be done first. First Year Seminar is taken in the first semester. Failure to complete CRWT and MATH will result in a hold when the student hits 64 credits. The following general education courses can be done in any order. For more info on these courses, please visit the [General Education program requirements website in the College Catalog](#):

- Social Science Inquiry (SOSC 110) [+W]
- Scientific Reasoning – EMBEDDED IN MAJOR
- Historical Perspectives [+W]
- Studies in the Arts & Humanities (*CRWT 102 is a prerequisite to this course*) [+W]
- Global Awareness [+W]
- Distribution Category (Social Systems & Society **OR** Culture & Creativity **OR** Values and Ethics) (**Must be outside of TAS**)
- Distribution Category

+W: Students transferring in with 48 or more credits are waived from these general education requirements.

**Important Footnotes explaining items [1] – [9] from the tables above:**

[2] Ideally, native Ramapo students should be fully admitted into the Teacher Education (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.

[3] Students planning to take gen ed courses in the summer after their freshman year, should take during their freshman year two gen ed courses that are not offered in the summer, and should save the gen ed courses that are offered online during the summer to take them online in the summer after their freshman year.

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, for instance, Gen Ed: SOSC 110 and Gen Ed: Global Awareness courses are often offered in an online format during the summer

[4] 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.

[5] **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.**

[6] **Only offered spring semester.** No other course may be taken with this course.

Clinical Experience Hours Required:

<sup>CE1</sup>EDUC 211 – 10 hours

<sup>CE2</sup>EDUC 222 – 20 hours

<sup>CE3</sup>EDUC 360 – 60 hours

Clinical Practice Hours Required:

<sup>CP1</sup>EDUC 310—170 hours

<sup>CP2</sup>EDUC 350—10 hours

<sup>CP3</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.**

[8] A student following a Graduation Plan that starts in the fall of an even year (such as Fall 2024, Fall 2026, etc.) wishing to follow a more accelerated schedule of ENSC courses, should start their course sequence as follows:

[9] EDUC 395 is not required, but it's strongly suggested. It's a seminar whose role is to support students in CP1 and CP2. Any full time student (i.e. a student taking between 12 and 18 credits in one semester) pays a flat rate "full time" tuition, so students who take EDUC 395 in addition to 4 other 4-credit classes in the same semester will take 18 credits, but will pay the flat rate "full time" tuition that semester. Students who take EDUC 395 will graduate with 135, not 133 credits.