

## School of Theoretical and Applied Science

### Mathematics

#### Recommended Four-Year Plan (Fall 2019)

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. 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 2019-2020 academic year.

<b>First Year</b>					
<b>Fall Semester</b>	<b>HRS</b>	<b>✓</b>	<b>Spring Semester</b>	<b>HRS</b>	<b>✓</b>
Gen Ed: MATH 121 - Calculus I *	4		Gen Ed: SOSC 110 - Social Science Inquiry	4	
Gen Ed: INTD 101 - First Year Seminar	4		Gen Ed: Historical Perspectives	4	
Gen Ed: CRWT 102 - Critical Reading & Writing II	4		MATH 237 - Discrete Structures WI OR MATH 205 - Mathematical Structures WI	4	
CMPS 147 - Computer Science I	4		MATH 122 - Calculus II	4	
			TAS Pathways Module 1: (SCIN-001) Career Assessment/ Advising		
<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>16</b>	

<b>Second Year</b>					
<b>Fall Semester</b>	<b>HRS</b>	<b>✓</b>	<b>Spring Semester</b>	<b>HRS</b>	<b>✓</b>
MATH 225 - Multivariable Calculus	4		MATH 305 – Differential Equations	4	
MATH 262 - Linear Algebra WI	4		MATH Elective numbered above 237	4	
PHYS 116 - Physics I w/ Calculus Lecture and PHYS 116L - Introductory Physics I Lab	4+1		Gen Ed: Distribution - Choose one course from one category - Culture & Creativity, Systems Sustainability & Society, or Values & Ethics	4	
Gen Ed: AIID 201 - Studies in the Arts & Humanities	4		Gen Ed: Global Awareness	4	
TAS Pathways Module 2: (SCIN-002) Resume/ CV Writing			TAS Pathways Module 3: (SCIN-003) Interview Preparation		
<b>Total:</b>	<b>17</b>		<b>Total:</b>	<b>16</b>	

<b>Third Year</b>					
<b>Fall Semester</b>	<b>HRS</b>	<b>✓</b>	<b>Spring Semester</b>	<b>HRS</b>	<b>✓</b>
MATH 432 - Abstract Algebra WI	4		MATH 416 - Introduction to Analysis	4	
MATH Elective Level 300 or Above	4		MATH Elective Level 300 or Above	4	
MATH Elective numbered above 237	4		Elective	4	
Gen Ed: Distribution - Choose one course from another category - Culture & Creativity, Systems Sustainability & Society, or Values & Ethics	4		Elective	4	
<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>16</b>	

<b>Fourth Year</b>					
<b>Fall Semester</b>	<b>HRS</b>	<b>✓</b>	<b>Spring Semester</b>	<b>HRS</b>	<b>✓</b>
MATH 441 - History of Math WI	4		Elective	4	
Elective	4		Elective	4	
Elective	4		Elective	4	

Elective	4	Elective **	3
<b>Total:</b>	16	<b>Total:</b>	15

**Total Credits Required:** 128 credits

**GPA:** 2.0

**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 CLM placement 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 CLM test.

Those mathematics majors who end up taking Precalculus, which is a 4-credit-hour course counting towards graduation credits, can count it as, for instance, the 4 HR Elective in the Fourth Year Spring in the table above.

\*\* If a 3 credit hour elective cannot be found in the schedule, it may be replaced by an elective (or a combination of electives) worth at least 3 credits hours total.