## School of Theoretical and Applied Science

## Mathematics

Recommended Four-Year Plan (Fall 2018)
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 2018-2019 academic year.

| First Year |  |  |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Fall Semester 2018 | HRS | $\checkmark$ | Spring Semester 2019 | HRS | $\checkmark$ |
| Gen Ed: MATH 121-Calculus I * | 4 |  | MATH 122-Calculus II | 4 |  |
| Gen Ed: INTD 101-First Year Seminar | 4 |  | MATH 237-Discrete Structures WI OR <br> MATH 205- Mathematical Structures WI | 4 |  |
| Gen Ed: CRWT 102-Critical Reading \& Writing <br> II WI | 4 |  | Gen Ed: Social Science Inquiry | 4 |  |
| CMPS 147-Computer Science I | 4 |  | Gen Ed: Historical Perspectives | 4 |  |
| Total: | 16 |  | Total: | 16 |  |


| Second Year |  |  |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Fall Semester 2019 | HRS | $\checkmark$ | Spring Semester 2020 | HRS | $\checkmark$ |
| 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 <br> PHYS 118L-Introductory Physics I Lab | $4+1$ |  | Gen Ed: Distribution | 4 |  |
| Gen Ed: Studies in the Arts \& Humanities WI | 4 |  | Gen Ed: Global Awareness | 4 |  |
| Total: | 17 |  | Total: | 16 |  |


| Third Year |  |  |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Fall Semester 2020 | HRS | $\checkmark$ | Spring Semester 2021 | HRS | $\checkmark$ |
| 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 | 4 |  | Elective | 4 |  |
| Total: | 16 |  | Total: | 16 |  |


| Fourth Year |  |  |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Fall Semester 2021 | HRS | $\checkmark$ | Spring Semester 2022 | HRS | $\checkmark$ |
| MATH 441-History of Math WI | 4 |  | Elective | 4 |  |
| Elective | 4 |  | Elective | 4 |  |
| Elective | 4 |  | Elective | 4 |  |
| Elective | 4 |  | Elective $* *$ | 3 |  |
| Total: | 16 |  | Total: | 15 |  |

Total Credits Required: 128 credits
GPA: 2.0
WI: Writing Intensive - $\mathbf{3}$ 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 .

