# Mathematics Secondary Education 7-I2 BA 

## 12 Required Core Credits | 8 Flexible Core Credits | 2 College Option Credits $45+27_{\text {(SEYS) }}$ Major Credits

6

## Elective Credits

This 4-year academic plan is for freshmen entering Queens College in Fall 2021.
Our 4-year academic plans are illustrative examples of integrated degree requirements and course sequencing for each of the College's programs of study which are designed to ensure degree completion in a timely manner. Students are advised to meet with professional and faculty advisors to tailor their degree maps to their individual interests (academic and career goals), as well as other considerations including course offerings and the incorporation of winter and summer sessions. Course pre-requisite/s and co-requisite/s are strictly enforced, as are entrance and maintenance criteria (if applicable) for the successful completion of the degree.

# Mathematics Secondary Education 7-I2 BA 

## FOUR YEAR ACADEMIC PLAN

## Freshman

## FALL

| English Composition I (ECI) | 3 credits |
| :--- | :---: |
| World Cultures \& Global Issues (WCGI) | 3 credits |
| US Experience in Its Diversity (USED) | 3 credits |
| Creative Expression (CE) | 3 |
| credits |  |
| Foreign Language (LANG) | 4 credits |
| Fall total credits | 16 credits |

## Sophomore

## FALL

| MATH I52* | 4 credits |
| :--- | ---: |
| Calculus II |  |
| MATH 220 | 3 credits |
| Discrete Mathematics | 3 credits |
| SEYS 20IW (W) |  |
| Historical, Social, and Philosophical Found of Edu. |  |
| College Option Literature (LIT) | 3 credits |
| An Additional College Core | 3 credits |

## SPRING

| English Composition II (EC2) | 3 credits |
| :--- | :---: |
| MATH I5I* (MQR) | 4 credits |
| Calculus I |  |
| Individual and Society (IS) | 3 credits |
| Scientific World (SW) | 3 credits |
| An Additional Flexible Core | 3 credits |
| Spring total credits | 16 credits |

## SPRING

| MATH 24I | 3 credits |
| :---: | :---: |
| Probability \& Mathematical Statistics |  |
| MATH 201 | 4 credits |
| Multivariate Calculus |  |
| MATH 242 | 3 credits |
| Methods of Mathematical Statistics |  |
| CSCI III | 3 credits |
| Intro to Algorithmic Problem Solving |  |
| SEYS 22I | 3 credits |
| Develop. \& Learning in Mid. Childhood \& Adole. |  |

General Education requirements may be taken in any order if the pre-requisite requirement(s) is/are satisfied.

* MATH I5I \& I52 OR MATH I4I, I42, \& I43
***Students must take either three or four additional courses as follows:
Three additional courses chosen from Lists $X$ and $Y$ below, of which two must be from list $X$ and one must be from list Y .
OR
Four additional courses chosen from Lists $X$ and $Y$ below, of which one must be from list $X$ and three must be from list Y. (Highlighted courses are strongly recommended)

List X: Math 310, 317(or 617), 609,612,618,619,626,634
List Y: Math 202, 223, 232, 242, 245, 247, 248,250, 320 and all 500 and 600 -level courses not already used to satisfy the above requirements.

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## FOUR YEAR ACADEMIC PLAN

## Junior

FALL<br>MATH 23I or 237 (select one)<br>4 credits<br>Linear Algebra<br>MATH 505<br>3 credits<br>Problem Solving<br>Either one CSCI or one PHYS course from: $3 / 5$ credits<br>CSCI II2, PHYS I2I4+I2II**, PHYS I454+|45I**<br>ECPSE 350<br>3 credits<br>Foundation of Special Education<br>College Option Science (SCI)<br>3 credits<br>Fall total credits<br>16/18<br>credits<br>Senior

FALL
MATH $518 \quad 3$ credits
College Geometry
SEYS 3503 credits
Cognition, Tech., and Instruct. for Diverse Learners
SEYS 36I 3 credits
Methods of Teaching Mathematics in \& High School
SEYS 371.2
3 credits
Initial Clinical Experience in Mathematics
Third additional Math course***
3 credits

Fall total credits
15
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## SPRING

SEYS $340 \quad 3$ credits

Lang. Literacy \& Cult. in Education MATH 385W (W)

4 credits
Mathematic Found. of the Secondary
School Curriculum
First additional Math course ${ }^{* * *} \quad 3$ credits
Second additional Math course*** 3 credits
MATH 333 or 613
3 credits
Abstract Algebra
Spring total credits
16 credits

## SPRING

MATH $618 \quad 3$ credits
Foundation of Geometry
SEYS 37I. 4
Students Teaching Mathematics in
Middle or High School
SEYS 38IW (W) 3 credits
Curriculum \& Assessment in Teach. Math
Life \& Physical Science (LPS) (if needed) 4 credits
Fourth additional Math course (if needed) ${ }^{* * *} 3$ credits
Spring total credits
16 credits

■ At least fifteen credits of these required and elective courses must be taken at Queens College.
** PHYS I214+|21I \& PHYS $1454+145$ I fulfill the General Education, Required Core, Life \& Physical Science (LPS) requirement or the College Option Science (SCl) requirement.
****General Electives: Students may complete general electives by taking courses in (most) department/s or programs they choose; however, depending on the course/program, students may need department permission and/or prerequisite course/s. Electives may be used to supplement the chosen major (an English major may want to take a course in French or Italian literature) or to fulfill interest in a different area (a Music major may be interested in the physics of sound). Students are encouraged to use available electives to complete a dual major, minor, pre-requisites for graduate or professional school, or complete and internship, experiential learning and/or study abroad. Students are encouraged to use their available general electives wisely and focus on coursework that will assist them personally, academically and professionally.

