## Mathematics Secondary Education 7-I2 BA

## FOUR-YEAR ACADEMIC PLAN

## 12 Required Core Credits <br> 18Flexible Core Credits

## 12 <br> College Option Credits

## $45+27_{\text {(SEYS) Major Credits }}$

## 6 <br> Elective Credits

## 120 wem

This 4-year academic plan is designed to help freshmen entering Queens College in Fall 2018 plan their academic career and ensure that they complete all requirements for graduation in a timely fashion. All other students should consult their academic and department advisors to chart their own 4 -year academic plans. Students should note that course pre-requisite/s and co-requisite/s are strictly enforced and they should regularly meet with their department advisors to identify their specific major/minor requirements and entrance and maintenance criteria (if applicable) for successful completion of their degree.

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## Freshman

## FALL

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

## SPRING

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

## Sophomore

## FALL

| MATH 152* | 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

Fall total credits
16 credits

## SPRING

MATH 24I or 6II(select one) 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.

Spring total credits
16 credits

[^0]List X: Math 3I0,3I7,609,6I2,6I8,6I9,626,634
List Y: Math 202, 2I 3W, 223, 232, 242, 245, 247, 248,320, 503, 524
And all 500 and 600 -level courses not listed.

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## Junior

| MATH 231 or 237 (select one) | 4 credits | SEYS 340 | 3 credits |
| :---: | :---: | :---: | :---: |
| Linear Algebra |  | Lang. Literacy \& Cult. in Education |  |
| MATH 505 | 3 credits | MATH 385W (W) | 4 credits |
| Problem Solving |  | Mathematic Found. of the Secondary |  |
| Either one CSCI or one PHYS course from: | 3/5 credits | School Curriculum |  |
| CSCI 2I2, PHYS 1214+12II**, PHYS 1454+ | 145 I** | First additional Math course*** | 3 credits |
| ECPSE 350 | 3 credits | Second additional Math course*** | 3 credits |
| Foundation of Special Education |  | MATH 333 or 613 | 3 credits |
| College Option Science (SCI) | 3 credits | Abstract Algebra |  |
| Fall total credits I | 16/18 credits | Spring total credits | 16 credits |

## FALL

Fall total credits
16/18 credits

## SPRING

## Senior

FALL
MATH 518
College Geometry
SEYS 350
Cognition, Tech., and Instruct. for Diverse Learners
SEYS 36I
Methods of Teaching Mathematics in
\& High School
SEYS 37I. 2
Initial Clinical Experience in Mathematics
Third additional Math course***

Fall total credits
I 5 credits

## SPRING

| MATH 6I8 | 3 credits |
| :--- | ---: |
| Foundation of Geometry <br> SEYS 37I.4 <br> Students Teaching Mathematics in <br> Middle or High School | 3 credits |
| SEYS 38IW (W) |  |
| Curriculum \& Assessment in Teach. Math <br> Life \& Physical Science (LPS) (if needed) | 3 credits |
| Fourth additional Math course (if needed)*** | 4 credits |
| Spredits |  |

[^1]
[^0]:    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, \& I 43
    ***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)

[^1]:    ** PHYS $1214+|2| \mid$ \& PHYS $1454+|45|$ 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.

