

QUEENS COLLEGE

Mathematics

Secondary Education 7-12 BA

FOUR-YEAR ACADEMIC PLAN

12 Required Core Credits

18 Flexible Core Credits

12 College Option Credits

45+27<sub>(SEYS)</sub> Education Credits

6 Elective Credits

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120 Total

This 4-year academic plan is designed to help freshmen entering Queens College in Fall 2017 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 prerequisite/s and corequisite/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.



# QUEENS COLLEGE

## Mathematics

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#### FOUR-YEAR ACADEMIC PLAN

#### Freshman

##### FALL

English Composition I (EC1)	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**

##### SPRING

English Composition II (EC2)	3 credits
MATH 151* (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**

#### Sophomore

##### FALL

MATH 152*	4 credits
Calculus II	
MATH 220	3 credits
Discrete Mathematics	
SEYS 201W (W)	3 credits
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 241 or 611 (select one)	3 credits
Probability & Mathematical Statistics	
MATH 201	4 credits
Multivariate Calculus	
MATH 242	3 credits
Methods of Mathematical Statistics	
CSCI 111	3 credits
Intro to Algorithmic Problem Solving	
SEYS 221	3 credits
Develop. & Learning in Mid. Childhood & Adole.	

**Spring total credits** **16 credits**

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

\* MATH 151 & 152 OR MATH 141, 142, & 143

\*\*\*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, 609, 612, 618, 619, 626, 634

List Y: Math 202, 213W, 223, 232, 242, 245, 247, 248, 320, 503, 524  
And all 500 and 600-level courses not listed.



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#### Junior

##### FALL

MATH 231 or 237 (select one) Linear Algebra	4 credits
MATH 505 Problem Solving	3 credits
Either one CSCI or one PHYS course from: CSCI 212, PHYS 1214+1211**, PHYS 1454+1451**	3/5 credits
ECPSE 350 Foundation of Special Education	3 credits
College Option Science (SCI)	3 credits

**Fall total credits**

**16/18 credits**

##### SPRING

SEYS 340 Lang. Literacy & Cult. in Education	3 credits
MATH 385W (W) Mathematic Found. of the Secondary School Curriculum	4 credits
First additional Math course***	3 credits
Second additional Math course***	3 credits
MATH 333 or 613 Abstract Algebra	3 credits

**Spring total credits**

**16 credits**

#### Senior

##### FALL

MATH 518 College Geometry	3 credits
SEYS 350 Cognition, Tech., and Instruct. for Diverse Learners	3 credits
SEYS 361 Methods of Teaching Mathematics in & High School	3 credits
SEYS 371.2 Initial Clinical Experience in Mathematics	3 credits
Third additional Math course***	3 credits

**Fall total credits**

**15 credits**

##### SPRING

MATH 618 Foundation of Geometry	3 credits
SEYS 371.4 Students Teaching Mathematics in Middle or High School	3 credits
SEYS 381W (W) Curriculum & Assessment in Teach. Math	3 credits
Life & Physical Science (LPS) (if needed)	4 credits
Fourth additional Math course (if needed)***	3 credits

**Spring total credits**

**16 credits**

\*\* PHYS 1214+1211 & PHYS 1454+1451 fulfill the General Education, Required Core, Life & Physical Science (LPS) requirement or the College Option Science (SCI) 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.

