

QUEENS COLLEGE

Computer Science BA

FOUR YEAR ACADEMIC PLAN

12 Required Core Credits

18 Flexible Core Credits

12 College Option Credits

66/67 Major Credits

12/11 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.

QUEENS COLLEGE

Computer Science BA

FOUR YEAR ACADEMIC PLAN

Freshman

FALL

English Composition I (EC1) credits	3
World Cultures & Global Issues (WCGI)	3 credits
U.S Experience in its Diversity (USED)	3 credits
Creative Expression (CE)	3 credits
MATH 151 (MQR) credits	4
Calculus I	

Fall total credits

16 credits

SPRING

English Composition II (EC2)	3 credits
Individual and Society (IS)	3 credits
An Additional Flexible Core	3 credits
College Option Literature (LIT+W) credits	3
With Writing Intensive Unit*	
MATH 152	4 credits
Calculus II	
Spring total credits	16 credits

Sophomore

FALL

CSCI 111	3 credits
Introduction to Algorithmic Problem Solving	
MATH 120	3 credits
Discrete Mathematics	
Scientific World (SW)	3 credits
An Additional College Core	3 credits
College Option Language (LANG)	4 credits

Fall total credits

16 credits

SPRING

CSCI 211	3 credits
OOP in C++	
CSCI 212	3
credits	
OOP in Java	
CSCI 220	3
credits	
Discrete Structures	
CSCI 240	3 credits
Computer Organization and Assembly Language	
One Writing Intensive Unit (W)	3 credits

Students may either focus on Gen Ed requirements during freshman year, or start CSCI-BA sooner by spreading courses for the major over 4 years in accordance to the prerequisite structure depicted in <http://www.cs.qc.edu/undergrad/BA.pdf>

*If a Literature course is taken with a W, it will count towards Literature and one Writing Intensive Unit.

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

QUEENS COLLEGE

Computer Science BA

FOUR YEAR ACADEMIC PLAN

Junior

FALL

CSCI 313 Data Structures	3 credits
CSCI 320 Theory of Computation	3 credits
CSCI 343 Computer Architecture	3
MATH 241 Probability & Statistics	3 credits
MATH 231 or 237 Linear Algebra	4 credits

SPRING

CSCI 323 Design & Analysis of Algorithms	3 credits
CSCI 331 Database Systems	3
CSCI 340 Operating Systems	3
CSCI 316 Principles of Programming Languages	3
First Computer Science Elective**	3 credits

Senior

FALL

CSCI 355 Internet & Web Technologies	3 credits
CSCI 370 Software Engineering	3 credits
Second Computer Science Elective**	3 credits
Life & Physical Science (LPS)	4 credits
General electives***	2 credits

Fall total credits

15 credits

SPRING

College Option Science (SCI)	3 credits
General electives***	12 credits
Spring total credits	15 credits

**6 credits of computer science courses numbered CSCI 300-396. One course from the following list may be used: BIOL 330; MATH 202, 223, 224, 232, 242, 245, 247, 248, 317, 333, 337, 609, 613, 619, 621, 623, 624, 625, 626, 633, 634, 635, or 636; PHYS 225, 227, 265, or 311. No more than 3 credits of CSCI 390 through 395 may be used as part of the major without the approval of the department's Honors and Awards Committee.

***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.