

QUEENS COLLEGE

Computer Science BS

FOUR YEAR ACADEMIC PLAN

12 Required Core Credits

18 Flexible Core Credits

12 College Option Credits

78/79 Major Credits

0 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.

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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) credits	3
MATH 151 (MQR) Calculus I	4 credits

Fall total credits **16 credits**

SPRING

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

Spring total credits **16 credits**

Sophomore

FALL

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

Fall total credits **16 credits**

SPRING

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

Spring total credits **15 credits**

*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

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Junior

FALL

CSCI 313 Data Structures	3 credits
CSCI 320 Theory of Computation	3 credits
CSCI 343 Computer Architecture	3 credits
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 credits
CSCI 340 Operating Systems	3 credits
CSCI 316 Principles of Programming Languages	3 credits
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
Third Computer Science Elective**	3 credits
College Option Science (SCI)	3 credits

SPRING

Fourth Computer Science Elective**	3 credits
Fifth Computer Science Elective**	3 credits
Sixth Computer Science Elective**	3 credits
Life & Physical Science (LPS)	4 credits
General elective	3 credits
Spring total credits	16 credits

Fall total credits

15 credits

**18 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 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.