B.S. Mathematics Primary Major, CS Secondary Major Curriculum
Requirements for Students Entering Tandon before Fall 2019 - 137 credits
http://engineering.nyu.edu/academics/programs/mathematics-bs/curriculum
https://engineering.nyu.edu/academics/programs/computer-science-bs

Name:

Mathematics Requirements: 52 Credits	Credits	Grade	Notes/Substitute
MA-UY 1024 Calculus I for Engineers **or** MA-UY 1324 Integrated Calculus I for Engineers	4		
MA-UY 1124 Calculus II for Engineers **or** MA-UY 1424 Integrated Calculus II for Engineers	4		
MA-UY 2114 Calculus III: Multi-Dimensional Calculus	4		
MA-UY 3034 Applied Linear Algebra **or** MA-UY 3044 Linear Algebra **or** MA-UY 3054 Honors Linear Algebra	4		
MA-UY 2314 Discrete Mathematics	4		
MA-UY 3014 Probability	4		
MA-UY 4114 Applied Statistics	4		
MA-UY 4204 Ordinary Differential Equations **or** MA-UY 4214 Applied Ordinary Differential Equations	4		
MA-UY 4414 Applied Partial Differential Equations	4		
MA-UY 4424 Numerical Analysis	4		
MA-UY 4434 Applied Complex Variables	4		
MA-UY 4444 Mathematical Modeling	4		
MA-UY 4614 Applied Analysis	4		
Math Elective: 4 Credits *(Students should select one 4-credit math elective course from an approved list)*			
MA-UY			
Computer Science Requirements: 29 Credits *			
CS-UY 1114 Introduction to Programming & Problem Solving	4		
CS-UY 1134 Data Structures and Algorithms	4		
CS-UY 2124 Object Oriented Programming	4		
CS-UY 2214 Computer Architecture and Organization	4		
CS-UY 2413 Design & Analysis of Algorithms	3		
CS-UY 3224 Introduction to Operating Systm	4		
CS-UY 4513 Software Engineering	3		
CS-UY 4523 Design Project	3		
Computer Science Electives: 10 Credits *(Students should select 3 CS elective courses from an approved list totaling at least 10 credits)*			
	4		
	3		
	3		
Other Required Courses: 26 Credits			
MA-UY 1002 The Art of Mathematics **or** CS-UY 1122 Introduction to Computer Science	2		
EG-UY 1001 Engineering and Technology Forum	1		
CM-UY 1004 General Chemistry for Engineers	4		
EXPOS-UA 1 Writing the Essay **or** EXPOS-UA 4	4		
EXPOS-UA 2 The Advanced College Essay **or** EXPOS-UA 9	4		
PH-UY 1013 Mechanics	3		
PH-UY 2023 Electricity, Magnetism and Fluids	3		
PH-UY 2121 General Physics Laboratory I	1		
PH-UY 2033 Waves, Optics and Thermodynamics	3		
PH-UY 2131 General Physics Laboratory II	1		
Humanities/Social Science Electives: 16 Credits **			
Free Electives: Optional *(with advisor's approval)*			

* A grade of at least C- is required in CS-UY 1114, CS-UY 1134, and CS-UY 2124.

** Humanities and Social Sciences Elective Requirement (4 courses, 16 credits)

Students may choose 4 courses from any humanities and social sciences cluster. These 4 electives can be within a single cluster or across multiple clusters. The department encourages students to take humanities and social sciences electives across clusters and/or across disciplines within a cluster. These 4 humanities and social sciences electives must satisfy the following constraints:

      a. **At least one course must be a 3xxx/4xxx level humanities and social science elective.**

      b. **At least one course must be a writing-intensive humanities and social science elective, labeled by "W."**

      c. **At least one course must be an ethics course**

Humanities and Social Sciences Electives List: http://bulletin.engineering.nyu.edu/preview_program.php?catoid=11&poid=3480