

Associate of Science in Computer Science Degree Requirements

CUNY Pathways Common Core Requirements	Credits
Required Core 1A: English Composition: ENGL-101 English Composition I	3
Required Core 1A: English Composition: ENGL-102 English Composition II	3
Required Core 1B: Mathematics and Quantitative Reasoning: MA-440 Pre-Calculus Mathematics ^{1,2,3}	4
Required Core 1C: Choose one course	3-4
Flexible Core 2A: Choose one course	3
Flexible Core 2B: Choose one course	3
Flexible Core 2C: Choose one course	3
Flexible Core 2D: Choose one course	3
Flexible Core 2E: CS-101 Algorithmic Problem Solving I ³	4
Additional Flexible Core: MA-441 Analytic Geometry and Calculus I ³	4
Subtotal	33-34
Major Core Requirements	
CS-201 Computer Organization and Assembly Language	4
CS-203 Algorithmic Problem Solving II in C++ OR CS-204 Algorithmic Problem Solving II in Java	4
MA-442 Analytic Geometry and Calculus II	4
MA-471 Introduction to Discrete Mathematics	3
Subtotal	15
Major Electives – Take 11 credits from courses listed below	
CS-100 Introduction to Computers and Programming	3
CS-102 Spreadsheet Programming with MS Excel	3
CS-103 Relational Databases	4
CS-203 Algorithmic Problem Solving II in C++	4
CS-204 Algorithmic Problem Solving II in Java	4
CS-220 Discrete Structures	3
ET-506 LINUX Operating System	3
ET-540 Digital Computer Theory I	3
ET-704 Networking Fundamentals I	3
ET-710 Front End Web Development	3
ET-725 Computer Network Security	3
MA-119 College Algebra ¹	3
MA-121 Elementary Trigonometry ¹	1
MA-443 Analytic Geometry and Calculus III	4
MA-461 Linear Algebra	4
MA-481 Probability and Statistics	3
MA-905 Undergraduate Research in Mathematics and/or Computer Science I	2
MA-906 Undergraduate Research in Mathematics and/or Computer Science II	2
Subtotal	11
Additional Requirements	
One laboratory science course – Select from: BI-132, BI-171, CH-102, CH-111, CH-121, ET-842, or PH-112 ⁴	0-1
Subtotal	0-1
Total Credits Required	60

Notes

1. Depending on math placement, students may be required to complete MA-119 and/or MA-121 (both with a C or better) prior to MA-440. When required by math placement, MA-119 and MA-121 will count as major electives.
2. Students who place into mathematics at MA-441 will use that course to satisfy Required Core 1B, use MA-442 in the Flexible Core, and take an additional 4 credits of major elective courses to reach 60 credits.
3. Students are required to take specific courses in some areas of the Common Core that fulfill both general education and major requirements. If students do not take the required courses in the Common Core, they will have to take additional credits to complete their degree requirements.
4. Students who take a STEM variant for Required Core 1C have satisfied this requirement.

All students must successfully complete two (2) writing-intensive classes (designated "WI") to fulfill degree requirements. MA-471 is a writing-intensive (WI) course.