

MATHEMATICS

A.S. Degree*

¹ Students with English Proficiency Index (EPI) of 0-49 enroll in corequisite course ENG 100. Students with EPI of 50-64 enroll in corequisite course ENG 110. Students with EPI of at least 65 (or other English proficiency qualification) enroll in ENG 111. Students with ESL need should take appropriate ESL course/s (Sequence: ESL 01 > 02 > 03 > 09) before enrolling in ENG 110.

² Students are eligible to enroll in MTH 28 if they have successfully completed an elementary algebra math intervention at a CUNY college (e.g., Math Proficiency Workshop, CUNY Start Math, Math Start), or if they are CUNY Math proficient AND had the appropriate math background in high school. See the Mathematics Course Placement page in the [College Catalog](#).

² Students not eligible for MTH 28 or higher courses enroll in corequisite course MTH 28.5. However, note that students with Math Proficiency Index of 39 or lower are strongly encouraged to enroll in Math Start/CUNY Start.

² If a student is required to take MTH 28/28.5 College Algebra and Elementary Trigonometry or MTH 30 Precalculus, then the following applies:

- If MTH 28/28.5 is required, then MTH 28/28.5 applies to Required Core B; MTH 30 applies to Flexible Core E/Restricted Elective, and MTH 31 will be required in the major courses. Free electives reduced to 3-4.
- If student is exempted from MTH 28 but MTH 30 is required, then MTH 30 applies to Flexible Core E/Restricted Elective

³ This program has received a waiver to require students to complete specific STEM/STEM Variant courses in Required Core B, Required Core C and Flexible Core E. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.

⁴ See [Common Core Pathways course listing](#).

***Note: In order to graduate, students must meet all requirements, including, completing all required courses with appropriate grades, completing two writing intensive courses, and earning a minimum GPA of 2.0, and [applying for graduation](#).**

SEMESTER I Freshman	Prerequisite/Corequisite	
<input type="checkbox"/> Required Core A: English Composition I - ENG 100 Integrated Reading and Writing OR ENG 110 Fundamentals of Writing and Rhetoric OR ENG 111 Writing and Rhetoric ¹	See footnote ¹	3
<input type="checkbox"/> Required Core B: MTH 28 College Algebra and Elementary Trigonometry OR MTH 28.5 College Algebra and Elementary Trigonometry Corequisite ²	See footnote ²	3
<input type="checkbox"/> Required Core C/Science I³: select ONE from BIO 11 General Biology OR BIO 120 Biology I OR CHM 11 General College Chemistry I OR PHY 11 College Physics I OR PHY 31 Physics I	See catalog	4
<input type="checkbox"/> Flexible Core A-D: Select ONE course from any Flexible Core Area ⁴	See catalog	3

WINTER/SUMMER SESSION	Prerequisite/Corequisite	
<input type="checkbox"/> Flexible Core E/Restricted Elective: MTH 30 Pre-Calculus Mathematics ²	MTH 28 or equivalent	4
Subtotal:		17

SEMESTER II Freshman	Prerequisite/Corequisite	
<input type="checkbox"/> Required Core A: ENG 112 Composition and Rhetoric II OR ENG 113 Writing About Literature OR ENG 114 Written Composition and Prose Fiction OR ENG 115 Written Composition and Drama OR ENG 116 Written Composition and Poetry	ENG 100, ENG 110, or ENG 111	3
<input type="checkbox"/> MTH 31 Analytic Geometry and Calculus I	MTH 30 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
<input type="checkbox"/> Flexible Core E/Science II³: select the second level from the same subject taken in Science I - BIO 12 General Biology OR BIO 121 Biology II OR CHM 12 General College Chemistry II OR PHY 12 College Physics II OR PHY 32 Physics II	See catalog	4
<input type="checkbox"/> Flexible Core A-D: Select ONE course from a different Flexible Core Area ⁴	See catalog ³	3

WINTER/SUMMER SESSION	Prerequisite/Corequisite	
<input type="checkbox"/> MTH 32 Analytic Geometry and Calculus II	MTH 31 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
Subtotal:		18

SEMESTER III Sophomore	Prerequisite/Corequisite	
<input type="checkbox"/> MTH 33 Analytic Geometry and Calculus III	MTH 32 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
<input type="checkbox"/> MTH 42 Linear Algebra		4
<input type="checkbox"/> Flexible Core A-D: Select ONE course from a different Flexible Core Area ⁴	See catalog ³	3
<input type="checkbox"/> Flexible Core A-D: Select ONE course from a different Flexible Core Area ⁴	See catalog ³	3
Subtotal:		14

SEMESTER IV Sophomore	Prerequisite/Corequisite	
Math Electives: Choose TWO from <input type="checkbox"/> MTH 34 Differential Equations & Selected Topics in Advanced Calculus (4 credits) <input type="checkbox"/> MTH 35 Selected Topics in Advanced Calculus and Linear Algebra (4 credits) <input type="checkbox"/> MTH 44 Vector Analysis (4 credits) <input type="checkbox"/> MTH 46 Abstract Algebra (4 credits) <input type="checkbox"/> MTH 48 Advanced Calculus (4 credits) <input type="checkbox"/> CSI 35 Discrete Mathematics II (3 credits)		7-8
<input type="checkbox"/> Free Elective to complete 60 credits	See catalog	3-4
Subtotal:		11

TOTAL: 60