Mathematics (A.S. Degree)

REMEDIAL/ESL SEQUENCE (if required)

□ ESL 1 (8) ₩	🔲 ESL 2 (6) 🕨	□ ESL 3 (6) ► □ ENG 9 (4)
□ ENG 1 ¹ (4) ▶	ENG 2 ¹ (4)	
□ RDL 1 ¹ (4) ▶	RDL 2 ¹ (6)	
MTH 1 ² (4) ▶	MTH 5 ² (6) ▶	MTH 6 ² (6)
CHM 2 ⁷ (4)		

GRADUATION REQUIREMENTS

☐ GPA ≥ 2.0	Writing Intensive 1	Writing Intensive 2
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¹ENG 1/ENG 2 & RDL 1/RDL 2 are no longer offered. Students with ENG/RDL developmental needs will now enroll in corequisite courses, ENG 100 (If English Proficiency Index < 50), **OR** ENG 110 (If English Proficiency Index = 50-64).

²MTH 1/MTH 5/MTH 6 are no longer offered. CUNY Math Proficient STEM students or those with Math developmental need will now enroll in corequisite course MTH 28.5.

 $^3\mbox{For MTH}$ 28 enrollment, CUNY Math Proficient STEM students will also have to meet one of the following criteria:

Mathematics high school GPA of at least 70 and successful completion of a course beyond Algebra 1, $% \left({{{\rm{A}}_{\rm{B}}}} \right)$

OR New York State Regents Trigonometry Score of at least 65,

OR New York State Regents Common Core Algebra 2 Score of at least 65.

⁴If a student is required to take MTH 28/28.5 College Algebra and Elementary Trigonometry or MTH 30 Pre-Calculus, 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 Scientific World/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 Scientific World/Restricted Elective.

⁵This program has received a waiver to require students to complete specific STEM/STEM Variant courses in Required Area B, Required Area C and Flexible Area 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.

⁶Lab Science I & II must form a sequence, e.g., BIO 11 & BIO 12.

⁷CHM 2 is a pre-requisite for CHM 11. Students can place out of CHM 2 by taking a Department administered Chemistry Placement Exam or by having a score of 75 or higher on the NYS High School Regents Chemistry exam.

⁸CSI 35 has as prerequisite CSI 30, for which a student will need to use free elective credits.

Note:

Computer Science and Mathematics courses must be taken each semester or graduation will be delayed.

Students are encouraged to begin Transfer Planning early in their academic careers. Please visit the Transfer Planning web site for the timeline as well as information on articulation and transfer. <u>Transfer Services – Bronx</u> <u>Community College (cuny.edu)</u>.

RECOMMENDED 2 YEAR ACADEMIC PLAN

SEMESTER I		Credits
ENG 100 ¹ OR ENG 110 ¹ OR ENG 111	English Composition I ¹ (Required Core A)	3
MTH 28 ^{2,3,4,5} OR MTH 28.5	College Algebra and Elementary Trigonometry OR Corequisite (Required Core B) ^{2,3,4,5}	3
BIO 11 ^{5,6} OR CHM 11 ^{5,6,7} OR PHY 11 ^{5,6} OR PHY 31 ^{5,6}	SCIENCE I (Required Core C) ^{5,6}	4
Flexible Core A-D	Select one course from any Flexible Core A-D	3
	Subtotal:	13
WINTER/SUMMER SESSION		
MTH 30 ^{4,5}	Pre-Calculus Mathematics (Flexible Core E/Restricted Elective) ^{4,5}	4
	Subtotal:	4
SEMESTER II		
ENG 112 OR ENG 113 OR ENG 114 OR ENG 115 OR ENG 116	Composition and Rhetoric II OR Writing About Literature OR Written Composition and Prose Fiction OR Written Composition and Drama OR Written Composition and Poetry (Required Core A)	3
MTH 314	Analytic Geometry & Calculus I (Major Requirement) ⁴	4
BIO 11 ^{5,6} OR CHM 11 ^{5,6,7} OR PHY 11 ^{5,6} OR PHY 31 ^{5,6}	SCIENCE II (Flexible Core E) ^{5,6}	4
Flexible Core A-D	Select one course from a different Flexible Core A-D	3
	Subtotal:	14
SUMMER/WINTER SESSION		
MTH 32	Analytic Geometry & Calculus II (Major Requirement)	4
Subtotal:		4
SEMESTER III		
MTH 33	Analytic Geometry & Calculus III (Major Requirement)	4
MTH 42	Linear Algebra (Major Requirement)	4
Flexible Core A-D	Select one course from a different Flexible Core A-D	3
Flexible Core A-D	Select one course from a different Flexible Core A-D	3
	Subtotal:	14
SEMESTER IV		
Two of the following courses: MTH 34 MTH 35 MTH 44 MTH 46 MTH 48 CSI 35 ⁸	(Major Requirements) Differential Equations & Selected Topics in Advanced Calculus Selected Topics in Advanced Calculus and Linear Algebra Vector Analysis Abstract Algebra Advanced Calculus Discrete Mathematics II	4 4 4 4 3
	Total:	7-8
Free Elective ⁴	Free Elective to complete 60 credits ⁴	3-4
	Subtotal:	11
	TOTAL CREDITS:	60



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