PATHWAYS
Mathematics (A.S. Degree)
FALL 2020-SPRING 2021

REMEDIAL SEQUENCE (if required)

☐ ESL 1 (8) ⏩	☐ ESL 2 (6) ⏩	☐ ESL 3 (6) ⏩	☐ ENG 9 (4)
☐ ENG 1[1] (4) ⏩	☐ ENG 2 (4)		
☐ RDL 1[1] (4) ⏩	☐ RDL 2 (6)		
☐ MTH 1 (4) ⏩	☐ MTH 5 (6) ⏩	☐ MTH 6 (6)	
☐ CHM 2 (4)			

GRADUATION REQUIREMENTS

☐ GPA ≥ 2.0	☐ Writing Intensive 1	☐ Writing Intensive 2

FRESHMAN SEMINAR

☐ FYS 11

[1] Students with prior ENG 1/RDL 1 placements (or English Proficiency Index < 50) will now take ENG 4 or RDL 4. Passing ENG 4 or RDL 4 will allow them to register for ENG 110.

[2] MTH 30 is a pre-requisite for MTH 31. Students requiring MTH 30 must use free elective credits for this purpose

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

[4] See Degree map at: http://www.bcc.cuny.edu/academics/academic-advising/degree-maps/ for semester-by-semester sequence.

[5] CSI 35 has as prerequisite CSI 30, for which a student will need to use free elective credits or sixth Flexible Core course (Area E). If a student chooses to take a different course for his/her sixth Flexible Core course, then this option is only available if the student does not need to take MTH 30 (Pre-calculus).

Notes:

- The Program has been given a waiver to require its students to take MTH 31 to fulfill Required Area B, BIO 11 or CHM 11 or PHY 11 or PHY 31 to fulfill Required Area C, and BIO 12 or CHM 12 or PHY 12 or PHY 32 to fulfill Flexible Area E. If students transferring into this program complete different course 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.
- 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: http://www.bcc.cuny.edu/TransferCounseling/

REQUIRED COMMON CORE

☐ **A**	**English Composition** ENG 110[1] **OR** ENG 111; **and** ENG 112 **OR** ENG 113 **OR** ENG 114 **OR** ENG 115 **OR** ENG 116	6
☐ **B**	**Mathematical and Quantitative Reasoning** MTH 31 Calculus & Analytic Geometry I[2]	4
☐ **C**	**Life and Physical Sciences**[3] Lab Science I BIO 11 **or** CHM 11 **or** PHY 11 **or** PHY 31	4
	Subtotal:	**14**

FLEXIBLE COMMON CORE (Course list at: http://www.bcc.cuny.edu/pathways/?p=Flexible-Common-Core)

Students can complete no more than two courses from any one discipline or interdisciplinary field.	
☐ **A World Cultures and Global Issues**	3
☐ **B US Experience in its Diversity**	3
☐ **C Creative Expression**	3
☐ **D Individual and Society**	3
☐ **E Scientific World**[2] Lab Science II BIO 12 **or** CHM 12 **or** PHY 12 **or** PHY 32	4
☐ **Select an additional course from Flexible Core Area A-E.**	3
Subtotal:	**19**

MAJOR REQUIREMENTS[4]

☐ MTH 32	Analytic Geometry & Calculus II	5
☐ MTH 33	Analytic Geometry & Calculus III	5
☐ MTH 42	Linear Algebra	4
Select two courses from the following (MTH OR CSI): ☐ MTH 34 Differential Equations & Selected Topics in Advanced Calculus ☐ MTH 35 Selected Topics in Advanced Calculus and Linear Algebra ☐ MTH 44 Vector Analysis ☐ MTH 46 Abstract Algebra ☐ MTH 48 Advanced Calculus ☐ CSI 35[5] Discrete Mathematics II		7-8
☐ ELECTIVES	MTH 30[2] **and/or** Free Electives	1-6
	Subtotal:	**27**
	TOTAL:	**60**