

PATHWAYS
Mathematics (A.S. Degree)
 FALL 2017

RECOMMENDED 2 YEAR ACADEMIC PLAN FOR FULL-TIME STUDENTS

REMEDIAL SEQUENCE (if required)

<input type="checkbox"/> ESL 1 (8) ▶▶	<input type="checkbox"/> ESL 2 (6) ▶▶	<input type="checkbox"/> ESL 3 (6) ▶▶	<input type="checkbox"/> ENG 9 (4)
<input type="checkbox"/> ENG 1 (4) ▶▶	<input type="checkbox"/> ENG 2 (4)		
<input type="checkbox"/> RDL 1 (4) ▶▶	<input type="checkbox"/> RDL 2 (6)		
<input type="checkbox"/> MTH 1 (4) ▶▶	<input type="checkbox"/> MTH 5 (6) ▶▶	<input type="checkbox"/> MTH 6 (6)	
<input type="checkbox"/> CHM 2 (4)			

GRADUATION REQUIREMENTS

<input type="checkbox"/> CAT-R	<input type="checkbox"/> CAT-W	<input type="checkbox"/> CAT-M	<input type="checkbox"/> GPA > 2.0
<input type="checkbox"/> Writing Intensive I		<input type="checkbox"/> Writing Intensive II	

PATHWAYS REQUIRED CORE (course list available online)

<input type="checkbox"/> A	English Composition – ENG 10/11 and ENG 12/14/15/16	6
<input type="checkbox"/> B	Mathematical and Quantitative Reasoning – MTH 30/31	4

PATHWAYS FLEXIBLE CORE (course list available online)

<input type="checkbox"/> A	World Cultures and Global Issues	3
<input type="checkbox"/> B	US Experience in its Diversity	3
<input type="checkbox"/> C	Creative Expression	3
<input type="checkbox"/> D	Individual and Society	3

PATHWAYS Science Selection

<input type="checkbox"/> Required Core C	Life and Physical Sci. - Lab Science I	4
<input type="checkbox"/> Flexible Core E	Scientific World - Lab Science II	4

Pathways Total: 30

¹ MTH 30 (Pre-Calculus) is a pre-requisite for MTH 31. Students who do not place out of MTH 30 should take it as soon as possible; this will use 4 Free Elective credits. Students who need MTH 30 should note that PHY 31 has a co-requisite of MTH 31.

² Lab Science I & II must form a sequence, e.g., BIO 11 & BIO 12.

PHY 31 and PHY 32 have co-requisites of MTH 31 and MTH 32, respectively.

³ Students must take one course in each of the Flex categories A, B, C, and D plus an additional course from any Flex category A, B, C, D, or E.

Students are encouraged to take CSI 30 (Flex E) so they have the option of taking CSI 35.

Notes: This 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/>.

SEMESTER I

<input type="checkbox"/> ENG 10 OR ENG 11	Fundamentals of Composition and Rhetoric OR Composition and Rhetoric I	3
<input type="checkbox"/> MTH 31	Analytical Geometry & Calculus I ¹ (pre-req MTH 30)	4
<input type="checkbox"/> BIO 11 OR CHM 11 OR PHY 11 OR PHY 31	Lab Science I ²	4
<input type="checkbox"/> XXX	Select one course from Flexible Core A/B/C/D/E ³	3
Subtotal: (hours) credits:		14

SEMESTER II

<input type="checkbox"/> ENG 12 OR ENG 14 OR ENG 15 OR ENG 16	Composition and Rhetoric II OR Written Composition and Prose Fiction OR Written Composition and Drama OR Written Composition and Poetry	3
<input type="checkbox"/> MTH 32	Analytic Geometry & Calculus II	5
<input type="checkbox"/> BIO 12 OR CHM 12 OR PHY 12 OR PHY 32	Lab Science II ²	4
<input type="checkbox"/> XXX	Select one course from Flexible Core A/B/C/D/E ³	3
Subtotal: (hours) credits:		15

SEMESTER III

<input type="checkbox"/> MTH 33	Analytic Geometry & Calculus III	5
<input type="checkbox"/> MTH 42	Linear Algebra	4
<input type="checkbox"/> XXX	Select one course from Flexible Core A/B/C/D/E ³	3
<input type="checkbox"/> XXX	Select one course from Flexible Core A/B/C/D/E ³	3
Subtotal: (hours) credits:		15

SEMESTER IV

Two of the following courses:		
<input type="checkbox"/> MTH 34	Differential Equations & Selected Topics in Advanced Calculus	4
<input type="checkbox"/> MTH 44	Vector Analysis	4
<input type="checkbox"/> MTH 46	Abstract Algebra	4
<input type="checkbox"/> MTH 48	Advanced Calculus	4
<input type="checkbox"/> CSI 35	Discrete Mathematics II (pre-req CSI 30 Flex E)	3
Total:		7/8
<input type="checkbox"/> XXX	Select one course from Flexible Core A/B/C/D/E ³	3
<input type="checkbox"/> ELEC	Free Electives ¹ (to bring total to 60 credits)	5/6
Subtotal: (hours) credits:		16

TOTAL CREDITS: 60

Mathematics must be taken each semester or graduation will be delayed.