

PATHWAYS

Science (A.S. Degree)

Earth Systems and Environmental Science Option

FALL 2021-SPRING 2022

REMEDIAL SEQUENCE (if required)

ESL 1 (8) ▶▶ ESL 2 (6) ▶▶ ESL 3 (6) ▶▶ ENG 9 (4)

ENG 1¹ (4) ▶▶ ENG 2¹ (4)

RDL 1¹ (4) ▶▶ RDL 2¹ (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

¹ENG 1/ENG 2 & RDL 1/RDL 2 are no longer available. Students with ENG/RDL remedial needs will now enroll in corequisite courses ENG 100 (English Proficiency Index < 50), or ENG 110 (English Proficiency Index = 50-64).

²This program has obtained a waiver to require STEM variant courses in Required Core Area B and Area C and Flexible Core 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.

³It is recommended that students take either GIS 11 or GIS 12 to fulfill this requirement.

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

⁵For students who take MTH 30 to fulfill the Required Core, no free electives remain. For students with free electives, it is recommended that students take either GIS 11 or GIS 12.

⁶See your department advisor for the appropriate sequence of specialization courses.

Notes:

- 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 the information on Articulation and transfer: [Transfer Services – Bronx Community College \(cuny.edu\)](http://www.bcc.cuny.edu/academics/academic-advising/transfer-services/)

REQUIRED COMMON CORE

<input type="checkbox"/> A	English Composition I & II	
<input type="checkbox"/> A	ENG 100 ¹ OR ENG 110 ¹ OR ENG 111; AND ENG 112 OR ENG 113 OR ENG 114 OR ENG 115 OR ENG 116	6
<input type="checkbox"/> B	Mathematical and Quantitative Reasoning MTH 30 ² Pre-Calculus Mathematics OR MTH 31 Analytic Geometry & Calculus I	4
<input type="checkbox"/> C	Life and Physical Sciences CHM 11 General Chemistry I ²	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.		
<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
<input type="checkbox"/> E	Scientific World CHM 12 General Chemistry II ²	4
<input type="checkbox"/>	Select an additional course from Flexible Core A-E ³	3
Subtotal:		19

MAJOR REQUIREMENTS⁴

<input type="checkbox"/> MTH 31 ²	Analytic Geometry & Calculus I	0-4
<input type="checkbox"/> MTH 32	Analytic Geometry & Calculus II	5
<input type="checkbox"/> ELECTIVES ⁵	Free Electives ⁵	0-4
Earth Systems and Environmental Science Option Requirements⁶		
<input type="checkbox"/> CHM 27	Principle of Laboratory Safety	2
<input type="checkbox"/> CHM 33	Quantitative Analysis	4
Choose two of the three courses below:		
<input type="checkbox"/> ESE 11	Earth Systems Science: The Earth OR	
<input type="checkbox"/> ESE 12	Earth Systems Science: The Atmosphere OR	
<input type="checkbox"/> ESE 13	Earth Systems Science: The Ocean	8
<input type="checkbox"/> ESE 21	Earth Systems Science: The Environment	4
Subtotal:		27
TOTAL:		60