

## Science (A.S. Degree)

### Earth Systems and Environmental Science Option

FALL 2022-SPRING 2023

#### REMEDIAL SEQUENCE (if required)

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

ENG 1<sup>1</sup> (4) ▶▶  ENG 2<sup>1</sup> (4)

RDL 1<sup>1</sup> (4) ▶▶  RDL 2<sup>1</sup> (6)

MTH 1<sup>2</sup> (4) ▶▶  MTH 5<sup>2</sup> (6) ▶▶  MTH 6<sup>2</sup> (6)

CHM 2 (4)

#### GRADUATION REQUIREMENTS

GPA ≥ 2.0  Writing Intensive 1  Writing Intensive 2

#### FRESHMAN SEMINAR

FYS 11

<sup>1</sup>ENG 1/ENG 2 & RDL 1/RDL 2 are no longer offered. Students with ENG/RDL developmental need will now enroll in corequisite course ENG 100 (if English Proficiency Index is 0-49), OR ENG 110 (if English Proficiency Index is 50-64).

<sup>2</sup>MTH 1/MTH 5/MTH 6 are no longer offered. They have been replaced by MTH 28/28.5. Students who have successfully completed an elementary algebra math intervention at a CUNY college (e.g., Math Proficiency Workshop, CUNY Start Math, Math Start, or MTH 5) are eligible for MTH 28.

<sup>3</sup>This 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.

<sup>4</sup>For MTH 28 enrollment, a new student must be CUNY Math Proficient, and 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, 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.

<sup>5</sup>See Degree map at: <http://www.bcc.cuny.edu/academics/academic-advising/degree-maps/> for semester-by-semester sequence.

<sup>6</sup>Students who place out of MTH 28 and/or MTH 30 will take elective course(s) to complete 60 total degree credits. Either GIS 11 or GIS 12 is recommended to fulfill free elective credits.

<sup>7</sup>Students transferring into the program with 24 or more degree or equated credits will be exempt from FYS 11, and can take 1 credit of elective to satisfy this requirement.

<sup>8</sup>See 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 \(cuny.edu\)](https://www.bcc.cuny.edu/transfer-services/)

#### REQUIRED COMMON CORE

<input type="checkbox"/> A <input type="checkbox"/> A	English Composition <sup>1</sup> I & II ENG 100 OR ENG 110 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 <sup>2,3</sup> MTH 28 <sup>4,6</sup> College Algebra and Elementary Trigonometry OR MTH 28.5 <sup>2</sup> (Corequisite)	3
<input type="checkbox"/> C	Life and Physical Sciences <sup>3</sup> CHM 11 General Chemistry I	4
<b>Subtotal:</b>		<b>13</b>

#### 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 <sup>3</sup> CHM 12 General Chemistry II AND MTH 30 <sup>6</sup> Pre-Calculus Mathematics	8
<b>Subtotal:</b>		<b>20</b>

#### MAJOR REQUIREMENTS<sup>5</sup>

<input type="checkbox"/> MTH 31 <sup>2</sup>	Analytic Geometry & Calculus I	4
<input type="checkbox"/> MTH 32	Analytic Geometry & Calculus II	4
<input type="checkbox"/> ELECTIVES <sup>6</sup>	Free Electives <sup>6</sup>	0-7
<input type="checkbox"/> FYS 11 <sup>7</sup>	First Year Seminar <sup>7</sup>	1
<b>Earth Systems and Environmental Science Option Requirements<sup>8</sup></b>		
<input type="checkbox"/> CHM 27	Principle of Laboratory Safety	2
<input type="checkbox"/> CHM 33	Quantitative Analysis	4
<b>Choose two of the three courses below:</b>		
<input type="checkbox"/> ESE 11	Earth Systems Science: The Earth OR	8
<input type="checkbox"/> ESE 12	Earth Systems Science: The Atmosphere OR	
<input type="checkbox"/> ESE 13	Earth Systems Science: The Ocean	
<input type="checkbox"/> ESE 21	Earth Systems Science: The Environment	4
<b>Subtotal:</b>		<b>27</b>
<b>TOTAL:</b>		<b>60</b>