

Engineering Science A.S. Degree

REMEDIAL SEQUENCE (if required)

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

ENG 1 (4) ▶▶ ENG 2 (4)

RDL 1 (4) ▶▶ RDL 2 (6)

MTH 1 (4) ▶▶ MTH 5 (6) ▶▶ MTH 6 (6)

CHM 2 (4)

GRADUATION REQUIREMENTS

CAT-R CAT-W CAT-M GPA ≥ 2.0

Writing Intensive I Writing Intensive II

PATHWAYS REQUIRED CORE (course list available online)

<input type="checkbox"/> <input type="checkbox"/> A	English Composition – ENG 110/111 and ENG 112/113/114/115/116	6
<input type="checkbox"/> B	Mathematical and Quantitative Reasoning – MTH 30/31	4
<input type="checkbox"/> C	Life and Physical Sciences ¹ – PHY 31	4

PATHWAYS FLEXIBLE CORE² (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
<input type="checkbox"/> E	Scientific World ¹ – PHY 32 AND CHM 11	8

Pathways Total: 34

¹ This program has received a waiver to require students to take MTH 30 or MTH 31 to fulfill Required Core B, PHY 31 to fulfill Required Core C, PHY 32 to fulfill Flexible Core E and CHM 11 to fulfill the 6th Flexible Core course.

NOTE that MTH 30 is a prerequisite to MTH 31. Students with MTH 30 placement need to take MTH 31 in the winter or summer session in order to complete this degree in four (4) semesters

² Students must complete four Flexible Core courses, one from each of the four (A-D) Flexible Core areas.

In choosing courses to fulfill Pathways Flexible Core requirements for Areas A, B, C, and D, student are strongly advised to select courses from no fewer than three (3) different departments.

NOTE: Student are encouraged to begin Transfer Planning early in their Academic careers. Please visit the Transfer Planning website for the timeline as well as the information on Articulation and transfer: <http://www.bcc.cuny.edu/TransferCounseling/>

TWO-YEAR ACADEMIC PLAN

SEMESTER I Freshman

<input type="checkbox"/> ENG 110 OR ENG 111	Fundamentals of Composition and Rhetoric OR Composition and Rhetoric I (Req. Core A)	3
<input type="checkbox"/> MTH 30 ¹	Pre-Calculus Mathematics	4
<input type="checkbox"/> CHM 11	General College Chemistry I (Scientific World)	4
<input type="checkbox"/> EGR 11	Introduction to Engineering Design	1
<input type="checkbox"/> Flexible Core A-D ²	Select ONE course from any Flexible Core A-D ³	3
Subtotal:		15

SEMESTER II Freshman

<input type="checkbox"/> MTH 31 ¹	Analytic Geometry & Calculus I (Winter OR Summer Session) Subtotal	4
<input type="checkbox"/> 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	3
<input type="checkbox"/> MTH 32	Analytic Geometry & Calculus II	5
<input type="checkbox"/> PHY 31 ¹	Physics I (Life and Physical Science)	4
<input type="checkbox"/> Flexible Core A-D ²	Select ONE course from any Flexible Core A-D ³	3
Subtotal:		15

SEMESTER III

Sophomore

<input type="checkbox"/> MTH 33	Calculus and Analytical Geometry III	5
<input type="checkbox"/> PHY 32 ¹	Physics II (Scientific World)	4
<input type="checkbox"/> EGR 21 OR EGR 31	Analysis Tool for Engineers OR Circuit Analysis	2-3
<input type="checkbox"/> Flexible Core A-D ²	Select ONE course from any Flexible Core A-D ³	3
Subtotal:		14-15

SEMESTER IV Sophomore

<input type="checkbox"/> MTH 34	Differential Equations & Selected Topics in Advanced Calculus	4
<input type="checkbox"/> PHY 33	Physics III	4
<input type="checkbox"/> Flexible Core A-D ²	Select ONE course from any Flexible Core A-D ³	3
<input type="checkbox"/> Restricted Elective	Select 1 from the following: CHM 12 General Chemistry II OR CHM 22 General Chemistry II with Qualitative Analysis 4-5 CHM 31 Organic Chemistry 5 EGR 21 Analysis Tools for Engineers 2 EGR 31 Circuit Analysis 3 ENG 223 Technical Writing 3 ELC 96 Digital Systems 4	0-5
Subtotal:		11-16

TOTAL: 60