

ENGINEERING SCIENCE

A.S. Degree*

¹ Students with English Proficiency Index (EPI) of 0-49 enroll in corequisite course ENG 100. Students with EPI of 50-64 enroll in corequisite course ENG 110. Students with EPI of at least 65 (or other English proficiency qualification) enroll in ENG 111. Students with ESL need should take appropriate ESL course/s (Sequence: ESL 01 > 02 > 03 > 09) before enrolling in ENG 110.

² Students are eligible to enroll in MTH 28 if they have successfully completed an elementary algebra math intervention at a CUNY college (e.g., Math Proficiency Workshop, CUNY Start Math, Math Start), or if they are CUNY Math proficient AND had the appropriate math background in high school. See the Mathematics Course Placement page in the [College Catalog](#).

Students not eligible for MTH 28 or higher courses enroll in corequisite course MTH 28.5. However, note that students with Math Proficiency Index of 39 or lower are strongly encouraged to enroll in Math Start/CUNY Start.

Students who place out of MTH 28 can use one elective credit toward EGR 31. Student who do not place out of MTH 28 should select EGR 21 so as not to exceed the 60 credit limit for the program. Students who place out of MTH 28 and/or MTH 30 will select courses from restricted Electives to complete 60 credits.

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.

³ 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. See [Common Core Pathways course listing](#).

Students are encouraged to begin Transfer Planning early in their Academic careers. Visit the [Transfer Services – Bronx Community College](#) for more information.

***Note: In order to graduate, students must meet all requirements, including, completing all required courses with appropriate grades, completing two writing intensive courses, and earning a minimum GPA of 2.0, and [applying for graduation](#).**

SEMESTER I Freshman

	Prerequisite/Corequisite	
<input type="checkbox"/> Required Core A: English Composition I - ENG 100 Integrated Reading and Writing OR ENG 110 Fundamentals of Writing and Rhetoric OR ENG 111 Writing and Rhetoric ¹	See footnote ¹	3
<input type="checkbox"/> Required Core B: MTH 28 College Algebra and Elementary Trigonometry OR MTH 28.5 College Algebra and Elementary Trigonometry Corequisite ²	See footnote ²	3
<input type="checkbox"/> Required Core C: CHM 11 General College Chemistry I	Placement Exam; and MTH 28 or 28.5 Corerequisite: ENG 110, if required	4
<input type="checkbox"/> EGR 11 Introduction to Engineering Design		1
<input type="checkbox"/> Flexible Core A-D: Select ONE course from any Flexible Core Area A-D ³	See catalog ³	3
Subtotal:		14

WINTER/SUMMER SESSION

	Prerequisite/Corequisite	
<input type="checkbox"/> Flexible Core E: MTH 30 Pre-Calculus Mathematics ²	MTH 28 or equivalent ²	4

SEMESTER II Freshman

<input type="checkbox"/> Required Core A: ENG 112 Composition and Rhetoric II OR ENG 113 Writing About Literature OR ENG 114 Written Composition and Prose Fiction OR ENG 115 Written Composition and Drama OR ENG 116 Written Composition and Poetry	ENG 100, ENG 110, or ENG 111	3
<input type="checkbox"/> MTH 31 Analytic Geometry and Calculus I	MTH 30 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
<input type="checkbox"/> PHY 31 Physics I	Corequisites: ENG 110, if required; and MTH 31	4
<input type="checkbox"/> Flexible Core A-D: Select ONE course from a different Flexible Core Area ³	See catalog ³	3
Subtotal:		18

WINTER/SUMMER SESSION

	Prerequisite/Corequisite	
<input type="checkbox"/> MTH 32 Analytic Geometry and Calculus II	MTH 31 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4

SEMESTER III Sophomore

<input type="checkbox"/> MTH 33 Analytic Geometry and Calculus III (Option Requirement)	MTH 32 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
<input type="checkbox"/> PHY 32 Physics II (Option Requirement)	PHY 31 Corequisite: MTH 32	4
<input type="checkbox"/> Choose ONE: EGR 21 Analysis Tool for Engineers OR EGR 31 Circuit Analysis		2-3
<input type="checkbox"/> Flexible Core A-D: Select ONE course from a different Flexible Core Area ³	See catalog ³	3
Subtotal:		17-18

SEMESTER IV Sophomore

	Prerequisite/Corequisite	
<input type="checkbox"/> MTH 34 Differential Equations & Selected Topics in Advanced Calculus	MTH 33 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
<input type="checkbox"/> PHY 33 Physics III (Option Requirement)	PHY 32 Corequisite: MTH 33	4
<input type="checkbox"/> Restricted Electives: Select from the following to reach 60 credits - CHM 12 General Chemistry II (4 credits), CHM 31 Organic Chemistry (5 credits), EGR 21 Analysis Tools for Engineers (2 credits), EGR 31 Circuit Analysis (3 credits), ENG 223 Scientific and Technical Writing (3 credits), ELC 96 Digital Systems (4 credits)	See catalog	0-7
<input type="checkbox"/> Flexible Core A-D: Select ONE course from a different Flexible Core Area ³	See catalog ³	3
Subtotal:		11-18

TOTAL: 60

