BRONX COMMUNITY COLLEGE *Degree Map*

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 21so 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	Credits
☐ **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
☐ **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
☐ **Flexible Core A-D:** Select **ONE** course from any Flexible Core Area A-D[3]	See catalog[3]	3
☐ **Flexible Core A-D:** Select **ONE** course from a different Flexible Core Area[3]	See catalog[3]	3
Subtotal		**12**
WINTER/SUMMER SESSION	Prerequisite/Corequisite	
☐ **Major Requirement:** MTH 30 Pre-Calculus Mathematics[2]	MTH 28 or equivalent[2]	4
SEMESTER II Freshman		
☐ **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
☐ **Flexible Core E:** CHM 11 General College Chemistry I	MTH 28 or 28.5 Corerequisite: ENG 110, if required	4
☐ **Major Requirement:** EGR 11 Introduction to Engineering Design	Corequisite: MTH 30	1
☐ **Major Requirement:** MTH 31 Analytic Geometry and Calculus I	MTH 30 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
☐ **Required Core C**: PHY 31 Physics I	Corequisites: ENG 110, if required; and MTH 31	4
Subtotal		**16**
WINTER/SUMMER SESSION	Prerequisite/Corequisite	
☐ **Major Requirement:** 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		
☐ **Flexible Core E:** PHY 32 Physics II	PHY 31 Corequisite: MTH 32	4
☐ **Major Requirement:** MTH 33 Analytic Geometry and Calculus III	MTH 32 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
☐ **Flexible Core A-D:** Select **ONE** course from a different Flexible Core Area[3]	See catalog[3]	3
☐ **Choose ONE:** EGR 21 Analysis Tool for Engineers[2] **OR** EGR 31 Circuit Analysis[2]		2-3
Subtotal[2]:		**13-14**
SEMESTER IV Sophomore	Prerequisite/Corequisite	
☐ **Major Requirement:** MTH 34 Differential Equations & Selected Topics in Advanced Calculus	MTH 33 or equivalent; CUNY English Proficiency or ENG 100 or 110, if required	4
☐ **Major Requirement:** PHY 33 Physics III	PHY 32 Corequisite: MTH 33	4
☐ **Restricted Electives:** Select from the following to complete 60 credits[2] - 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
☐ **Flexible Core A-D:** Select **ONE** course from a different Flexible Core Area[3]	See catalog[3]	3
Subtotal[2]:		**11-18**

TOTAL: 60

This degree map represents a recommended semester-by-semester sequences of courses intended to assist students with timely degree completion. Students should review this map in consultation with their academic advisor, success coach, or faculty advisor in order to make the best course selection and course load consistent with their circumstances. This document is for advisement purposes only and does not represent an official listing of degree requirements; please consult the college catalog, as well as DegreeWorks. (Revised 01/2024)