Engineering Science (A.S. Degree)

REMEDIAL/ESL SEQUENCE (if required)

☐ ESL 1 (8) ⏩	☐ ESL 2 (6) ⏩	☐ ESL 3 (6) ⏩	☐ ENG 9 (4)
☐ ENG 1[1] (4) ⏩	☐ ENG 2[1] (4)		
☐ RDL 1[1] (4) ⏩	☐ RDL 2[1] (6)		
☐ MTH 1[2] (4) ⏩	☐ MTH 5[2] (6) ⏩	☐ MTH 6[2] (6)	
☐ CHM 2[6] (4)			

GRADUATION REQUIREMENTS

☐ GPA ≥ 2.0	☐ Writing Intensive 1	☐ Writing Intensive 2

[1]ENG 1/ENG 2 & RDL 1/RDL 2 are no longer offered. Students with ENG/RDL developmental needs will now enroll in corequisite courses, ENG 100 (If English Proficiency Index < 50), **OR** ENG 110 (If English Proficiency Index = 50-64).

[2]MTH 1/MTH 5/MTH 6 are no longer offered. CUNY Math Proficient STEM students or those with Math developmental need will now enroll in corequisite course MTH 28.5.

[3]For MTH 28 enrollment, CUNY Math Proficient STEM students 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.

[4]This program has received a waiver to require students to take 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.

[5]Students who place out of MTH 28 and/or MTH 30 will select courses from restricted Electives to reach 60 credits.

[6]CHM 2 is a pre-requisite for CHM 11. Students can place out of CHM 2 by taking a Department administered Chemistry Placement Exam or by having a score of 75 or higher on the NYS High School Regents Chemistry exam.

[7]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.

[8]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.

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

☐ ENG 100[1] **OR** ENG 110[1] **OR** ENG 111	English Composition I[1] **(Required Core A)**	3
☐ MTH 28[2,3,4,5] **OR** MTH 28.5	College Algebra and Elementary Trigonometry **OR** Corequisite **(Required Core B)**[2,3,4,5]	3
☐ CHM 11[4,6]	General College Chemistry I **(Flexible Core E)**[4,6]	4
☐ EGR 11	Introduction to Engineering Design **(Major Requirement)**	1
☐ Flexible Core A-D[7]	Select **ONE** course from any Flexible Core A-D[7]	3
	Subtotal:	**14**

WINTER OR SUMMER SESSION

☐ MTH 30[5]	Pre-Calculus Mathematics **(Major Requirement)**[5]	4
	Subtotal:	**4**

SEMESTER II Freshman

☐ 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
☐ MTH 31	Analytic Geometry & Calculus I **(Major Requirement)**	4
☐ PHY 31[4]	Physics I (Life and Physical Science) **(Required Core C)**[4]	4
☐ Flexible Core A-D[7]	Select **ONE** course from a different Flexible Core Area[7]	3
	Subtotal:	**14**

SUMMER OR WINTER SESSION

☐ MTH 32	Analytic Geometry & Calculus II **(Major Requirement)**	4
	Subtotal:	**4**

SEMESTER III Sophomore

☐ MTH 33	Calculus and Analytical Geometry III **(Major Requirement)**	4
☐ PHY 32[4]	Physics II (Scientific World) **(Flexible Core E)**[4]	4
☐ EGR 21[8] **OR** EGR 31[8]	Analysis Tool for Engineers **OR** Circuit Analysis **(Major Requirement)**[8]	2-3
☐ Flexible Core A-D[7]	Select **ONE** course from a different Flexible Core Area[7]	3
	Subtotal:	**13-14**

SEMESTER IV Sophomore

☐ MTH 34	Differential Equations & Selected Topics in Advanced Calculus **(Major Requirement)**	4
☐ PHY 33	Physics III **(Major Requirement)**	4
☐ Flexible Core A-D[7]	Select **ONE** course from a different Flexible Core Area[7]	3
☐ Restricted Elective[5]	Select from the following to reach 60 credits:[5] CHM 12 General Chemistry II 4 CHM 31 Organic Chemistry 5 EGR 21 Analysis Tools for Engineers 2 EGR 31 Circuit Analysis 3 ENG 223 Scientific and Technical Writing 3 ELC 96 Digital Systems 4	0-7
	Subtotal:	**11-18**
	TOTAL:	**60**

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