



2016-2017 Pathways Track

[Pre-Engineering \(Special Program\)](#)

Department of Earth and Physical Science
 School of Arts & Sciences
 Academic Core 2F09 | 718-262-2654

The following is a **suggested** plan of study for completion of this degree program.

- All students should speak with an academic advisor about their academic programs.
This document is not a substitute for academic advisement.
- Students are encouraged to take Winter and Summer courses to facilitate their progress towards graduation.
- Transfer students do not need to take all courses in the plan; they should consult with an academic advisor.

York has developed a program of pre-engineering study, focusing on fundamental coursework in mathematics, physics, and chemistry to prepare students to smoothly transfer from York to engineering departments at other institutions, including the Grove School of Engineering at City College, the SUNY system, and private engineering colleges. There are many disciplines of engineering education at the Baccalaureate level, including for instance biomedical, chemical, civil, computer, electrical, environmental, and mechanical. Entering students may not be sure which area of engineering is most appealing to them. This is not a problem since there are few differences in the courses taken during the first two years. The sample two-year program below provides a proper sequence of courses for all engineering specialties. Our experience has been that students who apply themselves diligently to these courses will succeed in later engineering courses. Students desiring to transfer from York to an engineering program elsewhere should familiarize themselves with the transfer and curricular requirements of the other college as early as possible, and discuss those requirements with their pre-engineering advisor.

	Credits		Credits
FIRST YEAR - FALL	15	FIRST YEAR - SPRING	15
English Composition (EC): ENGL 125	3	English Composition (EC): ENGL 126	3
Mathematical & Quantitative Reasoning (MQR): MATH 121**	4	MATH 122	4
Life & Physical Science (LPS): PHSY 113 + 117*	5	Scientific World (SW): PHYS 114 + PHYS 118*	5
US Experience in its Diversity (USED)	3	World Culture & Global Issues (WCGI)	3
SECOND YEAR - FALL	15	SECOND YEAR - SPRING	13/14
Additional Flexible Core Course: CHEM 108 + CHEM 109 (SW)	5	MATH 223 or MATH 333	3/4
MATH 221	4	CS 172	4
Creative Expression (CE)+	3	Individual & Society (IS)+	3
Elective Course***	3	Writing Intensive (WI)++	3

*PHYS 117+113 and PHYS 118+114 satisfy the Life and Physical Sciences and Scientific World areas of Pathways, respectively.

**MATH 121 requires MATH 119+120 or placement by the Math department after testing. MATH 121 satisfies the Math and Quantitative Reasoning area of Pathways.

***Optional courses and Electives should be chosen from available courses in Physics, Geology, Mathematics, Chemistry, or Biology in consultation with the Pre-Engineering Advisor so as to satisfy requirements of the desired engineering program at the transfer College (e.g., PHYS 241, 211; GEOI 140; BIO202).

+The noted Pathways area courses are not required to be taken in the order shown here. ENG 125 and ENG 126 together satisfy the English Composition area of Pathways.

++Any writing intensive course, in addition to one taken in an upper level major course (e.g., PHYS 383), satisfies this requirement.