COOPERATIVE PROGRAM IN ENGINEERING (3-2 ENGINEERING)

Requirements

1. At least 27 credits in the humanities (fulfilled by the Fordham Core Curriculum).
2. A completed major in chemistry (Rose Hill), engineering physics (Rose Hill), physics (Rose Hill), mathematics (Rose Hill or Lincoln Center), computer and information sciences (Rose Hill or Lincoln Center), or in the joint major in mathematics and computer & information sciences (Rose Hill or Lincoln Center).
3. The following pre-engineering requirements for all intended engineering degrees;
   • Two years of calculus (MATH 1206 Calculus I, MATH 1207 Calculus II, MATH 2004 Multivariable Calculus I, and MATH 2005 Multivariable Calculus II)—can place out of some of these with AP credit or a placement exam.
   • One year of calculus-based physics with lab, choosing one of the following sequences:
     - PHYS 1601 Introduction to Physics I & PHYS 1602 Introduction to Physics II + lab: PHYS 1511 Physics I Lab & PHYS 1512 Physics II Lab
     - PHYS 1701 Physics I & PHYS 1702 Physics II + lab: PHYS 1511 Physics I Lab & PHYS 1512 Physics II Lab
     - NSCI 1701 Physics I & NSCI 1702 Physics II + lab: NSCI 1511 General Physics Lab I & NSCI 1512 General Physics Lab II
   • One semester of chemistry with lab (CHEM 1321 General Chemistry I & CHEM 1331 General Chemistry Lab I or NSCI 1321 General Chemistry Lecture I & NSCI 1331 General Chemistry Lab I)
   • One class in computer science in C++ (CISC 1600 Computer Science I & CISC 1610 Computer Science I Lab)
   • One class in economics (ECON 1100 Principles of Macroeconomics or ECON 1200 Principles of Microeconomics, which satisfy the Fordham Core Curriculum)
   • One class in English composition (ENGL 1102 Composition II)
4. Additional courses are required for the intended field of engineering at either Columbia or Case Western Reserve, please see the 3-2 Program website for more information.