

Preprofessional Programs

Pre-engineering

Faculty Liaison Teresa Larkin, Department of Physics

American University offers a cooperative five-year engineering program with the University of Maryland in College Park. American University students can combine the advantages of both liberal arts and professional education. Students are awarded two bachelor's degrees in a five-year period.

Students spend three years on the American University campus concentrating in a major field in the College of Arts and Sciences. In the third year, with recommendation of the pre-engineering faculty liaison, students apply to the engineering program at the University of Maryland. After admission to the program, the fourth year of study is spent there. Once the student completes the requirements for the American University major (generally at the end of the fourth year), the first bachelor's degree is awarded. After completion of the engineering requirements during the fifth year, the student receives a bachelor's degree in engineering from the University of Maryland.

Students work closely with the pre-engineering faculty liaison and a faculty advisor in one of the natural sciences, mathematics and statistics, computer science, or the office of the Associate Dean for Academic Affairs. Advisors will individually tailor course selection to meet the student's interests and needs. Students are generally advised to major in either mathematics or a natural science, and to maintain a high grade point average. If, however, the student chooses to complete a major in the arts, humanities, or social sciences, he or she may do so, provided that the engineering

program requirements are also satisfied. Completion of basic courses must be done during the first three years of study in order to complete the requirements for an engineering degree in five years. Courses with grades below C will not transfer to the cooperating schools.

Course Requirements

The engineering program at the University of Maryland has basic requirements covering a broad range of study, which must be completed before entrance:

- Two courses in English composition
- Two or three years of mathematics, including calculus and differential equations
- Two years of general physics with laboratory and more in-depth study in mechanics and in electromagnetism or thermodynamics
- One year of general chemistry with laboratory; for chemical engineering, a two-course sequence in organic chemistry
- One course in computer programming
- Five courses in the humanities and the social sciences

Prior to applying to a particular engineering program, students should also have taken ENES 100 Introduction to Engineering Design at the University of Maryland, which is offered every semester including the summer.