Unraveling the origins of life on Earth and determining whether life exists beyond the Earth will likely be two of the most significant scientific discoveries in the 21st century. The Program in Planets and Life is an interdepartmental, multidisciplinary plan of study designed for students interested in these two fundamental questions. The goal is to provide students with an understanding of the fundamental astrophysical, chemical, biological, and geological principles and engineering challenges that will guide our search for life in extreme environments on Earth and on other planets and satellites in the Solar System and among neighboring planetary systems. The Program will equip participating students with the skills they will require to assume a leadership role in discovering the origins of terrestrial and extraterrestrial life over the next decades. The cooperating departments from which the Program in Planets and Life draws faculty and other resources include Astrophysics, Chemistry, Ecology and Evolutionary Biology, Electrical Engineering, Geosciences, Mechanical and Aerospace Engineering, Operations Research and Financial Engineering, and the Woodrow Wilson School.

Admission, Program of Study, & Requirements:

The Program in Planets and Life is open to all A.B. and B.S.E. students. To receive a certificate, the student is expected to satisfy the following requirements: 1) taking the course ‘Life in the Universe’ AST/CHM/EEB/GEO 255; 2) taking an additional four cognate courses, only two of which (with occasional exceptions) can be in the student's department of concentration or can be required courses of a student’s major; 3) participating in a Planets and Life Undergraduate Colloquium; 4) conducting independent work in the junior and senior years that involves topics relevant to the certificate program.

http://www.princeton.edu/astrobiology

Jan 9, 2017
Application:

To express your interest and to apply to the Program, please contact the Program Director (Adam Burrows) or one of the executive committee members listed below in the various affiliated departments. We will put you on our announcement and seminar email list, as well as connect you with a mentor who can help you start crafting a personalized certificate program. Also, please make sure to register for AST/CHM/EEB/GEO 255 (Fall) “Life in the Universe.” This is all you need do to embark upon the Planets and Life Certificate!

Students are encouraged to indicate their interest in the program as early as possible, but, though we will maintain some flexibility on this, we recommend that they formally apply no later than the end of their sophomore year.

Contact People:

Adam Burrows (Astrophysical Sciences; program director; burrows@astro.princeton.edu)
Gaspar Bakos (Astrophysical Sciences; gbakos@astro.princeton.edu)
Chris Chyba (Woodrow Wilson School; cchyba@princeton.edu)
Jeremy Kasdin (Mechanical and Aerospace Engineering; jkasdin@princeton.edu)
A. James Link (Chemical and Biological Engineering; ajlink@princeton.edu)
Tullis Onstott (Geosciences; tullis@princeton.edu)
Ed Turner (Astrophysical Sciences; elt@astro.princeton.edu)
Robert Vanderbei (Operations Research and Financial Engineering; rvdb@princeton.edu)
Polly Strauss (Academic Program Administrator; pstrauss@princeton.edu)

http://www.princeton.edu/astrobiology

Jan 9, 2017