# Dual Degree Engineering Columbia University Program

Gettysburg College's Engineering Dual-Degree Program combines the enhanced communication skills and creativity of a liberal arts education with the focused rigor of a highly regarded engineering program.

Specific courses required for admission by each affiliated institution vary and students should schedule courses in close cooperation with the Engineering Advisor at Gettysburg, Bret Crawford, who is a member of the physics department.

Upon successful completion of the program, the student is awarded the bachelor-of-arts degree from Gettysburg and the bachelor-of-science degree in an engineering discipline from one of the four affiliated universities.

Since the student graduates with two degrees, all degree requirements from both institutions must be completed, including a major at each institution. The Gettysburg College major can be in any discipline provided the student completes the pre-engineering courses and the Gettysburg College curricular requirements before starting at the engineering school. The affiliation agreement between schools allows many courses to transfer so that the student can complete both degrees in 5 years.

For more information please visit: http://www.gettysburg.edu/academics/physics/programs/ dual-degree-engineering-program.dot

## Gettysburg College Department of Physics

In collaboration with

Rensselaer Polytechnic Institute Washington University, St. Louis University of Pittsburgh

## Requirements

Complete pre-engineering courses and the Gettysburg College curricular requirements.

Minimum 3.25 GPA

Recommendation by the Gettysburg College Engineering Advisor.

Schedule courses in close cooperation with Engineering Advisor at Gettysburg College

Through our various affiliations, below are examples of just some of the engineering degrees offered:

Biomedical Engineering

Chemical Engineering

Civil Engineering

Computer Engineering

**Electrical Engineering** 

**Environmental Engineering** 

Materials Engineering

Mechanical Engineering

Systems Engineering

## Department of Physics

Gettysburg College offers both Bachelor of Science and Bachelor of Arts degrees in this major; a minor; and a dual-degree engineering program.

The physics curriculum introduces students to concepts and techniques basic to our present understanding of the physical universe. Our physics faculty is dedicated to teaching, while remaining actively engaged in research. Mentoring relationships between faculty and students are the norm.

The physics major is flexible.

Gettysburg
College physics
majors have
succeeded in
diverse careers,
including
government, law,
and management,
as well as

The possibility of a double major is limited only by interests, dedication, and imagination.

engineering, particle physics, and molecular biology. Our majors who choose graduate study have been well prepared for study in a wide range of fields, including astronomy; astrophysics; biophysics; business; geophysics; environmental, electrical, nuclear, and ocean engineering physics; and physiological psychology.

At the core of our mission in the Gettysburg College Physics Department is the success of our students. We achieve this through creative and innovative teaching, exciting and accessible student-faculty research opportunities, and, most importantly, through our close relationships with all of the students in our major.



## **Undergraduate Research**

Research with faculty is a hallmark of the Gettysburg College Physics Department. Students from first years to seniors participate in cuttingedge research in a variety of different fields.

### Who We Are

Our Gettysburg College Physics Faculty Specialize in the Following Areas

Kurt Andresen DNA Packing

Bret Crawford Nucleon Interactions

Tim Good Plasma Wave-Particle Interactions

Ryan Johnson Galaxy Clusters

Jackie Milingo Spotted Stars

James Puckett Collective Animal Behavior

Yoshi Sato Photosynthetic Bacteria

Sharon Stephenson Exotic Nuclei