

VIRGINIA WESLEYAN UNIVERSITY

JOAN P. BROCK SCHOOL OF MATHEMATICS AND NATURAL SCIENCES

THE PROGRAM

The pre-engineering program offers students the opportunity to earn both a Bachelor of Science degree from Virginia Wesleyan University and a master's degree in biomedical, civil, environmental, mechanical, electrical, computer, aerospace, or systems engineering, or modeling and simulation from Old Dominion University. Students attend Virginia Wesleyan for four years and ODU for one to two years. Starting their sophomore year, students take one or two engineering courses each semester at ODU while enrolled at VWU. After graduating from VWU, qualified students are guaranteed admission to their chosen master's degree graduate program at ODU.

THE MAJOR

Students can participate in the pre-engineering program regardless of VWU major as long as they fulfill the coursework. Common majors include mathematics (BS), earth and environmental science (BS), biology (BS), chemistry, and computer science (BS).

THE COURSES

Students complete a series of mathematics, physics, and chemistry courses at VWU and then choose an engineering field and complete corresponding courses at Old Dominion University. Courses taken at VWU include linear algebra, differential equations, physics, and chemistry. Courses at ODU may include fluid mechanics, thermodynamics, electro-mechanical systems and hydromechanics.

INTERNSHIPS/UNDERGRADUATE RESEARCH

Students in the pre-engineering program have the opportunity to participate in internships or research projects related to their studies. Students in the program have been hired for undergraduate-level internships at a variety of companies including Dominion Energy and the Surry Nuclear Power Station. Faculty advisors and the Lighthouse Center for Exploration and Discovery work together to help students find internships and research opportunities related to their course of study and future career interests. Graduate-level internships are available during the graduate portion of the program.

BEYOND THE CLASSROOM

There are a multitude of career options available to students who complete the joint engineering program with ODU including mechanical engineer, civil engineer, aerospace engineer, computer engineer, electrical engineer, and biomedical engineer.

CONTACT INFORMATION

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