



# UNIVERSITY OF ARKANSAS

## College of Engineering

*John R. English, Dean of Engineering*  
*jre@uark.edu*

March 17, 2015

President of the United States  
The White House  
1600 Pennsylvania Avenue NW  
Washington, DC 20500

Dear Mr. President,

The college has been engaged in activities related to the Grand Challenge for a number of years. Our common freshman engineer program, in existence since 2007, is just one example of our activities. This program introduces all of our students to the processes of discovery and design in their first college semester. Approximately 15 percent of our incoming freshmen participate in an honors colloquium where students are paired with an active researcher to participate in that faculty member's research program. The concepts of discovery and entrepreneurship are inculcated during this year-long relationship, which concludes with a poster presentation in a conference setting. Additionally, 30 percent of our undergraduate students are members of the university's honor college. These honors students are tackling real-world research with great potential impact in Arkansas and beyond. Topics range from improving asphalt fracture testing, which could extend the life of the state's roads and sidewalks, to finding new ways to treat diseases, including cancer.

The college places high value on experiential learning through both its cooperative education programs and community sponsored "Capstone Designs". Nearly 20 percent of the undergraduate population is engaged in either alternating or parallel cooperative education experiences. The college is currently developing industry relationships that will expand this program and is enriching the program through employer-student developed learning outcomes. One in four senior capstone projects are industry sponsored and the vast majority of the projects are completed for an entity (NGO, GO, Non-Profit, Industry) that has a valid need for engineers to provide cost effective and safe solutions to their problems.

In the same vein, students from the college are strong supports of numerous non-profits that need their special skills to solve problems, real problems. The college has 33 registered student organizations that all participate in service learning activities annually. In addition, the college has been a staunch supporter of Arkansas Engineers Abroad, Habitat for Humanity and Engineers without Borders. Each of these organizations provides service learning opportunities both domestically and abroad.

Finally, the college is expanding opportunities for students to study abroad, both in short term summer programs and year-long exchange programs. Last summer 81 students participated in short term programs and 8 participated in exchange programs in Germany, Italy, England, and Australia. We are attempting to grow these programs by more than 100 percent in the next three to five years.

We in the college of engineering are excited about participating in the Grand Challenge and developing and educational experience that will produce the leaders of tomorrow.

Sincerely,

John English  
Dean of Engineering  
Professor & Irma F. and Raymond F. Giffels Endowed Chair in Engineering