

March 23, 2015
President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500


Dear Mr. President,

Here in the College of Engineering at the University of Delaware, we are enthusiastically committed to this intercollegiate initiative to educate the next generation of engineers to tackle society's most pressing challenges. We are excited about sharing our pedagogy with other institutions and learning from their own best practices through an "open source" exchange. Our focus presently is on restructuring our undergraduate engineering programs such that every student experiences ongoing and meaningful engagement with the Challenges during their professional development. Toward this end, we have undertaken the following actions:

- Introduction to Engineering: Our introductory course, which is taken by all engineering majors, will be re-launched this coming fall as an interdisciplinary, project-based course that is centered on The Grand Challenges. Students will tackle three pressing issues – one each in Healthcare, Security, and Sustainability – that will require them to interact with faculty and industry experts as well as members of the community.
- Interdisciplinary Design: We are rapidly integrating our capstone design experiences into a single interdisciplinary design course. In this course, students from different engineering majors work in teams to tackle a real-world challenge posed by industry or institutional partners. We presently have an arm of this course devoted to Healthcare with students from mechanical, electrical, and biomedical engineering; and we will be expanding the program this fall to integrate Civil and Environmental Engineers to tackle sustainability issues within our community as well as globally.
- Technical Specialization: This spring, we launched an Integrated Design technical specialization, in partnership with our art department; and in the fall, we will be starting a master's program in Entrepreneurship and Design in conjunction with the business program. We continue to strengthen student opportunities in areas of faculty expertise, such as Advanced Materials, Cybersecurity, and Fuel Cells.

We are proud of our work to "build" this next generation of engineers. Many of them enter college already thinking about the world's most pressing problems in Healthcare, Security, and Sustainability. It is our job to provide them with the tools to tackle the Grand Challenges and frequent, meaningful opportunities to engage with these issues during their training. We are looking forward to open, collaborative exchange of pedagogical practices with other institutions.

Sincerely,



Babatunde A. Ogunnaike, Ph.D.
Dean and
William L. Friend Chaired Professor of Chemical Engineering