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Aerospace and Mechanical Engineering

Parks College of Engineering, Aviation and Technology

The Honorable Barack Obama President of the United States The White House 1600 Pennsylvania Avenue, N.W. Washington, DC 20500

April 13, 2016

Dear President Obama,

We are excited to participate in #uifresh (University Innovation Freshmen), an initiative spearheaded by the University Innovation Fellows program as a means to expand the participation and retention of incoming first-year STEM students. The initiative will help young students see problems as opportunities that should be approached with fresh eyes and an entrepreneurial mindset.

As part of the initiative, University Innovation Fellows will work to integrate entrepreneurship, design thinking, creativity and innovation into the freshman experience. This will be done as part of orientation, a single class, or a series of classes that help students solve real-world problems and connect first-year students to peer communities of makers and innovators in STEM.

The initiative was developed in response to findings published by the President's Council of Advisors on Science and Technology in a report titled "Engage to Excel: Producing One Million Additional College Graduates With Degrees in Science, Technology, Engineering and Mathematics." The report indicates that 60% of U.S. freshmen (in aggregate) who arrive to college intending to major in STEM change majors to non-STEM disciplines. The report also cites the importance of a student experience that is both intellectually and personally engaging and fosters "identification with a STEM field." This can be established by connecting freshmen with a community of STEM professionals, and fostering meaningful relationships with both peers and instructors.

University Innovation Fellows and their teams will work with their faculty, administrators and staff to implement fun and engaging experiential learning opportunities that expose 100% of the incoming freshmen class to the institution's community of makers and innovators, with the goal of collectively reducing the national percentage of STEM attrition by half in five years.

We believe that early exposure to entrepreneurship, innovation, creativity and design thinking are powerful tools to engage and retain STEM students. We are excited to work with the University Innovation Fellows, an initiative of the NSF-funded National Center for Engineering

Pathways to Innovation (Epicenter) and a soon-to-be program of the Hasso Plattner Institute of Design (d.school) at Stanford University. We believe efforts such as #uifresh will contribute to enhancing STEM attraction and retention, ultimately meeting U.S. workforce needs and strengthening our national competitiveness.

Sincerely,

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