Call for Proposals

Enhancing Ethical Context in the Engineering Curriculum

Competitive Awards up to \$20,000 All CoE Faculty are Eligible

Background: The College of Engineering has received a substantial gift from a donor to support the enhancement of ethics education in the undergraduate curriculum. This gift will provide funding for instructors to develop and integrate ethics-related content into engineering courses at all levels, with the goal of substantially enhancing students' exposure to, and understanding of, ethical issues facing 21st century engineers. This funding will be awarded on a competitive basis, as described below.

Up to four awards of up to \$20,000 each in AY 2019-20 (Additional awards to be made in subsequent years). Funding can be requested for summer or academic-year salary support, appropriate travel, and other justifiable expenses.

Expectations for Proposals: The focus of this developmental effort will be the creation of robust "modules" of instruction that can be deployed in a variety of course settings. Modules should be designed to provide rich and engaging learning experiences in Engineering Ethics for CoE students at all levels. The goal of this initiative is to provide experiences aimed at actively engaging students in exercises (both in and outside the classroom) including role-playing scenarios, simulations, and real-world investigations, with the goal of immersing students in the ethical aspects of engineering practice and providing them with the tools and knowledge to navigate contemporary ethical challenges. Modules are expected to be focused on an aspect of ethics facing 21st century engineers, and must include plans for didactic training, participatory experiences, and tangible outcomes/artifacts to document the experience and potentially inform other students and members of society. The modules should be self-contained curricular units that can be integrated into existing engineering courses. Developed modules should be broadly applicable across multiple engineering disciplines and easily adaptable for use in multiple courses across all 4 years of undergraduate training. Preference will be given to proposals with the potential for broadest impact throughout the College Curriculum.

The following (incomplete) list provides example topics for module focus.

- Global and Diversity Issues
- Environmental Impact
- Personal Privacy
- Public Safety and Health
- Societal Impacts of Machine Intelligence
- Source and Supply-chain Issues

For accepted proposals, deployment in a course in AY 2019-20 is expected. Additional funding may be available in future years to support the integration of developed modules into some

additional engineering courses and for further refinement of modules based upon assessment results.

Within the 2-page limit for proposals, the following should be addressed: Focus of ethical topic choice, target course (and other courses to which the module could be applied), expected number of students impacted, sufficient detail of experiential learning aspects to allow evaluation of degree of student engagement, plan for assessment of effectiveness, and budget.

Deadline: For proposals targeting AY 2019-20, the deadline for submission is **May 31, 2019**. Applicants are strongly encouraged to discuss preliminary ideas with either of the co-Directors prior to submission.

Submit applications directly to the program co-directors: Jon Kuhl and Tom Casavant. A blind review panel will be utilized to evaluate and rank proposals. Final decisions on funding will be made by the Dean's office.