CALL FOR PAPERS 2020 ASEE ANNUAL CONFERENCE Liberal Education/Engineering & Society (LEES) Division

The Liberal Education/Engineering & Society (LEES) Division invites abstracts for papers and proposals for partial or full sessions, panel discussions, and innovative session formats for the ASEE Annual Conference, June 21-24, 2020, Montréal, Québec, Canada. LEES provides a diverse and dynamic forum for those concerned with integrating the humanities, arts, and social sciences into engineering education and practice. The division is dedicated to helping understand and improve the processes that contribute to engineers' development of essential skills in communication, teamwork, local and international cultural understanding, ethical and professional responsibility, and lifelong learning. LEES scholars explore social, historical, political, and cultural contexts co-constituted with technological development. As stated in the bylaws, LEES seeks to:

- 1. Promote the concept that the humanities and social sciences are an integral and significant part of engineering education, as well as being inherently important in themselves as branches of learning.
- 2. Provide ways for people who teach the humanities and social sciences in engineering programs to share their ideas and concerns.
- 3. Provide ways for people in humanities, social sciences, and engineering to interact in the discovery and development of scholarly and curricular relationships.
- 4. Express its concern for and involvement in engineering education on an international scale.

LEES welcomes papers on any topic pertaining to the broader division goals, but is especially encouraging papers pertaining to the following specific themes for the 2020 conference. Please notify the program chair if you are submitting a paper for a specific thematic session.

Theme 1: Minoritization Processes in Engineering Education: There is a critical need for additional work on minoritization processes in engineering education. LEES would like to include papers with (but not limited to) the following domains: (1) experiences of disabled people, LGBTQ communities, or low-income and first generation students; (2) intersectional approaches to identity; (3) discriminatory formulations of intellectual capacity and the categorization of "soft skills" (note that LEES does not condone the usage of this term); (4) the implications of prevailing framings of 'diversity' and 'inclusion' for research and practice.

Theme 2: Communication Across Divisions Initiative: Issues surrounding communication are addressed across ASEE's divisions. As in the past several years, we plan to coordinate joint sessions on engineering communication with a range of other divisions. As part of this initiative, LEES would like to strongly consider that researchers consider LISTENING as perhaps one of the most important yet neglected dimensions of communication. Many other divisions use listening as a core skill (e.g., to build empathy for human-centered design or for community engagement) yet take it for granted without much theorizing about it or thinking how it can be taught and learned in engineering curricula.

Theme 3: Integration of Engineering & Liberal Arts in International Engineering Contexts: This theme calls for studies on efforts to integrate engineering and liberal arts in international engineering programs, including, but not limited to, papers on (1) humanitarian engineering-type efforts outside of the US that have significant HU/SS elements; (2) different ways to teach social

responsibility than the models we currently find in the US; and (3) on educational efforts addressing global climate- or immigration-related challenges.

Theme 4: Personal and Institutional Experiences with Integrating Liberal Arts in Engineering: This theme calls for authors to share their personal accounts with integrating the liberal arts into engineering curriculum in specific institutional settings. Many instructors may need to overcome a fear of co-optation (selling out) in our teaching and research as we apply the liberal arts to contexts wherein it is under-valued. Papers pertaining to this theme will bring a much-needed critical perspective to engineering education, and will showcase both challenges and success stories.

Theme 5: International Perspectives and Initiatives Integrating United Nations Sustainable Development Goals into Engineering Classrooms: This theme will focus on the call from numerous national and international organizations to increase the inclusion of sustainability concepts and topics within engineering education. While a variety of sustainability frameworks have been adopted by educators, the United Nations has endorsed a holistic set of Sustainable Development Goals (SDGs) that is intended to provide cross-cutting principles adaptable across disciplines, recognizing that unified sustainable development requires convergent approaches that include diverse perspectives. Papers are requested that document how educators are integrating the SDGs into engineering education and how this integration might be challenging the boundaries between engineering and the liberal arts. Papers that focus on the SDGs as they relate to diversity, equity, and inclusion, convergence (i.e., multidisciplinary approaches), and power skills (e.g., teamwork, communication) are especially encouraged as are those that emphasize strategies of Canadian and other international organizations. Please note that presenters with papers accepted that are aligned with this theme may be asked for PechaKucha style presentations.

The complete programs from the 2018 and 2019 conferences are available on the LEES website (https://sites.asee.org/lees/annual-conference). For each technical session we have also provided a brief summary and a list of possible topics for future papers and collaborations. We welcome submissions that address topics and questions other than those included on this website, but we hope the material posted there will be helpful both for those who are new to LEES and those seeking broader collaborations within LEES.

All paper submissions are publish-to-present. Papers submitted to technical sessions are peer reviewed through the LEES Division process, and those accepted will appear in ASEE Proceedings. The first step in proposing a paper is to submit an abstract to the ASEE paper management by **Monday**, **October 14**, **2019**. Abstracts for papers should be approximately 500 words long and will be peer reviewed. Once your abstract has been accepted, the first draft paper deadline is **Tuesday**, **February 3**, **2020**. Paper submissions may include research reports, classroom applications, or other frameworks. We encourage review papers that synthesize and identify trends in research of interest to the division. Papers published through LEES in the conference proceedings are typically 10-15 pages and include a substantial literature review.

In addition to technical papers, we also welcome proposals for partial or complete sessions. If you are proposing a paper as part of a partial or complete session (including but not limited to the themes listed above), please inform the Program Chair, Justin Hess, by email at jhess@purdue.edu and provide the names of all authors intended to make up this partial or complete session. All paper abstracts, including those proposed as parts of such planned sessions, will be reviewed on an individual basis.