

Liberal Education/Engineering & Society (LEES) Division Call for Papers and Proposals

The Liberal Education/Engineering & Society (LEES) Division invites abstracts for papers and posters, and proposals for full sessions, panel discussions, workshops, and non-traditional session formats for the [ASEE Annual Conference](#), June 22 - 25, 2025 in Montreal, Quebec, Canada. We especially welcome sessions that highlight local collaborators and engineering practice and engagement in and around Montreal and/or reimagine the traditional conference paper-session. **If you would like to propose a non-paper or poster-centered session of any kind, please email the LEES Program Chair, Kari Zacharias, at kari.zacharias@umanitoba.ca as early as possible.** We are excited to work with you on planning, proposing, and reviewing these sessions.

LEES is interested in the role of the humanities, arts, social sciences, and communication in engineering education, and in the role of engineering in broad and relevant liberal education. Engineering processes and products are value-laden; work in LEES calls attention to implicit and explicit values in engineering education. LEES welcomes proposals related to any of the diverse areas falling within the scope of our division, including but not limited to: critical analysis of social and ethical dimensions of technoscience; situating engineering within larger social, historical, political, and cultural contexts; course- and curricular-level integration of engineering and the humanities, arts, and social sciences; and the development, study, and transformation of engineering education programs.

LEES welcomes submissions on any topic pertaining to the broader division goals. For the 2025 conference, we especially encourage work that pertains to the specific themes below. We encourage prospective contributors to consider building collaborations across ASEE divisions that might support our scholarship and capacity building. Past LEES work has had strong overlaps with, among other divisions: Ethics; Equity, Culture & Social Justice in Education; and Technological and Engineering Literacy/Philosophy of Engineering.

1. **Engineering Education for Truth and Reconciliation**

We invite submissions that explore engineers' past and present connections with colonialism, as well as ways that engineering education can support Indigenous sovereignty and actions towards truth and reconciliation. Work in this area may analyze the role of engineering in (re)creating colonial relationships (Nieusma & Riley, 2010), examine engineers' engagement with Indigenous communities (Ketchum et al., 2023), or critically explore STEM education as a space for reconciliation, decolonization, or Indigenization (Liboiron, 2021; Valle, Slaton, & Riley 2022). We welcome contributions that address colonialism, decolonization, and reconciliation in a wide variety of local contexts, including but not limited to American and Canadian settler colonialism and the many Indigenous cultures of [Turtle Island](#) (North America).

2. Engineering and Conflict

Engineers have long played significant roles in global politics, war, and revolution, but the field of engineering education has shown reluctance to confront its own involvement: “to write of politics, activism, or past events is not to engage in any familiar way with engineering epistemics” (Slaton & Vakil, 2024). We invite contributions that contravene this norm by examining relationships between engineering and conflict, both in the literal sense of engineers’ involvement in war, protest, labor disputes, etc. (Nieusma & Blue, 2012; Riley & Lambrinidou, 2015; Wisnioski, 2012) and as an analytical category that can be applied to teaching and/or research in engineering education (Tonn & Hira, 2024). In the context of ongoing geopolitical conflicts, rights violations, and anti-DEI legislative efforts, how might engineering education prepare students for conversations, considerations, and choices that acknowledge and address conflict?

3. Engineering and Climate Change

We invite submissions that focus on engineering values and practices pertaining to energy transition, decarbonization, and sustainability broadly. While engineering has contributed to climate change, it has also hidden the evidence (Oreskes & Conway, 2011) and dodged or denied responsibility (Pawley, 2019). With states’ increased attention to justice in energy transition and environmental racism (Heffron, 2022; Sovacool, 2021), we ask, how might engineering education prepare students to participate in complicated, global, and local sociotechnical transitions for climate change mitigation?

4. **Sociotechnical Integration in Engineering Education:** LEES leads efforts to critique and dissolve the artificial boundaries between “social” and “technical” to show that engineering is always a sociotechnical endeavor. LEES work holds engineers accountable for understanding how to bridge the socio-technical “divide,” and minimizing discriminatory disciplinary chauvinism (Reddy et al., 2023; Bairaktarova & Pilotte, 2020; Smith & Smith, 2018; Carrigan & Bardini, 2021). This work may be done on a variety of scales, from the personal to the cross-institutional. We especially welcome submissions that recognize, analyze, and otherwise engage with a “generative tension” among LEES participants, a group that serves as a venue for engineering educators grounded in science and technology studies and/or engineering studies and also makes space for liberal arts education program building which includes promoting the importance of communication and professional skills, etc (Nieusma, 2015).

The first step for all submission formats is an abstract or proposal. Abstracts for papers and posters must be submitted via Nemo by **October 1, 2024. Note that this is one month earlier than past abstract submission deadlines!** Abstracts should be approximately 300-500 words long and will be peer reviewed.

We will also work to incorporate a wide variety of other formats into the peer review system, designate them as special sessions, or otherwise find ways to include this work in the conference. We plan to repeat the special session format on teaching case studies that LEES

hosted at the 2024 conference. Please stay tuned for more information about submissions to this session! If your proposal does not fit comfortably into the submission options available through Nemo, **please email LEES Program Chair Kari Zacharias (kari.zacharias@umanitoba.ca) to initiate the submission and review process.**

ASEE is once again adamant that they will not extend any deadlines this year because they are trying to adapt a standard, annual calendar. Information for Authors will be posted by ASEE regarding submission times and uploading instructions. All paper submissions are publish-to-present and will be peer reviewed by the LEES Division process after submission to ASEE's paper management system. Abstracts and papers are double-blind reviewed. It is the author's responsibility to ensure that the requirements for double-blind review are met. The abstract and subsequent drafts should NOT include authors' names or institutional affiliations nor should author names be in the file name or in document properties. It is not necessary to include references in the abstract. Additional information will be shared to the listserv for current members and the [LEES website](#) as the year progresses.

To share ideas for panels/workshops or any questions about possible papers, panels, co-sponsoring with other divisions or other special session concepts, or to express interest in serving as a peer reviewer or session moderator, please contact the program chair:

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References

- Bairaktarova, D., & Pilotte, M. K. (2020). Person or thing oriented: A comparative study of individual differences of first-year engineering students and practitioners. *Journal of Engineering Education*, 109(2), 230–242. <https://doi.org/10.1002/jee.20309>
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- Liboiron, M. (2021). *Pollution is Colonialism*. Duke University Press.
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- Nieusma, D. (2015). Conducting the instrumentalists: a framework for engineering liberal education. *Engineering Studies*, 7(2–3), 159–163. <https://doi.org/10.1080/19378629.2015.1085060>
- Oreskes, N., & Conway, E. M. (2011). *Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming*. Bloomsbury Publishing USA.
- Pawley, A., “Asking questions, we walk”: How should engineering education address equity, the climate crisis, and its own moral infrastructure? *Advances in Engineering Education*, Fall 2019.
- Reddy, E. A., & Kleine, M. S., & Parsons, M., & Nieusma, D. (2023, June), *Sociotechnical Integration: What Is It? Why Do We Need It? How Do We Do It?* Paper presented at 2023 ASEE Annual Conference & Exposition, Baltimore , Maryland. <https://peer.asee.org/44239>
- Riley, D. M., & Lambrinidou, Y. (2015, June), *Canons against Cannons? Social Justice and the Engineering Ethics Imaginary* Paper presented at 2015 ASEE Annual Conference & Exposition, Seattle, Washington. 10.18260/p.23661

Slaton, A. E., & Vakil, S. (2024, June), *Engineering Education in Times of War, Upheaval, and Revolution* Paper presented at 2024 ASEE Annual Conference & Exposition, Portland, Oregon. 10.18260/1-2--47280

Smith, J. M., & Smith, N. (2018). Engineering and the politics of commensuration in the mining and petroleum industries. *Engaging Science, Technology, and Society*, 4, 67–84.
<https://doi.org/10.17351/ests2018.211>

Sovacool, B. K. (2021). Who are the victims of low-carbon transitions? Towards a political ecology of climate change mitigation. *Energy Research & Social Science*, 73, 101916.

Tonn, J., & Hira, A. (2024, June), *Engineering as Conflict: A Framing for Liberal Engineering Education* Paper presented at 2024 ASEE Annual Conference & Exposition, Portland, Oregon. 10.18260/1-2--47271

Valle, J., & Slaton, A., & Riley, D. (2022, August), *A Third University is Possible? A Collaborative Inquiry within Engineering Education* Paper presented at 2022 ASEE Annual Conference & Exposition, Minneapolis, MN. 10.18260/1-2--41827

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