

Student Essay Competition

Exploring the Intersection between Engineering Design Education and Analysis

*What do **you** need to better learn engineering analysis?*

Provocative. Visionary. Aspirational. Innovative.

You love to design. You have taken both design and analysis-focused classes. As the ultimate stakeholder of design education, we look to you to imagine ...

How might engineering design be used to better teach engineering analysis?

Engineering design and analysis are both complementary elements of engineering practice. Engineering education often begins with a strong foundation in analysis, followed by a culminating design experience. Consider...

What if engineering design were integrated more widely throughout the curriculum? What if engineering design was taught before analysis? How would integrating design affect the rigor of an engineering degree? What types of projects could be used to teach engineering analysis more effectively and efficiently than problem sets?

Inspire us all to look forward to the future of engineering design education. Challenge our current assumptions. Consider the far-reaching and expansive or one dimension could be explored in great depth. From the lens of a student, how might engineering design be used to better teach engineering analysis?

Four winning student essay submissions will get to present their work as part of part of the ASEE DEED Postcard Poster Session. At the session, the winners will be honored, including the official awarding of \$500 (to offset part of the cost of attending ASEE) and a certificate to each winning submission.

Evaluation and Selection of Winners:

A panel of judges from the Design in Engineering Education Division will review applications and select two undergraduate and two graduate student winners. Criteria used in evaluating the submissions will assess the degree to which the submission is:

- **Aspirational** - it sets a high bar for what might be,
- **Innovative** - it breaks beyond traditional assumptions about EDE and engineering analysis,
- **Grounded** - it provides a strong basis and rationale for what might be, and
- **Well Communicated** - it paints a clear picture of what might be.

Winners will be informed no later than April 27, 2018.

Submissions:

- Maximum of two 8.5x11 pages of text and one page of images/drawings/figures as appropriate.
- On the first page:
 - Start with a title for your submission,
 - Include prominently a one sentence takeaway for your entire submission (i.e., if you only had one sentence to convey the future of engineering design education, what would that sentence be?).
- Submissions can be from individuals or pairs, but the award will be shared if the submission is from a pair of students. If submitting as a pair, both students should be undergraduate or both graduate (i.e., not one undergraduate and one graduate student)
- Submit a single PDF file to asee.deed.officers@gmail.com by 23:59:59 EDT on April 16, 2018.