The intent of this newsletter is to inform the DEED community about upcoming events and related news in DEED, ASEE, and the engineering design community. As always, these newsletters and even more awesome content are available 24 hours a day, 7 days a week, at locations all around the world on our DEED website: http://deed.asee.org/

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#### **TABLE OF CONTENTS: March 2017**

- 1) DEED Student Essay Contest -get some funds for students to attend ASEE 2017!
- 2) ABET definition of DESIGN is out for comment! Tell ABET what you think!
- 3) Olin College Summer Institute: Designing Student-Centered Learning Experiences
- 4) AccessEngineering Capacity Building Institute (CBI): Accessibility and Universal Design
- in Engineering Curriculum
- 5) Survey of Academic Women's Participation in Professional Organizations
- 6) Position Announcement: Colorado School of Mines teaching faculty position in mechanical engineering
- 7) Position Announcement: NSF Division of Undergraduate Education Program Officer rotators
- 8) Position Announcement: Arizona State University tenure track position in engineering education
- 9) Position Announcement: University Of Idaho tenure-track position in design
- 10) Submitting to the DEED Listserv

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1) DEED Student Essay Contest -get some funds for students to attend ASEE 2017!
We are pleased to be announcing the DEED Student Essay Contest: Imagining the Future of Engineering Design Education. The idea is to have undergraduate and graduate students - (as key stakeholders in the design education system!) - write short pieces about what engineering design education should look like in the future. Awards will help offset the cost of attending ASEE 2017 in Columbus. Get your students to make a

submission! The call for submissions follows:

DEED Student Essay Contest: Imagining the Future of Engineering Design Education. You love to design. You have taken design classes. As the ultimate stakeholder of design education, we look to you to imagine ...

What is the future engineering design education?

*Provocative. Visionary. Aspirational. Innovative.* Inspire us all to look forward to the future of design. Challenge our current assumptions. Consider the far-reaching and expansive or one dimension in great depth. From the lens of a student, what would learning about design be like in 2040?

Four winning student essay submissions (2 undergraduate, 2 graduate) 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.

#### Submissions are due April 7, 2017

Winners will be informed no later than May 1, 2017

Details are available here.

https://drive.google.com/file/d/0B3vwt4RMvHB8eTkxVmdJNDhBdEE/view?usp=sharing

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### 2) ABET definition of DESIGN is out for comment! Tell ABET what you think!

Read about the latest proposed changes, including a new way of defining design.

#### Proposed definition:

Engineering Design – Engineering design is the process of devising a system, component, or process to meet desired needs and specifications within constraints. It is an iterative, creative, decision-making process in which the basic sciences, mathematics, and engineering sciences are applied to convert resources into solutions. The process involves identifying opportunities, performing analysis and synthesis, generating multiple solutions, evaluating those solutions against requirements, considering risks, and making trade-offs to identify a high quality solution under the given circumstances. For illustrative purposes only, examples of possible constraints include accessibility, aesthetics, constructability, cost, ergonomics, functionality, interoperability, legal considerations, maintainability, manufacturability, policy, regulations, schedule, sustainability, or usability.

The place to give feedback directly to ABET is here.

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## 3) Olin College Summer Institute: Designing Student-Centered Learning Experiences

Are you looking to build new skills as a designer of student-centered learning experiences? Join teams of faculty, faculty developers, and administrators from across the U.S. and around the world at the 2017 Olin College Summer Institute. <a href="Designing Student-Centered Learning Experiences">Designing Student-Centered Learning Experiences</a> is a weeklong interactive workshop for teams of who are engaged in a curricular change effort at their own institution. Hands-on analysis and design exercises, case studies, and project consulting and coaching sessions will equip institute attendees with learner-centered mindsets and practice tools to create and launch new courses, programs and/or educational initiatives.

<u>Designing Student-Centered Learning Experiences</u> will be held June 5-9, 2017. The application may be found here. For more information, contact collaboratory@olin.edu

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# 4) AccessEngineering Capacity Building Institute (CBI): Accessibility and Universal Design in Engineering Curriculum

The CBI will be held April 20-21, 2017 in Seattle, WA and will bring together engineering faculty, engineering students, and students and professionals with disabilities.

We will focus on how to make engineering courses accessible to students with disabilities and how to train all engineers in principles of **inclusive design**. This year we will also work together to develop strategies and guidelines to integrate inclusive or universal design into **capstone and cornerstone design courses**.

We are excited that <u>Dan Formosa</u>, co-founder of <u>Smart Design</u> and a leader in applying universal design principles, will present a keynote address and workshop.

We'll work together to answer the question: what should every engineer know about inclusive design? Note that accessibility is on the new list of ABET criterion - let's make it a strong part of our future programs and curriculum!

Attendees will share their expertise and work together to create resources and action plans that can be implemented at attendee schools and beyond.

Travel, food, and conference materials will be covered by <u>AccessEngineering</u>. AccessEngineering is an NSF-funded project that works to increase the participation of people with disabilities in education and careers in engineering and improve engineering fields with their perspectives and expertise.

Faculty, graduate students with disabilities, and engineering instructors teaching capstones or project-based design courses are encouraged to apply. We are also seeking presentation proposals from folks who have implemented modifications in their courses and would like to share that process with the rest of the group.

We are particularly interested in reaching individuals who have not attended a previous CBI. It is also welcome for participants to come in pairs from a specific institution so that they have support on their campus to implement some of the interventions we will cover at the CBI. If you know others who would be interested in this topic, please share this email message with them.

Apply now at: <a href="https://catalyst.uw.edu/webq/survey/kayladb/322676">https://catalyst.uw.edu/webq/survey/kayladb/322676</a>

Email Kayla Brown at kayladb@uw.edu with questions.

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#### 5) Survey of Academic Women's Participation in Professional Organizations

The Society of Women Engineers (SWE) Women in Academia (WIA) Group invites you to participate in a research study about how and why women in academia participate in professional organizations. The findings from this study will be published in a manuscript for ASEE (and possibly WEPAN). One of the goals of SWE WIA is to present at other professional conferences about SWE and WIA. The survey will take about 10 to 15 minutes of your time and can be accessed via the link below. All responses are anonymous and confidential.

https://olin.gualtrics.com/SE/?SID=SV 9MFsZUFm1g8tZVr

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## 6) Position Announcement: Colorado School of Mines teaching faculty position in mechanical engineering

The Department of Mechanical Engineering (ME) at the Colorado School of Mines, in Golden, CO, is seeking a full-time Teaching Professor in the areas of engineering design, manufacturing processes, mechanics of materials and/or computer-aided engineering. We seek applicants that can help us advance design in our core mechanical engineering curriculum. The successful candidate will work with ME faculty to enhance the undergraduate curriculum and pedagogical methods to improve student learning. Teaching responsibilities may include introductory mechanical engineering, machine design, computer-aided engineering and/or mechanics of materials. The position will have opportunities to teach advanced undergraduate electives and introductory graduate courses as well. More details can be found at the following link: <a href="http://jobs.mines.edu/cw/en-us/job/492685/teaching-professor-mechanical-engineering">http://jobs.mines.edu/cw/en-us/job/492685/teaching-professor-mechanical-engineering</a>

Applications will be accepted through 3 April 2017. More information on Mines and the ME department can be found at <u>mines.edu</u> and <u>mechanical.mines.edu</u>. For more information on the position, please contact **Prof. and Department Head Greg Jackson** <u>gsjackso@mines.edu</u> or **Prof. Joel Bach** <u>jbach@mines.edu</u>, search chair.

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## 7) Position Announcement: NSF Division of Undergraduate Education Program Officer rotators

The National Science Foundation's Division of Undergraduate Education (DUE) has a call out for Program Officer rotators. This is in the form of a Dear Colleague Letter (DCL). More details can be found in the link below.

https://www.nsf.gov/pubs/2017/due17001/due17001.jsp?org=DUE

Inquiries in the disciplinary area of engineering can be directed to Olga Pierrakos (OLPIERRA@NSF.GOV).

#### 8) Position Announcement: Arizona State University tenure track position in engineering education

The Polytechnic School in the Ira A. Fulton Schools of Engineering at Arizona State University seeks applicants for an **open-rank tenure-track/tenured faculty position in engineering education**.

The Polytechnic School, one of six schools in the Ira A. Fulton Schools of Engineering, has a vibrant engineering education research community. We have a growing critical mass of engineering education researchers, and would like to expand our expertise by adding faculty to support our innovative approach to

undergraduate education as well as advance our newly established Ph.D. program in Engineering Education Systems and Design.

Specific areas of interest include, but are not limited to:

- Increasing the participation and retention of underrepresented groups
- Global/international context of engineering / engineering education
- The application of learner analytics/data mining to engineering education problems
- Entrepreneurship in engineering education

Candidates with cross-cutting research interests are particularly encouraged to apply. We seek applicants who will contribute to our academic programs, promote transdisciplinary teaching and research, and help the University to achieve its aspirations, including enabling student success, transforming society, valuing entrepreneurship, and conducting use-inspired research. Faculty members in the Fulton Schools of Engineering are expected to develop an internationally recognized and externally funded research program, adopt effective pedagogical practices in the development and delivery of graduate and undergraduate courses, advise both undergraduate and graduate student research and projects, and undertake service activities.

For more information and to apply, please see the full announcement at: <a href="https://engineering.asu.edu/hiring/engineering-education-11731/">https://engineering.asu.edu/hiring/engineering-education-11731/</a>

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## 9) Position Announcement: University Of Idaho tenure-track position in design

The Mechanical Engineering Department at the University of Idaho invites applications for a tenure-track faculty position at the rank of Assistant or Associate Professor with expertise and experience in design beginning in the fall of 2017. Applicants must have an earned PhD in mechanical engineering or a closely related field, preferably with an emphasis on product design, manufacturing, innovation, and/or design pedagogy. The successful candidate must have potential to develop a strongly funded program through collaboration with regional and national industries, and interdisciplinary efforts with departments within the College of Engineering, the College of Business, and/or the College of Art/Architecture. Vision and leadership among faculty/staff involved in a nationally acclaimed multi-disciplinary senior design program is also integral to this position. For more information about this position, please explore the listing at <a href="https://uidaho.peopleadmin.com/postings/15865">https://uidaho.peopleadmin.com/postings/15865</a> or contact Steve Beyerlein, chair of Mechanical Engineering (sbeyer@uidaho.edu).

#### 10) Submitting to the DEED Listserv

To submit an item to the InDEED newsletter, please prepare a short description (no more than 2 paragraphs) including any relevant URLs (in explicit form, not as hyperlinks), deadlines and contact information.

Putting the words "DEED newsletter" in the subject will help make sure your submission makes it in the email.

Email this information to Reid Bailey, DEED Division Chair - rrbailey@virginia.edu

The newsletter will be distributed around the 15th of each month. Newsletter submissions should be sent no later than the 10th of the month.

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Reid Bailey
DEED Chair 2016-2017