

The **CIVIL ENGINEERING (CE) DIVISION** seeks papers for presentation at the 2017 ASEE Annual Conference and Exposition to be held in Columbus, Ohio, June 25-28, 2017. Paper submission is a two-step process: (1) Abstract submission, review, and acceptance; followed by (2) Paper submission, review, and acceptance. The submission and review process is blind; do not include names of authors or institutions within the title or body of the Abstract. Abstracts are limited to 500 words and should provide a clear statement of the objectives of the work, its relevance to the civil engineering community, assessment methods used, and major findings. Authors of accepted Abstracts will be invited to prepare full papers for peer review.

*Integrating Tenure-Track, Non-Tenure-Track and Adjunct Faculty as Well as Graduate Student Teachers into a Cohesive Department*

This session will include topics such as:

- Faculty mentoring
- Professional development opportunities for non-tenure-track faculty
- Models for co-teaching and sharing teaching loads
- Teaching training models
- Using expertise and strengths of all teaching faculty

*Disruptive Topics in Civil Engineering*

This proposed panel session would address professional practice topics that may be the driving forces for the profession in the future. Possible topics include entrepreneurship, globalization, free access to data, ethics in a digital world, etc.

*Looking Forward: Teaching Native Speakers of Technology*

Today's students are fluent in technology and already use it extensively in their learning process. How can we, as faculty, embrace its functionality while maintaining effective pedagogy and academic rigor? Scholarly papers are welcome to include, but are limited to:

- Poll Everywhere
- Kahoot!
- Socrative
- Video instruction formats such as Doceri, Explain Everything, Camtasia, etc.
- Course management software
- Clickers
- Mobile devices
- Virtual labs or lessons
- Eportfolios
- Non-traditional assignments such as short videos, music videos, Wikipedia pages, games, etc.

*Engaging Exceptional Students*

Programs that engage high achieving students (e.g. honors) are becoming increasingly popular as a recruitment and retention tool. This session seeks papers on the need for, development of, and success of these programs.

*Thinking Globally, Acting Locally: The Role of Engineering Education towards Attaining UN Sustainable Development Goals*

Topics of interest include, but are not limited to, the following:

- Unique connections among the roles of engineers, engineering education, and the UN

### Sustainable Development Goals

- Innovative instructional strategies to enhance engineering student learning of concepts across all pillars of sustainability – people, planet, and prosperity
- Curricular and co-curricular models for integrating the UN Sustainable Development Goals into the undergraduate engineering student experience
- Methods for assessing effective teaching and learning related to the UN Sustainable Development Goals, including development and implementation of validated instruments
- Strategies for addressing diversity and creating inclusivity in courses and programs through student engagement with UN Sustainable Development Goals
- Papers addressing multidisciplinary (engineering and non-engineering) approaches to addressing UN Sustainable Development Goals in engineering curricula are especially encouraged.

### *Toward the Future Direction of the ASEE Civil Engineering Division*

The purpose of this session is to facilitate scholarly input and discussion regarding the future direction of the ASEE Civil Engineering Division. Specific session topics include:

- Assessment of the Goal Statements specified in the current CE Division By-Laws, and recommendations for updates that more appropriately reflect the division's current goals and aspirations
- Fragmentation in the civil engineering education community, reflected in the proliferation of education committees in professional societies and technical institutes associated with the civil engineering profession (e.g., ASCE institutes, AAEE, SEI, NCSEA)
- Proliferation of formally articulated but largely uncoordinated bodies of knowledge in technical areas related to civil engineering
- Recommendations regarding the potential for the ASEE Civil Engineering Division to facilitate enhanced coordination and collaboration with respect to these issues
- And other related topics

### *Growing/Training Effective Faculty*

This session focuses on developing faculty at all career stages at different sizes and types of institutions. Representative topics include:

- Mentoring of new faculty
- Reinvigorating senior faculty
- Effective teacher-scholar models

### *Challenging Courses and Content*

This session will capture creative and best practices for developing, disseminating, and assessing civil engineering courses and experiences that are typically challenging to teach and manage.

Potential focus areas include:

- Capstone design
- Introductory courses
- Laboratory courses
- Study abroad/away
- Internships and cooperative education
- Team-taught courses
- Sustainability-infused courses
- Courses integrated with humanities and social sciences

*Educational & Professional Issues of Strategic Importance to the Civil Engineering Profession – and ASCE.*

Significant changes ARE occurring in the professional practice of civil engineering and the education of future civil engineers. ASCE has been working proactively to address those educational and professional issues of greatest strategic importance to the future of the civil engineering profession. To this end, there are several groups of future-focused civil engineering educators and practitioners working to define and analyze the strategic issues – and prepare action plans to appropriately and proactively respond to changes. Most civil engineering professionals are not aware of the educational and professional issues being addressed by ASCE – and the scholarly investigations of these issues that are being pursued by ASCE volunteer groups.

The purpose of this session is to explore several of the key educational and professional issues of strategic importance to the civil engineering profession that are being addressed (or should be addressed) by ASCE. This might include, but is not limited to, the following areas:

- The “Raise the Bar” initiative - a Quinquennial Report (2012 - 2017)
- The roles and recognition of the Civil Engineering Technologist
- The Body of Knowledge of the Civil Engineering Technologist
- The accreditation of academic programs in the advanced specialty areas of civil engineering; e.g., structural engineering, geotechnical engineering, etc.
- The proposed changes to Criterion 3 and Criterion 5 of the EAC/ABET General Criteria
- A progress report on revising the Civil Engineering Body of Knowledge
- A business case for Raise the Bar based upon workforce structure/organization
- An assessment of the ExCEED Teaching Workshop and its impact on civil engineering education
- ASCE's educational initiatives related to sustainability
- The educational issues related to "A Vision for the Future of Structural Engineering and Structural Engineers: A Case for Change."
- ABET accreditation - neither necessary nor sufficient for ASCE strategic interests?
- Using national infrastructure needs assessments (aka ASCE's Report Card) to inspire the next generation of innovative engineers
- Other?

*Notable Topics in Civil Engineering Education*

This session will highlight well-written papers on a variety of topics related to civil engineering education, that may not otherwise fall within other defined technical sessions.

The **CE Division is a publish-to-present division.** At least one author for each paper is expected to register for, and present at, the Annual Conference. All papers are expected to demonstrate an appropriate level of originality and scholarship. Accepted papers will also be considered for appropriate award recognition within the Division.

Please forward this Call for Papers to all interested parties. Questions regarding the 2017 CE Division program may be directed to the Program Chair, Sean St.Clair, PE, PhD, at: [sean.stclair@oit.edu](mailto:sean.stclair@oit.edu) or 541.850.2497.