# **2021 ASEE Annual Conference & Exposition**

Long Beach, California | June 27-30, 2021

### Aerospace Division Call for Papers

**The Aerospace Division (AERO)** of ASEE invites full length and work-in-progress papers for the 128<sup>th</sup> Annual Conference and Exposition. Aerospace educators, engineers, and scientists in industry from across the world are invited to submit current papers on relevant topics in aeronautical/aerospace engineering and technology education.

Suggested topics include, but are not limited to:

- 1. *Engineering Epistemologies* (research on what constitutes engineering thinking and knowledge within social contexts now and in the future)
  - o Professional development of aerospace engineers
  - Integration of professional skills into an aerospace engineering course
  - Aerospace systems engineering
- 2. *Engineering Learning Mechanisms* (research on engineering learners' developing knowledge and competencies in context)
  - Aircraft and/or spacecraft design education
  - Capstone and/or student industry experiences
  - Hands-on experiences (which may include laboratory classes)
  - o Aerospace related educational activities conducted outside the classroom
  - $\circ$   $\:$  Integration of Unmanned Aerial Vehicles, CubeSats or Nanosats in the curriculum
- 3. *Engineering Learning Systems* (research on the instructional culture, institutional infrastructure, and epistemology of engineering educators)
  - $\circ$   $\;$  Effective and innovative teaching and projects in aerospace courses
- 4. Engineering Diversity, Equity and Inclusiveness (research on how diverse human talents contribute solutions to the social and global challenges and relevance of our profession)
  - o K-12 outreach
  - Student persistence in aerospace engineering
  - Women and under-represented groups in aerospace engineering (academia and industry)
- 5. *Engineering Assessment* (research on, and the development of, assessment methods, instruments, and metrics to inform engineering education practice and learning)
  - Aerospace engineering curriculum development or assessment
- 6. Any other topics of interest to the aerospace engineering community
  - Teaching strategies and lessons learned for effectively delivering courses and hands-on activities, or addressing any of the preceding topics, in remote/online settings

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#### Submission tips and guidelines

Abstracts, with approximately 500 words, must be submitted electronically through the ASEE paper submission system by the deadline of October 12, 2020. The abstracts should contain enough details on the topic of discussion, methodologies, preliminary results (if any) and expected outcomes to facilitate informed review of the abstract. Authors of each accepted abstract will have the opportunity to submit a full paper draft by the deadline of February 8, 2021. Abstracts and papers will be <u>double-blind</u> <u>peer-reviewed</u> and judged based on the level of innovation, technical merit, demonstrated outcomes, and relevance to advancing aeronautical and aerospace engineering and technology education as appropriate. Special sessions, such as panel discussions, are encouraged but should be discussed directly with the program chair prior to abstract submission. Please refer to the Author's Kit, available at the ASEE Annual Conference web site, for additional information.

Questions regarding the abstract or paper submission can be directed to the AERO Program Chair, Dr Michael Hatfield, University of Alaska Fairbanks, by email: <u>mchatfield@alaska.edu</u>. Further details on Paper Management, Conference, Travel, Program Schedule and Registration can be found at ASEE's 2021 Annual Conference and Exposition website: <u>https://www.asee.org/annual-conference/2021</u>

#### Notes:

- If the paper is a "Work-in-Progress", please include that in the title.
- Please remember to remove all identifying information (author names, agencies, universities, etc)

#### **Important Dates:**

- Abstract Submission Open September 8, 2020
- Abstract Submission Due October 12, 2020
- Draft Paper Due February 8, 2021
- Revised Paper Due March 22, 2021

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## Aerospace Division Call for Student Papers

Do you have a memorable experience with a national student competition and its educational impact?

Have you thought about the influence of handson activities in lecture dominated courses? Are you conducting research in aerospace engineering or technology education?

Have you tried innovative teaching practices as a graduate TA in lectures, labs, or recitations? Do you have something to say about other activities in aerospace engineering or technology with main focus on education?

If you answered <u>YES</u> to any of these questions, then the **Aerospace Division (AERO)** invites you to tell us about it in a student-authored paper in all areas related to aerospace engineering and technology education. Turn your thoughts and observations into reality! Help shape the future of how engineering or technology is perceived and taught!

#### **Student Paper Attributes**

- AUTHORS: Work is mainly conducted by undergraduate / graduate student(s) in collaboration with a faculty advisor. The final manuscript of each accepted paper will list a student as the lead author and faculty advisor as a co-author. Each student presenter must register for the annual conference.
- FOCUS: Paper has a significant educational component.
- AWARDS: Only the papers presented by the student authors / co-authors are eligible for student paper awards. Up to 3 student papers will be recognized by both cash awards and certificates.

#### **Review Process**

- An approximately 500-word abstract must be submitted electronically through the ASEE paper submission system by the deadline of October 12, 2020. Please write "Student Paper" on top and do not list the names and affiliations of the authors. If accepted, a full paper draft must be submitted by the deadline of February 8, 2021.
- Note: If the paper is a "Work-in-Progress", please include that in the title.

#### Important Dates:

- Abstract Submission Open September 8, 2020
- Abstract Submission Due October 12, 2020
- Draft Paper Due February 8, 2021
- Revised Paper Due March 22, 2021

More info: https://www.asee.org/annual-conference/2021

Contact AERO Program Chair: Dr Michael Hatfield, University of Alaska Fairbanks Email: mchatfield@alaska.edu