

SEFI2020 review criteria for full papers

Submitting your paper (confTool): <https://www.confTool.com/sefi2020>

Review criteria are consisting of general review criteria and submission-type specific review criteria.

Specific review criteria for research papers

This set of review criteria will be applied for all full papers, which state to be research paper. Reviewers are asked to state on a 5-step Likert scale how much they agree with the following statements (weight of each criterion):

1. The author(s) describe the rationale of the study (background / introduction). (10%)

Please use the following questions as guiding questions for your evaluation:

- Does the introduction include a purpose / problem statement / hypothesis?
- Is it clearly understandable what research question was being investigated?
- Is it clearly understandable why this question is important?
- Does the proposal build on existing scholarship in the field?
- Does the proposal identify theories and/or conceptual frameworks used?

2. The author(s) describe the methods & research design. The chosen methods are appropriate (data assessment and analysis). (17.5 %)

Please use the following questions as guiding questions for your evaluation:

- Does the proposal define the study population and the sampling?
- Are manipulations / interventions / innovations described clearly?
- Are the methods for data assessment described sufficiently, avoiding undefined terms and unnecessary jargon?
- Is it clearly described how the data were analyzed?
- Are the chosen methods appropriate for the research question?

3. The author(s) describe the data analysis and results appropriately. The results are well presented. (17.5 %)

Please use the following questions as guiding questions for your evaluation:

- Are the results summarized adequately, using quantitative terms?
- Is the descriptive analysis of the data appropriate?
- Is the statistical analysis of the data appropriate?
- Do the statistical tests used make sense with the data presented?
- Are the data sufficient and presented in a way that allows the reader to reach a conclusion?

4. The author(s) interpret and discuss the results and draw appropriate conclusions. (17.5 %)

Please use the following questions as guiding questions for your evaluation:

- Is it clearly stated what the results mean in relation to the initial problem statement or hypothesis?
- Are the results and their interpretation discussed in the context of existing scientific knowledge?
- Are possible limitations of the study described?
- Are lessons learned described?

5. The author(s) estimate the impact on engineering education (EE), recommend interventions to develop EE, and identify the significance for EE. (17.5 %)

Please use the following questions as guiding questions for your evaluation:

- Are specific actions within engineering education recommended, or reported as undertaken?
- Are the actions/recommendations/control measures practical, and derived directly from the results presented?
- Does the study provide clear evidence of its potential or actual impact on engineering education?
- Does the study, in both its topic and its results, have a clear application to improving engineering education, and is this application obvious to the reader, without the need for complex explanation or extrapolation?
- Does the proposal provide information or ideas that would be of interest to the SEFI community?

6. The author(s) present an original study and it reflects good practice in Engineering Education Research (EER). (10%)

Please use the following questions as guiding questions for your evaluation:

- Is the study sufficiently sound (including clarity and strength of results) to serve as a basis for taking action in engineering education?
- Do the data solve an immediate problem, or build on existing knowledge (rather than simply repeat what is already known)?
- Is the proposal of innovative nature within engineering education?
- Does the paper reflect good practice in Engineering Education Research?

Specific review criteria for concept papers and short papers

This set of review criteria will be applied for all full papers, which state to be concept or short paper. Reviewers are asked to state on a 5-step Likert scale how much they agree with the following statements (weight of each criterion):

1. The author(s) build on existing scholarship in the field. (9%)
2. The author(s) identify theories and/or conceptual frameworks used. (9%)
3. The author(s) provide appropriate context. (9%)
4. The author(s) identify the rationale for the work. (9%)
5. The author(s) clearly describe the scope of the work. (9%)
6. The author(s) explain the methodological approach. (9%)
7. The author(s) describe its findings in an appropriate way (e.g. qualitative and quantitative results, insights, lessons learnt). (9%)
8. The author(s) draw appropriate conclusions based on the findings. (9%)
9. The author(s) puts its findings into perspective. (9%)

10. The author(s) provide information or ideas that would be of interest to the SEFI community. (9%)

Specific review criteria for workshops

The submission and review process of workshops differ from full paper contributions. This is due to the nature of a workshop session, which lasts **40, 60 or 80 minutes**.

- Workshops proposals were submitted in the form of an **extended abstract (maximum 500 words)** until 16 March 2020.
- Authors of accepted abstracts can submit a revised version of **maximum 1000 words** until 15 April. The revised version is undergoing a double-blind peer review process, running in parallel to the review process for the full papers.
- At the conference, during the workshop sessions, authors and participants will discuss and reach some conclusions. It will be possible to include these valuable results in the conference proceedings by submitting a revised version in ConfTool (maximum words 1500) until **30 September 2020**. All accepted workshops are part of the conference proceedings.

The structure of a workshop shall address the following questions:

- ***what are session participants expected to learn?*** (motivation & learning outcomes)
- ***why is the session relevant?*** (background and rationale of the session)
- ***how are session participants activated?*** (engagement of and interaction with session participants in alignment with expected learning outcomes)
- ***how will results be summarized?*** (take home message for session participants)
- ***how is this work significant for Engineering Education?***

Reviewers of workshops shall in particular focus on how:

- ***How attractive the topic could be for the audience*** (how many participants could there be? Is the title conveying the topic of the workshop in a concise, sharp way?)
- ***How engaging the session is*** (authors shall explain how they plan to organize the session and what the participants are expected to do and learn).

General review criteria (independent of submission type)

The following review criteria will be used for all proposals independent of their submission type.

Overall clarity of the submission (10%)

- Are appropriate and simple terms used to describe the proposal? (2%)
- Is the use of the English language appropriate? (2%)
- Is the proposal coherent? (i.e. the rationale, foundation, approach to the work, findings and conclusions are all included) (2%)
- Is there a logical sequence and cohesiveness among all sections? (2%)
- Does the proposal follow the template guidelines? (2%)