

2024 WE Local Collegiate Competition Packet

For

WE Local Las Vegas, Baltimore, Wichita

For questions, contact SWE Awards at email: awards@swe.org or WELocalCollegiateCompetitionUS@swe.org or by Phone: (312) 596-5223.

Objective

The WE Local Collegiate Competition provides undergraduate and graduate students the opportunity to present their research to a broad technical audience in three styles: short form abstract submission, visual poster presentation, and Snap Session presentation. Participating in the competition allows students to learn and gain insight on their research, as well as receive live feedback and encouragement from others within the STEM community.

General Information

The Society of Women Engineers (SWE) is accepting online abstract submissions for the WE Local Collegiate Competition. Applicants can select one of the United States WE Local Conference locations. Each WE Local conference location will have two submission categories: Undergraduate and Graduate.

All poster abstracts must be submitted online and are limited to one submission per person, which is valid for all WE Local conferences. The top five finalists for each city and within each category (Undergraduate and Graduate) will be selected and notified via email.

Timeline:

September 1, 2023 - Application Opens November 1, 2023 - Application Closes November 30, 2023 - Applicants are notified of decisions December 7, 2023 - Finalist must accept terms through notification

Each finalist will receive a \$250 travel stipend to compete. Finalists will receive a complimentary Collegiate registration and recognition on Saturday afternoon.

STEP 1: Abstract Submission: Apply here.

Abstract Eligibility/Criteria

Revised 10/16/2023

- Must be a SWE member with a current paid membership.
- Select your academic level (undergraduate or graduate).

Abstract Application

Applications must be submitted online.

REQUIRED APPLICANT INFORMATION

- Name
- University/College
- Academic Level (undergraduate or graduate)
- Expected Date of Graduation
- Biography of the Applicant (maximum 200 words)
- SWE Membership Number
- Contact Information
 - o Address
 - o Phone
 - o Email
- Alternate Contact Information
 - o o Phone
 - o Email
- Please, select the WE Local conference you would like to be considered for take into consideration schedule, transportation costs, etc. (This does not guarantee you will be selected for that conference.)
 - o WE Local Las Vegas, Nevada | Feb 23-24, 2024
 - o WE Local Baltimore, Maryland | March 1-2, 2024
 - o WE Local Wichita, Kansas | March 15-16, 2024

REQUIRED ABSTRACT INFORMATION

- Title of Technical Research/Project
- Author(s) Name Acknowledge those who have participated significantly in the technical aspects of the research/project
- Abstract (maximum 250 words)

Abstract Guidelines

The abstract is a concise summary of the research or project being submitted for consideration for a poster presentation and a 10-minute live Snap Session (formerly lightning talk). Assume the reader is knowledgeable in the broad category of the topic, but not necessarily an expert in the specialty of the project. Abstracts are prepared to serve either or both of the following purposes:

- Enable a reader to decide whether this topic is of enough interest to warrant taking the time to read the entire paper or to go hear the presentation.
- Acquaint a reader with recent research/project results without the need to read the entire article or hear the paper.

The abstract is a maximum of 250 words and submitted only via the online application.

Abstract Selection Criteria

| REQUIREMENTS | POINTS AVAILABLE | POINTS EARNED |
|---|---------------------|------------------|
| Title : Clear and understandable, summarizes abstract, interesting. | 10 | |
| Context: Background on research or project area, gives context to the work and how it fits into the larger field. Limits of the scope of the investigation/project. Answers "Why was this work undertaken?" | 15 | |
| Objectives: Hypothesis, intent of work, or problem statement. Answers "What is this work trying to show? What is being proven or implemented?" | 20 | |
| Methods & Results: Concise summary of experiments or project accomplishments. Summarizes key data. Answers "How was the work done? What happened?" | 15 | |
| Conclusions: Interpretation of outcomes. Gives context to how the work fits into the larger field. | 20 | |
| Overall: Submission is structured as an abstract. Clear communication style, without typos or grammatical errors. Work is compelling, high quality, and rigorous. | 20 | |
| TOTAL | 100 | |

Helpful Hints for Preparing your Abstract

Tips for Content

- Briefly explain the context of your work. What is the objective? What are you aiming to demonstrate or prove? Why is your work important or significant for your field?
- If you need to reference a type of test or procedure, try to restrict it to identification of method or type of process employed. Stay away from excessive details that would take away from clarity.

• State results, conclusions, or findings in a clear, concise fashion.

Tips for Style

- Assume that the reader has a good general technical vocabulary but try to avoid use of highly specialized words or abbreviations. Remember that they may not be an expert in the specialty of your work or even your field of engineering or science.
- Use past tense and third person in describing completed research, present tense when stating existing facts and what is included in the larger work.
- Proofread your work. Incorrect spelling and poor sentence structure will discourage interest in your project.
- Ask an advisor, mentor, or colleague to review your abstract. Provide the scoring rubric so they can give feedback on how well they understand your work. Reach out to members of your SWE section, GradSWE, or the Women in Academia group for review or support.

STEP 2: On Site Competition

Poster and Snap Session Eligibility/Criteria

If selected as a finalist, applicants will compete onsite at one of the following WE Local conferences:

- o WE Local Las Vegas, Nevada | Feb 23-24, 2024
- o WE Local Baltimore, Maryland | March 1-2, 2024
- o WE Local Wichita, Kansas | March 15-16, 2024

Poster Presentation

- The poster should be prepared in a format that is easy to interpret in the absence of the author.
- Except for fasteners, all poster materials must be flush with the board, not protruding more than 1/8 inch (3.2 mm).
- There may be no mechanical or electrical devices on the board.
- All material must be accessible without having to lift or turn pages.
- There can be no materials placed in front of, above, below, or to the side of the poster.
- The poster must be able to be hung on a bulletin board and easily rolled for transportation purposes.
- The poster must be no larger than 36 inches (91.4 cm) by 24 inches (60.96 cm) unrolled.
- The poster must contain the title, author's name(s), and institution. We recommended that the entrant use a printed 36-inch roll paper. Programs that may be helpful to generate the poster include Adobe Illustrator, Power Point, etc.

Poster Guidelines

The WE Local Collegiate Poster Competition emphasizes the ability to deliver visual presentations. Subject matter must be original research or work with an application in engineering. This could be laboratory work, computer simulation, a modeling project, or something similar. Regardless of the type of research/project, it's important that it represents new work, is unique to you, and is not a review article in which you summarize the work of others.

You may use a current Research/project you are working on alone, an independent study project, or a project you are working on with others. Research and projects completed at university or during co-ops/internships are also eligible. Material must be able to be viewed by all conference attendees and should not contain any company/institution proprietary information, unless it has been cleared for public viewing by appropriate parties.

Poster Judging Criteria

Total Points — 100

| REQUIREMENTS | POINTS AVAILABLE | POINTS EARNED |
|---|---------------------|------------------|
| Visual Presentation | | |
| Organization: Easy-to-follow flow of poster content to include – Introduction, Objectives, Approach, Results, Conclusion | 10 | |
| Creativity: Use of color, variety of materials, eye-catching | 5 | |
| Clarity: Not overcrowded, legible lettering, contrast between components and background, grammar, spelling | 10 | |
| Technical Content | | |
| Subject Matter: Technical information clearly communicates to a professional audience; understandable to a variety of backgrounds | 25 | |
| Contribution & Applicability: Research clearly indicates a contribution to the scientific community and the world as a whole: environmental, social, safety, health, state-of-the-art, industrial, etc. | 10 | |

| Supporting Figures: Graphs, tables, equations, pictures, schematics, etc. are clearly explained, including significance to the results, and appropriately referenced in the technical content. | 15 | |
|--|-----|--|
| Results & Conclusions: Results clearly give status of the research; Conclusion is definitive, follows from results | 15 | |
| Completeness: Follows thought to a logical conclusion; Concepts as fully explained as possible | 10 | |
| TOTAL | 100 | |

Helpful Hints for preparing your Poster:

- 1. Title, name of author(s), and school are easily recognized and legible by the audience.
- 2. Do not use more than two font types. Use bold, italic, and font size to set type differently.
- 3. Stick to one color scheme.
- 4. Stay consistent with spaces between text, figures, and headings. Spacing in the poster should not be cramped.
- 5. Words should be large enough to read from several feet away.
- 6. Figures and graphs must have labels.
- 7. Ensure that the Introduction, Objectives, Approach, Results, and Conclusion are clear.
- 8. Ask a colleague to look at your poster to make sure it is easily understood without the presence of the author.

Use the Judging Rubric to confirm that all parts of your poster are present. Judging criteria is based on the content and presentation of the poster. The final competition score will be an average of the Poster and Snap Session scores.

Snap Session Presentation

Snap Session presentations should include a PowerPoint presentation (placed on a USB Flash Drive). Internet will not be available onsite. Presentations should be done in English.

Snap Session Guidelines

Snap Sessions are short presentations lasting only 10-minutes, followed by 3 minutes for question and answers. Times for the presentation will be sent at the time of notification of finalists. <u>Time limits will be adhered to strictly.</u>

Snap Session Judging Basis

Revised 10/16/2023

| REQUIREMENTS | POINTS AVAILABLE | POINTS EARNED |
|--|---------------------|------------------|
| Visual Presentation | | |
| Organization: Easy-to-follow flow of talk content to include - Introduction, Objectives, Approach, Results, Conclusion | 10 | |
| Creativity: Use of color, visualization of data, eye-catching | 5 | |
| Clarity of content: Not overcrowded, legible lettering, contrast between components and background, grammar, spelling | 10 | |
| Speaking Style | | |
| Volume, pace, enthusiasm | 5 | |
| Communication of Content: Ability to communicate complex concepts to a diverse set of backgrounds, ability to answer audience questions clearly and succinctly | 20 | |
| Technical Content | | |
| Contribution & Applicability: Speaker clearly communicates how research contributes to the scientific community and the world -Environmental, social, safety, health, state-of-the-art, industrial, etc. | 10 | |
| Supporting Figures: Graphs, tables, equations, pictures, schematics, etc. are clearly explained, including | 15 | |

| significance to the results, and appropriate referenced in the technical content | | |
|---|-----|--|
| Results & Conclusions: Speaker clearly gives status of the research; Conclusions are definitive, follows from results | 15 | |
| Completeness: Speaker follows thought to a logical conclusion; Concepts as fully explained as possible | 10 | |
| TOTAL | 100 | |

Helpful Hints for preparing your Snap Session:

- 1. Title, name of author(s), and school should be easily recognized by the audience.
- 2. Use a simple slide format with a consistent color scheme and formatting.
- 3. Words should be large enough to read from several feet away.
- 4. Figures and graphs should be labeled, and all details should be visible from several feet away.
- 5. Present your talk to a colleague to make sure that your research and order is presented clearly.
- 6. Define all acronyms and field-specific jargon.
- 7. Ensure that the Introduction, Objectives, Approach, Results, and Conclusion are clear.
- 8. Practice speaking slowly, clearly, and with confidence, while adhering to the 10-minute time limit.
- 9. Use the Snap Session Judging Rubric to confirm that all parts of your presentation are prepared. Judging criteria is based on the content and presentation of the Snap Session. The final competition score will be an average of the Poster and Snap Session scores.