



2020 WE Local Collegiate Competition Packet

SWE Contact Information

E-mail: welocal@swe.org

Phone: (312) 596-5223

Objective

The objective of the WE Local Collegiate Competition is to provide 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 face-to-face discussion. This allows for students to learn and gain insight on their research, and to receive live feedback and encouragement from others within the STEM field.

General Information

The Society of Women Engineers (SWE) is now accepting online abstract submissions for the WE Local Collegiate Competition. Each WE Local conference location will have two submission categories: Undergraduate Collegiate and Graduate Collegiate. All applicants are required to submit an online abstract for judging.

All submissions must be submitted online and are limited to one submission per person, which is valid for all WE Local conferences. The top five finalists within each category (Undergraduate Collegiate and Graduate Collegiate) and for each city will be selected and notified by e-mail in December.

Each finalist will receive a \$250 travel stipend to compete in the technical poster presentation and lightning talk competition to the conference site for which they were selected. Finalists will receive a complimentary Collegiate premier registration, as well as recognition and awards during the WE Achieve awards ceremony on Saturday evening where three finalists from each category will be awarded first, second and third place overall for the poster presentation and lightning talk.

Questions about the WE Local Collegiate Competition can be directed to welocal@swe.org.

STEP 1: Abstract Submission

REMEMBER SELECTION OF FINALISTS FOR POSTERS IS BASED ON YOUR ABSTRACT SUBMISSION!

Abstract Eligibility/Criteria

- SWE Undergraduate or Graduate Collegiate Member are eligible to enter
- You must enter the category for which you are currently enrolled as a member in the Society, either a Collegiate Member or a Graduate Collegiate Member

Abstract Application

Applications must be submitted online.

REQUIRED APPLICANT INFORMATION

- Name
- University/College
- Member College Level – Collegiate Member or Graduate Collegiate Member
- Expected Date of Graduation:
 - Undergraduate
 - Graduate
- Biography of the Applicant (limited to 200 words)
- SWE Membership Number
- Winter Contact Information (Winter Break)
 - Address
 - Phone
 - Email
- School Contact Information
 - Address
 - Phone
 - Email
- Please, select the WE Local conference you would like to be considered for – take into consideration schedule, transportation costs, etc.
 - WE Local San Diego (January 31-February 1, 2020)
 - WE Local Salt Lake City (February 7-8, 2020)
 - WE Local Raleigh (February 21-22, 2020)
 - WE Local Buffalo (March 27-28, 2020)
 - WE Local Des Moines (April 17-18, 2020)
- Please, choose which conference is your #1 choice. (This does not guarantee you will be selected for that conference.)
 - WE Local San Diego (January 31-February 1, 2020)
 - WE Local Salt Lake City (February 7-8, 2020)
 - WE Local Raleigh (February 21-22, 2020)
 - WE Local Buffalo (March 27-28, 2020)
 - WE Local Des Moines (April 17-18, 2020)

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 – limited to 500 words

Abstract Guidelines

An abstract is a concise summary about the research or project being submitted for consideration for a poster presentation and 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 should be no more than 500 words and submitted via the online submission form using Smarter Select.

Abstract Selection Criteria

Total Points — 100

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 how it fits in 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 in 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.
- Have an advisor, mentor, or colleague 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: Poster Competition

Poster Eligibility/Criteria

If selected as a finalist (based on online abstract submission), applicants will compete onsite at one of the following WE Local conferences:

- WE Local San Diego | January 31-February 1, 2020
- WE Local Salt Lake City | February 7-8, 2020
- WE Local Raleigh | February 21-22, 2020
- WE Local Buffalo | March 27-28, 2020
- WE Local Des Moines | April 17-18, 2020

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 the it represents new work, is unique to you and is not a review article in which you summarize the work of others. You can 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 Basis

Total Points — 100

REQUIREMENTS	POINTS AVAILABLE	POINTS EARNED
<i>Visual Presentation</i>		
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	
<i>Technical Content</i>		
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 importance to the results, and appropriately referenced in the technical content.	15	
Results & Conclusions: Results clearly gives 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 should be easily recognized and readable by reader.
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. Have a colleague 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 Lightning Talk scores.

STEP 3: Lightning Talk

Lightning Talk Eligibility/Criteria

In addition to the onsite Poster visual presentation, finalists will present their research to an audience of up to 75 attendees. Finalists will compete onsite at one of the following WE Local conferences:

- WE Local San Diego | January 31-February 1, 2020
- WE Local Salt Lake City | February 7-8, 2020
- WE Local Raleigh | February 21-22, 2020
- WE Local Buffalo | March 27-28, 2020
- WE Local Des Moines | April 17-18, 2020

Lightning Talk Presentation

Lightning Talk presentations should include a PowerPoint presentation (please place on a USB Flash Drive, internet is not reliable). Note: Internet will not be available onsite so please prepare. Presentations should be done in English.

Lightning Talk Guidelines

Lightning talks are short presentations lasting only 10-minutes followed by 5 minutes for question and answers. Poster finalists will present with two other finalists within one hour. Times for the presentation will be sent at the time of notification of finalists. Time limits will be strictly adhered to.

Lightning Talk Judging Basis

Total Points — 100

REQUIREMENTS	POINTS AVAILABLE	POINTS EARNED
<i>Visual Presentation</i>		
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	
<i>Speaking Style</i>		
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	
<i>Technical Content</i>		
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 importance to the results, and appropriate referenced in the technical content	15	
Results & Conclusions: Speaker clearly gives status of the research; Conclusion is 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 Lightning Talk 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 able to be seen 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 talking slowly, clearly, and with confidence, while adhering to the 10-minute time limit.

Use the Lightning Talk Judging Rubric to confirm that all parts of your presentation are prepared. Judging criteria is based on the content and presentation of the Lightning Talk. The final competition score will **be** an average of the Poster and Lightning Talk scores.