

# Region 5 Student Paper Competition Rules

## Quick Guide

Section A: General (for all)

Section B, C, D, and E: Conduct of Contest (for administrators)

Sections F and G: Written and Oral Presentation Rules (for students and judges)

Sections H, I, and J: Judging Guidelines and Criteria (for judges)

## A. General

**Purpose:** To improve communication skills of undergraduate IEEE student members.

**Levels:** Competitions occur at the Local (LC), Area (AC), and Region (RC) levels (in that order). Local contests may be Branch or Section contests or any combination thereof. Oral presentations are required at LC & RC levels. Winners may revise their papers before submission to the next level. LC are optional and may be conducted as determined by the Section.

**Eligibility:** The LC entrant must be an undergraduate and an IEEE student member (or pending). Graduation before the AC or RC does not affect eligibility. Entrants may collaborate with up to two other undergraduate entrants.

**Subject:** Papers must cover technical, engineering, management, or societal aspects of subjects relevant to the IEEE. A paper must address a research of the literature, entrant's original work, or work performed by a group to which the entrant belongs.

## B. Regional Contest

**Venue:** The RC is part of the annual Region 5 Conference.

**Entry:** Only the top three winners of each AC may enter.

**Date:** Electronic submission of the written paper in PDF form to the RC Chair by the deadline date.

**Suppression:** The Contest Chair may suppress contestant identification to prevent actual or inferred unfairness.

**Prizes:** Region 5 and the Institute Life Member Fund provide \$1500 prize money, allocated thusly (per paper, not per entrant): First Place, \$800; Second Place \$500, Third Place \$200; plus, certificates (entrants) and inscribed plaques (entrants' schools). The Contest Chair may offer additional prizes.

**Expenses.** The Regional Student Activities Committee (RSAC) reimburses authorized travel expenses after receiving an entrant's completed IEEE Regional Expense Form A-95 by the deadline usually 1 week following the competition date. Late requests will not be reimbursed.

Papers may be submitted for other publications such as the R5 Conference, the *IEEE Potentials* magazine, etc.

## C. Area Contest

**Date:** Electronic submission of the written paper in PDF form to the AC Chair by the required competition paper submission date.

**Entry:** If the LC is among 3 or more papers, the top 2 winners enter the AC. If no LC is conducted, the AC is open to all.

**Prizes:** First, second, and third place winners receive \$125, \$100, and \$75, respectively—plus certificates and a reimbursed trip to compete in the RC. The AC Chair may award additional prizes.

### Area locations:

- North Area: KS, MO, OK, and Southern IL.
- West Area: CO, South WY, Southwest ND, West NB, West TX, and Southeast NM.
- East Area: AR, LA and East TX.
- South Area: TX (except East & West TX).

## D. Local Competition

**Venue:** The LC Chair selects the place prior to the AC February deadline.

**Prizes:** The local unit determines and funds its LC prizes and expenses.

## E. Competition Chairs

### 1. Appointments:

- Local Student Activities Chair appoints the LC Chair.
- Area Chair serves as or appoints the AC Chair.
- Region Meeting Chair serves as or appoints the RC Chair.

### 2. Some specific duties:

- Post due dates and contact information via e-mail and website(s) in a timely manner.
- Solicit, select, and oversee judges (see section H).
- Explains rules, judging procedure, and forms to the judges (see section H).
- Manage document submission process.
- Manage presentation or delivery of prizes, plaques, and certificates.
- Notifies the contestants of the results by the required deadline and the winners of the procedure for the next-level competition.
- Promptly notify the entity Chair (e.g., AC Chair notifies the Area Chair) of contest outcome (RSAC notifies the IEEE Student Activities Chair).

### 3. Other duties

#### **Written Judging:** *The Competition Chair*

- Manages communication with the judges so that all questions, disqualification votes, etc. are handled through the contest chair.
- Enforces the rules, e.g. paper format.

### ***Oral Presentation: The Competition Chair***

- Ensures the following are present: computer, digital projector, and screen, pointer, blackboard or equivalent. Podium is optional.
- Briefly explains the rules at start of contest.
- Introduces speakers before their respective presentations, unless identities are suppressed.
- Fairly enforces the rules.
- Allow judges up to 3 minutes after a presentation to complete their assessments.
- Uses timing system that provides:
  - Signal to begin the presentation.
  - Warning signal at 10 minutes.
  - Stop signal at 12 minutes.
  - Stop signal at 15 minutes, terminating Q&A.

### **F. Written Presentation Rules**

**Penalties:** Submissions not in PDF format will be disqualified. Submissions without a title page and a Originality/Acknowledgements page will be disqualified. Submissions violating the page limits will have a 15 pt. per page penalty to the score. Submissions without correct formatting or without required sections will be given a 15 pt. penalty per failure to the score.

**General format:** Papers must be submitted as Portable Document Format (PDF), single-spaced, single column, and formatted for letter-sized paper. All entries must have the title page and a second page giving Originality and Acknowledgements. The main paper text (includes Abstract, Introduction, Body, Conclusions, References, Tables, and Figures, this is about 7 pages) must be 2,500 to 3,000 words — over/under results in penalty. The optional Appendices must not exceed 5 pages. You may use the standard guidelines and template for IEEE publications as described for this technical conference or the more general IEEE Information for Authors for the guidelines not covered by the rules in this section.

**Style:** While third person is preferable, first person is acceptable if it enhances clarity or readability (e.g., “our team” or “I” vs. “the author”). Active voice and a tight writing style enhance paper quality.

**Structure:** Include the following, in the order listed (appendices are optional).

**Title page (Required First page):** The title is concise, but conveys the subject. List on separate lines: title, author name(s), principal author’s membership number (“IEEE Student Member No. xxxxxx” or “IEEE Student Membership pending”), school name, and month/year of contest.

**Originality Statement and Acknowledgments Page** (Two Separate Sections Required on the Second page): Briefly explain the originality of the paper and project. Briefly list specific contributions of each author and of supportive parties.

**Table of Contents (Optional):** Use formal format, with page numbers.

**Abstract (Separate Section Required):** In 100 words or less, briefly state the problem or objective and summarize the results or conclusions, touching upon details only if they are particularly significant.

**Introduction (Separate Section Required):** Explain the significance of the paper; summarize what the paper will deliver. One-way: briefly explain the problem and then how the paper will address it.

**Body:** Provide the subject arguments in logical sequence, with supporting data.

**Conclusions (Separate Section Required):** Summarize the major points of the paper.

**References (Separate Section Required):** List the literature used to develop the paper. Number references consecutively in order of first citation and follow this citation form:

*Periodical:* R.N. Hall, "Power Rectifiers and Transformers," Proc. IRE, Vol. 40 pp, 1512-1518, November 1952.

*Book:* W.A. Edison, Vacuum Tube Oscillators, John Wiley and Sons, Inc., New York, New York, pp. 170-171, 1948.

*Article:* B. Lawrence, B.H. Well, and M.H. Graham, "Making on line search available in an industrial research environment," Journal of the American Society for Information Science, pp. 364-369, Nov.-Dec. 1974.

*Electronic Sources:* In addition to author and title data, include the URL and date accessed.

**Appendices (Optional):** In these, include material that is helpful (but not essential) for supporting the arguments in the body. Each appendix item must have a reference in the body of the paper. Number items consecutively, continuing the sequence used in the body (e.g., if Table 3 were last in the text, Table 4 would be first in the appendices). Judges may penalize a paper with essential information included in an appendix rather than the main paper.

### **Graphics:**

These supplement, not duplicate, the text (or each other). Graphics enhance the presentation with supporting data using curves, charts, or tables.

### *Layout options:*

Place graphics in the text or place at the end.

Provide explanatory caption for each graphic.

Letters, explained in captions, may identify portions of graphics.

When feasible, combine multiple curves in one graphic, and identify appropriately.

Tables may be images (or files) embedded in the document. Do not build with spaces or tabs (due to display disparities).

Number equations consecutively, from order of first appearance.

Number tables consecutively (e.g., Table 1, Table 2).

Number figures consecutively (e.g., Figure 1, Figure 2).

Use MS-Equation editor or embedded images for equations or symbols.

Use standard symbols and abbreviations. (Ref. "Graphic Symbols for Electrical and Electronic Diagrams," IEEE STD 315 and/or IEEE Information for Authors).

Upon first use of an abbreviation, use the full wording then follow with the abbreviation in parentheses (AIP).

**Electronic Submission deadlines:** The Region Competition Chair sets the deadlines. Late entries will be disqualified. Tip: submit 3 days early, with receipt request.

## **G. Oral Presentation Rules**

**Penalties:** If a presenter continues speaking 15 seconds beyond the 15-minute "Stop" signal, all judges will give a 15 pt. penalty to the presenter's score (the Paper Competition Chair will determine if the presenter has exceeded this limit and report the penalty to the judges).

**General format:** Determine the order of presentations by lot. Each presenter has 15 minutes to present, including the 3-minute Question & Answer (Q&A). In the case of co-authors, only one may orally present. During Q&A, the presenter will recognize questioners and answer questions from judges. The Competition Chair may veto inappropriate questions. In interest of fairness, judges will ask questions in the same category to all presenters with minimal deviation.

**Questions** – only judges may ask questions.

**Visual aids** – *using impermissible aids will result in disqualification of the contestant.*

**Permissible:** Slides using software packages like PowerPoint or Adobe to be shown using a projector and a computer.

**Impermissible:** Demonstrations, hardware displays, films, sound recordings or handouts.

## **H. Guidelines and Criteria for Judges and Judging**

**Judges:** The Competition Chair must select 3 to 5 judges for each portion (written, oral). These need not be the same judges for each portion. Preference is for judges with expertise in written and oral communication. The Competition Chair must make reasonable effort to obtain a judge from outside the IEEE; someone with a degree or career in English or journalism (e.g., editor, English teacher, technical writer).

**Judging Criteria:** The criteria are on the official score sheets. Note: 60 percent of the criteria relate to communication skills, not technical skills.

**Winner selection:** Based on their scoring, each judge will rank the paper or presentation and award 5 points to first, 4 points to second, 3 points to third, 2 points to fourth, and 1 point to fifth. The judges' ranking points awarded will be tallied and the winners determined by these tallies. Judges vote to break a tie. Note that papers and presentations will be ranked separately.

**Disqualifications:** Only the Contest Chair, the judges, or a Branch Counselor (or equivalent) may report a disqualification issue (for only explicit reasons given in the rules). A majority vote of the judges will decide if a disqualification is warranted and the Competition Chair will break any tie vote on disqualification among the judges.

**Judge Guidelines:** Score each criterion on a 1 to 10 scale. Scores of 2-4 weak, 5-7 normal, and 8-9 superior. Scores of 1 or 10 indicate extremes so a solid paper will get a 6.

The subject matter criteria emphasize technical grasp of the subject. At oral presentations, judges should ask probing questions to determine the presenter's role in the project. Judges should add comments and constructive criticisms to score sheets to help contestants improve communication skills. Presenters should be shown or given the judges scoring sheets.

## **I. Disputed Decisions**

Branch Counselor (or equivalent) may dispute contest results, for technical errors only (e.g., score sheet arithmetic or a time limit breach not reflected in scores). Absent any technical errors, the decision of the judges is final.

Branch Counselor (or equivalent) may appeal (the judges' response to a disputed decision) to the Competition Chair. The decision of the Competition Chair is final.

## **J. Judging Criteria**

Score each criterion on a 1 to 10 scale. Scores of 2-4 weak, 5-7 normal, and 8-9 superior. Scores of 1 or 10 indicate extremes so a solid paper will get a 6.

### **Written Presentation Portion**

Form (30% of overall score)

Concise, informative abstract

Adequacy of introduction

Logical development and analytical treatment in the body (delivers on the promise of the introduction)

Adequacy of conclusion

Compliance with format rules

Clarity and directness

Grammar, spelling, and style

Subject Matter (20% of overall score)

Originality of ideas, procedures, processes, designs, results, or conclusions

(For paper based on literature: originality of analysis and interpretation)

Quality, level of content, appropriateness, interest, and importance

Factual and technical accuracy

### **Oral Presentation Portion**

Form (35% of overall score)

Adequacy of introduction and conclusions

Logical development of major points

Flow and balance of subject material

Poise, eye contact, and manners

Grammar, fluency and word choices

Clarity and directness (Tone, pace, enunciation, volume and delivery)

Use of graphic aids

Subject Matter (15% of overall score)

Technical and factual accuracy, grasp of the subject.

Use of examples, metaphors, and analogies

Answers to questions

*Success tip: For your slides (e.g., done in PowerPoint), limit your text to only a few words per line and no more than 6 bulleted items per page. Use graphics liberally. For best results, add a photo that ties the project to a larger social or economic theme.*