



TECHNOVANZA

and



Present

PURPOSE OF JUDGING

TPP's goal is to provide young people with a high quality educational experience—whether or not they win a prize. It is critical that your interactions with the students be fair, helpful, and positive. Your spoken and written comments are fundamental to the learning process. Together we succeed or fail based on the quality of the learning experience.

YOUR PROCESS

Follow your TPP coordinator's instructions for pre-contest evaluation procedure.

Quick Guide

Section E: General (for all)

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

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

E. General

Purpose: To improve communication skills of engineering students.

Eligibility: The TPP entrants may collaborate with up to three other undergraduate entrants.

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

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.

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), 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 states the problem or objective and summarizes 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 unessential) for supporting the arguments in the body. Each appendix item must have a reference in the body. 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 of supporting data with 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).

G. Oral Presentation Rules

Penalties: If a presenter continues speaking 15 seconds beyond the 10-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 12 minutes to present, including the 2-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.

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 hand-outs.

H. Guidelines and Criteria for Judges and Judging

Judges: The Competition Chair will select 3 to 5 judges. Preference is for judges with expertise in written and oral communication.

Judging Criteria: The criteria are on the official score sheets. Note: 70 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. 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 (35% 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 (15% 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.