

ACSEF 2027 Judging Criteria

Alameda County Science and Engineering Fair 2027

Science and engineering projects are judged on different rubrics, each with five sections and a suggested point value for each section (100 points in total). Each section lists the key items to consider both before and after the interview.

Students are encouraged to design their posters in a clear and informative manner to allow pre-interview evaluation and to enable the interview to become an in-depth discussion. Judges should examine the student notebook and, if present, any special forms such as Form 1C (Regulated Research Institution/Industrial Setting) and Form 7 (Continuation of Projects). Considerable emphasis is placed on two areas: **Creativity & Potential Impact** and **Presentation**, especially the Interview.

Creativity & Potential Impact

A creative project demonstrates imagination and inventiveness. Such projects often offer different perspectives that open up new possibilities or new alternatives. Similarly, a project's impact or potential impact on the world can be a key element to consider. If not clearly demonstrated or tested, does the student recognize and envision the potential impact? Judges should place emphasis on research outcomes and analysis in evaluating creativity and potential impact.

Presentation / Interview

The interview provides the opportunity to interact with the finalists and evaluate their understanding of the project's basic science, interpretation and limitations of the results and conclusions.

Notes for Judges

- If the project was done at a research or industrial facility, determine the degree of independence of the finalist in conducting the project, which is documented on Form 1C.
- If the project was completed at home or in a school laboratory, determine if the finalist received any mentoring or professional guidance.
- If the project is a multi-year effort, the interview should focus **only** on the current year's work. Review the project's abstract and Form 7 (ISEF Continuation Projects) to clarify what progress was completed this year.
- Team and individual projects are judged together, and projects should be judged only on the basis of their quality. However, all team members should demonstrate significant contributions to and an understanding of the project.

Scoring at a Glance

Section	Science Projects	Engineering Projects	Points
I	Research Question	Research Problem	10
II	Design and Methodology	Design and Methodology	15
III	Execution: Data Collection, Analysis and Interpretation	Execution: Construction and Testing	20
IV	Creativity & Potential Impact	Creativity & Potential Impact	20
V	Presentation (Poster 10, Interview 25)	Presentation (Poster 10, Interview 25)	35

Science Projects Rubric

Criterion	Points	What judges consider
I. Research Question	10	• Clear and focused purpose • Identifies contribution to field of study • Testable using scientific methods
II. Design and Methodology	15	• Well designed plan and data collection methods • Variables and controls defined, appropriate and complete
III. Execution Data Collection, Analysis and Interpretation	20	• Systematic data collection and analysis • Reproducibility of results • Appropriate application of mathematical and statistical methods • Sufficient data collected to support interpretation and conclusions
IV. Creativity & Potential Impact	20	• Project demonstrates significant creativity in one or more of the above criteria • Project has impact or potential impact in its field and/or in technology, economy, environment or society
V-a. Presentation Poster	10	• Logical organization of material • Clarity of graphics and legends • Supporting documentation displayed
V-b. Presentation Interview	25	• Clear, concise, thoughtful responses to questions • Understanding of basic science relevant to project • Understanding interpretation and limitations of results and conclusions • Degree of independence in conducting project • Recognition of potential impact in science, society and/or economics • Quality of ideas for further research • For team projects, contributions to and understanding of project by all members
Total Points	100	

Engineering Projects Rubric

Criterion	Points	What judges consider
I. Research Problem	10	• Description of a practical need or problem to be solved • Definition of criteria for proposed solution • Explanation of constraints
II. Design and Methodology	15	• Exploration of alternatives to answer need or problem • Identification of a solution • Development of a prototype/model
III. Execution Construction and Testing	20	• Prototype demonstrates intended design • Prototype has been tested in multiple conditions/trials • Prototype demonstrates engineering skill and completeness
IV. Creativity & Potential Impact	20	• Project demonstrates significant creativity in one or more of the above criteria • Project has impact or potential impact in its field and/or in technology, economy, environment or society
V-a. Presentation Poster	10	• Logical organization of material • Clarity of graphics and legends • Supporting documentation displayed
V-b. Presentation Interview	25	• Clear, concise, thoughtful responses to questions • Understanding of basic science relevant to project • Understanding interpretation and limitations of results and conclusions • Degree of independence in conducting project • Recognition of potential impact in science, society and/or economics • Quality of ideas for further research • For team projects, contributions to and understanding of project by all members
Total Points	100	