



Formula Hybrid Volunteer Roles

DESIGN JUDGE*

Design judges evaluate the engineering design of student vehicles on the basis of several criteria: safety, innovation, reliability, serviceability, as well as ease of manufacturing and assembly.

Prior to the competition, the chief design judge will forward copies of the student design reports to the design judges so they have the opportunity to familiarize themselves with the vehicles and design concepts.

Design event criteria is outlined in the 2020 [Formula Hybrid rules](#).

- S4.1 Design Event Objective and S4.2 Submission Requirements (pages 137-138)
- Appendix D (page 166) for the design judging form

PROJECT MANAGEMENT JUDGE*

The objective of the project management event is to evaluate the team's ability to structure and execute a project management plan that meets the team's goals. Project management judges evaluate each team's initial project plan and an interim plan submitted before the event. At the event, teams present their final project status and must convince a review board that the team's project has been carefully planned, effectively and dynamically executed. This event requires participants to consider wider communication, planning and team management principles critical to career success as well as an understanding of financial, ethical, societal and global issues, beyond the usual technical competencies.

Presentation event criteria is outlined in the 2020 [Formula Hybrid rules](#).

- S3.7 Presentation and S3.8 Presentation format (pages 135-136)
- Appendix C (page 164) for the presentation judging form

TEAM MENTOR

A team mentor is an expert in the field of engineering who is willing to spend time helping guide a Formula Hybrid team. Mentors will coach teams during the months leading up to the competition, monitoring progress and assisting with technical advice. A mentor's purpose is to help the team arrive at the event with a completed, track-worthy vehicle that is ready to pass technical inspection and compete in the dynamic events. Mentors check in with teams regularly, either via phone, email, or video conferencing. Additional mentor information [can be found here](#).



TECHNICAL INSPECTORS

Formula Hybrid has two categories of technical inspector: mechanical and electrical. The mechanical and electrical portions of the tech inspection occur at separate locations under the direction of the chief mechanical and chief electrical inspectors, respectively. Most mechanical inspectors have an automotive, mechanical, structural background with racing and/or scrutineering experience in SCCA, FSAE, or similar organizations.

The electrical inspectors generally have a high-power electrical background in automotive or hybrid drive systems often with a racing background as well.

Technical inspection criteria is outlined in the [2020 Formula Hybrid rules](#).

- T1 Vehicle Requirements and Restrictions (page 19)
- Article S2 Technical Inspection (page 131-132)

PRE-EVENT ELECTRICAL REVIEWERS (PEER)

Pre-Event Electrical Reviewers help a team of student engineers by performing a review of the team's electrical system prior to the competition. Electrical tech reviews will begin at least 3 weeks before the competition and will be conducted at the team's home institution. Volunteers, such as IEEE society members or team mentors, will perform the inspections while communicating with experienced electrical technical inspectors.

PEER criteria is outlined in the [2020 Formula Hybrid Rules](#)

- Article S1 (page 130)

**Our Platinum sponsors have priority in providing personnel for these Judging positions. Remaining slots will be filled from our volunteer pool as appropriate.*