

Judge Description "Design Event"

The Design Event consists in the evaluation, by a technical jury, divided into 10-11 commissions, of the design standards which each team followed in the building of their racing car, from the comprehension of these by the team to the quality of the car.

To make this possible, judges listen to the team presentation, they inspect the car, which has to be completed and ready to race, they interview the team members and in the end they evaluate their ability in giving answers.

Because of this, judges need to have one of the following technical types of knowledge, at least 10/15 years of experience in automotive companies and have worked in an international context:

- √ aerodynamics / ergonomics / style
- √ electronics / infotainment
- ✓ chassis / vehicle dynamics
- ✓ powertrain (endothermic, electric):
 - 1) Endothermic engine calibration
 - 2) Endothermic engine fluid-dynamics and thermodynamics
 - 3) Mechanical design of an endothermic engine and its accessories
 - 4) Gearbox design
 - 5) Electric engines
 - 6) Power electronics (inverter)
 - 7) Battery pack
 - 8) Battery management system
- ✓ electric traction systems
- √ driver assistance systems / autonomous driving
 - 1) Architectures of autonomous driving vehicles
 - 2) Control systems (component level and/or vehicle level)
 - 3) Sensors and fusion sensors algorithms
 - 4) Localisation and/or mapping systems
 - 5) Artificial Intelligence
 - 6) Simulation and/or testing
 - 7) Software release processes
 - 8) ADAS systems calibration
 - 9) Functional safety

Commitment:

- Before the event:
 - 2 hours of training (between end of July and end of August) in a dedicated meeting in ANFIA headquarter or on conference call
 - Reading the Design Event rules (about 4 hours)
 - Review of the Design Reports/Autonomous Design Report and Design Spec Sheets of the teams assigned (about 30 minutes for each team, for a total of 7/8 teams per judge)



- During the event:
 - Thursday from 8.30 to 8.45pm for the Design Briefing in Varano Circuit
 - Friday from 9.00am to 6.00pm for Design presentation and from 8.30 to 10.30pm for Design Finals. These latter are not mandatory for all the judges but it is necessary to have at least one judge per board
 - Saturday morning from 9.00am to 12.45pm to give teams the judges' feedbacks. This is not mandatory for all the judges but it is necessary to have at least two judges per board.

Judges are required to check the definitive timing, and thus the sessions in which they will be involved, on the official schedule of the event published on line (www.formula-ata.it) and shared via email.



Judge Description "Business Presentation Event"

The Business Presentation Event consists in the evaluation of the team ability in developing and presenting a complete business case. The event is judged by experts from the automotive sector: that's why each team has to be able to face off not only with engineers but also with other positions of a company, including production, marketing and financial managers. The evaluation focuses on the content, on the organization and on the explanation of the project but also on the ability of the team in answering to the judges questions. Therefore, the team which will give the best presentation, also together with the quality of the car, will get the highest score in the event.

Business Presentation judges, also divided into 4 commissions, need to have the following knowledge:

- ✓ Fluent English
- ✓ Ability in working and taking decisions in a team and in respecting the other judges' opinions, or, where necessary, the board leader of the commission they belong to
- ✓ Timekeeping
- ✓ Dedicating entirely their own time to the event, which will take place physically in Varano, in order to offer teams, the maximum guarantee of professionalism and impartiality.
- ✓ Willingness to follow the directions of organizers and of board leaders

Features required:

- ✓ Motivation and interest in the event.
- ✓ Notions at least in one of the following areas: Marketing, Sales, Finance and Controlling, Project Management or Production, especially in the Automotive field
- √ Fast track for people already experienced in Formula Student Events (also as a student)

Judges who participate for the first time will have to agree with the BPE Responsibles an introductory session (estimated 1-2 hours depending on basic knowledge), so that they can have the voting right during the evaluations.

Commitment:

- Before the event:
 - 2 hours of training (between July and August) through Teams r other web conference platforms
 - Reading the Presentation Event rules (about 30 minutes)
- During the event:
 - Thursday from 9am to 6.30pm
 - Friday from 9am to 6.00pm
 - Saturday morning from 9am to 12.30pm to give feedbacks to the teams. Attendance to give feedback to teams is mandatory for the Board Leader, while it is not (but highly recommended) for the other judges. In the event that a Board Leader cannot stay for feedbacks, he/she will be responsible to appoint a replacement before the start of the event foreseen on Thursday morning.

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Judge Description "Cost Event"

The Cost Event evaluates, following the rules, the project costs made by the teams.

Features required:

- ✓ Motivation and interest in the event
- ✓ University level knowledge and interest in the topic of costs
- ✓ Fast track for people already experienced in Formula Student Events
- ✓ Excellent English both spoken and written

Commitment:

- ✓ Before the event: 3 hours of training (mid May) mainly through phone calls and conference calls; and in addition the needed time to evaluate the cost reports: about 3 or 4 hours for each report (of course it would be easier for people who already had an experience in some FSAE events)
- ✓ During the event:
 - Thursday from 11am to 6.30pm
 - Friday from 8am to 5.30pm
 - Possibly Saturday morning (optional) from 9am to 12.30pm for feedbacks

Overall, this is what you could gain from being a judge during this event:

- ✓ Living in an international atmosphere made of passionate people (both judges and students)
- ✓ the chance to prove yourself as a judge (for the youngest people it would be the first time after years of being judged as students or junior engineers)
- ✓ the chance to dealing with the English language: cost reports are filled in English and also the inspections are in English (Italian teams included)
- ✓ the chance to deal with high level experts coming from several companies and from different nationalities, both during the main event and during parallel events like the Judges & Sponsors Welcome cocktail but also simply being present in the circuit until the closing of the day
- ✓ Living a positive team experience: the group of the judges is very close and varied
- ✓ Being part of a training event for the future generations of engineers

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