



VIRTUAL FORMULA IMPERIAL 2020 GUIDELINES

Recommended By:



Organized By:



Accredited With:



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V.1 Introduction and Welcome

DEAR FORMULA IMPERIAL COMPETITORS,

Hope your entire team is healthy and safe. We all know your team is waiting for the Final Event of Formula Imperial but due to pandemic it won't be possible. Till this time we are keeping a hope of organizing Formula Imperial at Buddha International Circuit, Gr. Noida. Now, coming at this point we have to take the decision. So, Our Organizing & Technical committee has taken the decision to organize Virtual Formula Imperial 2020. As Every Team is learning new things from every event and there should not be any break in Learning. This will help teams in various aspects.

This can enhance their practical/theoretical skills as well as learn team management, so our engineering student will avail to face any hurdles in the way of real engineering. So we welcome all the enthusiasts to come forward to race, to participate, to invest for new era of hybrid technology and electric technology.

Note: ISIEINDIA will be sharing the details of the Digital Platform to be used for Presentation and other purposes with other details like Dress Code, PPT Format through email.

Event Organizer:

Imperial Society of Innovative Engineers (ISIE, An ISO 9001:2008 & Associate Member of FMSCI and SFI, National Youth Award Winner by Ministry of Youth Affairs, Recommended by Ministry of New and Renewable Energy, Govt. of India, Supported by Ministry of Forest and Climate Change, Govt. of India), is the most popular and favorite E-mobility Motorsports, Education and Research Publication organization in India among engineering institutes and green energy research organization. ISIEINDIA become the epicenter of green energy concept development in India.

We are motivating people (Engineers + Future Engineers) to work on New and Renewable Sources of Energy. We give the platform to new start-ups, Innovative ideas and to passionate people, who really want to contribute to society.

We set out with an obsession for concept development, one that was unheard in the corridors of green energy development. It was about a commitment to create value through innovation, quality, creativity, partnerships, openness, and learning. It has created a road which is leading the world to a new direction laid out by ISIEINDIA.

V.2 Registration:

V.2.1 Team Registration:

Every team need to submit the confirmed team list. ISIEINDIA will be sharing the format of the list to team email ids. Every team has to submit it to formulaimperial@imperialsociety.in.

V.2.2 Team Registration Fees:

Every Team registered for Formula Imperial 2020 (with complete payment) will get the 50% Discount in the next season of Formula Imperia 2021.

V2.3 Refund Policy:

Registration fees are not refundable and may not be transferred to a subsequent year's competition.

V2.4 Withdrawals:

In case of team withdrawing from Virtual Formula Imperial, In this case as well Registration Fee is not refundable. They can get the offer to avail 50% discount in the next season. (Team with 100% Fees).

V.3 Final Virtual Formula Imperial:

According to the Decision by Organizing & Technical Committee, ISIEINDIA has taken a decision to organize Virtual Formula Imperial. We will be conducting all the Static Rounds as a part of Virtual Formula Imperial. Based on the same the Winner & Runner Up of the event will be announced.

V.3.1 Virtual Rounds:

V.3.1.1 Virtual Design Round: (150 Points)

- Design reports submitted by teams before the deadline will be evaluated by our Technical Juries.
- Every team will get the reviews from the experts accordingly they are required to make changes in the design report and submit it before deadline.

Design Report Presentation Procedure:

In Design Report Presentation round teams are required to present their design report through digital platform. This round will follow the guidelines mentioned below:

- Presentation must consist of their CAE Report, Ergonomics & Safety Report, Chassis Report & Subsystem Design Report.
- During the presentation Judges can ask for proof or clarification of your design and can ask question on that basis.
- Presentations are limited to a maximum of twenty minutes. The judges will stop any presentation exceeding twenty minutes.
- The presentation will not be interrupted by questions. Immediately following the presentation there will be a question and answer session.
- One or more team members can present the Design Report. Maximum 5 members are allowed.

- Team members can present their report from different places.

Judging Criteria:

Design Round will be judged on following categories:

- Design Consideration (Design& Analysis)
- Vehicle Dynamics Knowledge
- Aesthetics
- Safety and Ergonomics
- Team knowledge
- Manufacturing consideration in design
- Design Report
- Knowledge on type of transmission system and transmission system used
- Knowledge on Batteries and type of batteries used (Only for Electric & Hybrid)
- Knowledge of Electrical Safety (Only for Electric & Hybrid)
- Knowledge on Battery Management System (Only for Electric & Hybrid)

V.3.1.2 Virtual Innovation Round: (200 Points)

- Teams are required to submit the Innovation Form with the full details of the innovation.
- Innovations related to the sensors or innovations available in the market will not be considered.

Innovation Report Presentation Procedure:

In Innovation Report Presentation round teams are required to present their innovation report through digital platform. This round will follow the guidelines mentioned below:

- Teams need to show the video or software model of working model.
- Presentations are limited to a maximum of twenty minutes. The judges will stop any presentation exceeding twenty minutes.
- The presentation will not be interrupted by questions. Immediately following the presentation there will be a question and answer session.
- One or more team members can present the Innovation Report. Maximum 5 members are allowed.
- Team members can present their report from different places.

Judging Criteria:

Innovation Round will be judged on following categories:

- Concept of Innovation & Ideation
- Scope of Concept
- Sketching of Innovation to product
- Developing Process
- Cost Vs. Market Value
- Contribution to Automotive Technology

V.3.1.3 Virtual Cost Report Round: (100 Points)

Teams has submitted the Cost Report with the design report, further addendum is not possible.

- The Cost report should include the cost of every component that will be used for the vehicle.
- Manufacturing cost
- Name of Vendor/Supplier along with their address and contact details

Cost Report Presentation Procedure:

In Cost Report Presentation round teams are required to present their cost report through digital platform. This round will follow the guidelines mentioned below:

- There will be discussion with every team and it will split into two parts:

Part 1: “Cost Report (CR) Discussion”: A discussion to evaluate the team’s ability to prepare an accurate engineering and manufacturing cost for the complete vehicle. The team must prove the following:

- The specification of the vehicle in the CR accurately reflects the vehicle brought to the competition.
- The costs within the Costed Bill of Material mentioned in cost report are correct and realistic.
- The manufacturing feasibility of the vehicle.

Part 2: “Cost Understanding”: A discussion to evaluate the general cost and manufacturing knowledge of the team. The following topics might be judged:

- Differences between prototype and mass production
 - Resource and cost planning
 - Financial and production risk management
 - Make or buy decisions
 - Environmental influence of the vehicle production
 - Effectiveness of financial planning
- Presentations are limited to a maximum of twenty minutes. The judges will stop any presentation exceeding twenty minutes.
 - The presentation will not be interrupted by questions. Immediately following the presentation there will be a question and answer session.
 - One or more team members can present the Innovation Report. Maximum 5 members are allowed.
 - Team members can present their report from different places.

Judging Criteria:

Cost Report Presentation will be judged on following basis:

- Format and Accuracy of Documents
- Knowledge of Documents and Vehicle
- Content and Completeness of the Cost Report
- Realism of Cost Report
- Discussion Part 2 “Cost Understanding”

V.3.1.4 Virtual Business Plan Round: (150 Points)

The objective of the BPP is to evaluate the team’s ability to develop and deliver a comprehensive business model which demonstrates their product – a prototype race vehicle – could become a rewarding business opportunity. Teams are required to submit the B-Plan Presentation before the deadline.

Business Plan Presentation Procedure:

In B-Plan Presentation round teams are required to present their B-Plan through digital platform. This round will follow the guidelines mentioned below:

- Presentations are limited to a maximum of ten minutes. The judges will stop any presentation exceeding ten minutes.
- The presentation will not be interrupted by questions. Immediately following the presentation there will be a question and answer session.
- One or more team members may present the business plan. Maximum 5 members are allowed.
- Teams that fail to make their presentation within their assigned time period will receive zero points for the BPP.
- Teams are required to submit Executive Summary with the B-Plan Presentation. The executive summary should contain a brief description of the team’s business plan.
- The executive summary must not exceed one page. The vehicle number and university (or college) name must be written in the top right corner.

Judging Criteria:

B-Plan Presentation will be judged on following basis:

- Executive Summary
- Novelty
- Content
- Finances
- Deep Dive Topic
- Demonstration and Structure
- Delivery
- Questions
- General Impression

V.3.1.5 People Choice Award:

Teams are required to submit the Vehicle Status Video. This is not just a vehicle status video, It is for People's Choice Award. ISIEINDIA will upload this video on ISIE YOUTUBE channel & FORMULA IMPERIAL Facebook page. The video having maximum views and shares sum of both Youtube channel and FB page will be winner of this round.

Some added Guidelines for Video:

- Include team introduction
- Previous achievements (If any)
- Your views for Formula Imperial
- Team Photos or Video while manufacturing of vehicle.
- Maximum Video Size: 1 minute

We want you, your team, college and of course your dream formula Car to represent on huge social media platform. So, Teams don't take it lightly. Be creative as much as possible to represent yourself in front of everybody.

V.3.2 Virtual Formula Imperial Scoring:

As ISIEINDIA is organizing Virtual Formula Imperial, Only scoring of the rounds conducted in Virtual Formula Imperial will be counted. Based on that only, Winner and Runner-Up of the event will be announced.

Rounds	Maximum Score	Specific Award
Virtual Design Round	150	Best Design Award (Best & Runner Up)
Virtual Innovation Round	200	Best Innovation Award (Best & Runner Up)
Virtual Cost Report Round	100	Best B-Plan & Cost Award (Best & Runner Up)
Virtual B-Plan Round	150	
Total	600	

V.3.3 Awards:

S. No.	Award Categories	Prize Worth
3.	Best Design	Certificate + Trophy
4.	Design Runner-Up	Certificate + Trophy
5.	Best B-Plan & Cost	Certificate + Trophy
6.	B-Plan & Cost Runner Up	Certificate + Trophy
7.	Best Innovation	Certificate + Trophy
8.	Innovation Runner-Up	Certificate + Trophy
9.	People Choice Award	INR 10,000 + Certificate + Trophy

V.3.4 Event Timeline:

S.No.	Particulars	Deadline
1.	Reviewed Design Report	Till 13 th September 2020
2.	People Choice Award Video Submission	Till 10 th September 2020
3.	Business Plan & Cost PPT Submission	Till 15 th September 2020
4.	Design Report Submission with Changes	Till 27 th September 2020
5.	Innovation PPT Submission with Demo	Till 3 rd October 2020
6.	Design PPT Submission with Other Reports	Till 3 rd October 2020
7.	Final Virtual Formula Imperial	10 th & 11 th October 2020