

ON CAMPUS MENTORSHIP PROGRAM (ESVC-2020)

Imperial Society of Innovative Engineers is organizing On-Campus Mentorship program for the teams participating in **ELECTRIC SOLAR VEHICLE CHAMPIONSHIP- 2020**, so as to provide them the overwhelming experience of learning that they never had. Experts from different industries will come in their respective campus to train them and to provide necessary knowledge of the respective category of the vehicle.

Who can participate?

The confirmed team required to send application mail to conduct On-Campus Mentorship with suitable dates for 2 days. (Prefer Saturday, Sunday for experts from industries).

Benefits for the teams: -

- Students will be having good approach to Technical part i.e. Designing, Calculations, Material selection, and various Material testing processes and production processes.
- Students will learn how to be professional in terms of sending official mails, presentations, report submissions, approach towards sponsorship and much more.
- Students don't need to worry about the dates and transportation as the program will be conducted in their campus on the chosen dates.
- Students can also get sponsorship by enrolling other students in the program.
- An Industry OEM will be assigned to every team, who will evaluate the progress and will provide technical help.
- Promotion of team and college on social media and website from ISIEINDIA.
- Certificates will be provided to all members attending program.

Guidelines for On-Campus Mentorship Program: -

As the program is Mandatory, all teams have to conduct the program in their campus.

Max. no. of students: - There will be no cap on the maximum no of students who can attend the program ISIEINDIA

Min. no. of students: - Minimum 15 students have to attend the program.

No. of Participants	Fees per Head
15 Participants	INR 3600/-
20 Participants	INR 3000/-
25 Participants	INR 2400/-
30 Participants	INR 2000/-
40 Participants	INR 1500/-
40+ Participants	INR 1500/- (500 per head will be sponsor to Team, apart from 40 members).

Recommended & Supported By:

2 DAYS Course Content for ESVC On-Campus Mentorship:

Day 1			
	Topic	Type of Lecture	Time
Season 1 (3.0 Hours)	Electric Vehicle System & Sub System <ul style="list-style-type: none"> • Chassis • Traction System • Drive Train • Body • Safety & Testing • Certification and EV Policies / Market / Job / Opportunities /Statics 	PPT + Video	30 Minutes
	Case Study of Different EVs <ul style="list-style-type: none"> • International Solar Car Team 	Analytical + PPT + Video	20 Minutes
	EV Infrastructure <ul style="list-style-type: none"> • Power Source for EV • Charging • Need of Renewable Energy Resource 	Analytical + PPT + Video	20 Minutes
	Solar Car Model for ESVC <ul style="list-style-type: none"> • Challenges • Previous Year Teams Model Case Study • Expected model 	Analytical + PPT + Video + Case Study	30 Minutes
	Q & A of the Season	NA	10 Minutes
	Material for Chassis <ul style="list-style-type: none"> • Selection • Welding Methods • Cutting Methods 	PPT + Video	20 Minutes
	Chassis <ul style="list-style-type: none"> • Types • Design of Chassis • Forces Acting on Chassis • Affective Design of Chassis 	Software + Calculation	30 Minutes
	Chassis Analysis <ul style="list-style-type: none"> • Static & Dynamic Analysis 	Software + Calculation	90 Minutes

Recommended & Supported By:

Season 2 (3.5 Hours)	<ul style="list-style-type: none"> Accurate Analysis 		
	Chassis Development for ESVC <ul style="list-style-type: none"> Rulebook Dos & Don'ts 	PPT	20 Minutes
	Steering , Braking & Suspension <ul style="list-style-type: none"> Selection Method Calculation Lotus Analysis Rulebook Compliances 	Theory + Calculation + Hands-on	90 Minutes
	Q & A		10 Minutes
DAY 2			
Season 1 (3.5 Hours)	Drive Train & Its Components <ul style="list-style-type: none"> Motor & Selection Method Controller Throttle Paddle LV & HV Harness F-N-R Selector Switch Other Switches Calculation Connection Performance Graph 	PPT + Calculation + Hands ON	60 Minutes
	Transmission <ul style="list-style-type: none"> Selection of Transmission for 3 /4 Wheel Vehicle Calculation Safety 	PPT + Analytical + Calculation	30 Minutes
	Solar Power <ul style="list-style-type: none"> PV System Solar Charge Controller Solar Panel Mounting 	PPT + Analytical + Calculation	40 Minutes
	Rulebook <ul style="list-style-type: none"> Rules Compliance Safety Compliance 	Theory	30 Minutes
	Q&A	NA	20 Minutes
Season 2 3.0 Hours	Traction System <ul style="list-style-type: none"> Battery Pack BMS Connectors DC-DC Convertor Selection Method 	PPT + Demonstration + Analytical	60 Minutes

Recommended & Supported By:

	<ul style="list-style-type: none"> • Dos & Don'ts for Energy Storage System 		
	<p>Traction System Rules & Safety</p> <ul style="list-style-type: none"> • IP67 Protection • Mounting • Battery Envelop (IP67 Protection) • Fire Wall • High Voltage • GLV & NLV • Mountings 	PPT + Demonstration + Analytical + Hands On	30 Minutes
	<p>Protection</p> <ul style="list-style-type: none"> • Over Charge • Over Discharge • Temperature • Sensors • Cooling (Natural / Air / Water / Force) • Cell Balancing / BMS Integration 	PPT + Demonstration + Analytical	30 Minutes
	<p>Autonomous Vehicle</p> <ul style="list-style-type: none"> • Method • Autonomous Features • Sensors & Controllers • Guidelines for Autonomous Round 	PPT + Video	30 Minutes
	<p>Team management</p> <ul style="list-style-type: none"> • Report Writing (Design, Cast , DVP, DFME , Electric etc) • Research Paper Writing • Finance & Sponsorship 	PPT	30 Minutes
Expert Advice & Message to Develop Perfect Solar Car.			

Application: Application should be printed on the college letter head provided with signatures from HOD or other higher authority. Team required to send scan copy to electricsolarvehicle@gmail.com

Recommended & Supported By:

Requirements to be fulfilled by the College Authority:

ISIEINDIA will provide best help to the students, but we also look forward for your support too. Here is the requirement list for our end.

- Hospitality & Accommodation for trainers & organizers.
- Local transportation
- Good and efficient labs
- AC Lecture hall as per the no. of students
- Mic (wireless)
- Speaker installation
- Projector along with VGA cable and laptop.
- Board, markers and dice.

For any query:

Contact Details:

0120-4538457

electricsolarvehicle@gmail.com



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