

Shri. NARA Chandra Babu Naidu
Hon'ble Chief Minister of AP



Shri. NARA Lokesh
Minister of Information & Technology



Shri. Kollu Ravindra
Minister of Skill Development of AP

APSSDC - GOVT. OF AP

Andhra Pradesh State Skill Development Corporation

Presents



22ND - 25TH FEBRUARY 2019

**A Motorsport Event for
ATV | Student Formula | Go-Kart**



Powered By:



Organized By:



Venue:



Accredited By:



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INTRODUCTION

“If you can meet with Triumph and Disaster
And treat those two imposters just the same:
[...] Yours is the Earth and everything that’s in it,
And---whichismore---you’llbeaMan,myson!”

These moving lines come directly from one of the greatest pieces from the world of literature. “If” written by Mr. Rudyard Kipling brings to light the magnificence of how triumph and disaster are part of the same coin. It highlights how if one learns to treat both the imposters equally, then there’s would be the Earth and everything that’s in it. Hence, fulfilling the absolute purpose of the fruition of mankind.

Such has been the principle of ISIEINDIA in this short span of time that we have had since our inception in the year 2013. Our glorious past lays a robust foundation for the team and the present time guides us in our journey to the future. Hence, we as a team decide to walk steadily and calmly, making sure we leave no stone unturned, no path untouched to attain a green and sustainable future. Movingforwardwiththe time in order tospread Skill awareness withprimefocus on practical learningISIEINDIAsteppedinto organization of Champion of Champions event.



Andhra Pradesh State Skill Development Corporation presents the Motorsports Event "Champion of Champions" for different categories of vehicle i.e., BAJA ATV, Formula Students, Go Kart. APSSDC is giving a common platform to all the participants those are participating in different types of event to compete at a single place, this event is powered by Dassault System & Hero Electric. This is the event where students from all over INDIA will bring their own designed and manufactured "ATV/Formula/Go-Kart" vehicles. It will be a perfect mixture of Skill, Innovation and Technology by youths where students will bring three categories of vehicles.

This is the 1st Edition of Champion of Champions that will be supported by Dassault System, Hero-Electric, hosted by KL University, Vijayawada, AP (No. 1 College of Andhra Pradesh) from 22nd to 25th Feb 2019, organized by Imperial Society of Innovative Engineers & Accredited by Federation of Motorsports Clubs of India.

APSSDC is a unique organization formed as a public private partnership (PPP) corporation to promote skill-development & entrepreneurship in the state of Andhra Pradesh. The corporation is incorporated as a Section-8 company (not-for-profit) with a private equity component of 51% and 49% by Govt of AP. The Corporation now serves as the Executive Agency for the newly formed Department of Skill Development, Entrepreneurship and Innovation.

IMPERIAL SOCIETY OF INNOVATIVE ENGINEERS (ISIE): ISIE INDIA is the most popular and favorite e-mobility motorsports, education and research publication organization in India. ISIE INDIA is the global platform, we are giving services in Asia. ISIE INDIA is giving services in 22 states of India and 3 Countries (India, Bangladesh, and Sri Lanka). We are giving our innovative services to more than 50,000 + peoples. Our services and product have been appreciated and noted by delegates from 22 countries. We are under pipeline to make some MOU with International Association for the better future of our engineering students and Society.

HOST UNIVERSITY – KL UNIVERSITY, VIJAYWADA (ANDHRA PRADESH)

ORGANIZING COMMITTEE AND PATRONS

S.N	NAME	DESIGNATION & COMPANY
1	MR.T.ANIL	(Executive Director, APSSDC) CHAIRPERSON
2	MR.HEMANTGADGIL	Executive Director Dassault System Foundation CO-CHAIRPERSON
3	MR.VINODK GUPTA	President ISI INDIA CONVENER
4	DR.G.RAVIKUMAR	(CGM, APSSDC)
5	DR.A.SRINATH	ME Department HOD, KLU JOINT CONVENER
6	MR.DINESHTAJ	(Project Manager, Gram Tarang, Dassault System)
7	MR.RAJIVARMADAKA	(Brand Lead Catia, Dassault System)
8	MR.V.GRAO	(Vice President, KETO, Auto Industries)
9	DR.ASHWINISHARMA	(Dean Kaziranga University, Assam)
10	DR.GOPINATHCHINTALA	(Principal, BIT, Vizag)

REGISTRATIONS

Registrations for **APSSDC.GOVTOFAP“COC:CHAMPIONOFCHAMPION”** started on 5 January 2019 offering the three different student manufactured vehicle categories:

- ATV-Allterrainvehicle
- StudentFormula
- Go-Kart

ATV-Teamsofstudentshavetodesignandbuildsmalloff–roadcars.Thecarsall haveenginesof the same specifications. The goal is to design, build and race off-road vehicles that can withstand the harshest elements of rough terrain. The vehicles used in racing are often similar in appearance to dune buggies.

STUDENT FORMULA-Student teams from around the country design, build, test, and race a small-scale formula style racing car. The cars are judged on a number of criteria as listed in the rulebook. The prototype race car is to be evaluated for its potential as a production item. Each student team designs, builds and tests a prototype based on a series of rules, whose purpose is both ensuring on-track safety (the cars are driven by the students themselves) and promoting clever problem solving.

GO-KART-A Go-kart (often referred to as simply a **kart**), is a type of open-wheel car. Go-karts come in all shapes and forms, from motor less models to high-powered racing machines. Many recreational karts are powered by four-stroke engines or electric motors, students build a single seater and have to pass different tests.

More than 100+ teams all across the country registered in the event.

HANDS-ON TRAININGS

ISIEINDIA provided Designing & Software session training to all the participating teams on Chassis & Body works, Suspension, Braking, Power train Axle & wheel assembly, Steering Assembly. As well as vehicle dynamics and electric mobility in order to improve the manufacturing quality of the vehicles. They had a hands-on practice on vehicle building, Testing and Refinement of the Engines and Motors. This resulted in good quality of the vehicles at the event site.



HANDSON CHASSIS MANUFACTURING

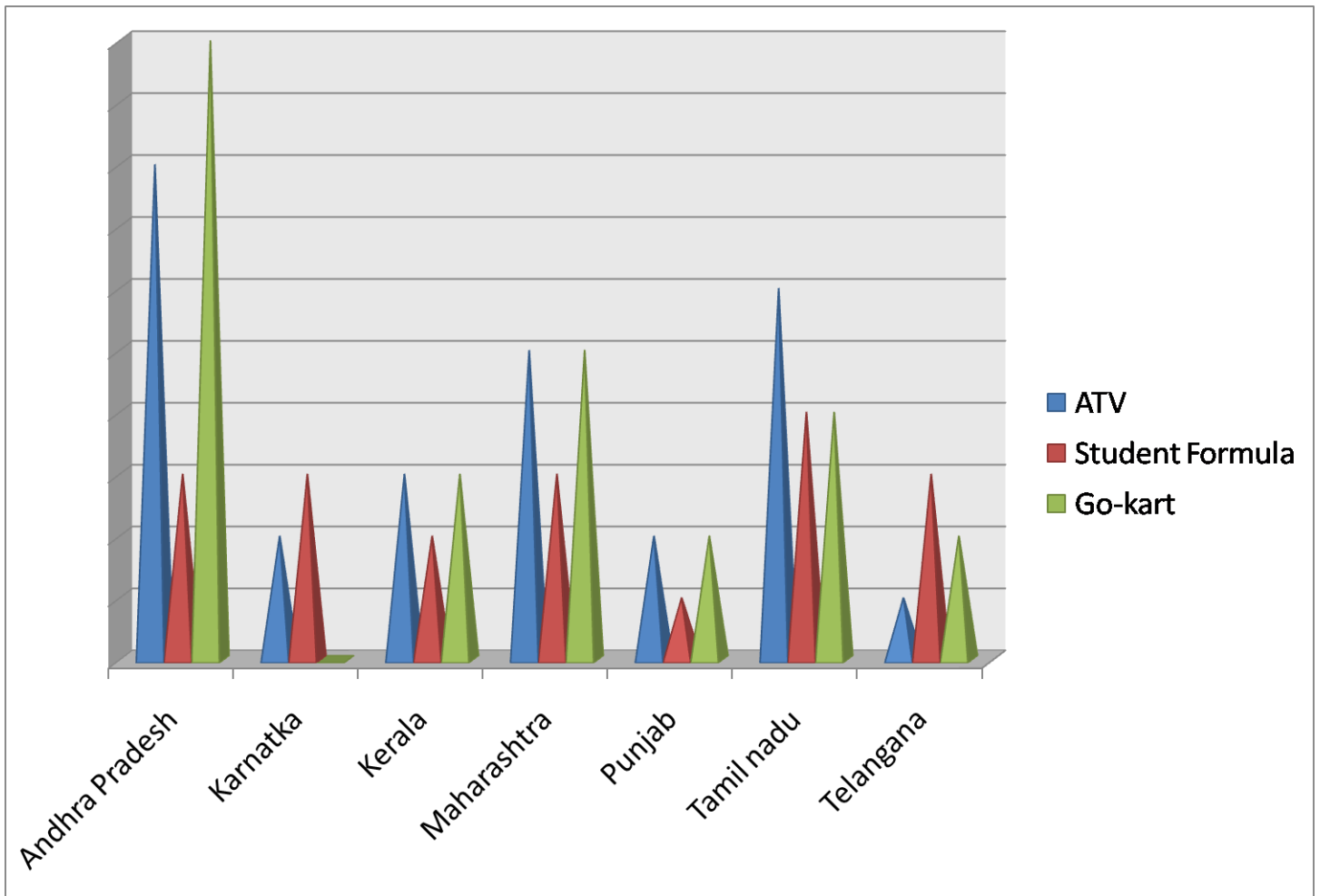


HANDSON CAD/CAE ANALYSIS



ISIEINDIA EXPERTS DELIVERING LECTURES ON VARIOUS TOPICS OF VEHICLE DESIGNING AND DYNAMICS

TEAMSPARTICIPATED



Statewiseteamsfordifferentcategories.

Morethan50+Teamsfromdifferentstatesincluding:

- AndhraPradesh
- Punjab
- Maharashtra
- UttarPradesh
- Rajasthan
- Gujarat
- TamilNaduandmanymoreparticipatedattheeventsitewiththeir vehicle.

EVENTS

Students brought their own manufactured Vehicles according to the Rules prescribed in Rulebook. Keeping the safety at first priority vehicles were supposed to pass different **STATIC** and **DYNAMIC** tests such as Technical Inspection, Design inspection ,Brake Test ,Acceleration test in order to proceed further for final Endurance race.

DIFFERENT CATEGORY: DIFFERENT TESTS

STATIC EVENTS: The static events were held on the first day of competition. Static Events are consist of:

- Technical Inspection
- Design Inspection
- Business Plan & Cost
- Innovation

Technical Inspection- All vehicles competing in the race must pass through Tech Inspection. The vehicles are checked by inspectors to make sure that teams adhere to the rules and safety standards set by ISIE INDIA.



Design Inspection- This is an opportunity that teams have to defend/explain the reasoning used behind designing their vehicle. Prior to the race, a Design Report is submitted.

This report is reviewed by the judges who will be judging the vehicle during the event. Taken from the ISI INDIA rules, "Students will be judged on the creation of design specifications and the ability to meet those specifications, computer aided drafting, analysis, testing and development, manufacturability, serviceability, system integration and how the vehicle works together as a whole. The vehicle that illustrates the best use of engineering to



meet the design goals and the best understanding of the design by the team members will win the design event.

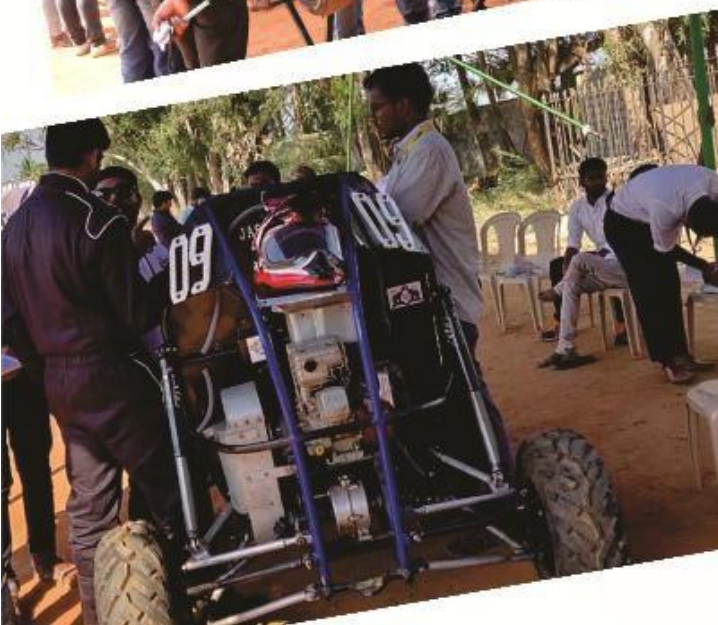
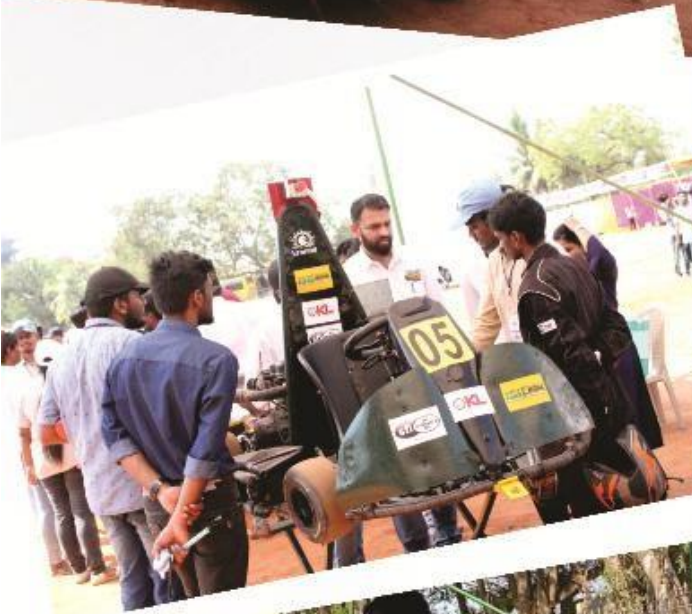
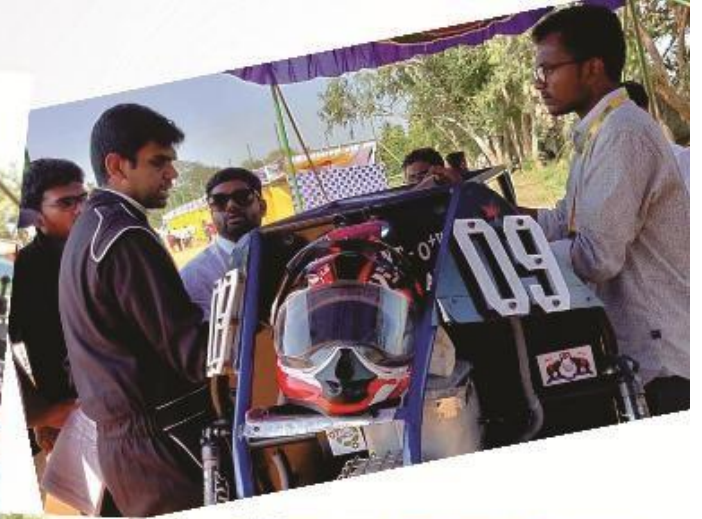
Business Plan & Cost- Teams need to showcase a hypothetical manufacturing company to judges to try and convince them to purchase the team's vehicle design. The presentation is limited to 10 minutes, with a 5-minute question period. They are questioned on the content of the presentation, organization of the presentation, effectiveness of the visual aids etc.



Innovation- Teams bring their vehicle by implementing a new innovation and need to present it to judges that how their innovation is different and can be used in the industry. They are judged and scored on basis of their new ideas and use of application.



GLIMPSE OF STATIC EVENTS



DYNAMICEVENTS: DynamicEventswas heldonthefinaldaysofcompetition.Thefirst dynamic day includes the following events:

- Brake
- Acceleration
- Crosspad
- HillClimb
- Suspension&Traction
- Maneuverability

Ontheseconddynamicday,an**EnduranceRace**is held.

Brake-theTeammustclearthisEventinorderto proceedforthefurtherDynamicevents. Thevehiclehavetorunfor50mstraightstretchandthen have to apply brakes in 5m of length to clear this test.



Acceleration-The acceleration event is a measure of a vehicle's acceleration. The event is a 75 m straight run from a standing start. The faster the time the more points the team will score. Every team can make two attempts with the best time counting for score.



Cross pad-Cross pad is designed to assess each vehicle's handling ability in a form of Figure of eight which have two circles and other sharp turns, pylon maneuvers.



Hill Climb-This event tests the vehicle's ability to climb an incline from a standing start or pull a designated object. Every team can make two attempts with the best time or distance counting for score.



Suspension & Traction-Vehicles suspension and its traction is checked in this event that how much bumps and vibrations the vehicle can bear at the time of dynamic condition.



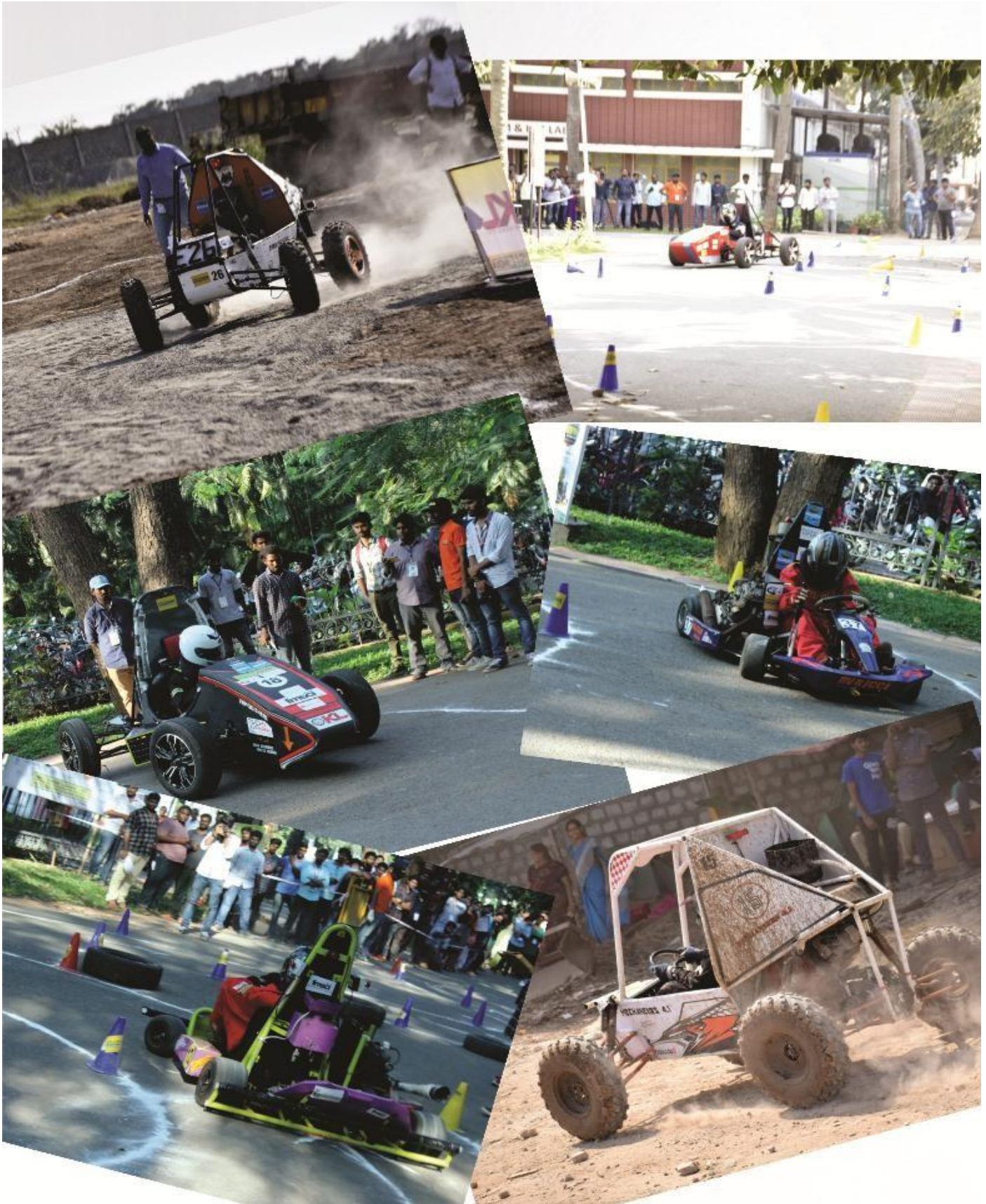
Maneuverability-Maneuverability is designed to assess each vehicle's handling ability over typical ATV terrain. The course may consist of a variety of challenges at the organizer's option, possibly including tight turns, pylon maneuvers, ruts and bumps, drop-offs, sand, rocks, gullies, logs, and inclines.



Endurance Race-The endurance event assesses each vehicle's ability to operate continuously and at speed containing obstacles in any weather conditions. Endurance may be run for either time or distance. Endurance events for time usually run for 1.5 hours. The starting grid for endurance will be based on each team's performance in a previous dynamic event, or set of dynamic events, to be determined by the organizer. Endurance mainly checks the working capacity of the vehicle



GLIMPSE OF DYNAMIC EVENTS



GO-MARKET EXHIBITION

Believing in transformation and stepping up to convert project into product, ISIEINDIA came up with a unique approach to explore strategy and action that specifies how a company will reach target customers and achieve competitive advantage through its products life cycle. Product planning is the process of searching ideas for new products, screening them systematically, converting them into tangible products and introducing the new product in the market. It also involves the formation of product policies and strategies.

Product Strategy, Planning and Technology includes improvements in existing products as well as deletion of unprofitable or marginal products. It also encompasses product design and engineering which is also called product development. Product planning comprises all activities starting with the conception of product idea and ending up with full scale introduction of the product in the market. It is a complex process requiring effective coordination between different departments of the firm. It is intimately related with technical



operations of the organisation, particularly with engineering, research and development departments. In order to make things simple, Dassault System developed a platform for the same.

During the Event APSSDC GOVT. OF A.P- "COC: CHAMPION OF CHAMPIONS" season 1.0, Dassault System organized a Go-market expo in which more than 500 students from different colleges and participants took part. Dassault Systems

develops and markets PLM software and services that support industrial processes by providing a 3D vision of the entire lifecycle of products from conception to maintenance. Dassault Systems customers are companies in the following industries: Aerospace & Defense, Architecture, Engineering and Construction, Consumer goods - distribution, FMCG - Distribution, Energy, and processes, Finance and Corporate Services, High Technology, Industrial Equipment, Life Sciences, Marine & Offshore, Natural Resources, and Transport & mobility. Requirements of industries can be fetched and simulated virtually through proper model in the software.

WINNERS

ATV CATEGORY:

TEAM	AWARDS	COLLEGE NAME
MECHANERS4.1	Overall champion, Best Endurance(Combustion), Best Acceleration(Combustion), Best Maneuverability(Combustion), Best Suspension & Traction(Combustion)	ADITYA COLLEGE OF ENGINEERING (Surampalem, Andhra Pradesh)
THE ELECRUISERS	First Runner up, Best endurance(Electric), Best Maneuverability(Electric)	SRM INSTITUTE OF SCIENCE AND TECHNOLOGY (Chennai, Tamil Nadu)
TEAM MUD TRAILERZ	Second Runner up, Best Suspension & Traction(Electric)	VEL TECH RANGARAJAN DR. SAGUNTHALAR & INSTITUTE OF SCIENCE AND TECHNOLOGY (Chennai, Tamil Nadu)
TEAM ZIBARACERS	Best Design, Best Innovation	SHRIVISHNU ENGINEERING COLLEGE FOR WOMEN(AUTONOMOUS) (Bhimavaram, Andhra Pradesh)
INFERNORACING2.0	Best Acceleration(Electric)	ST. JOSEPH'S COLLEGE OF ENGINEERING (Chennai, Tamil Nadu)
TEAM FLUX	Best B. Plan & Cost	SARANATHAN COLLEGE OF ENGINEERING (Trichy, Tamil Nadu)



STUDENT FORMULA CATEGORY:

TEAM	AWARDS	COLLEGE NAME
VANQUISHERS	Overall champion, Best Endurance(Electric), Best Cross pad(Electric) Best B.Plan&cost	K L UNIVERSITY (Vaddeswaram,Andhrapradesh)
TEAMLAKSHYA	First Runnerup, Best Endurance(Combustion), Best Acceleration(Combustion)	CHITKARA UNIVERSITY (Rajpura,Punjab)
FALCON RACERS	Second Runnerup, Best Endurance(Combustion) Best Acceleration(Combustion)	RVR&JCC COLLEGE OF ENGINEERING (Guntur,Andhrapradesh)
KREINTORACING	Best Innovation	K L UNIVERSITY (Vaddeswaram,Andhrapradesh)
SPECTRAX TREME	Best Design	RMK.COLLEGE OF ENGINEERING AND TECHNOLOGY (Thiruvallur,Andhrapradesh)



GO-KARTCATEGORY:

TEAM	AWARDS	COLLEGENAME
FALCONRACERS	OverallChampion, Best endurance(combustion), BestAcceleration(Combustion) Best Design	RVR&JCCOLLEGE OF ENGINEERING (Guntur,Andhrapradesh)
ADROITARRAY	First Runner UpBestendurance(Electr ic) BestCrosspad(Electric))	SNSCOLLEGE OF TECHNOLOGY (Coimbatore,TamilNadu)
KRONOS	SecondRunnerup BestCross pad(Combustion)	VISHNUINSTITUTE OF TECHNOLOGY (Bhimavaram,Andhrapradesh)
BRAINIACS	Best Acceleration(Electric)	SRIKRISHNACOLLEGE OF ENGINEERING AND TECHNOLOGY (Coimbatore,TamilNadu)
FIRE BLADE	Best Innovation	VIGNAN'SUNIVERSITY (Guntur,Andhrapradesh)
ACCELERATORS	Best B.Plan&Cost	BVRIT HYDERABAD COLLEGE OFENGINEERINGFORWOMEN (Hyderabad,Telangana)



INDUSTRIAL CONNECTIONS AND COMMITTEE

S.N	NAME	DESIGNATION & COMPANY
1	MR.MANISHKUMAR	R&D Engineer TVS MOTOR LIMITED
2	DR.RANGASRINIVAS GUNTI	Deputy General Manager MAHINDRA AND MAHINDRA
3	MR.V.SHYAMKUMAR	FMSCI official
4	MR.SONU SINGH	R&D Engineer RENAULT NISSAN
5	MR.V.V.SATYANARAYAN	Lead Engineer Design Coe R & D Power train MAHINDRA AND MAHINDRA
6	MR.VIKASKUMAR	R& D Engineer ESCORTS
7	MR.TANUJ GUPTA	Engineer DENSO
8	MR.NARENDRAVANKATESH	HONDA CARS INDIA
9	MISS.CHALAMALASETTISNEHA	Engineer MAHINDRA & MAHINDRA
10	MR.VIJAYAKUMAR V	Divisional Manager ASHOK LEYLAND
11	MR.PRUDHVI POTUGUNTI	Data Scientist AVID DATA SCIENCE

12	MR.DEVSAHU	Engineer AMAZON
13	MISS.BINDU	THERMAX
14	MR.NIDIGUNT APALEMMAHESH SINGH	Engineer AMAZON
15	MR.KAUSHIK.K	INFOSYS
16	MR.NAVEENCHAUHAN	Executive Assistant ANDRITZHYDRO
17	MR.HUMENDRASAHU	Mechatronics Engineer
18	MR.ABHILASHTRIVEDI	Faculty BITS,RAIPUR
19	MR.PATEL CH	Faculty LPU,JALANDHAR
20	MR.RAVIGARG	Faculty LPU,JALANDHAR



EXPERTGUESTLECTURES

➤ **DR.PRUDHVIPOTUGANTI**

Data Scientist, Avid Data Science
EXPLORINGDATASCIENCEWITHIOT



➤ **DR.SITARAMESWARASARMA AKELLA**

Sr. General Manager
Mahindra&Mahindra
AUTOMOBILECONCENT&CAREERBUILDING



➤ **MR.VIJAYAKUMARV**

Divisional Manager-Electrical&Hybrid
ELECTRIC VEHICLE TREND IN INDIA



➤ **MR.V.V.SATYANARAYAN**

Lead Design Engineer
Mahindra&Mahindra
AUTOMOBILECONCENT&CAREERBUILDING



ENTREPRENEURSHIP PROGRAMS

ISIE INDIA and APSSDC GOVT. OF AP gave students a platform to showcase their skills and come up with the new startup ideas.

More than 100+ students from different fields took part and shared their astonishing ideas not only regarding automobile industry but also many others too.

Some Startup ideas by students were:



- Electric vehicle charging stations.
- Drones: Shaping the future.
- Velomobiles
- Vehicle Development and racing academies for children.
- Manufacturing Plant of Li-ion battery
- Autonomous Tractor for farmers.



Electric vehicle Charging Stations: An **electric vehicle charging station**, also called **EV charging station**, **electric recharging point**, **charging point**, **charge point**, **ECS** (electronic charging station), and **EVSE** (electric vehicle supply equipment), is an element in an infrastructure that supplies electric energy for the recharging of electric vehicles, such as plug-in electric vehicles, including electric cars, neighborhood electric vehicles and plug-in hybrids.

Drones- Shaping the future: Building the drones having lightweight and having more stability so that they can be used at remote places in any case of any natural disaster.

Velomobiles: A Velomobile is a human-powered vehicle enclosed for aerodynamic advantage and protection from weather and collisions. They are similar to recumbent bicycles and tricycles, but with a full fairing (aerodynamic shell). A fairing may be added to a non-faired cycle, or the fairing may be an integral part of the structure, monocoque like that of an airplane.

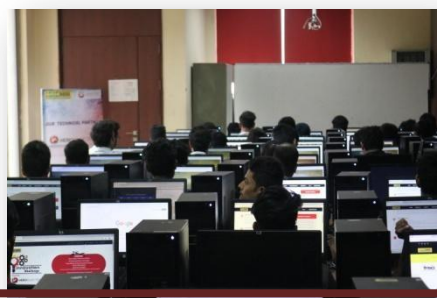
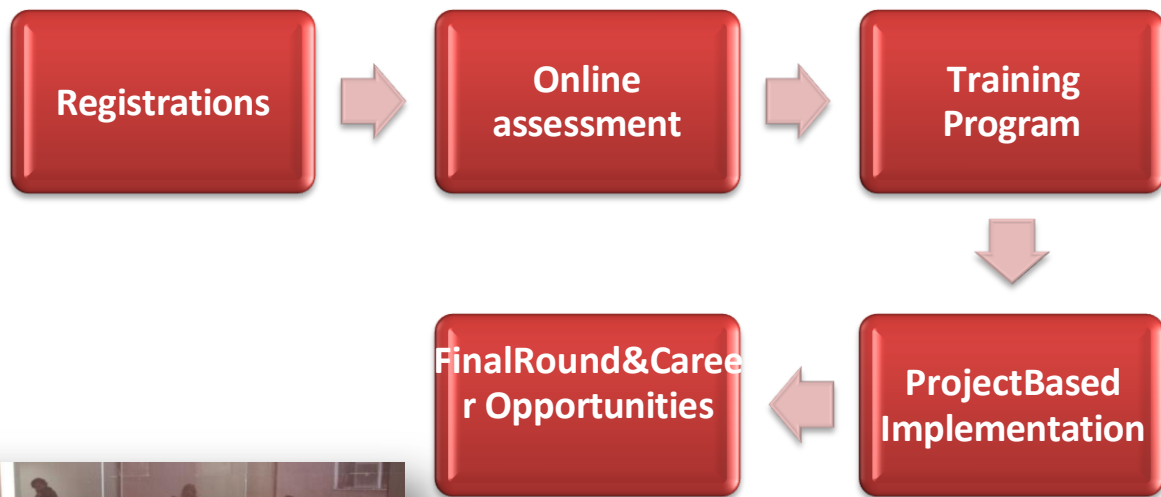
Students were very much appreciated by the Delegates from different startup companies as well as industrial committee and were even offered with different opportunities at the same time.

ENCOURAGEMENT TOWARD ELECTRIC VEHICLE

A session was taken by the Industrial Delegates from **HERO ELECTRIC** who visited the event and encouraged students to work and come up with new innovative ideas. They were told about the electric vehicles how they work, their benefits in coming future as they are not limited to, road and rail vehicles, surface and underwater vessels, electric aircraft and electric spacecraft.

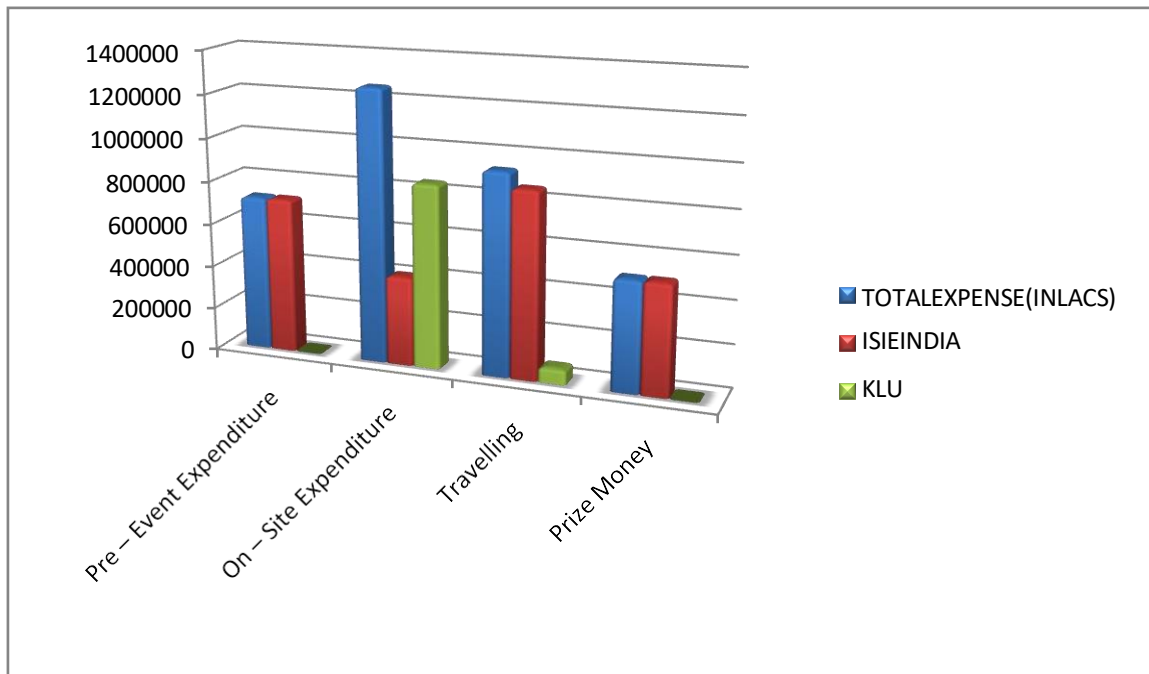
A complete explanation and hands-on experience was given starting from the motor selection, battery selection, wiring and connections, safety and all the new technologies coming in hybrid vehicles.

1500+ students took part in the Aptitude test conducted by **HERO ELECTRIC** for the participating teams as well as the other students and offered them Jobs/Internship.



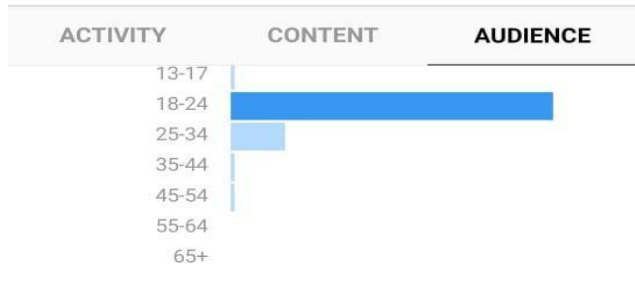
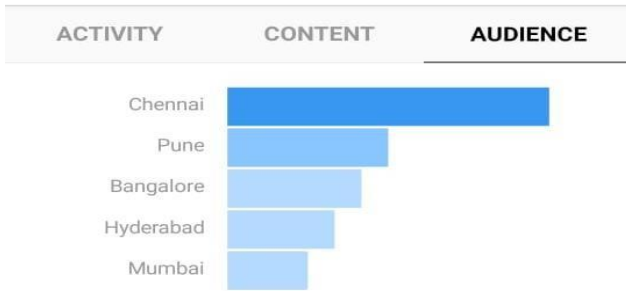
EXPENDITURE REPORT

Brief Expense Details				
S.No	Title	Cost	Expenses By ISIEINDIA	Expenses By KLU
1.	<i>Pre-Event Expenditure</i>	INR7,19,000	INR7,19,000	NIL
2.	<i>On – Site Expenditure</i>	INR12,61,000	INR4,11,000	INR8,50,000
3.	Travelling	INR9,32,500	INR8,62,500	INR70,000
4.	Prize Money	INR5,10,000	INR5,10,000	
GRAND TOTAL		INR34,22,500	INR25,02,500	INR9,20,000

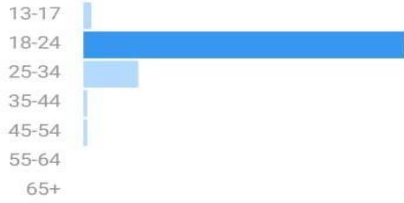


COC: SOCIAL MEDIA





Age Range ⓘ All Men Women



Gender ⓘ



8%
Women

92%
Men

Gender ⓘ

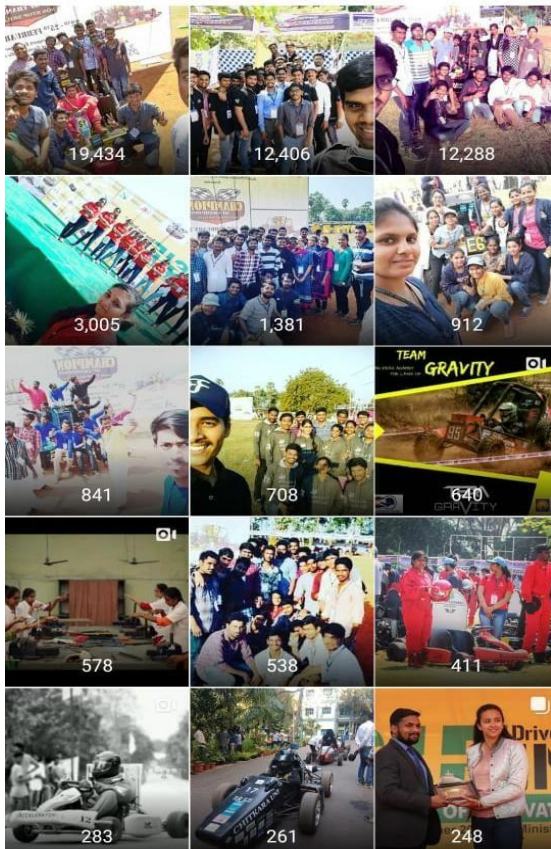


8%
Women

92%
Men

Followers ⓘ Hours Days

< Wednesdays >



Champion of Champions COC by Apsdc

Page Inbox Events Notifications **Insights** Publishing To... More Settings Help

Overview Page summary Last 28 days Export Data

Results from 9 Feb 2019 - 8 Mar 2019
Note: Does not include today's data. Insights activity is reported in the Pacific time zone. Ads activity is reported in the time zone of your ad account.

Metric	Value	Percentage
Actions on Page	4	43%
Page Views	635	26%
Page previews	23	39%
Page Likes	59	77%
Post reach	8,029	31%
Recommendations	-	-
Post engagements	3,193	38%
Videos	2,830	151%
Page followers	65	74%
Orders	0	0%
Earnings from orders	0	0%

Recent promotions on Champion of Champions COC by Apsdc

Promotion	People reached	Post engagement	Spent out of
Boosted post: We (APSSDC, Govt. of AP), Welcome all ATV...	26,288	12,146	2,000.00

Manage all promotions Chat (273)

COC:MEDIA COVERAGE

Students display design skills

DC CORRESPONDENT VIJAYAWADA, FEB. 25

KL University was adjudged as the best in the Formula category. Aditya College Bheemavaram topped the list in the All-Terrain Vehicle (ATV) category and RVR JC, Guntur was deemed the champion in GoKart category in the Champions of Champions Car invention competitions held at KL University here on Monday.

The national level competitions, organised jointly by the mechanical engineering department of the university, the Imperial Society of Innovative Engineers and APSSDC, had commenced on February 23.

Addressing the students on the occasion, APSSDC executive director T. Anil Kumar, who was the chief guest, said that he was excited to see students presenting several models that were designed to combat the ever increasing pollution levels.

Mr Anil Kumar appreciated the management of KL University for hosting the event and said that such events would help automobile engineering students.

He added that the APSSDC has been organising such skill-based events from the past few years and with the suggestion of Chief Minister N. Chandrababu Naidu, it had launched the Dassault System.

He informed that with the help of Dassault Systems, students could increase their knowledge about aerospace, automobile, shipbuilding and marine engineering.

The national level competitions that commenced on February 23 saw enthusiastic participation of students from various engineering departments.

కుర్ర కారులు

ముగిసిన కార్ రేస్లు



National coverage in more than 70+ leading newspaper and news channels.

CONCLUSION

We Step up We Transform

At ISIEINDIA (Imperial Society Of Innovative engineer)a priority is to ensure that practice meets theory across all functional areas and events. Students have many opportunities for engagement with industry leaders throughout the event. Champion of Champions is home to get connected with industrial experts from companies ,entrepreneurial ventures. ISIEINDIA has established close ties with many of them as well as with key companies from across India. Team of the experts from industries gathers under the banner of ISIE to mentor, guide and evaluate students projects. Also they shape students ideas leading to transformation.

Any change, influential or not, big or small, is less governed by the meek practice of it's preach but more by it's precise and judicious implementation. However, this is achievable only when there stands a strong wall of guidance and experience at every move we make, in every path we tread and with the intention of bringing E-Mobility Change, the First Edition of Champion of Champions was fortunate to have had such skilled and supportive workforce. At the end of the competition we had understood that no journey leads to instant success and that ours had just begun and that is when the great words of Rudyard Kipling come floating in front of us and state:

"If you can dream---and not make dreams your master;

If you can think---and not make thoughts your aim

Yours is the Earth and everything that's in it,

And---which is more---you'll be a Man, my son!"

Though in COC, specifically indifferent static and dynamics rounds, some teams couldn't make it to the notch in the event but we are sure that our participating teams have realized that the true spirit of competition doesn't lie in showing others down but lies in the spirit of putting your best at every level and then may the worthy one win. So, finally with this, the First Edition of Champion of Champions comes to an end, leading to the start of the next journey.


Faculty In-Charge


Professor In-charge


HOD-ME
Dr. A. SRINATH
PROFESSOR & HEAD
Department of Mechanical Engineering,
KL (Deemed to be University)
Vaddeswaram - 522 502.