



Hindusthan College of Engineering And Technology
 Approved by AICTE, New Delhi, Accredited with 'A++' Grade by NAAC
 (An Autonomous Institution, Affiliated to Anna University, Chennai)
 Valley Campus, Pollachi Highway, Coimbatore.



Club: HICET SAE COLLEGIATE CLUB

Academic Year:2024-2025

INDEX OF EVENTS

Activity	Date	Name of the Event	Number of Participants
1	2/8/2024	Minutes of Meeting	12
2	7/7/2024	Hosting V12 Racing	71
3	19-21/8/24	AIMS Gokart 2024 Event	25
4	22/9/2024	Hosting Airarbia Autocross 2024	71
5	18-24/10/24	Bharath Solar Vehicle Championship (BSVC 2024)	30
6 ✓	13-17/3/24	CSRM SEVC 2024	50
7 ✓	9/12/2024	SIH Borewell baby recovery device	6
8	9/12/2024	SIH Co2 to energy	6
9	07/02/2025	SAE Club Inauguration	153
10 ✓	20-25/2/25	SAE Ebaja	30
11	20/5/2025	Niral thiruvizhala 2.0 Form rover	4
12	21/5/2025	Niral thiruvizhala 2.0 Solar Powered water purifier	4

Academic Year 2024-2025

Date: 07/02/2024

Minutes of Meeting`

Council Meeting of SAE club was held on 07-02-2024 in Mechanical Department staff meeting hall with the following the coordinators.

Sr.No.	Name of member	Key Role/ Position assigned
1.	Dr. K. Siva	Head/Mech
2.	Dr. Y. Ras Mathew	Faculty Coordinator
3.	Mr. S. Ramkumar	Member
4.	Dr. C. Senthilmurugan	Member

The HoD/ Mech welcomed the coordinators and the following instructions were given to the faculty members.

1. The faculty coordinator presented the details of programmes conducted in year semester.
2. The HoD/ Mech clarifies the need of SAE Clubs and its importance.
3. The HoD/ Mech discussed about list of competition going to be registered by our teams.
4. The following are the various programs planned current academic year.

Sl. No	Programme
1	SAE Club Inauguration
2	Lecture Meeting
3	Trekking
4	Bicycle Competition
5	Solar vehicle Competition
6	Electric Vehicle Competition
7	UG NX CAD Competition
8	Autonomous Vehicle Design Competition
9	Electric Bike Competition
10	SAE Tractor Design Competition


HoD


Principal


Hindusthan
College of Engineering and Technology,
Valley Campus, Coimbatore 641 032.
HICET www.hicet.ac.in
Report for "Hosting of V12 Racing"

Name of the Faculty : Dr. Y. Ras Mathew	
Department : Mechanical Engineering	Designation : Associate Professor
Name of the Event : Hosting of V12 Racing	
Level : College Level	
Mapping with UN SDGs (Tick the relevant) : <input type="checkbox"/> No poverty (SDG 1) <input type="checkbox"/> Zero hunger (SDG 2) <input type="checkbox"/> Good health and well-being (SDG 3) <input checked="" type="checkbox"/> Quality education (SDG 4) <input type="checkbox"/> Gender equality (SDG 5) <input type="checkbox"/> Clean water and sanitation (SDG 6) <input type="checkbox"/> Affordable and clean energy (SDG 7) <input checked="" type="checkbox"/> Decent work and economic growth (SDG 8) <input checked="" type="checkbox"/> Industry, innovation and infrastructure (SDG 9) <input type="checkbox"/> Reduced inequalities (SDG 10) <input checked="" type="checkbox"/> Sustainable cities and communities (SDG 11) <input type="checkbox"/> Responsible consumption and production (SDG 12) <input checked="" type="checkbox"/> Climate action (SDG 13) <input type="checkbox"/> Life below water (SDG 14) <input type="checkbox"/> Life on land (SDG 15) <input type="checkbox"/> Peace, justice, and strong institutions (SDG 16) <input type="checkbox"/> Partnerships for the goals (SDG 17)	
Venue / Mode : Hindusthan College of Engineering and Technology, Coimbatore / Hindusthan Dirt Park	
No. of Days : 1 Day	Dates : 07.07.2024
Funded by : HICET	
No. of Participants : • Faculties: 1 • Students (Volunteers): 20 • Externals: 50+	Registration charges (if any) : Nil
Name and Designation of Resource Person(s) : • FMSCI Team • Coimbatore Corporation Mayor	

Outcome :

1. The event was successfully conducted with participation from various regions across the country.
2. Students gained hands-on exposure to vehicle endurance testing and different engine specifications.
3. Participants learned about real-time vehicle modifications, performance enhancements, and critical safety features required in motorsport events.

Remarks and Feedback on the Event :**Key Remarks:**

1. Food and accommodation facilities were provided to the participants.
2. Stage arrangements were made for the valediction ceremony.

Feedback from Participants:

- Participants appreciated the well-organized event, safety precautions, and technical knowledge shared.
- Students found the exposure to motorsports engineering to be practically valuable and engaging.

Plan of Implementing in HiCET (if any) : NIL



Signature of the Faculty



HoD



Principal

V. RAS MATHEW, M.E., P.
Associate Professor
Department of Mechanical Engineering
Hindusthan College of Engg & Tech
Coimbatore - 641 032.

Dr. K SIVA, B.E., M.Tech., Ph.D.,
Professor & Head
Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.

PRINCIPAL
Hindusthan College Of Engineering & Technology
COIMBATORE - 641 032

Copy of the Event Brochure / Invitation:



Geo Tagged Photographs of Event – 2 Nos:



**Hindusthan****College of Engineering and Technology,****Valley Campus, Coimbatore 641 032.****HICET www.hicet.ac.in****Report for "E Kart Racing Championship"**

Name of the Faculty : Dr. Y. Ras Mathew

Department : Mechanical Engineering

Designation : Associate Professor

Name of the Event : E Kart Racing Championship

Level : College level

Mapping with UN SDGs (Tick the relevant) :

- ☐ SDG 1 – No Poverty
☐ SDG 2 – Zero Hunger
☐ SDG 3 – Good Health and Well-being
☒ **SDG 4 – Quality Education**
☐ SDG 5 – Gender Equality
☐ SDG 6 – Clean Water and Sanitation
☒ **SDG 7 – Affordable and Clean Energy**
☒ **SDG 8 – Decent Work and Economic Growth**
☒ **SDG 9 – Industry, Innovation and Infrastructure**
☐ SDG 10 – Reduced Inequalities
☒ **SDG 11 – Sustainable Cities and Communities**
☐ SDG 12 – Responsible Consumption and Production
☒ **SDG 13 – Climate Action**
☐ SDG 14 – Life Below Water
☐ SDG 15 – Life on Land
☐ SDG 16 – Peace, Justice and Strong Institutions
☐ SDG 17 – Partnerships for the Goals

Venue / Mode : Hindusthan College of Engineering and Technology, Coimbatore., KARI MOTORSPORTS

No. of Days : 4 days

Dates : 19.08.2024-22.08.2024

Funded by :

 No. of Participants :
 Faculties: 1, Students: 29, Externals: 300+

Registration charges (if any) : Nil

 Name and Designation of Resource Person(s) :
 Academy of Indigenous Motor Sports

Outcome :**1. Design and Fabrication Exposure:**

Students were actively involved in the **conceptualization, CAD modeling, structural analysis (FEA), and fabrication** of an electric Go-Kart, gaining practical knowledge in mechanical design, electrical integration, and battery management systems (BMS).

2. Testing and Validation:

Real-time exposure was gained through **track testing, braking efficiency tests, acceleration tests, and endurance trials**, providing hands-on insight into vehicle dynamics and safety standards followed in professional racing.

3. Awards and Achievements:

- **Best Captain Award** – Awarded for leadership in team coordination, project execution, and performance on track.
- **Best Female Participant** – Recognition for outstanding contribution to fabrication and presentation phases.
- **Winner – Virtual Presentation** – Secured first place for presenting the design, simulation results, and innovation strategy.
- **Overall First Runner-Up** – Based on combined performance across design, innovation, track events, and team management.
- Understood **motor-controller interfacing**, regenerative braking, and **powertrain efficiency** optimization.
- Gained practical experience in **supply chain management, sponsor communication, and project budgeting**.

Remarks and Feedback on the Event :**Key Remarks:**

- The event was **professionally managed**, offering a national platform for innovation and teamwork in the EV domain.
- Students were **highly engaged** and received appreciation from judges and mentors for their technical depth and discipline.
- The **facilities, safety measures, and technical inspections** were conducted to industry standards.

Overall Feedback: Excellent

Plan of Implementing in HiCET (if any) : NIL



Signature of the Faculty



HoD



Principal

Dr. K. SIVA, B.E., M.Tech., Ph.D.,

Professor & Head

**Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.**

PRINCIPAL

**Hindusthan College of Engineering & Technology
COIMBATORE - 641 032**

Copy of the Event Brochure / Invitation:





AIMS **ACADEMY OF INDIGENOUS MOTOR SPORTS**
(REGISTERED UNDER)
ACADEMY OF INDIGENOUS MOTOR SPORTS, EDUCATIONAL AND SOCIAL WELFARE TRUST

A NATIONAL LEVEL GO-KART EVENT - 2024
KART RACING CHAMPIONSHIP
SEASON - 04

CATEGORIES
CV - 130/150 CC
EV - 3KW TO 6KW

ENDURANCE
45 TO 60MINS

CONTACT US: 9952617999,
www.aimsacademys.org

MAXIMUM STUDENTS PER TEAM
35 MEMBERS
(CONDITIONS APPLIED)

SPECIAL CATEGORIES
ENDURANCE FOR GIRLS & ALUMNI

REGISTRATION FEES
INR 39,999
(INCLUDING OF 18% GST)

HOSTING PARTNERS
HINDUSTHAN COLLEGE OF
ENGINEERING AND TECHNOLOGY
COIMBATORE &
KARI MOTORS SPEED WAY RACE TRACK

DATE : AUGUST 7 TO 10/2024

HINDUSTHAN
COLLEGE OF
ENGINEERING AND TECHNOLOGY
COIMBATORE

KARI MOTOR
SPEEDWAY

CRA
MOTORSPORTS

VINTAGE
VISION

KOSHI
MOTORS

ARC GLOBAL

VMTL

<u>S.NO</u>	NAME	YEAR	DEPT	REG NO
1	SEVUGA PERUMAL S	IV	MECH	720721108085
2	MAHA GAYATHRI S	IV	ECE	720721106061
3	RAMANA M	III	MECH	720722108067
4	UKANTH ARUN K	III	ECE	720722106034
5	ABIJITH W	III	MECH	720722108003
6	ARAVINDH S	III	MECH	720722108013
7	SARAN	III	EEE	720722105048
8	KALAISELVAN	III	EEE	720722105021
9	KAZANDHARAN	III	EEE	720722105026
10	JAYA PRASANTH	III	EEE	720722105019
11	PRAVIN S	III	ECE	720722106083
12	SABARI	III	AGRI	720722116037
13	KAVI PRIYAN	III	AGRI	720722116043
14	MUTHU KUMAR	III	EEE	720722105037
15	DHARUNESWARAN V	II	AUTO	720723102012
16	MANICHANDAR A	II	MECH	720723108049
17	MADHAN K	II	MECH	720723108047
18	KARTHIKEYAN G	II	MECH	720723108043
19	GIDHENDRAKUMAR N	II	MECH	720723108029
20	REBIN R MATHEW	II	MECH	720723108072
21	KARAN	II	MECH	720723108042
22	SUBASH S	II	MECH	720723108089
23	AMITH	II	AUTO	LATERAL
24	NEERAJKRISHNA	II	MECH	720723108064
25	SANJAY	II	MECH	720723108077
26	NAVEEN A	II	AUTO	720723102035
27	AJAY ASHOK	II	EEE	720723105003
28	HAFIS	II	ECE	720723106029



Hindusthan

College of Engineering and Technology,

Valley Campus, Coimbatore 641 032.

www.hicet.ac.in

Report for "Airarabia AutoCross 2024"

Name of the Faculty : Dr. Y. Ras Mathew

Department : Mechanical Engineering

Designation : Associate Professor

Name of the Event : Airarabia AutoCross 2024

Mapping with UN SDGs (Tick the relevant) :

- ☐ SDG 1 – No Poverty
☐ SDG 2 – Zero Hunger
☐ SDG 3 – Good Health and Well-being
☒ **SDG 4 – Quality Education**
☐ SDG 5 – Gender Equality
☐ SDG 6 – Clean Water and Sanitation
☒ **SDG 7 – Affordable and Clean Energy**
☒ **SDG 8 – Decent Work and Economic Growth**
☒ **SDG 9 – Industry, Innovation and Infrastructure**
☐ SDG 10 – Reduced Inequalities
☒ **SDG 11 – Sustainable Cities and Communities**
☐ SDG 12 – Responsible Consumption and Production
☒ **SDG 13 – Climate Action**
☐ SDG 14 – Life Below Water
☐ SDG 15 – Life on Land
☐ SDG 16 – Peace, Justice and Strong Institutions
☐ SDG 17 – Partnerships for the Goals

Venue / Mode : Hindusthan College of Engineering and Technology, Coimbatore., Hindusthan Dirt Park

No. of Days : 1 day

Dates : Sept 22 , 2024

Funded by : HICET(Hosting)

No. of Participants :

Faculties	1
Students	20
Externals	50+

Registration charges (if any) : Nil

Signature of the Faculty

Hod/Mech

Dr. K. SIVA, B.E., M.Tech., Ph.D.,
Professor & Head

Principal

PRINCIPAL

Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.

Hindusthan College of Engineering & Technology

COIMBATORE - 641 032

Name and Designation of Resource Person(s) : KMA Motorsport Team, FMSCI

Outcome :

1. **National Exposure to Motorsports Engineering:**

The event attracted participants from across India, creating an opportunity for students to observe and engage in a nationally scaled endurance racing event involving a wide range of car types and engine configurations.

2. **Technical Understanding of Vehicle Modifications:**

Students closely observed modifications in suspension geometry, intake systems, turbocharging techniques, weight reduction strategies, and tuning methods—each affecting lap times, traction, and power delivery. These insights enriched their grasp of performance engineering.

3. **Hands-on Event Coordination and Safety Practice:**

As volunteers, students were trained in motorsport safety protocols, including track setup, barrier management, and emergency response routines. They also assisted in managing pit lanes and timing systems, gaining real-world operational experience.

4. **Learning Through Live Demonstration:**

Students witnessed how real-time telemetry, driver behavior, and tuning decisions impact the outcome of races—offering a comprehensive learning loop not typically found in the classroom.

Remarks and Feedback on the Event :

1. Food, Accommodation facilities has been given to them.
2. Stage Facilities was given to them for valediction.

Feedback from Participants:

- Food **and accommodation** arrangements were made for all participants and guests.
- Valediction **ceremony** was conducted on a well-organized stage setup.
- Participants appreciated the **event management, technical value, and hospitality**.

Plan of Implementing in HiCET (if any) :

NA





AUTO CROSS



• LIFE AT HINDUSTHAN



Hindusthan

College of Engineering and Technology,

Valley Campus, Coimbatore 641 032.

www.hicet.ac.in

Report for "Participation in FMAE BSVC Racing Championship"

Name of the Faculty : Dr. Y. Ras Mathew		
Department : Mechanical Engineering	Designation : Associate Professor	
Name of the Event : Solar electric vehicle Championship		
Mapping with UN SDGs (Tick the relevant) : <input type="checkbox"/> SDG 1 – No Poverty <input type="checkbox"/> SDG 2 – Zero Hunger <input type="checkbox"/> SDG 3 – Good Health and Well-being <input checked="" type="checkbox"/> SDG 4 – Quality Education <input type="checkbox"/> SDG 5 – Gender Equality <input type="checkbox"/> SDG 6 – Clean Water and Sanitation <input checked="" type="checkbox"/> SDG 7 – Affordable and Clean Energy <input checked="" type="checkbox"/> SDG 8 – Decent Work and Economic Growth <input checked="" type="checkbox"/> SDG 9 – Industry, Innovation and Infrastructure <input type="checkbox"/> SDG 10 – Reduced Inequalities <input checked="" type="checkbox"/> SDG 11 – Sustainable Cities and Communities <input type="checkbox"/> SDG 12 – Responsible Consumption and Production <input checked="" type="checkbox"/> SDG 13 – Climate Action <input type="checkbox"/> SDG 14 – Life Below Water <input type="checkbox"/> SDG 15 – Life on Land <input type="checkbox"/> SDG 16 – Peace, Justice and Strong Institutions <input type="checkbox"/> SDG 17 – Partnerships for the Goals		
Venue / Mode : Kumaraguru college of Technology, Coimbatore., KARI MOTORSPORTS		
No. of Days : 7 days	Dates : 18.10.2024 to 24.10.2024	
Funded by : HICET(Hosting)		
No. of Participants :	Registration charges (if any) : Nil	
Faculties		1
Students		31
Externals		700+

Signature of the Faculty

Nod/Mech
Dr. K.SIVA, B.E., M.Tech., Ph.D..
Professor & Head

Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.

Principal

PRINCIPAL

Hindusthan College Of Engineering & Technolo.
COIMBATORE - 641 032

Name and Designation of Resource Person(s) : FMAE

Outcome :

1. **Overall Champion** – Secured the top spot among national teams in combined performance, innovation, and race results.
2. **Design Winner** – Recognized for optimal vehicle geometry, solar panel placement, and structural weight distribution using CAD & simulation tools.
3. **Cost Winner** – Efficient component selection, local sourcing, and budget-conscious design led to minimum manufacturing cost with maximum performance output.
4. **Acceleration Winner** – Achieved highest score in straight-line performance through optimized torque control, gear ratio calibration, and lightweight chassis.
5. **Autocross Winner** – Demonstrated superior handling, turning radius, steering response, and driver maneuverability on a technical circuit.
6. **Traction Winner** – Maximized grip and energy efficiency via precise tire configuration, load balancing, and rear-wheel drive optimization.
7. **Skid Pad Winner** – Outstanding lateral acceleration and cornering stability; highlighted suspension tuning and weight transfer dynamics.

Student Learnings and Experience

- **Technical Skills:** Gained in-depth exposure to solar power integration, BMS tuning, regenerative braking, and energy modeling.
- **Team Skills:** Students were involved in project planning, interdisciplinary collaboration, budgeting, and sponsor pitching, and on-track troubleshooting.
- **Industry Engagement:** Interaction with mentors and resource persons enabled strong awareness of green mobility trends and professional motorsport standards.
- Students enhanced their confidence, leadership, and innovation mindset through a real-time engineering challenge.

Remarks and Feedback on the Event :

1. The event was conducted smoothly with participation from premier institutions across India.
2. Event infrastructure, safety, and support systems met professional racing benchmarks.
3. **Overall Feedback:** *Excellent – technically immersive and nationally competitive*

Feedback from Participants:

1. Participants described the event as **an eye-opening experience** in sustainable engineering and EV technology.
2. They appreciated the **depth of learning** from real-time design validation and racing performance feedback.
3. Students emphasized that this event helped them **build confidence in applying classroom knowledge** to practical engineering challenges.
4. Volunteers noted improved exposure to **team-based problem-solving under pressure**.

Plan of Implementing in HiCET (if any) :

NA







Hindusthan

**College of Engineering and Technology,
Valley Campus, Coimbatore 641 032.
www.hicet.ac.in**

Report for "Participation in Solar Electric Vehicle Racing Championship"

Name of the Faculty : Dr. Y. Ras Mathew & Mr. S Ram Kumar

Department : Mechanical Engineering

Designation : Associate Professor & Assistant Professor

Name of the Event : Solar Electric Vehicle Racing Championship

Mapping with UN SDGs (Tick the relevant) :

- ☐ SDG 1 – No Poverty
☐ SDG 2 – Zero Hunger
☐ SDG 3 – Good Health and Well-being
☒ **SDG 4 – Quality Education**
☐ SDG 5 – Gender Equality
☐ SDG 6 – Clean Water and Sanitation
☒ **SDG 7 – Affordable and Clean Energy**
☒ **SDG 8 – Decent Work and Economic Growth**
☒ **SDG 9 – Industry, Innovation and Infrastructure**
☐ SDG 10 – Reduced Inequalities
☒ **SDG 11 – Sustainable Cities and Communities**
☐ SDG 12 – Responsible Consumption and Production
☒ **SDG 13 – Climate Action**
☐ SDG 14 – Life Below Water
☐ SDG 15 – Life on Land
☐ SDG 16 – Peace, Justice and Strong Institutions
☐ SDG 17 – Partnerships for the Goals

Venue / Mode : Hindusthan College of Engineering and Technology, Coimbatore

No. of Days : 4 days

Dates : 13-17 March, 2025.

Funded by : HICET

No. of Participants :

Faculties	2
Students	29
Externals	400+

Registration charges (if any) : Nil

Signature of the Faculty

Hod/Mech

Principal

Name and Designation of Resource Person(s) **K. SIVA, B.E., M.Tech., Ph.D.,**

Professor & Head

PRINCIPAL

Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.

Hindusthan College of Engineering & Technology
COIMBATORE - 641 032

1. Coimbatore Society of Racing Minds (CSRM)

Outcome :

- **Go Green Award** – Recognized for environmental consciousness, with emphasis on minimal carbon footprint and efficient solar harvesting.
- **Trending Team Award** – Awarded for innovation and online engagement, showcasing technical updates and awareness through digital media.
- **Build Quality Award** – Honored for superior **structural integrity, welding precision, and finish** of the solar vehicle chassis.
- **Solar Endurance Award** – Achieved for maximum distance covered using only solar power, with optimized **panel efficiency and battery management**.
- **Hovering and Drag Award** – Received for effective aerodynamic design that minimized drag and maintained vehicle stability.
- **Rusk in Dusk Award** – Performance-based award for maintaining optimal performance under low-light or late-evening racing conditions.
- **Second Runner-Up** – Overall third-best among national teams for technical performance, innovation, and teamwork.

Student Learnings and Experience

- Developed technical skills in **solar panel alignment, motor-controller tuning, regenerative braking, and endurance testing**.
- Applied classroom learning to real-world problems through **design validation, manufacturing, and testing**.
- Improved capabilities in **event strategy, project logistics, and interdisciplinary collaboration**.
- Strengthened confidence through **on-track decision making, presentation, and exposure to peer competition**.

Remarks and Feedback on the Event :

- The event was a **technically enriching national platform** with wide-scale participation.
- Judges commended the team's **professionalism, safety standards, and technical depth**.
- **Overall Feedback:** *Good – highly educational and competitive.*

Feedback from Participants:

- Students found the event to be a **complete learning ecosystem**, blending design, fabrication, and real-time racing strategy.
- They appreciated the **opportunity to test theoretical knowledge in a live environment** under the guidance of industry professionals.
- The team expressed gratitude for **faculty mentorship, institutional support**, and the collaborative team spirit that led to multiple awards.

Plan of Implementing in HiCET (if any) :

- Proposing to **integrate SEVC modules** into capstone projects and workshops.
- Planning to **mentor junior batches** to participate in similar future events.
- Exploring opportunities to **host zonal SEVC qualifiers** at HiCET campus.



Overall 2nd 🌟







Hindusthan

College of Engineering and Technology,

Valley Campus, Coimbatore 641 032.

www.hicet.ac.in

Report for "SMART INDIA HACKATHON (SIH) 2024"

Name of the Faculty : Dr. Y. Ras Mathew

Department : Mechanical, ECE, EEE & MCT

Designation : Associate Professor

Name of the Event : Smart India Hackathon – SIH 2024

Mapping with UN SDGs (Tick the relevant) :

- ☐ SDG 1 – No Poverty
☐ SDG 2 – Zero Hunger
☒ SDG 3 – Good Health and Well-being
☒ SDG 4 – Quality Education
☐ SDG 5 – Gender Equality
☐ SDG 6 – Clean Water and Sanitation
☐ SDG 7 – Affordable and Clean Energy
☒ SDG 8 – Decent Work and Economic Growth
☒ SDG 9 – Industry, Innovation and Infrastructure
☐ SDG 10 – Reduced Inequalities
☐ SDG 11 – Sustainable Cities and Communities
☐ SDG 12 – Responsible Consumption and Production
☐ SDG 13 – Climate Action
☐ SDG 14 – Life Below Water
☐ SDG 15 – Life on Land
☐ SDG 16 – Peace, Justice and Strong Institutions
☐ SDG 17 – Partnerships for the Goals

Venue / Mode : GITAM University, Visakhapatnam / Offline

No. of Days : 5 days

Dates : 11.12.2024 – 15.12.2024

Funded by : HICET

No. of Participants :

Faculties	1
Students	06
Externals	NA

Registration charges (if any) : Nil

Signature of the Faculty

Hod/Mech

DR. K.SIVA, B.E., M.Tech., Ph.D.,
Professor & Head

Department of Mechanical Engineering
Hindusthan College of Engineering & Technology

Principal

Principal

Hindusthan College Of Engineering & Technology
COIMBATORE - 641 032

Name and Designation of Resource Person(s) :

Outcome :

- **Overall 1st Place Winner** in the national finale of SIH 2024 (Hardware Edition)
- **Awarded a cash prize of ₹ 50,000** by the organizing committee
- **Shortlisted to Grand Finale** of the Smart India Hackathon 2024, under the Hardware Edition.
- Developed a **working prototype** of a borewell rescue device using **integrated robotic arms, real-time camera vision, thermal detection, and control systems**.
- Successfully implemented **IoT-based monitoring** and **AI-based obstacle detection algorithms** to support autonomous and semi-automatic operations.
- Project received **financial support of ₹ 25,000** from institutional management toward development and logistics.

Student Learnings and Experience

- Acquired in-depth experience in **hardware-software integration, design optimization, and embedded systems programming**.
- Developed **problem-solving and innovation skills** by designing a solution to a real-world social issue.
- Gained national-level exposure and mentoring from domain experts.
- Learned **effective project pitching and presentation techniques** for jury evaluation.

Remarks and Feedback on the Event :

1. Excellent infrastructure and mentoring provided at the nodal center (GITAM University).
2. Participants appreciated the opportunity to collaborate and network with peer innovators.
3. **Overall Feedback:** *Very Good – professionally rewarding and socially impactful*

Feedback from Participants:

- Students described the Hackathon as a **transformational experience** blending technical innovation with social responsibility.
- They appreciated the **cross-functional teamwork** and **national-level visibility** provided by the platform.
- The final prize and success were **motivating milestones** in their academic journey.

Plan of Implementing in HiCET (if any) :

NA



AICTE-SMART INDIA HACKATHON 2024

TEAM SHORTLISTED FOR GRAND FINALE

LAHURIANS RESCUE



MENTOR
DR. RAS MATHEW.Y
ASSO. PROF./MECH



- **ZIGBEE MONITOR CONTROL**
- **IT FEATURES MECHANISMS DESIGNED TO SECURELY HOLD THE VICTIM, ENSURING THEY DO NOT DESCEND FURTHER INTO THE BOREWELL.**
- **IT CONTINUOUSLY MONITORS THE CONDITION OF THE VICTIM INSIDE THE BOREWELL, PROVIDING REAL-TIME UPDATES TO ENSURE THEIR SAFETY.**



MAHA GAYATHRI. S
ECE IV YEAR



SEVUGA PERUMAL S
MECH IV YEAR



MARIESWARAN M
MCT III YEAR



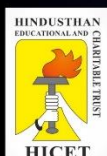
RUBIKA R
EEE II YEAR



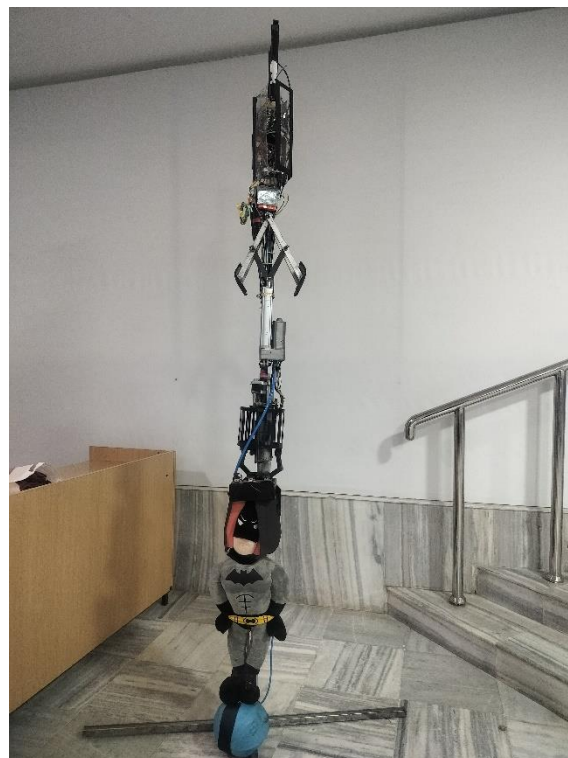
UKANTH ARUN K
ECE III YEAR



GURUPRASATH N
EEE II YEAR



HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY,
COIMBATORE



Fabricated Bore well device Image



#SIH
Hardware Edition

GRAND
FINALE
2024

December
11-15



SMART INDIA
HACKATHON
2024

Winner

Certificate

This Certificate is awarded to

Ukanth Arun · K

the winner of Smart India Hackathon, 2024

Heartiest Congratulations!

Sh. Sanjay Kumar

Sh. Sanjay Kumar
Secretary,
Department of School Education & Literacy,
Ministry of Education

Prof. T. G. Sitharam

Prof. T. G. Sitharam
Chairman, AICTE
Ministry of Education

Dr. Abhay Jere

Dr. Abhay Jere
Vice Chairman AICTE &
Chief Innovation Officer (CIO),
Ministry of Education

Gouthama Rao Yezju

Gouthama Rao Yezju
Vice-Chancellor(In-charge)
GITAM (Deemed To Be University)

#SIH
Hardware Edition

GRAND
FINALE
2024

December
11-15



SMART INDIA
HACKATHON
2024

Winner

Certificate

This Certificate is awarded to

Marieswaran · M

the winner of Smart India Hackathon, 2024

Heartiest Congratulations!

Sh. Sanjay Kumar

Sh. Sanjay Kumar
Secretary,
Department of School Education & Literacy,
Ministry of Education

Prof. T. G. Sitharam

Prof. T. G. Sitharam
Chairman, AICTE
Ministry of Education

Dr. Abhay Jere

Dr. Abhay Jere
Vice Chairman AICTE &
Chief Innovation Officer (CIO),
Ministry of Education

Gouthama Rao Yezju

Gouthama Rao Yezju
Vice-Chancellor(In-charge)
GITAM (Deemed To Be University)

Team List

S.NO	Department	Year	Student Name	Reg No
1	Mechanical	IV	Sevuga Permal S	720721108085
2	ECE	IV	Maha Gayathri S	720721106061
3	EEE	III	Ukanth Arun K	720722106034
4	MCT	III	Marieswaran M	720722109053
5	EEE	II	Rubika R	720723105016
6	EEE	II	Guruprasath N	720723105050



Hindusthan

College of Engineering and Technology,

Valley Campus, Coimbatore 641 032.

www.hicet.ac.in

Report for "SMART INDIA HACKATHON 2024"

Name of the Faculty : Dr. Y. Ras Mathew & Mr Ramalingam R

Department : Mechanical Engineering

Designation : Associate Professor & Assistant Professor

Name of the Event : SMART INDIA HACKATHON 2024

Mapping with UN SDGs (Tick the relevant) :

- ☐ SDG 1 – No Poverty
☐ SDG 2 – Zero Hunger
☐ SDG 3 – Good Health and Well-being
☒ **SDG 4 – Quality Education**
☐ SDG 5 – Gender Equality
☐ SDG 6 – Clean Water and Sanitation
☒ **SDG 7 – Affordable and Clean Energy**
☒ **SDG 8 – Decent Work and Economic Growth**
☒ **SDG 9 – Industry, Innovation and Infrastructure**
☐ SDG 10 – Reduced Inequalities
☐ SDG 11 – Sustainable Cities and Communities
☒ **SDG 12 – Responsible Consumption and Production**
☐ SDG 13 – Climate Action
☐ SDG 14 – Life Below Water
☐ SDG 15 – Life on Land
☐ SDG 16 – Peace, Justice and Strong Institutions
☐ SDG 17 – Partnerships for the Goals

Venue / Mode : KIET GROUP OF INSTITUTION, UTTAR PRADESH.

No. of Days : 5 Days

Dates : 11-12-2024 to 15-12-2024

Funded by : Management, Rs 40000

No. of Participants :

Faculties	2
Students	6
Externals	NA

Registration charges (if any) : Nil

Signature of the Faculty

Hod/Mech

Dr. K.SIVA, B.E., M.Tech., Ph.D.,
Professor & Head

Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.

Principal

PRINCIPAL

Hindusthan College of Engineering & Technology
COIMBATORE - 641 032

Name and Designation of Resource Person(s) :

Outcome :

- **Shortlisted to Grand Finale** of Smart India Hackathon 2024, under the Hardware/Software category.
- Students developed **cutting-edge AI/ML-based solutions** for automating operations and optimizing industrial processes.
- Implemented models involving **predictive analytics, smart data visualization, and real-time decision-making systems** using advanced frameworks.
- Successfully received **₹ 40,000 in funding** from management for prototype development and travel expenses.
- **Winners of Smart India Hackathon 2024**
- **Awarded Cash Prize of ₹ 33,000** by the organizing committee for best national-level solution

Student Learnings and Experience

- Gained practical knowledge in **Artificial Intelligence, Machine Learning, cloud deployment, and UI/UX integration**.
- Understood project lifecycle from **problem definition, algorithm development, validation, and final product demonstration**.
- Participated in **team-based development, agile working models, and technical pitching** in front of national-level evaluators.
- Improved **critical thinking, communication, and engineering creativity** through hands-on exposure and expert mentoring.

Remarks and Feedback on the Event :

- The national event provided students with an **inspiring and competitive innovation ecosystem**.
- Facilities at KIET were highly conducive for 24x7 development and mentorship.
- **Overall Feedback:** *Very Good – Empowering platform for practical innovation and national recognition.*

Feedback from Participants:

- Students felt **honored to represent the institution** at a prestigious national event.
- They highlighted the hackathon as a **transformative experience**, pushing them beyond their academic boundaries.
- The supportive ecosystem and expert mentoring boosted their confidence and technical fluency.
- Winning the national title was a **career-defining moment** for all participants.

Plan of Implementing in HiCET (if any) :

NA









Team List

S.NO	Department	Year	Student Name	Reg No
1	Chemical	III	Padma Priya R S	720722114036
2	Chemical	III	Alten Rey v	720722114005
3	Chemical	III	Patchamuthu M	720722114037
4	EEE	II	Chandru R	720723105011
5	EEE	II	Sweety E	720723105059
6	EEE	II	Akshaya Sruthi R	720723105006

MANAGEMENT SUPPORT

From

21.11.2024

Padma Priya R S,
Team Eco Vortex,
Hindusthan College of Engineering and Technology,
Coimbatore- 32.

To

The Principal,
Hindusthan College of Engineering and Technology,
Coimbatore-32

Respected Mam,

Subject: Request for financial support for Smart India Hackathon 2024 Grand Finale project prototype- Regarding

We, the students of Chemical Engineering and Electrical & Electronics Engineering, are writing to request financial support for our project as it was selected for SIH 2024 Grand Finale.

Our team has cleared the preliminary rounds and has been shortlisted for the grand finale. The estimated expenditure for the project is approximately ₹70,000. We, as students, have collectively contributed ₹30,000 towards the project.

However, we require additional funding to cover the remaining expenses. We kindly request the college management to consider contributing the remaining amount of ₹40,000 to support our project. Participating in SIH 2024's Grand Finale will not only bring prestige to our institution but also provide us with invaluable exposure, networking opportunities, and potential collaborations. Your support will enable us to showcase our innovative solution at national level.

We would be grateful if you could consider our request. Your support will be instrumental in helping us achieve success in prestigious competition, Thank you for your time and considerations.

Coimbatore

20.11.2024

Padma Priya: R. S
Yours sincerely,

Team Eco Vortex

Mentor 1: R. Ramalingam - R. S 21/11/24

Mentor 2: Dr. Y. R. S. Mathew 29/11/24
Dean JIS

Principal
29/11/24



Hindusthan

College of Engineering and Technology,

Valley Campus, Coimbatore 641 032.

www.hicet.ac.in

Report for "Participation in Electric BAJA Championship"

Name of the Faculty : Dr. Y. Ras Mathew

Department : Mechanical Engineering

Designation : Associate Professor

Name of the Event : Electric BAJA Championship

Mapping with UN SDGs (Tick the relevant) :

- ☐ SDG 1 – No Poverty
- ☐ SDG 2 – Zero Hunger
- ☒ SDG 3 – Good Health and Well-being
- ☒ SDG 4 – Quality Education
- ☐ SDG 5 – Gender Equality
- ☐ SDG 6 – Clean Water and Sanitation
- ☒ SDG 7 – Affordable and Clean Energy
- ☒ SDG 8 – Decent Work and Economic Growth
- ☒ SDG 9 – Industry, Innovation and Infrastructure
- ☐ SDG 10 – Reduced Inequalities
- ☒ SDG 11 – Sustainable Cities and Communities
- ☐ SDG 12 – Responsible Consumption and Production
- ☒ SDG 13 – Climate Action
- ☐ SDG 14 – Life Below Water
- ☐ SDG 15 – Life on Land
- ☐ SDG 16 – Peace, Justice and Strong Institutions
- ☐ SDG 17 – Partnerships for the Goals

Venue / Mode :

No. of Days : 4 days

Dates : 20.02.2025 – 25.02.2025

Funded by : HICET(Hosting)

No. of Participants :

Faculties	1
Students	20
Externals	700+

Registration charges (if any) : Nil

Signature of the Faculty

Hod/Mech

Dr. K.SIVA, B.E., M.Tech., Ph.D..

Professor & Head

Department of Mechanical Engineering

Hindusthan College of Engineering & Technology
Coimbatore - 32.

Principal

PRINCIPAL

Hindusthan College Of Engineering & Technolo.
COIMBATORE - 641 032

Name and Designation of Resource Person(s) : **SAEINDIA** – National Engineering Body & Technical Host

Outcome :

1. **Technical Skill Acquisition:**

Students learned the **end-to-end process of designing and simulating an all-terrain electric vehicle (EV)** using design and analysis tools such as **SolidWorks, ANSYS, and MATLAB**.

2. **Fabrication and Assembly Exposure:**

Students actively participated in **manufacturing, welding, fitting, drivetrain assembly, and electrical system integration**, adhering to SAEINDIA's EV regulations and safety standards.

3. **Collaborative and Competitive Learning:**

Team members collaborated on tasks like **chassis layout, weight optimization, suspension testing, braking system setup**, and competed with top institutions across India, gaining confidence and competitive edge.

4. **Industry-Relevant Learning:**

Students interacted with experts and peer teams, **exchanging insights on EV advancements**, battery management systems, and motor controllers aligned with the latest industry trends.

Student Learnings and Experience

- Exposure to **electric mobility solutions, lightweight materials, and energy-efficient drivetrain systems**.
- Developed skills in **team leadership, time-bound execution, and technical documentation**.
- Gained practical understanding of **terrain endurance testing, failure analysis, and system troubleshooting**.
- Learned how to **integrate software simulations with physical testing**, crucial for modern automotive design.

Remarks and Feedback on the Event :

- Event was conducted smoothly with **structured technical evaluation rounds, safety audits, and endurance trials**.
- Received appreciation from judges for **technical documentation and innovation in design**.
- **Overall Feedback:** *Good – technically enriching, challenging, and aligned with EV trends.*

Feedback from Participants:

- Students expressed that the event provided an **unparalleled hands-on experience** in vehicle design and build.
- They appreciated the **collaborative environment**, professional mentorship, and feedback from SAE experts.
- The challenge helped them **translate academic knowledge into practical innovation**, boosting confidence and future career readiness.

Plan of Implementing in HiCET (if any) :

- Plan to initiate an **All-Terrain Electric Vehicle Club** for continuous learning and internal competitions.
- Encourage interdisciplinary student teams to **design next-gen electric off-road vehicles**.
- Organize **workshops and training sessions** based on SAEINDIA guidelines.







<u>S.NO</u>	NAME	YEAR	DEPT	REGISTER NO
1	SEVUGA PERUMAL S	IV	MECH	720721108085
2	SIBI SHRI RAM D M	IV	MECH	720721108089
3	MAHA GAYATHRI S	IV	ECE	720721106061
4	MOHAMMED ASIK S	IV	MECH	720721108061
5	MARIESWARAN M	III	MCT	720722109053
6	RAMANA M	III	MECH	720722108067
7	UKANTH ARUN K	III	ECE	720722106034
8	ABIJITH W	III	MECH	720722108003
9	DHARUNESWARAN V	II	AUTO	720723102012
10	MANICHANDAR A	II	MECH	720723108049
11	MADHAN K	II	MECH	720723108047
12	KARTHIKEYAN G	II	MECH	720723108043
13	GIDHENDRAKUMAR N	II	MECH	720723108029
14	REBIN R MATHEW	II	MECH	720723108072
15	ASWIN S	II	MECH	720723108016
16	THISHAN C	II	MECH	720723108020
17	COLLIN B FERRELL	II	MECH	720723108095
18	SIVAMANIKANDAN G	II	MECH	720723108082
19	NAVEEN S	II	MECH	720723108063
20	ANUSH RAJA G	II	MECH	720723108009
21	CHANDRU	II	EEE	720723105011
22	AKSHAYA	II	EEE	720723105006
23	GIRITHAR	II	EEE	720723105014
24	ABISHEK M	I	AUTO	720724102002
25	PARANI KUMAR K	I	MECH	720724108090
26	JEFFRIN MONIS J	I	AUTO	720724102027
27	VETRISELVAM S S	I	AUTO	720724102059
28	SHIJIN KARTHIC B	I	ECE	720724106107
29	EBEN FELIX F	I	MECH	720724108038
30	NITHYA SRI	I	MECH	720724108087

BAJA SAEINDIA 2025

eBAJA SAEINDIA 2025 PHASE II - VDE OVERALL

TEAM ID	INSTITUTE NAME	TEAM NAME	CITY	STATE	LAP TIME (sec)	LAP DISTANCE (m)	TRACK OFFSETS	TRACK_ECC	INTERIM SCORE (OUT OF 25)	LATE PENALTY	ATP SCORE (OUT OF 25)	PRESENTATION SCORE (OUT OF 50)	TOTAL SCORE (OUT OF 75)
252001	ACROPOLIS INSTITUTE OF TECHNOLOGY AND RESEARCH	ACRORACERZ	INDORE	MADHYA PRADESH	173.87		13		6.48		6.48	14.06	20.54
252002	AJENKYA DY PATIL UNIVERSITY	TEAM AVINYA	PUNE	MAHARASHTRA		62.33	48		0.81		0.81	5.87	6.68
252003	ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S COLLEGE OF ENGINEERING	RESONANCE RACING	PUNE	MAHARASHTRA	63.93				20.25		20.25	41.85	62.10
252004	B.V RAJU INSTITUTE OF TECHNOLOGY	E-OFFROADERS	MEDAK	TELANGANA	142.49				9.08		9.08	15.66	24.74
252005	BANNARI AMMAN INSTITUTE OF TECHNOLOGY	Q-TRON	ERODE	TAMIL NADU	219.37		15		5.19		5.19	29.12	34.31
252006	BIRLA INSTITUTE OF TECHNOLOGY, MESRA	TEAM AVEON RACING	RANCHI	JHARKHAND	BACKOUT				BACKOUT		BACKOUT	BACKOUT	BACKOUT
252008	BRAC'T'S VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY	TEAM VISHWARACERS BAJA	PUNE	MAHARASHTRA	91.69				14.12		14.12	24.57	38.69
252009	CHANNABASAVESHWARA INSTITUTE OF TECHNOLOGY, GUBBI TUMKUR KARNATAKA	TEAM GOLDEN EAGLE	TUMAKURU	KARNATAKA		94.40	2		1.23		1.23	16.02	17.25
252010	CHENNAI INSTITUTE OF TECHNOLOGY	TEAM YAALEE	CHENNAI	TAMIL NADU		60.72	2		0.79		0.79	18.59	19.38
252011	CHITKARA UNIVERSITY	ELECRAMA	RAJPURA	PUNJAB		56.80	2		0.74		0.74	33.33	34.07
252012	CHRIST COLLEGE OF ENGINEERING, IRINJALAKUDA, THRISSUR	PROWLER	THRISSUR	KERALA	DQ				DQ		DQ	BACKOUT	DQ/BACKOUT
252013	COEP TECHNOLOGICAL UNIVERSITY	TEAM NEMESIS RACING	PUNE	MAHARASHTRA	104.45				12.39		12.39	36.40	48.79
252014	COLLEGE OF ENGINEERING GUINDY	CEG MOTORSPORTS	CHENNAI	TAMIL NADU	65.20				19.85		19.85	40.50	60.35
252015	COLLEGE OF ENGINEERING TRIVANDRUM	HERAKLES RACING	THIRUVANANTHAPURAM	KERALA	74.78				17.31		17.31	33.22	50.52
252016	CSMSS, CHH. SHAHU COLLEGE OF ENGINEERING	TEAM SAMSKARA E-BAJA	AURANGABAD	MAHARASHTRA	195.88		11		5.94		5.94	7.13	13.07
252017	D.Y PATIL COLLEGE OF ENGINEERING, AKURDI	TEAM PREDATORS RACING	PUNE	MAHARASHTRA	52.50				24.66		24.66	38.41	63.07
252018	DAVV IET INDORE	TEAM ELEKTRONIN RACERS	INDORE	MADHYA PRADESH		210.94	5		2.75		2.75	5.36	8.11
252019	DR MAHALINGAM COLLEGE OF ENGINEERING AND TECHNOLOGY	ICHNOFOSSILS	POLLACHI	TAMIL NADU	186.03		5		6.60		6.60	28.50	35.10
252020	DR. D. Y. PATIL INSTITUTE OF TECHNOLOGY, PIMPRI	TEAM DURGAYANS	PUNE	MAHARASHTRA	76.53		1		16.48		16.48	34.13	50.61
252021	DR. D.Y. PATIL INSTITUTE OF ENGINEERING, MANAGEMENT AND RESEARCH	GENESIS 16 MOTORSPORTS ELECTRIC	PUNE	MAHARASHTRA	123.90				10.45		10.45	31.21	41.66
252022	DR. VISHWANATHI KARAD MIT WORLD PEACE UNIVERSITY,PUNE	PIRANHA RACING	PUNE	MAHARASHTRA	51.78				25.00		25.00	42.54	67.54
252023	DWARKADAS J SANGHVI COLLEGE OF ENGINEERING	DJS KRONOS INDIA	MUMBAI	MAHARASHTRA	77.00		1		16.38		16.38	15.66	32.04
252024	FINOLEX ACADEMY OF MANAGEMENT AND TECHNOLOGY, RATNAGIRI	TEAM MATADORS	RATNAGIRI	MAHARASHTRA	113.05				11.45		11.45	19.78	31.23
252025	FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING	TEAM ABADHA	MUMBAI	MAHARASHTRA	143.04				9.05		9.05	14.54	23.59
252026	G H RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT PUNE	TEAM ABHYUDAY	PUNE	MAHARASHTRA	82.31				15.73		15.73	32.83	48.55
252027	GOVERNMENT COLLEGE OF ENGINEERING, AMRAVATI	TEAM GCOEA	AMRAVATI	MAHARASHTRA	197.50		8		6.06		6.06	BACKOUT	6.06
252028	GOVERNMENT COLLEGE OF ENGINEERING, AURANGABAD	TEAM ARYANS RACING	AURANGABAD	MAHARASHTRA	103.92				12.46		12.46	44.29	56.75
252029	GOVERNMENT ENGINEERING COLLEGE THRISSUR	BUG-E	THRISSUR	KERALA		105.18	2		1.37		1.37	39.50	40.87
252030	GOVIND BALLABH PANT INSTITUTE OF ENGINEERING AND TECHNOLOGY	TEAM SAVITAR RACING	PAURI	UTTARAKHAND		206.00	3		2.69		2.69	30.12	32.80
252031	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY	HINDUSTHANI LAHURIANS	COIMBATORE	TAMIL NADU	170.54		1		7.50		7.50	24.72	32.22
252032	INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, SHIBPUR	SLICK WHEELS	KOLKATA	WEST BENGAL	BACKOUT				BACKOUT		BACKOUT	BACKOUT	BACKOUT
252033	INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN AND MANUFACTURING KANCHEEPURAM	REVOLT RACERS	CHENNAI	TAMIL NADU	70.64				18.32		18.32	42.23	60.55
252034	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE	TEAM KNOX	ROORKEE	UTTARAKHAND	103.13		3		11.86		11.86	37.37	49.23
252035	INDIAN INSTITUTE OF TECHNOLOGY, BHUBANESWAR	KNOCKSONIACS	KHURDA	ODISHA	245.09		8		4.96		4.96	34.13	39.08
252036	INDIAN INSTITUTE OF TECHNOLOGY, GANDHINAGAR	MOKSHA IITGN	GANDHINAGAR	GUJARAT	219.88		5		5.63		5.63	BACKOUT	5.63
252037	INSTITUTE OF TECHNOLOGY, NIRMA UNIVERSITY	TEAM STALLIONS	AHMEDABAD	GUJARAT	143.60				9.01		9.01	28.79	37.80
252038	IPS ACADEMY, INSTITUTE OF ENGINEERING & SCIENCE	IPS_SPRINTER'S	INDORE	MADHYA PRADESH		25.36	1		0.33		0.33	14.38	14.71
252039	K. K. WAGH INSTITUTE OF ENGINEERING EDUCATION AND RESEARCH	TEAM BRAHMASTRA RACING	NASHIK	MAHARASHTRA	76.54				16.91		16.91	40.25	57.16
252040	KIET GROUP OF INSTITUTION	E IMMORTALS	GHAZIABAD	UTTAR PRADESH		53.25	5		0.69		0.69	37.20	37.89
252041	KLE TECHNOLOGICAL UNIVERSITY	TEAM CONCEPT GREEN	HUBBALLI	KARNATAKA	84.29				15.36		15.36	32.18	47.53
252042	KUMARAGURU COLLEGE OF TECHNOLOGY	E-BLITZ	COIMBATORE	TAMIL NADU		59.37	4		0.77		0.77	4.84	5.61
252043	M.S.P. MANDAL'S DEOGIRI INSTITUTE OF ENGINEERING AND MANAGEMENT STUDIES, AURANGABAD	VIDYUTASHWA	AURANGABAD	MAHARASHTRA	DQ				DQ		DQ	BACKOUT	BACKOUT
252044	MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY, GORAKHPUR	RAPTOR 7.0	GORAKHPUR	UTTAR PRADESH		10.78	9		0.14		0.14	14.14	14.28
252045	MAHARAJ VIJAYRAM GAJAPATHI RAJ COLLEGE OF ENGINEERING	TEAM INVINCIBLE 1.0	VIZIANAGARAM	ANDHRA PRADESH	DQ				DQ		DQ	18.97	18.97

BAJA SAEINDIA 2025

TEAM ID	INSTITUTE NAME	TEAM NAME	CITY	STATE	LAP TIME (sec)	LAP DISTANCE (m)	TRACK OFFSETS	TRACK_ECC	INTERIM SCORE (OUT OF 25)	LATE PENALTY	ATP SCORE (OUT OF 25)	PRESENTATION SCORE (OUT OF 50)	TOTAL SCORE (OUT OF 75)
252046	MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY	TEAM JATAYU	ROHINI	DELHI	145.74				8.88		8.88	32.18	41.06
252047	MANIPAL INSTITUTE OF TECHNOLOGY	TEAM MANIPAL RACING ELECTRIC	MANIPAL	KARNATAKA	79.53				16.28		16.28	24.38	40.66
252048	MAR ATHANASIOS COLLEGE OF ENGINEERING	TEAM INFUX	ERNAKULAM	KERALA	BACKOUT				BACKOUT		BACKOUT	BACKOUT	BACKOUT
252049	MIT ACADEMY OF ENGINEERING	TEAM NIYUDRATH RACING	PUNE	MAHARASHTRA	101.35		1		12.52		12.52	27.16	39.68
252051	MODERN EDUCATION SOCIETY'S COLLEGE OF ENGINEERING, PUNE	TEAM GYRFALCONS	PUNE	MAHARASHTRA	65.22				19.85		19.85	32.43	52.28
252052	NATIONAL INSTITUTE OF TECHNOLOGY AGARTALA	TEAM XANTHRONZ	AGARTALA	TRIPURA	DQ				DQ		DQ	5.21	5.21
252053	NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT	TEAM UNWIRED	KOZHIKODE	KERALA	DNS				DNS		DNS	BACKOUT	DNS/BACKOUT
252054	NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA	TEAM NITROX	KURUKSHETRA	HARYANA	191.89		5		6.41		6.41	21.53	27.94
252055	NATIONAL INSTITUTE OF TECHNOLOGY, RAIPUR	IGNITRR 6.0	RAIPUR	CHHATTISGARH	BACKOUT				BACKOUT		BACKOUT	BACKOUT	BACKOUT
252056	NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA	BLACK MAMBA RACING ELECTRIC	SUNDARGARH	ODISHA	BACKOUT				BACKOUT		BACKOUT	BACKOUT	BACKOUT
252057	NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI	PSI RACING	TIRUCHIRAPPALLI	TAMIL NADU		305.62	4		3.99		3.99	18.03	22.01
252058	PANDIT DEENDAYAL ENERGY UNIVERSITY	TEAM SOVEREIGN	GANDHINAGAR	GUJARAT		85.00	4		1.11		1.11	BACKOUT	1.11
252059	PIMPRI CHINCHWAD COLLEGE OF ENGINEERING	TEAM RED BARON	PIMPRI-CHINCHWAD	MAHARASHTRA	85.05				15.22		15.22	40.40	55.62
252060	PSG COLLEGE OF TECHNOLOGY	E BAJA BHAIS	COIMBATORE	TAMIL NADU		259.13	8		3.38		3.38	27.10	30.48
252061	PSG INSTITUTE OF TECHNOLOGY AND APPLIED RESEARCH	VELOCITA RACING	COIMBATORE	TAMIL NADU		139.37	7		1.82		1.82	30.14	31.95
252062	PUNJAB ENGINEERING COLLEGE, (DEEMED TO BE UNIVERSITY), CHANDIGARH	TEAM RPM	CHANDIGARH	CHANDIGARH	BACKOUT				BACKOUT		BACKOUT	BACKOUT	BACKOUT
252063	RAJALAKSHMI ENGINEERING COLLEGE	TEAM EFORZA	CHENNAI	TAMIL NADU	143.36				9.03		9.03	27.83	36.85
252064	RAJIV GANDHI INSTITUTE OF TECHNOLOGY (RIT)	MOTORAGE	KOTTAYAM	KERALA	DQ				DQ		DQ	BACKOUT	DQ/BACKOUT
252065	RASHTREEYA VIDYALAYA COLLEGE OF ENGINEERING	TEAM HELIOS RACING	BANGALORE URBAN	KARNATAKA		30.04			0.39		0.39	42.00	42.39
252066	S.R.M. INSTITUTE OF SCIENCE AND TECHNOLOGY	THE ELECRUISERS	CHENNAI	TAMIL NADU		84.28	4		1.10		1.10	BACKOUT	1.10
252067	SAINTGITS COLLEGE OF ENGINEERING	E-WOUK RACING 5.0	KOTTAYAM	KERALA	DQ				DQ		DQ	BACKOUT	DQ/BACKOUT
252068	SHIV NADAR UNIVERSITY	TEAM GENESIS	GAUTAM BUDDHA NAGAR	UTTAR PRADESH	DQ				DQ		DQ	BACKOUT	DQ/BACKOUT
252069	SHRI GOVINDRAM SEKSARIA INSTITUTE OF TECHNOLOGY AND SCIENCE	TEAM GSRACERS	INDORE	MADHYA PRADESH	90.77		1		13.95		13.95	22.22	36.17
252071	SHRI MATA VAISHNO DEVI UNIVERSITY	CRAWLERS	RIASI	JAMMU AND KASHMIR	DQ				DQ		DQ	BACKOUT	DQ/BACKOUT
252072	SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT	TRIDENT RACING	NAGPUR	MAHARASHTRA		105.10	3		1.37		1.37	34.13	35.50
252073	SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN	TEAM E ZIBA RACERS	BHIMAVARAM	ANDHRA PRADESH	97.54		2		12.75		12.75	21.39	34.14
252074	SILVER OAK UNIVERSITY	TEAM SPARKX RACING	AHMEDABAD	GUJARAT		87.97	3		1.15		1.15	BACKOUT	1.15
252075	SRI RAMAKRISHNA ENGINEERING COLLEGE	PHOENIX RACING	COIMBATORE	TAMIL NADU		61.33	2		0.80		0.80	22.58	23.38
252076	SRI SAI RAM ENGINEERING COLLEGE	TEAM EVEGA RACING	CHENNAI	TAMIL NADU	67.47				19.19		19.19	36.46	55.65
252077	SRI SAI RAM INSTITUTE OF TECHNOLOGY	TEAM ZEUS	CHENNAI	TAMIL NADU	DQ				DQ		DQ	BACKOUT	DQ/BACKOUT
252078	ST JOSEPH ENGINEERING COLLEGE	TEAM ESJEC RACING	MANGALURU	KARNATAKA	71.79				18.03		18.03	43.00	61.03
252079	ST. JOSEPHS COLLEGE OF ENGINEERING AND TECHNOLOGY PALAI	TYROVELOCE	KOTTAYAM	KERALA	BACKOUT				BACKOUT		DQ	BACKOUT	DQ/BACKOUT
252080	ST. JOSEPH'S COLLEGE OF ENGINEERING	INFERNO RACING TEAM	CHENNAI	TAMIL NADU		152.64	5		1.99		1.99	26.00	27.99
252081	VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY	E - VETTURA RACING	HYDERABAD	TELANGANA	121.35		1		10.49		10.49	25.03	35.52
252082	VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA	VEERSS RACING	SAMBALPUR	ODISHA	DQ				DQ		DQ	2.60	2.60
252083	VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE	TEAM MOTORBREATH	MUMBAI	MAHARASHTRA		186.14	7		2.43		2.43	34.65	37.08
252084	VELLORE INSTITUTE OF TECHNOLOGY, VELLORE	KSHATRIYA ELECTRIC	VELLORE	TAMIL NADU	86.43				14.98		14.98	34.30	49.27
252085	VIT BHOPAL UNIVERSITY	TEAM GARVIT	SEHORE	MADHYA PRADESH	DQ				DQ		DQ	BACKOUT	DQ/BACKOUT
252086	VIT CHENNAI	THE ROADRUNNERS	CHENNAI	TAMIL NADU	175.17		2		7.22		7.22	22.23	29.45
252087	BRAC'T'S VISHWAKARMA INSTITUTE OF TECHNOLOGY	TEAM ENDURANCE RACING	PUNE	MAHARASHTRA	70.70				18.31		18.31	36.58	54.88
252088	BANGALORE INSTITUTE OF TECHNOLOGY	STRATOS	BENGALURU	KARNATAKA	177.00		3		7.07		7.07	39.90	46.97

NOTE

- EX_DOC_DNF** - Teams classified as Excessing Drive Off Course as per part II of article B.4 of Virtual Dynamic Event Guidelines II released on BAJA SAEINDIA Forum.
- DNS** - Teams classified as Did Not Start/Vehicle Data Error/ Simulation did not start as per article B.4 of Virtual Dynamic Event Guidelines II released on BAJA SAEINDIA Forum.
- BACKOUT** - Teams that did not register for the Phase II Event / Teams that did not submit the IPG CarMaker vehicle model/Test Run or both will be classified as BACKOUT as per Virtual Dynamic Event Guidelines II released on BAJA SAEINDIA Forum.
- DQ** - Teams submitting the wrong vehicle model/test run file will be classified as DQ.
- Delay Sub Penalty** - Teams who have not submitted the Vehicle Model/Test Run File as per the deadline are penalized.



Hindusthan

**College of Engineering and Technology,
Valley Campus, Coimbatore 641 032.
www.hicet.ac.in**

Report for "Niral Thiruvizha 2025"

Name of the Faculty : Dr. V. Senthil Murugan

Department : Mechanical Engineering

Designation : Associate Professor

Name of the Event : Niral Thiruvizha 2025

Mapping with UN SDGs (Tick the relevant) :

☒ **SDG 1 – No Poverty**

☐ **SDG 2 – Zero Hunger**

☒ **SDG 3 – Good Health and Well-being**

☒ **SDG 4 – Quality Education**

☐ **SDG 5 – Gender Equality**

☒ **SDG 7 – Affordable and Clean Energy**

☒ **SDG 8 – Decent Work and Economic Growth**

☒ **SDG 9 – Industry, Innovation and Infrastructure**

☒ **SDG 11 – Sustainable Cities and Communities**

☐ **SDG 12 – Responsible Consumption and Production**

☒ **SDG 13 – Climate Action**

Venue / Mode :

No. of Days : Multi-phase

Dates : Fund Utilization Completed in AY 2024–25

Funded by : TNSDC / CSRC – Anna University (₹ 10,000)

No. of Participants :

Faculties	1
Students	4
Externals	NA

Registration charges (if any) : Nil

Signature of the Faculty

Hod/Mech

Dr. K.SIVA, B.E., M.Tech., Ph.D.,
Professor & Head
Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.

Principal

PRINCIPAL
Hindusthan College Of Engineering & Technology
COIMBATORE - 641 032

Name and Designation of Resource Person(s) :

Outcome :

- **Design Innovation:**

Developed a **multi-purpose, electric-powered farm rover** to carry out short-plot cultivation tasks—specifically bund forming, drip irrigation hose laying, and transplanting.

- **4-in-1 Functional Integration:**

Eliminates the need for separate farming equipment through modular design, enabling high productivity and reduced operating costs.

- **High Efficiency & Automation:**

One person can operate and control farming operations across a 5-acre field, increasing automation and sustainability.

- **Multidisciplinary Engineering Application:**

Combined **mechanical design, electrical drive systems, and agricultural workflows**, supported by software-enabled control.

- Learned system integration using **CAD, prototyping, and actuator mechanism design.**
- Understood agricultural process flows and adapted engineering principles to rural requirements.
- Gained exposure to **project budgeting and utilization reporting** under government-funded schemes.
- Developed skills in **team collaboration, technical communication, and real-world design thinking.**

Remarks and Feedback on the Event :

- The project received **positive feedback for its utility in small-scale and precision farming.**
- Supported under the **Niral Thiruvizha Scheme** by CSRC – Anna University.
- Utilized full sanctioned amount (**₹ 10,000**) effectively as certified in the Utilization Certificate.

Feedback from Participants:

NA

Plan of Implementing in HiCET (if any) :

- Proposal to include the project under **Smart Agriculture Lab Initiatives.**
- Extend the rover design as a **capstone project or startup incubation proposal.**
- Showcase at **Tech Fests, Farmer Exhibitions**, and promote for patent filing and pilot trials.

UTILISATION CERTIFICATE

Niral Thiruvizha ID : NMNISTD7207819
College Name : Hindusthan College of Engineering and Technology
Project Title : Design and Development of Farm Rover

Certified that out of Rs.10,000/- (Rupees Ten thousand Only) sanctioned by TNSDC under Niral Thiruvizha Scheme through Centre for Sponsored Research and Consultancy (CSRC), Anna University towards the financial assistance for the project details indicated above, an amount of Rs. 10,000/- (Rupees Ten Thousand only) was utilised for the purpose for which it was sanctioned, leaving a balance of Rs. 0/- (Rupees Zero only).

Certified that I have satisfied myself that the conditions on which the grant-in-aid was sanctioned have been duly fulfilled and that I have exercised the necessary checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Team details

SLNo.	Reg. No.	Student Name	Branch	Mobile No.	Sign.
1	720721108810	Boopathi M	MECHANICAL	9360732580	<i>m. Piel</i>
2	720721108017	Anthony Jerrison J	MECHANICAL	9080877478	<i>A. Jerrison</i>
3	720721108028	Dhuvarhan R G	MECHANICAL	9385475165	<i>D. R. G.</i>
4	720721108033	Hariram S	MECHANICAL	9677984856	<i>Hariram S</i>
5	Name, Designation, Department of the Faculty Guide	Dr. V. Senthil Murugan, Associate Professor, Dept. of Mechanical Engg.		994231081	<i>V. Senthil Murugan</i>

K. Siva
Name and Sign
of the HoD

Dr. K.SIVA, B.E., M.Tech., Ph.D.,
Professor & Head
Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Place: Coimbatore 32
Date: 15-05-2025

V. Vimala K
Name and Sign
of the Finance Officer /
Auditor / Accounts
Officer with seal

Mrs. VIMALA K
FINANCE OFFICER
HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY
COIMBATORE

J. Jaya
Name and Sign
of the Principal with seal

Dr. J. JAYA, M.Tech., Ph.D
PRINCIPAL
Hindusthan College of Engineering and Technology
COIMBATORE - 641 032.



INTRODUCTION


- > A revolutionary electric-powered, multi-purpose farming rover designed for short plant cultivation.
- > Reduces labor dependency, lowers operational costs, and enhances farming efficiency.
- > A solution for modern small & medium-scale farmers facing increasing labor shortages and high maintenance costs.




BUND FORMER




DRIP HOSE




HINDUSTHAN
CHARITABLE TRUST




HINDUSTHAN
CHARITABLE TRUST




HINDUSTHAN
CHARITABLE TRUST




HINDUSTHAN
CHARITABLE TRUST




HINDUSTHAN
CHARITABLE TRUST



HINDUSTHAN
CHARITABLE TRUST



HINDUSTHAN
CHARITABLE TRUST



HINDUSTHAN
CHARITABLE TRUST

HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

NAAN MUDHALAVAN
NIRAL THIRUVIZHA 2025

TITLE OF THE PROJECT

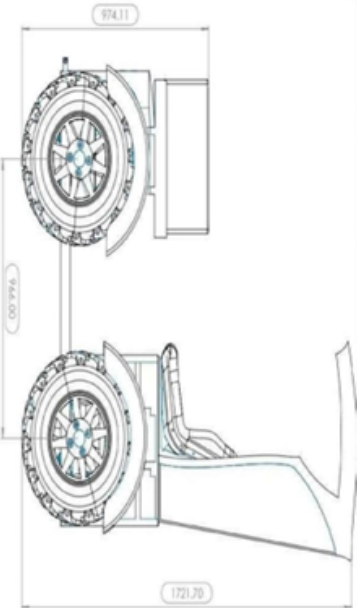
TEAM DETAILS

DESIGN AND DEVELOPMENT OF FARM ROVER

MENTOR NAME
Dr.V. SENTHIL MURUGAN, ME.,Ph D .,
ASSOCIATE PROFESSOR ,
MECHANICAL ENGINEERING

- 1. BOOPATHI M
 - 2. ANTONY JERRISON J
 - 3. DHUVARAHAN R G
 - 4. HARIRAM S
- (IV YEAR MECH 2021-2025 BATCH)

PROTOTYPE MODEL

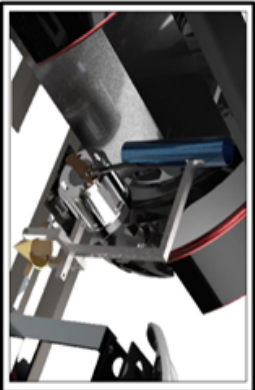


METHODOLOGY

Designing and developing a farm rover involves a multidisciplinary approach, integrating principles from mechanical, electrical, software, and agricultural engineering.

OUTCOMES

One person can operate & control the entire farming process for a 5-acre field. 4-in-1 Multi-Functional Attachments for All Farming Stages Eliminates the need for multiple machines, saving costs & increasing productivity.



TRANSPLANTING





Hindusthan
College of Engineering and Technology,
Valley Campus, Coimbatore 641 032.
www.hicet.ac.in

Report for "Niral Thiruvizha 2025"

Name of the Faculty : Dr. Y Rasmathew	
Department : Mechanical Engineering	Designation : Associate Professor
Name of the Event : Niral Thiruvizha 2025	
Mapping with UN SDGs (Tick the relevant) : <input checked="" type="checkbox"/> SDG 1 – No Poverty <input type="checkbox"/> SDG 2 – Zero Hunger <input checked="" type="checkbox"/> SDG 3 – Good Health and Well-being <input checked="" type="checkbox"/> SDG 4 – Quality Education <input type="checkbox"/> SDG 5 – Gender Equality <input checked="" type="checkbox"/> SDG 7 – Affordable and Clean Energy <input checked="" type="checkbox"/> SDG 8 – Decent Work and Economic Growth <input checked="" type="checkbox"/> SDG 9 – Industry, Innovation and Infrastructure <input checked="" type="checkbox"/> SDG 11 – Sustainable Cities and Communities <input type="checkbox"/> SDG 12 – Responsible Consumption and Production <input checked="" type="checkbox"/> SDG 13 – Climate Action	
Venue / Mode : Offline	
No. of Days : Multi-phase	Dates : Fund Utilization Completed in AY 2024–25
Funded by : TNSDC / CSRC – Anna University (₹ 10,000)	
No. of Participants :	Registration charges (if any) : Nil
Faculties : 1	
Students : 4	
Externals : NA	

Signature of the Faculty

Hod/Mech

Principal

Dr. K.SIVA, B.E., M.Tech., Ph.D.,
Professor & Head
Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore - 32.

PRINCIPAL
Hindusthan College of Engineering & Technology
COIMBATORE - 641 032

Name and Designation of Resource Person(s) :

Outcomes:

1. **Sustainable Water Purification:**
Successfully designed and fabricated a **low-cost, solar-powered water purifier** tailored for use in off-grid or rural communities.
2. **Energy Efficiency:**
Utilized **solar thermal principles** and passive heating mechanisms to enhance purification while minimizing electricity consumption.
3. **Innovation in Design:**
Integrated filters, solar collectors, and automated control in a compact layout, ensuring ease of use and low maintenance.
4. **Effective Fund Utilization:**
Entire grant of ₹10,000 was utilized as per the sanctioned budget for prototyping, materials, and testing components (as certified in the Utilization Certificate).

Student Learnings and Experience

- Gained hands-on skills in **thermodynamics, fluid filtration, solar energy applications, and thermal system design.**
- Applied theoretical concepts in a **real-world solution aligned with community health needs.**
- Developed understanding of **project cost management, utilization compliance, and documentation under government funding schemes.**
- Strengthened teamwork, innovation, and communication through a **community-impact-focused project.**

Remarks and Feedback on the Event :

- The project was well appreciated during **internal reviews and peer demonstration sessions.**
- Faculty mentors noted the **clarity of design, alignment with sustainability goals, and field utility** of the prototype.
- **Overall Feedback:** *Very Good – A socially relevant and energy-efficient innovation*

Feedback from Participants:

NA

Plan of Implementing in HiCET (if any) :

- Proposal to **demonstrate the prototype in rural outreach and NSS activities.**
- Encouraging **future project batches** to continue innovation in **sustainable water and sanitation solutions.**
- Plan to explore **patenting options** and **deployment at institutional hostels or village schools.**

UTILISATION CERTIFICATE

Niral Thiruvizha ID : NMNTSTD7207880






College Name : Hindusthan College of Engineering and Technology

Project Title : Design and Fabrication of Solar assist Water Purifier


Certified that out of Rs.10,000/- (Rupees Ten thousand Only) sanctioned by TNSDC under Niral Thiruvizha Scheme through Centre for Sponsored Research and Consultancy (CSRC), Anna University towards the financial assistance for the project details indicated above, an amount of Rs. 10,000/- (Rupees Ten Thousand only) was utilised for the purpose for which it was sanctioned, leaving a balance of Rs. 0/- (Rupees Zero only).

Certified that I have satisfied myself that the conditions on which the grant-inaid was sanctioned have been duly fulfilled and that I have exercised the necessary checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Team details

SLNo.	Reg. No.	Student Name	Branch	Mobile No.	Sign.
1	720721108010	Ajith Kumar	MECHANICAL	6238981127	
2	720721108011	Akhil Kumar A	MECHANICAL	6238632560	
3	720721108044	Johan J	MECHANICAL	7397623181	
4	720721108045	Joshua J	MECHANICAL	9363503516	
5	Name, Designation, Department of the Faculty Guide		Dr.Y. Ras Mathew, Associate Professor, Dept. of Mechanical Engineering.		9843098861 


Name and Sign
of the HoD
Dr. K.SIVA, B.E., M.Tech., Ph.D.,
Professor & Head
Department of Mechanical Engineering
Hindusthan College of Engineering & Technology
Coimbatore-22.
Date: 15-05-2025


Name and Sign
of the Finance Officer /
Auditor / Accounts
Officer with seal
Mrs. VANDANA K
FINANCE OFFICER
HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY
COIMBATORE


Name and Sign
of the Principal with seal
Dr. J. JAYA, M.Tech., Ph.D
PRINCIPAL
Hindusthan College of Engineering and Technology
COIMBATORE - 641 032.

College Seal

