

## Department of Humanities and Basic Sciences DEAN DIARY OF EVENTS

## EVENT SUMMARY REPORT

Department		Mechanical					
Professional Body	Institutional Body	Under SAE					
Nature of the Event (Workshop / Seminar / Guest Lecture / Tech Talk/ GD/ Training Program / Quiz / Presentation/Conference/ Industry Visit/Co & Extra curricular Activities		Technical Talk					
Title / Theme of the Event		Innovatives on Aerodynamics					
Dates on which Event is held		From	То		No. of Days		
		15-03-2024	024 15-03-2024		01		
Details of the Speaker / Guest Name Organization		Deepankar, Deputy Manager, Vaideehi Aerodynamics Engineer					
Participants (Teaching Faculty Faculty / Students	// Non-Teaching	No. of Faculty	No. of UG students	No. of PG Student	No. of Parents	Total Participants	
		02	60			62	

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		Here's a brief summary of some key aerospace technologies discussed during the session:
	Summary of the Event	<ol> <li>Jet Propulsion: Jet engines, including turbojets, turbofans, and turboprops, power most modern aircraft. They work by compressing air, mixing it with fuel, igniting the mixture, and then expelling it at high speed to produce thrust.</li> <li>Rocket Propulsion: Rockets propel themselves by expelling mass in the form of exhaust gases at high speeds. They are crucial for space exploration and satellite deployment.</li> <li>Composite Materials: Lightweight and strong composite materials, such as carbon fiber reinforced</li> </ol>
		polymers (CFRP), are increasingly used in aerospace to reduce weight and improve fuel efficiency.  4. Advanced Avionics: Avionics encompass the electronic systems used in aircraft, including navigation, communication, and flight management systems. Advances in avionics have improved safety, efficiency, and automation in aircraft operations.
		<ul> <li>5. Unmanned Aerial Vehicles (UAVs): Also known as drones, UAVs have applications ranging from military reconnaissance to commercial delivery and aerial photography. They often utilize advanced autonomy and control systems.</li> <li>6. Spacecraft Propulsion: Various propulsion systems,</li> </ul>
	-	<ul> <li>including chemical rockets, ion engines, and solar sails, are used for spacecraft to maneuver, reach distant destinations, and maintain orbits.</li> <li>Additive Manufacturing (3D Printing): Aerospace industries use additive manufacturing to produce complex components with reduced weight and increased design flexibility.</li> </ul>
	IRG (in rupees)	NIL .
	Expenditure (in rupees)	NIL

## POs attained with this Event (number and description)

PO2: Identify, formulate, review research literature, and problems complex engineering substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO4: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO7: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

## Photographs of the event (Hard copy and Soft copy)

Tech Talk by Skyroot Aerospace in collaboration with Mech (SAE) & ECE (Space Club)





Speaker ( Deepankar, Deputy Manager, Vaideehl Aerodynamics Engineer )

Proofs:

**Enclosed** 

Signature of Coordinator

And (aushn) 15/29
Signature of HOD

(Dr A-Anitha
Laushmi)