



# AERO NEWSLETTER

## 2021-2022

### VISION

The Department of Aeronautical Engineering is committed to impart quality education fostering excellence in academics, research and innovation to develop globally competent aeronautical engineers contributing to the society.

### MISSION

**M1:** To offer outcome-based learning that encompasses research and innovation.

**M2:** To promote interdisciplinary learning and interaction with the global community.

**M3:** To enable holistic education engrossed with social values.



## AIR INDIA ENGINEERING SERVICES LTD

16/11/21-17/11/21

The department of Aeronautical Engineering organized an educational visit to Air India Engineering Services Ltd, Mumbai (AIESL) on the 16th and 17th of November 2021. The third-year students of AE were taken on an experiential learning to AIESL to have a know-how feeling of Aircraft maintenance, repair and overhaul. Students had the opportunity to witness the sophisticated equipment's, controlled work processes that ensures quality at each stage of aircraft maintenance of A320 family, A310, A330, B737NG, B747-400, B787, B777 and maintenance of Engine models such as V2500, CFM56-5B, CFM56-7B, PW4000-94, PW4000-100, GE 90-110 & GenX Engines.

This visit was initiated under the guidance of Dr. S K Maharana (HOD, AE) and was facilitated by Prof. Mahantayya K H, Prof. Steffi Thangachan, Dr. Swetha S and Dr. Venugopal.



## AIR FORCE TECHNICAL COLLEGE, JALAHALLI

11/10/21

The Department of Aeronautical engineering organized an educational visit to Airforce Technical College, Jalahalli, Bengaluru on 11 October 2021.

The visit was conducted as a part of experiential learning enabling students to seek, find and explore the field of aviation with the auspices from the Indian Airforce. This visit was initiated under the guidance of Dr.S K Maharana, HOD AE and the third-year students of AE were accompanied to AFTC by Prof.Swetha S, Prof.Mahantayya and Prof. Amar.



## RANGOLI COMPETITION

30/11/21

“The Art and cultural club” of Aeronautical department of Acharya Institute of Technology, organized ‘Rangoli competition 2021’ on 30/11/21 at ANA block. The students put their foot forward and took part in the competition with much delight and zest. The art was indeed a treat to eyes.



## PAPER PLANE

30/11/21

The Department of Aeronautical Engineering organized a make & fly event named “PAPER PLANE” under its technical Forum 'UDAAN'; on 30/11/2021.

The aeromodelling club of AE aims at developing both academic and technical skills by providing platform for creativity.

“PAPER PLANE” was conducted as a part of experiential learning enabling students to seek and exhibit their innovative ideas through ‘MAKE & FLY’. This event was initiated under the guidance of Dr. S K Maharana, HOD AE and was executed by the “UDAAN” Aero Club Co-Ordinator’s Prof. Prashant and Prof. Akash S.



## PEOs

**PEO1: Employability:** Graduates of the program shall have necessary skills and competence to be employable in the core industry, academia and multi-disciplinary sectors

**PEO2: Advancement:** Graduates of the program shall advance professionally in the management, entrepreneurship and allied industries.

**PEO3: Contribution:** Graduates of the program shall have innovative idea and the potential to contribute to the expansion, maintenance and ongoing needs of the aviation industry.

**PEO4: Lifelong learning:** Graduates of the program shall possess an unrelenting interest in learning and adapt new technological advancements to the requirements of the evolving industrial contexts.

## PSOs

**PSO1: Elements of Aircraft Components and their operations:** Apply the foundations of aerodynamics, propulsion, aircraft structure and materials; Evaluate the performance and operation of components of aircrafts and flying vehicles.

**PSO2: Flight Vehicle design and development:** Demonstrate the flight vehicle design, integrate the aircraft systems and components and test the flight.

**PSO3: Aircraft Thermal and Fluid Structure Interaction:** Apply the concepts of aerothermodynamics, energy conversion, heat and mass transfer in analyzing both internal and external flows; Demonstrate it for various aircraft engines and structures.

**PSO4: Aircraft Avionics, Stability and Control:** Apply the basic knowledge of avionics to communicate and control with the aircraft components; Evaluate the stability of the overall aircraft.