## **ACS COLLEGE OF ENGINEERING**



Kambipura, Mysore Road, Bengaluru - 560074 (Affiliated to VTU, Approved by AICTE, Accredited to NAAC A Grade and Recognized by Govt of Karnataka)



# DEPARTMENT OF AERONAUTICAL ENGINEERING (Accredited by NBA)

#### **Event Report (AY2023-2024)**

Name of the Event : Seminar on Role on F&DT in Aircraft Structural Design

Date & Time : 19th march 2024 (10.45am to 12.30pm)

Place : AE Seminar Hall

Resource Person : Dr.Kishore Brahma

Former Scientist, NAL, DRDO, Bangalore

No of Student Participants : 95 Students

Event Coordinator : Prof.P.Soma

#### **About the Event:**

The Aeronautical Engineering department organized a Seminar on Role of F&DT in aircraft structural design on 19/03/2024. The program was started at 10.45 AM with the welcome speech and introduction about the resource person by Dr.G.Ramanan, HOD, AE Department. The resource person handled an interactive session about the role of Fatigue and Damage Tolerance (F&DT) in aircraft design is critical to ensuring safety, performance, and longevity. He mentioned that aircraft are subject to repetitive loading and unloading cycles (e.g., takeoffs, landings, and pressurization cycles), which can lead to fatigue cracking. F&DT methodologies aim to predict, detect, and mitigate fatigue-induced damage, ensuring the aircraft structure remains safe throughout its operational life. Civil aviation authorities (e.g., FAA, EASA) mandate F&DT assessments for certification of aircraft. Standards require that aircraft structures demonstrate: Resistance to fatigue over a defined life cycle, Ability to sustain damage without catastrophic failure until maintenance or repair is performed. The resource persons were honored with the memento by Prof.Soma and Student participants of Aeronautical Department Students expressed their gratitude that the program was highly informative and interesting. Finally, the session ended with the vote of thanks.



### **Event Pictures:**











Event Coordinator
Dr.Inamul Hasan

HOD Dr.G.Ramanan