

FACILITIES & INNOVATIONS AT IAM

Institute of Aerospace Medicine believes inculcating innovation among students there by contributing to nation's development that solves societal problems. Strong Academics, relevant training, emerging technology knowledge through R&D and professional mindset with human approach are the essential attributes that determine the success of our institute. The spirit of innovation has to be incubated in the minds of the students and the college has instituted different innovative ideas and solutions, studies and projects. From then onwards, the institute has been encouraging the students to come out with innovative solutions for the problems that are faced by the aerospace community at large.

- IAM is blessed with meritorious, dynamic and enterprising young civil faculty selected through an elaborate selection process that involves careful scrutiny of applications, testing of knowledge and teaching skills through seminars and selection interviews.
- The annual performance appraisal system encourages faculty to enhance their teaching, research and administrative skills, as well as social services to the desired level of promotion.
- The Institute follows Student-centric teaching for best academic and professional outcome:
 - Small Group discussions: Social interactions give rise to an enjoyable educational experience. It encourages participation and improves their reasoning, interpersonal and presentation skill.
 - Problem-based learning: PBL invites intense interaction among students' groups as they are stimulated to seek knowledge, understand its correlation and apply their mind for intervention. It helps the students in developing communication skills, critical thinking and decision making.
 - Evidence-based medicine: It involves seeking new knowledge and conducting an appraisal which is being followed in journal clubs and on the other hand there is a different perspective that takes into consideration successful established practices that have improved clinical outcomes.
 - Team-based learning: Team based learning particularly used in community situations is useful for understanding & constructing management processes after a team is formed.

- Self-directed learning: The institute has provided abundant knowledge resources & IT infrastructure for students to access. It results in prior preparation when facilitated by assignments, tasks & presentation.
 - One-minute preceptor ship: It is a framework for teaching in the office or emergency room. The structure encourages students to think critically regarding the case and given insight into reasoning skills.
 - Reflective learning: It involves stepping back from an event or experience to analyse it from different perspectives with a view to improve future performance. These skills are learned through practice-based projects.
 - Simulation based learning: The Institute has various simulation labs for simulation-based learning and skills development. The simulators provide training on state-of-the-art equipment. The advantage is the learning poses no risk of injury to the user of any type.
- Faculty members are encouraged to undergo professional development programmes and organize and participate in Conferences, Seminars and Workshops. Study leaves and financial support is provided to participate in various conferences and course in India and abroad. Teaching and non-teaching staff are encouraged to enhance their qualifications and pursue to be part in various research programmes.
 - The institute has a well-defined and published research promotion ideology. The same is showcased in the flagship conference of the institute - Indian Society of Aerospace Medicine. Faculty members are encouraged and financially supported to guide research in various fields of aerospace medicine. Many students have presented papers in ISAM and the numbers are increasing every year. All aerospace research enthusiasts across the globe demonstrate their research work through this platform.
 - Research infrastructure has been created, and supported by inputs from DRDO'S like ISRO, ADA, DEBEL and CEMILAC. The institute has also signed MoU with ISRO for further accelerated improvements in the field of Human Space Mission. Funding is provided to pursue specific research programs.
 - Central facilities and Advanced Research Centres and Laboratories have been established that are made accessible to the staff and students. It is ensured that they are optimally utilized.

- The institute invites renowned experts from various domains from India and abroad to facilitate value added educational sessions and establish collaborations for undertaking multi-disciplinary and interdisciplinary research.
- Regular annual events are ensured to be participated such as, the Indian Society of Aerospace Medicine Conference & ICASM - The International Congress of Aviation & Space Medicine; the international platform for scientific research paper presentation, as part of the prestigious research tradition of this Institute.
- This centre has been established to facilitate innovative, flexible and economical solutions to problems. The university uses a system's thinking approach for research. The multi-disciplinary and inter-disciplinary focus on research makes this institute unique.
- Some of the unique areas identified by the institute and work ongoing include: pSumedha - the innovative psychological tool for the aviation and space crew. IAM-EMP institute of aerospace medicine exercise manoeuvre protocol made exclusively in this institute for better assessment of aircrew with musculoskeletal disabilities at the department of Human Engineering. Overall, the institute believes and follows better research practices.