



IARE

Institute of
Aeronautical Engineering

AERONAUTICAL
ENGINEERING

AERO



DESIGN IS NOT JUST WHAT IT
LOOKS LIKE AND FEELS LIKE.

**Design is
how it works.**



VISION & MISSION

VISION

To build a strong community of dedicated graduates with expertise in the field of aeronautical science and engineering suitable for industrial needs having a sense of responsibility, ethics and ready to participate in aerospace activities of national and global interest.

MISSION

To actively participate in the technological, economic and social development of the nation through academic and professional contributions to aerospace and aviation areas, fostering academic excellence and scholarly learning among students of aeronautical engineering.

Program Educational Objectives (PEOs)

EDUCATIONAL OBJECTIVES AND OUTCOMES The plan of having Educational Objectives and Outcomes is to achieve Outcome-based education (OBE). OBE is an educational theory that bases each part of an educational system around goals (outcomes). By the end of the educational experience, each student should have achieved the goal. There is no single specified style of teaching or assessment in OBE; instead, classes, opportunities, and assessments should all help students achieve the specified outcomes. The role of the faculty adapts into instructor, trainer, facilitator, and/or mentor based on the outcomes targeted.

PROGRAM OUTCOMES (PO's)

A graduate of the Aeronautical Engineering Program will demonstrate

Engineering knowledge

Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem Analysis

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

Design/development of solutions

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct investigations of complex problems

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.

Modern tool usage

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The engineer and society

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and sustainability

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

Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice

Individual and team work

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication

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.

Project management and finance

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-long learning

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

A graduate of Institute of Aeronautical Engineering in Aeronautical Engineering discipline should have a successful career in Aeronautical Engineering or a related field, and within three to five years, should attain the following:

Preparation & Learning Environment

To prepare and provide student with an academic environment for students to excel in postgraduate programs or to succeed in industry / technical profession and the life-long learning needed for a successful professional career in Aeronautical Engineering and related fields

Breadth

To train students with good scientific and engineering breadth so as to comprehend, analyze, design, and create novel products and solutions for the real life problems

Core Competence

To provide students with a solid foundation in mathematical, scientific and engineering fundamentals required to solve engineering problems and also to pursue higher studies

Professionalism

To inculcate in students professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, and an ability to relate engineering issues to broader social context



PROGRAM SPECIFIC OUTCOMES (PSO's)

A graduate of the EEE Program will demonstrate:

Professional skills

Able to utilize the knowledge of aeronautical/aerospace engineering in innovative, dynamic and challenging environment for design and development of new products

Problem solving skills

Imparted through simulation language skills and general purpose CAE packages to solve practical, design and analysis problems of components to complete the challenge of airworthiness for flight vehicles

Practical implementation and testing skills

Providing different types of in house and training and industry practice to fabricate and test and develop the products with more innovative technologies

Successful career and entrepreneurship

To prepare the students with broad aerospace knowledge to design and develop systems and subsystems of aerospace and allied systems and become technocrats

ABOUT THE DEPARTMENT

Department offers a vibrant academic atmosphere which cherishes the hope that its graduates will be the leaders of tomorrow. The department has continuous interaction with national and international R & D organizations of repute in the field of aerospace engineering that lead to mutually beneficial research activities and free exchange of ideas.

The department of Aeronautical Engineering was established in 2000 and offers B. Tech in Aeronautical engineering and M. Tech program in Aerospace Engineering. B. Tech program in Aeronautical Engineering has been accredited thrice since 2008 by the National Board of Accreditation (NBA).

PROGRAMS OFFERED

B Tech program in Aeronautical Engineering

M. Tech program in Aerospace Engineering

Key Strengths of Departments:

- State of art laboratories with advances equipments and high end instrumentation.
- Continuous Industry interactions with reputed R&D organizations like DRDO, NAL and ISRO.
- Collaborative programs through MOUs with Various Aerospace Industries and R & D Centers.
- Learning Programs and certifications in for Advance Design and Simulation Software's (Nastran, ANSYS, CATIA).
- Good track record of Academic performance in Competitive Exams and university Exams.
- Student centric Teaching learning process.
- Project based teaching and learning process.
- Consistent and quality placements.
- Highly qualified and prominent faculty.
- Modern pedagogy with E- Class Rooms.
- Center of excellence in wind tunnel testing
- Consultancy in structural dynamics and vibration, Flight simulator and wind tunnel testing.
- Department library with E-Journals and video lectures.
- Hands-on Training programs in Industrial Automation.
- Highly Innovative and industry ready student's projects.
- Students Technical and Cultural Clubs.
- Personality Development and Soft Skills Training.



Why **AERONAUTICAL** ENGINEERING

Aeronautical Engineering is one of the most challenging fields of engineering with a wide scope for growth and career excellence. Nowadays there is a tremendous potential as air transportation has been growing rapidly and requiring more engineers for Design, manufacturing, maintenance and management of flight vehicles. This field deals with the development of new technology in the field of aviation, space exploration and defense systems. It specializes in designing, development, manufacture, testing, operation and maintenance of flight vehicles.





Whether you enjoy solving technical challenges or being creative and innovative, aerospace engineering opens up opportunities in a range of industries from automotive to finance and IT

Jobs directly related to your degree include:

Design engineer

Maintenance engineer

Materials engineer

Manufacturing engineer

Simulation engineer

Jobs where your degree would be useful include

Automotive engineer

Control and instrumentation engineer

Energy engineer

Technical sales engineer

Production manager

Quality manager

Patent attorney

Government industries in India



Private Companies in India



Success steps to the CAREER in Aeronautical Engineering at IARE



Centre of excellence

Place for skill up gradation

- The department have the centre of excellences in specialized areas of Aeronautical engineering to prepare the candidates for their future
- Students will be encouraged to take up special training to gain experience of the professional world
- Faculty stays beyond the working hours to train our students on specialized software's and technology

Advance laboratories

Labs with current industrial needs

- Aeronautical engineering laboratories are setup highly sophisticated equipments which satisfies the current idustry needs
- Every lab session students will have hand on experience in laboratory
- Highly professional Technical team is well supportive to students to enrich their practical skills

Research initiatives

Appreciation to student ideas

- The Department provides funding to the projects and innovative ideas of students
- Inter college level Modeling experimental tools in Engineering Expo (Project-Expo) will enhance the student technical and problem solving skills
- Students will be encouraged to participate National and International level Design and modeling competition

Employment: A choice of Student

- Our Students have obtained prestigious placements at leading companies such as Boeing, AIRBUS, Pawan Hans, ISRO, VSSC, DRDO, HAL, BDL, NAL, ADA, Rolls-Royce, CYIENT, Mphasis (Aerospace), Infosys, Tata Technology, and many more.
- The Placements and training programs aimed at developing each student's professionalism, Meritocracy, Technical proficiency, Innovation, Leadership and Team playing skills has resulted in well rounded master of the highest professional competence.
- Mock-interview and Group discussion sessions are conducted with the help of Alumni and Industrial partners.
- Career Counseling arranged during the Pre-Final year by industry experts to make sure that students are aware of various opportunities available in the corporate world.

Exploration to field

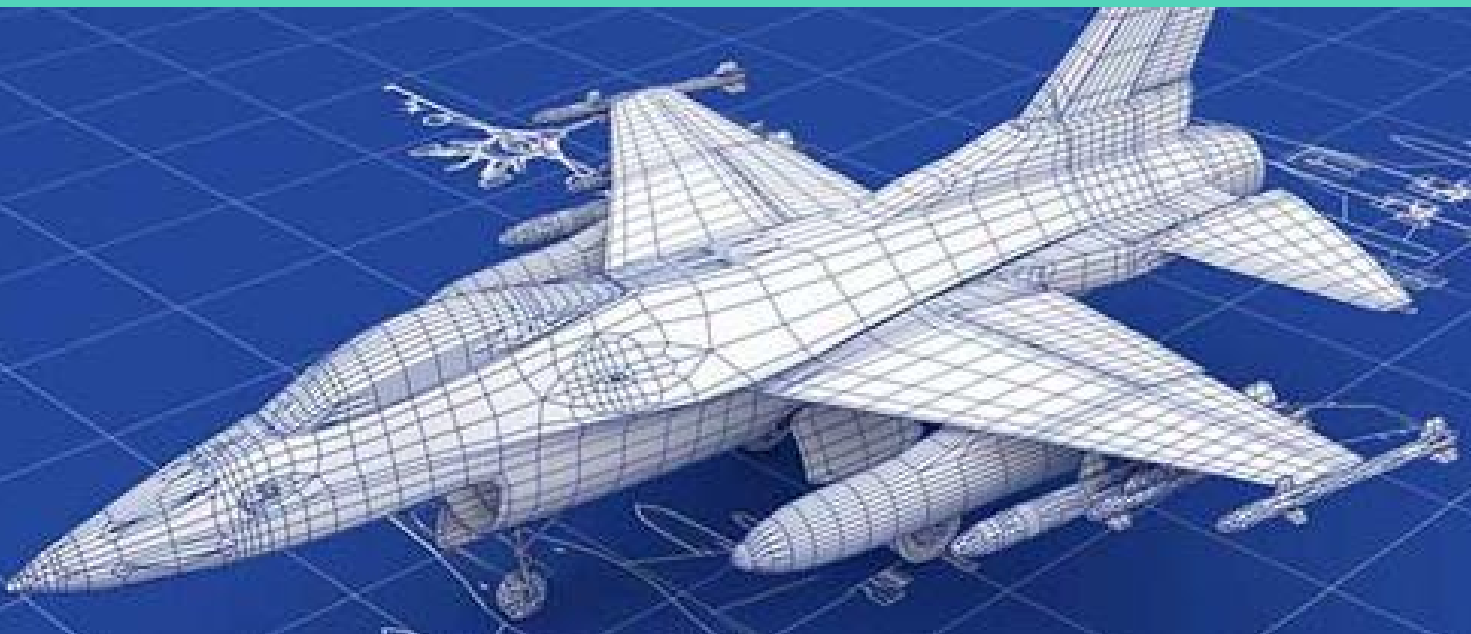
Exploring an unfamiliar area

- The department will conduct the webinars workshops guest lecturer's seminars in regular intervals of time to explore innovative ideas from students
- Industrial visits, Aviation Expo's will helps the students to think beyond the curriculum and for the initiation of multidisciplinary field interaction
- Department enables the students to enrich their skills through virtual laboratories

Robust curriculum

To make ready to current needs

- The curriculum of Aeronautical Engineering is suggested by the eminent industrial and academic experts to bridge up gap between industries and academics
- The Students must carried out their internships and projects in emerging areas of Aeronautical field from various industries for partial fulfillment of Degree
- The Grading system offered at IARE will ease their opportunities for higher education



Student Chapters

(ASTRA& ANTHARIKSH)

Aeronautical technical and research association (ASTRA) and ANTHARIKSH Aero Club are student bodies for conducting career developing, interpersonal and intrapersonal skills of students. It's an exciting place where, the faculty is friendly, well qualified and able to provide excellent supportive environment for the students to study.

Objectives

- To Promote the interaction between academia and industry by organizing industrial visits, special lectures and facilitate in industrial training
- Promoting the interests of students in various technical areas pertaining to mechanical engineering
- To encourage students of the mechanical Engineering department to develop their personal skills, like event management & time management by organizing inter & inter Collegiate Events
- To bring about the technical development of students by organizing seminars, workshops and other activities.
- Expansion of knowledge of students by exposing them to intra inter and multi disciplinary knowledge areas with an emphasis on self-learning.
- To promote multi dimensional skill development among students for employability and research demands.
- To offer congenial environment for inculcating team spirit professional behaviour and ethical attitude.
- To provide a platform for expression of knowledge and skills for feasible applications upon identification of needs of society, industry and research

Activities in ASTRA

Modeling competitions

Webinars

Seminars

Quiz Programs

Industrial Visits

Paper Presentations

Group Discussions

Guest Lectures

Career Guidance

Apart from technical events ASTRA encourages social activities, such as:

01

Social awareness programs in remote areas

02

Blood donation camps

03

Youth convections

04

Tree plantation

05

Women empowerment

06

Marathon for social causes

07

Road safety Awareness

ADD ON COURSES FOR STUDENTS

For enhancing and enriching the students' engineering knowledge, our department provides certain courses to impart advanced training on technologies. **These special courses have been successfully assessing the curiosity of the students and their minds in research.**

30 days course

ON STRUCTURAL ANALYSIS

using ANSYS (Workbench)

Objectives

This is an introductory course on Finite element Analysis (FEA) using ANSYS. The main objective is to introduce to the Finite Element Analysis (FEA) concepts and make familiar with the tools and techniques of the ANSYS software package.

Overview:

ANSYS is a popular and well recognized general purpose finite element modelling package for numerically solving a large range of problems including static, dynamic mechanical, structural analysis (linear and non-linear), heat transfer and fluid problems, as well as acoustic and electromagnetic problems. It is widely used in the aeronautical, mechanical, automobile, structural and chemical industries.

Topics Covered:

- Introduction to FEM with ANSYS elements and the type of analysis that can be done using ANSYS in APDL and Workbench.
- Modeling the basic geometries with the tool box and parameterization
- Overview of mechanical analysis procedure and exposure to analysis interfaces.
- Meshing of various geometries with suitable elements and meshing tools. Applying different loads and boundary conditions.
- Static structural analysis, Analysis settings, viewing the results and post processing



30 days course

ON Flight Simulation

Objectives

In order to give students to hands-on experience of what goes on in the cockpit of an aircraft, and It encompasses the application of Aerodynamics ,Stability and control to Aircraft simulation and helps the students to get a hands-on understanding in Aeronautical Engineering.

Overview:

This simulator is used to support engineering design modules that involve aerodynamics and control systems by giving a more practical experience of aircraft design than a traditional theory and laboratory approach. Students design and input their own aircraft parameters into the simulator before then assessing the flight characteristics.

Topics Covered:

- Simulation of Steady flight take off, Steady climb, Accelerated climb and cruise model flight.
- Simulation of maneuvers like co-ordinate turn, steady turn with set bank angle 300 and 450
- Simulation of accelerated flight like landing and performance.



30 days course

3D SOLID MODELING

using solid works

Objectives

Solid Works is a 3D solid modeling package which allows users to develop full solid models in a simulated environment for both design and analysis. In Solid Works, you sketch ideas and experiment with different designs to create 3D models.

Overview:

Solid Works is a solid modeling computer-aided design (CAD) and computer-aided engineering (CAE) computer program that runs on Microsoft Windows. Solid Works is published by Dassault Systems. Solid Works is a solid modeler, and utilizes a parametric feature-based approach to create models and assemblies. Solid works is a 3D mechanical design system that enables virtual prototyping, assembly, simulation and finally output as native or open format 3D models, or as drawings

Topics Covered:

- **Designing and prototyping can be achieved in Solid works by using various workbenches available such as Part modeling, Assembly design, Sheet metal design, surface modeling and drafting, etc.**
- **Solid Works is used by students, Designers, Engineers, and other professionals to produce simple and complex parts, assemblies, and drawings.**
- **Plug-in are available for electrical design, FEA, Optical rendering, electromagnetic simulation and more. It is probably the most widely used and thought CAD suite worldwide and is used in a full spectrum of industry sectors including automobile, automotive, aerospace and communication**
- **Designing in a modeling package such as Solid Works is beneficial because it saves time, effort, and money that would otherwise be spent prototyping the design.**



TECHNICAL FESTS AND PROJECT EXPOS in Exposure to Talent

The annual technical fest of electrical and electronics engineering department CONSORTIUM was organized on April, 2017. In this monotonous biological clock of students, fests show certain degree of fluctuations in the excitement level of students. As the festive season slowly marches closer and closer with time every student can taste the sweet scent of hard work with incessant practices to win the victory title. We provide platform to the young minds organizing certain events like.

- ▶ Paper Presentation
- ▶ RC modeling
- ▶ Quad copter
- ▶ Hover boat
- ▶ Robotic Arm
- ▶ Flight Simulation

METE Project EXPO

IARE sponsors few competitions with the aim to encourage students to be involved in a profession that is crucial to ensure a sustainable future for our technology. It provides a platform where young minds come together to share knowledge and wide the horizon of their own technical knowledge and skills.

Objective:

The objective of conducting this event is to encourage students to develop basic working models related to Aeronautical engineering applications in process of “Learning by Doing” mechanism. We have proposed some projects based on designing of Drones, RC planes Ornithopters few other mechanisms involved in aircraft. We have also encouraged students show up their innovative ideas by discovering new projects.

RESEARCH FACILITIES

Aerodynamics Laboratory

Aerodynamics is the epicenter of Aeronautical Engineering. Laboratory facilitated with Low Speed research level Wind Tunnel to facilitate various models for force measurements and flow visualization techniques competing with various research levels using in Experimental Aerodynamics. One such example is a Flight Demonstrator and also internal aerodynamics such as flow studies over compressors, fans, blowers etc



Aerospace Structures Laboratory

The Aerospace Structures laboratory provides an environment for educational research, and development of activities in Structural integrity and testing. The goals of the laboratory are to promote the understanding the Structural design and use of various Engineering materials, to maintain up-to-date testing facilities in order to conduct basic research, and to provide an accessible knowledge and technology base. Facilities which allow the full spectrum of research study of specimen's behavior under different load conditions. Several test rigs have been designed and available for testing of various structural components. Digital data acquisition systems allow high speed data collection from multiple channels.

Flight Simulation Laboratory

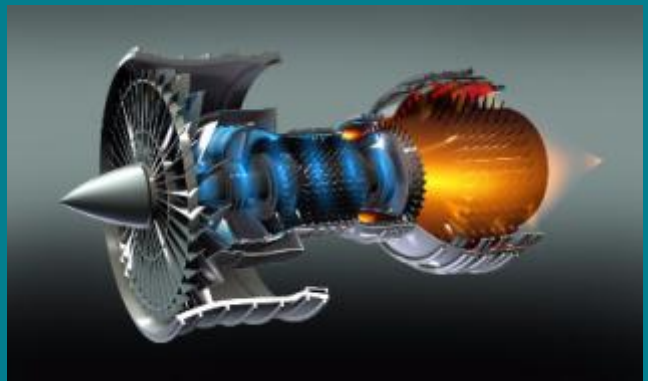
The primary purpose of the flight controls laboratory is to give students hands-on experience of what goes on in the cockpit of an aircraft, and to understand the basic fundamentals of flight. In addition to the cockpit interfaced simulator, the flight simulation laboratory contains: Single seated CESSNA Flight simulator, Cockpit live shares (4Nos)



Aerospace Propulsion Laboratory

Basic analysis of all types of engines used in aircrafts will be carried for detailed study of propulsion systems and power match studies.

Laboratory is equipped with mini gas turbine, Cut Section of Rolls Royce Turbojet Engine, Cut Section of Avon Turbojet Engine to study off design parameters which can be evaluated by utilizing the available physical engines



Consultancy

@ AERO

The Department of Aeronautical Engineering provides consultancy services in the areas of Aerospace structures, Aerodynamics Gas turbine technologies and flight controls and simulation by experienced and highly qualified faculty. AE consultancy is a team of eminent people who are working in different verticals. The most important and valuable assets for any organization is to have a right team of people at right time and at right place for organization success. Faculty members and students actively participate in the consultancy works which helps the students in getting campus & off-campus employment in to the core industries. We as a team have gained a lot of experience in all the fields to make the journey fruitful. Our team is completely dedicated to our students in succeeding globally. We aim to be a world-class organization in education, training, research, consultancy and placement services.

Consultancy Services Available

- Vibrations and Structural Dynamics Test Facility (VSDTF)
- Gas Turbine Test Facility (GTTF)
- Flight Simulation Test Facility (FSTF)
- Experimental Aerodynamics Test Facility (EATF)



The consultancy works carried out through

Vibrations and Structural Dynamics Test Facility (VSDTF)

Experimental structural dynamics is a very important subject for certification and modification of aerospace structures. Using the equipment, the dynamic behavior of the structure, in-terms of natural frequencies, mode shapes and damping values are obtained experimentally. These test results would be used to compare, update and fine tune the mathematical model of the structure. Different types of excitations to the structure, such as, impulse excitation using instrumented hammer and forced excitation through electro-dynamic shakers can be applied to get the dynamic properties of the structure.

The following works are carried out by research students in this group

- Determine the natural frequency of a free-free uniform rod with circular cross-sections.
- Determination of modal characteristics of a uniform cantilevered beam of rectangular cross section and made of isotropic material.
- Determination of modal characteristics of a square cantilevered beam of rectangular cross section and made of composite material.
- Analyze transient and forced vibrations of a swept cantilevered plate made of composite materials
- Determine the modal characteristics of free-free wing model and observe the difference between symmetric and anti-symmetric modes.
- Calculate free vibration characteristics of typical launch vehicle model using impulse excitation.
- Vibration control using passive techniques (usage of constraint layer and viscoelasticity layers).



Flight Simulation

Test Facility (FSTF)

Flight simulation facility hosts an engineering simulation based on simulink implementation of the equations of motion. Flight simulation is used for a variety of reasons, including flight training (mainly of pilots), the design and development of the aircraft itself, and research into flight dynamics and handling qualities. The use of flight simulators for training in complex and potentially dangerous situations (e.g. engine failure, systems failure, structural damage etc) is a critically important area in aircraft development.

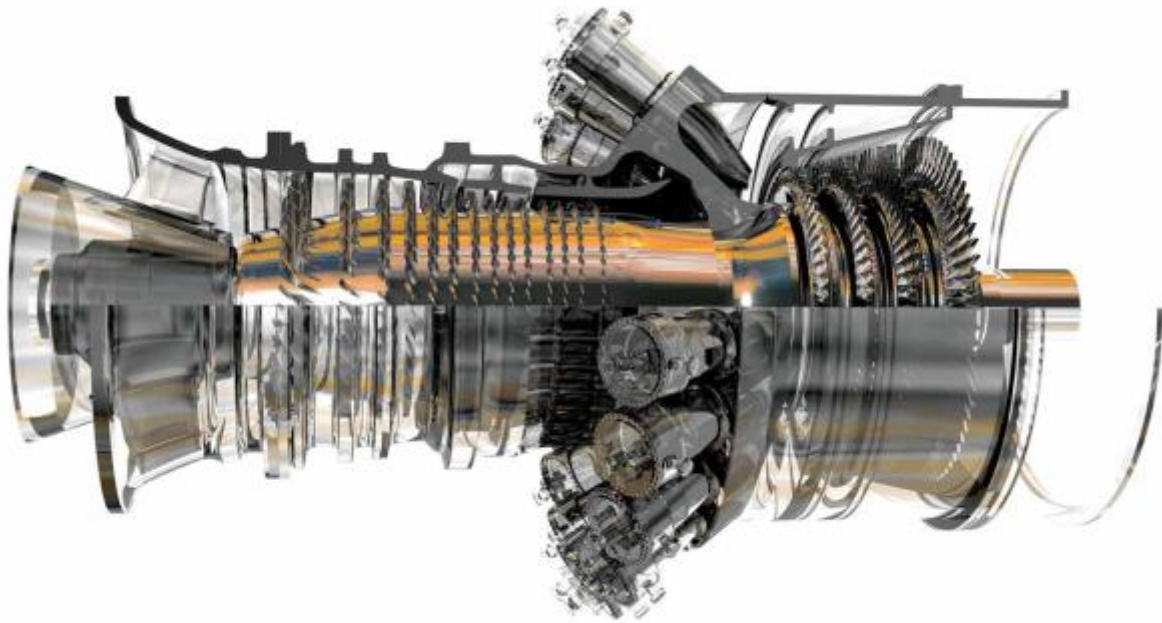
The following works are carried out by research students in this group:

- Provide a feel, how an airplane flies and performs maneuvers.
- Recreating aircraft flight and the environment in which it flies, for pilot training, design, development, testing.
- Understand the dynamics and demonstrate the control of flight vehicles.
- Analyze the effects of aerodynamics derivatives.
- Evaluate the parameters affecting the aircraft performance.
- Demonstrate the significance of flight derivatives and its impact on aircraft dynamic response.



Gas Turbine Test Facility (GTTF)

We have Micro gas turbine facility with features that make them unique. Our equipment is used to develop and test new combustion systems, components and fuels at gas turbine relevant temperatures and pressures. The measurements available allow for the calculation of component efficiencies, compressor and turbine power, thrust, propulsive and thermal efficiency at various power settings.



The following works are carried out by research students in this group:

- Improve the basic characteristics of axial flow gas turbine
- Analyze the range of performance of axial flow gas turbine
- Analyze the component types and performance
- Perform parametric jet engine performance analysis
- Perform turbo machinery calculations
- Perform basic combustion calculations

Experimental Aerodynamics Test Facility (EATF)

Aerodynamics is the epicenter of Aeronautical Engineering. Though the wave of Computational tools is still on a climb, Experiments are an irreplaceable tool to understand real world Aerodynamics.

Experiments facilitate in understanding the real Physics by conducting tests on geometrically scaled models using the concept of dynamic similarity

Wind tunnel testing is the most viable and versatile tool to conduct the aerodynamic experiments. Department of Aeronautical Engineering at IARE is in possession of a low speed subsonic wind tunnel and all necessary allied equipment /instruments required for executing a glitch free environment academic research.

The following works are carried out by research students in this group:

- Perform flow visualization on any model under observation using a smoke generator and smoke rake
- Evaluate all the three component aerodynamic forces and three component aerodynamic moments on any model with the help of 6-component strain gauge balance.
- Modify the experimental conditions on models for speeds up to 70m/s
- Perform experiments on boundary layer growth using boundary layer rake
- Flight Demonstration Model for demonstrating lift, landing and cruise with output of and tail angle interface
- Encouraging innovative projects to stretch the scope of aerodynamic experiments in the academia
- Expand the horizons of the facility to be utilized by the aeronautical fraternity of local, regional & national domains.



EMINENT PROFESSORS



Dr. D. Govardhan

Professor & Head

Dr. D Govardhan is a professor and head of Aeronautical Engineering. He is also the Chairman, anti-ragging committee and member, Disciplined committee. He completed B.E in Mechanical Engineering from Osmania University, Hyderabad; M.Tech (PE) and Ph.D from JNT University, Hyderabad. He has 26 years of experience in teaching, R & D and industry. He has published 12 papers in international and national journals and conferences.



Dr. Amalesh Barai worked at National Aerospace Laboratories (NAL), Engineering Mechanics Research Corporation (EMRC), Bangalore; Tata Advance Systems Ltd., Pune and Airbus, Bristol UK. After serving for two decades in the industry, with his extensive and varied experience

Dr. Amalesh joined as a professor of Aeronautical Engineering in 2010. Dr. Amalesh finished his graduation in Aeronautical Engineering from Indian Institute of Technology (IIT), Kharagpur (1981) and his Masters in Aerospace Engineering, Indian Institute of Science (IISc), Bangalore (1983) and obtained his doctoral degree in Structural Dynamics and Aero Elasticity, IISc, Bangalore (1991). He has published over 39 research papers in various national/international journals and has guided 8 research scholars in their research pursuits.



Dr. Pramod Kumar Das is a professor of Aeronautical Engineering. Dr. Das received M.E and Ph.D in Aerospace Engineering from Birla Institute of Technology, Ranchi in 1991 and 1996 respectively; B.Tech in Aeronautical Engineering from Aeronautical Society of India, 1989. He has an academic experience of 26 years in research/teaching and published 83 research papers in national and international journals.



Prof. T M Naidu is a senior professor in the department of Aeronautical Engineering with vast industry and research experience of 36 years. After his post graduation in Aeronautical Engineering from Indian Institute of Science (IISc), Bangalore (1977) joined Structural Sciences Division, National Aerospace Laboratories, Bangalore. He shouldered the responsibilities for the design, fabrication and testing of various models of aircraft and aerospace vehicles, such as, HF24, SLV3, ASLV, PSLV.

Subsequently, he joined Aeronautical Development Agency, Bangalore during 1986 and served as Project Director (Airframe) in 2013. He was responsible for the design, development and airworthiness clearance of entire structure of LCA (Tejas) from structural dynamics and aero elastic point of view. He has published over 100 research papers and technical reports in reputed national and international journals. He was past president and current director of ISAMPE.



Dr. M.S. Rajamurthy is a senior professor in the department of Aeronautical Engineering with nearly four decades of experience in aircraft research, design, and testing as well as airline industry. He received Ph.D. in Aeronautical Engineering from IIT Poway, Bombay. He worked at National Aerospace Laboratories for 32 years, where he contributed to the development of first indigenous motion based flight simulator, human pilot modeling, and fabrication of Light Canard Research aircraft (Rutan's Long-EZ). As DAAD scholar, he worked at the Institute for Flight Guidance, TU Braunschweig, West Germany for two years on Flight testing and parameter estimation of Dornier DO-28D1 aircraft. He participated in the PDP phase of LCA (Tejas) and was deputed to AMD-BA, Paris, France. He also served Kuwait airways as a senior flight safety researcher for 6 years. Dr. M.S. Rajamurthy is an elected fellow of the Aeronautical Society of India. He has over forty publications comprising conference & Journal papers, and Technical reports.

EMINENT PROFESSORS



Dr. P Srinivasa Rao is a Professor in the department of Mechanical Engineering. He obtained B.E from Osmania University, M.Tech from JNT University. He worked for Ph.D at IISc, Bangalore on CFD, and JNT University. Dr. Rao has 20 years of teaching and research experience. He published one book, 26 research papers and also a book chapter. Rao conducted research on Indo-Russian and Indo-German projects at SECG of C-DAC, Pune in the CFD division. Dr Rao successfully guided one Ph.D and guiding 3 Ph.D scholars and also guided more than 20 M.Tech scholars. He has been the editor of three international scientific journals and reviewer for more than twenty journals of Asia, Europe and USA. He has been the member of SAE International reviewers for Aerospace Engineering since four years.



Prof. N. Venkata Raghavendra is an Associate Professor in the Department of Aeronautical Engineering. He received his B.Tech in Aerospace Engineering from Indian Institute of Technology Madras, and his M.E. in Aerospace Engineering from Indian Institute of Science, Bangalore. He has also submitted his Ph.D thesis in the faculty of Aerospace Engineering to Indian Institute of Science, Bangalore, and is awaiting conferment of Doctoral degree. His research interests are in the area of Computational Aerodynamics, especially for high speed flows. He has 10 years of industrial experience working on software applications, including projects at Aeronautical Development Agency (ADA) and Honeywell Aerospace. He has also presented and published in International journals and Conferences, related to Computational Fluid Dynamics and Scientific Computing.



Prof. Farheen Sana is a Assistant Professor in the Aeronautical Department. She has completed B.Tech in Aeronautical Engineering from Mallareddy College of Engineering, Dhulapally Hyderabad. M.Tech (Aerospace) from Institute of Aeronautical Engineering, Dundigal, Hyderabad. Pursuing Ph.D at Vellore Institute of Technology, Chennai (Thesis under correction). She has published 6 papers in international, national journals and conferences.

Faculty

Professors

Dr. A Barai, Ph.D
Dr. Pramod Kumar Dash, Ph.D
Dr. Raja Murthy
Dr. T M Naidu – M.Tech, Ph.D
Dr. P.Srinivas Rao M.Tech, Ph.D

Associate Professors

Mr. S Srikrishnan, M.Tech
Mr. GSD Madahv, M.Tech
Mr. S Devaraj, M.Tech (Ph.D) (Pursuing)
Mr. G Ram Vishal, M.Tech (Ph.D) (Pursuing)
Mr. Y Swetha, M.Tech
Mr. R Suresh kumar, M.Tech
Mr. U Shiva Prasad, M.Tech
Ms. K Babitha, M.Tech

Assistant Professors

Mr. M Balaji Himkar, M.E
Ms. G Sravanthi, M.Tech
Ms. M Snigdha, M.Tech
Mr. T Mahesh Kumar, M.Tech
Mr. G Satya Dileep, M.Tech
Mr. E Naresh, M.Tech
Mr. B Naveen Kumar, M.Tech
Mr. P Dileep Kumar, M.Tech
Mr. P Dhatchana Murthy, M.Tech
Mr. P Ravi Kumar, M.Tech
Ms. CH Ragha Leena, M.Tech
Ms. D Anitha, M.Tech
Ms. P Hanuma, M.Tech
Mr. R Sabri Vihar, M.Tech
Mr. P Anudeep, M.Tech
Mr. A Rathan Babu, M.Tech
Ms. S Sangeetha, M.Tech
Ms. M Mary Thraza, M.Tech
Ms. Gopala Krishnan Shamili, M.Tech
Ms. Vijay Kumar Madura, M.Tech
Mr. N Anil Kumar, M.Tech
Ms. G Swathi, M.Tech
Ms. K Sai Priyanka, M.Tech

Associations

1. The department has got memorandum of understanding with leading organizations like M/s Cyient (Infotech), M/s MTE Industries, M/s Airhub technologies, M/S Sanathan Industries, M/s Envirotech technologies, M/s BEVCON WAYERS Pvt.Ltd for Industrial consultancy and Research Projects.
2. A Number of Guest Lectures and Training Programs, workshops were conducted under Professional Society activities, under the auspices of ASTRA, SAE, Aeronautical Society of India New Delhi. Indian society for advanced material and process, The department of American Institute of Aeronautics& Astronautics, The department of Aeronautical Society of India and etc.

Funded Projects

2. Modernization of existing aerodynamic lab field: Experimental aerodynamics funded by modernization of removal of obsolescence MODROBS. The Principal investigator is Dr. A Barai AERO Dept.
3. Modernization of existing aircraft material and production technology lab field funded by modernization of removal of obsolescence MODROBS. The Principal investigator is Dr D. Govardhan AERO Dept.

CONTACT



Dr D Govardhan

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