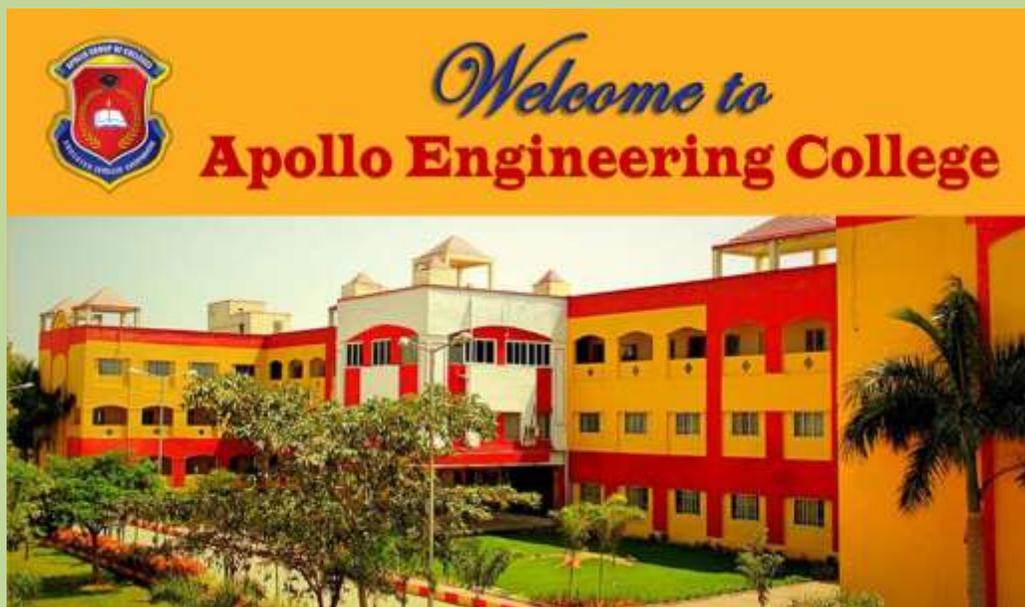


AEC- AERO
NEWSLETTER

JUNE 2014
TO
MAY 2015

ACTIVITIE OF THE DEPARTMENT OF
AERONAUTICAL





APOLLO ENGINEERING COLLEGE

(Approved by AICTE, Govt. of India, New Delhi and an ISO 9001:2008 certified institution)

Mevalookuppam, Near Queensland Theme Park, Chennai-602 105

DEPARTMENT PROFILE:

Department of Aeronautical Engineering

Education is the process of continuous learning and improvement. In the present scenario, students should be trained up with professional qualities apart from book education. Hard work and commitment are essential to achieve your goals.

At Apollo Engineering College, we nurture professionalism apart from bookish education. We also aim at improving student's practical knowledge from our various corporate tie-ups

If you have a love for aircrafts and the designs behind them, explore this course. It includes study in the areas of Aerodynamics, Structures, Propulsion, Aircraft Performance, Stability and Control, Avionics, Flight Vehicle Design; Aircraft Systems & Flight testing. The students get hands on experience through lab experiments in addition to the other engineering disciplines.



Laboratories:

The Department has 3 labs worth of 50 Lakhs with all equipments as per Anna University norms for UG programme.

AERODYNAMICS LAB:

At our aerodynamics lab the students get an understanding of nature of flow past various models through flow visualization techniques. The nature of pressure distribution over various aerofoil and body shapes is explained. The wake and boundary layer survey provide information on the momentum thickness and displacement thickness.

PROPULSION LAB:

We have Experiments related to aircraft engines, force measurements through wall jets and measurement of speed of flame propagation is checked.

AIRCRAFT STRUCTURES LAB:

This lab provides the student with the practical knowledge of the various theorems, like reciprocal theorem, buckling phenomenon of columns, WAGNER beam stresses information. The vibration of beam equipment provides information on types of nodes and vibration patterns.

Hope you can enjoy the experiential learning at our AEC-Aero Department and can find Places in NAL, HAL, ISRO, QUEST global, TECH MAHINDRA and so on through our campus recruitments.



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ACTIVITIES OF THE DEPARTMENT OF AERONAUTICAL ENGINEERING

(June 2014 to May 2015)

GUEST LECTURES

Workshop on 'GLIDER DESIGN' on July 25th 2014 by AEROTRIX, Bangalore.











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AEROBUZZ:

AEROBUZZ IS CONDUCTED ON 07-02-2015

THE FOLLOWING PROGRAMMES WERE CONDUCTED :

- Glider designing
- Bottle rocket
- Aero quiz



Aero quiz



Bottle rocket designing

IMPLANT TRAINING:

Students were taken to the implant training at TANEJA AERO SPACE AND AVIATION LIMITED, Hosur





Students inspect the aircraft



Students inspect the aircraft avionics system



Demonstrate on fuel filling into the aircraft

Memorandum of Understanding



Apollo Engineering College & The Department of Aeronautical Engineering is proud to announce that we have Signed Memorandum of Understanding with AeroTriX, Bangalore.

AeroTriX is founded by a group of Aerospace and Mechanical Engineering graduates of IIT Kanpur working towards increasing skills and employability of Engineering Students in India. AeroTriX bagged various prestigious awards including:

- 2nd Best Business Venture Award, Ideas, IIT Kanpur
- 30 Most Promising Start-ups, Next Big Idea, IIM Bangalore
- Runner up of United India Growth Challenge 2013 for enterprises with Social Impact
- Entered into Limca Book of Records – 2014

As a part of Career Development Programme- AEC has Joined hands with AeroTriX to conduct Workshops on Glider Design, Mini Air Vehicle (RC Aircraft), Delta Wing Aircraft Design, Fabrication and Flying, Biplane Design, Fabrication and Flying, Ornithopter Workshop (Certified by Ornithopter Zone, USA), RC

Hovercraft Workshop so that the aeronautical engineering students will have an experiential learning.

All the students will receive participation certificates. Apart from participation certificate, awards are provided to participants for excellence in design, fabrication and innovation in the workshops. The recipients will be provided with certificate of merit and their names will be put up on the website at www.apollocolleges.in and www.aerotrix.com/participant-awards.

The Department of Aeronautical Engineering Is keen on bringing out the Design talents from the students hence they can seek a good place in Core companies such as NAL,HAL,ISRO,DRDO,QUEST GLOBAL ,Tech Mahindra.

FACULTY PUBLICATIONS

1. International Journal Papers:

- N.Rajamurugu et.al., "Analysis on High Speed Jet Flow Characteristics using CFD", International Journal of Mechanical Engineering Research, Volume 3,Number 6,2013, ISSN 2249-0019.**Impact factor:0.132**
- N.Rajamurugu et.al.,"Analysis on High Speed Jet Flow Characteristics using CFD", Advances in aerospace Science and applications, Volume 3,Number 3,2013, ISSN 2277-3223. **Impact factor:0.132**
- N.RajaMurugu et.al "Computational analysis of Vortex generator jets in LP turbines" International Journal Of Engineering Research and Technology(IJERT) volume I, Issue 8, October 2012, ISSN NO:2278-0181.
- N.RajaMurugu et.al. "MODELING AND FLOW ANALYSIS OF MODERN FIGHTER AIRCRAFT CONFIGURATION USING -CFD", International journal of pure and applied research in engineering and technology, Issue 3, March 2013.

International Conference Presentations:

- Participated and presented a paper on DETERMINATION OF PRESSURE OVER LOW RISE GABLE ROOF BUILDING in 10th ASIAN SYMPOSIUM ON FLOW VISUALISATION at SRM UNIVERSITY, 2010.
- Participated and presented a paper in International conference on IMPACT TEST ON COMPOSITE MATERIALS at ICAME'10 at VELTECH University, Chennai, 2010.
- Participated and presented a paper in International conference on WATERFLOW CHANNEL USEFUL TOOL FOR FLOW VISUALISATION at ICAME'10 at VELTECH university ,Chennai,2010
- Participated and presented on VORTEX GENERATOR JETS EMPLOYED ON LP TURBINES at ICAME'10 at VELTECH University, Chennai, 2010.

- Participated and presented a paper on “Experimental investigation of a swept wings with control motions” at International conference ICMOC2012 at Noorul Islam University, Nagercoil,2012.

National conference Papers:

- Participated and presented a paper on nonlinear gust response of an airplane wing at national level conference 3C’s at MVJ college of engineering Bangalore,2013.
- Participated and presented a paper on “Experimental investigation of a swept wings with control motions” at national level conference at KLN Engineering College, Madurai,2012.
- Participated and won the second price in national level technical symposium at Hindustan University, September 2011.
- Participated and presented a paper on non linear gust response of an airplane wing at national level conference 3c’s at MVJCE Bangalore, Feb. 2013.
- Participated and won the second price in national level technical symposium at Hindustan University, September 2011.
- Participated and presented a paper on VORTEX GENERATORS at national level conference at ANNA UNIVERSITY OF TECHNOLOGY, TIRUNELVLEI, 2011.