



A.C.S. COLLEGE OF ENGINEERING BENGALURU



(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi and Govt. of Karnataka)

DEPARTMENT OF AERONAUTICAL ENGINEERING NEWSLETTER

FLIGHT – 3, TAKE OFF – 1

2016-2017



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ABOUT AERONAUTICAL DEPARTMENT

The Department of Aeronautical Engineering aims to provide talented, motivated and competent students with Aeronautical engineering curriculum of the highest quality that will enable them to reach the global standard.

COURSE OFFERED

B.E – AERONAUTICAL ENGINEERING

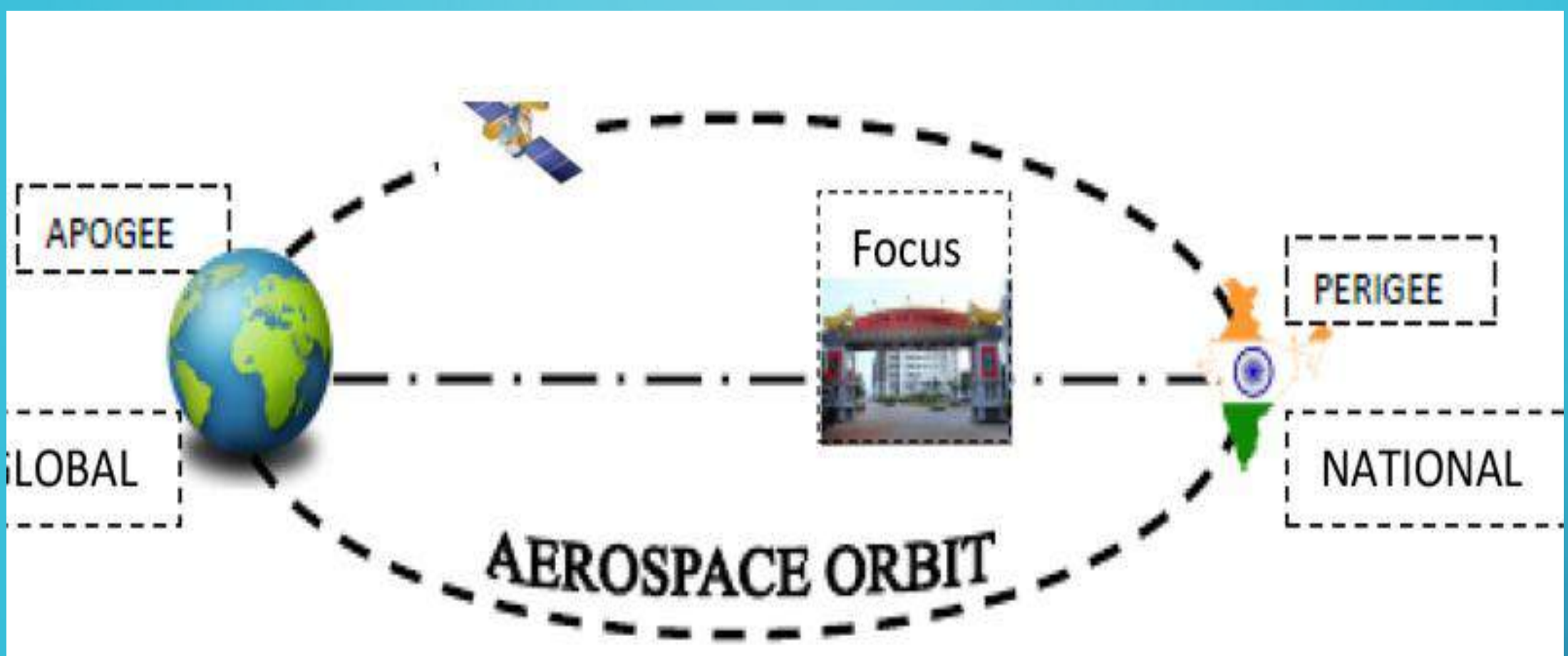
With the intensions to fulfill the increasing demands of skilled manpower in Aero-based industries and hence to serve the society, the Department of Aeronautical Engineering was established in year 2010 with under Graduate Course in Bachelor of Engineering in Aeronautical Engineering under VTU, Belgaum. The course is approved by AICTE, New Delhi and three batches have been graduated successfully



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VISION

To be at the focus of the Aerospace orbit with Global at the Apogee and Nation at the Perigee.



MISSION

Lift the knowledge of students beyond the sky of syllabus to become engineering leaders. Dragging the national and global resources for making the student as skilled managers. Thrusting the students to propel beyond the atmosphere of Employment to Entrepreneurship Weightage to shape the students from I to PI to excel as an ethical and responsible citizens.

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PROGRAMME EDUCATIONAL OBJECTIVES (PEO'S)

PEO-1 : PROFESIONAL KNOWLEDGE

Aeronautical Graduates have the ability to apply their knowledge across interdisciplinary areas in nationally and globally emerging domains of Aeronautical engineering for higher studies, Research, Employment, Entrepreneurship and product development.

PEO-2 : LEADERSHIP SKILLS

Graduates will have multitasking skills like software hardware skills, interpersonal skills and management qualities like critical thinking decision making to implement their knowledge in the Aeronautical domain.

PEO-3 : ATTITUDE DEVELOPMENT

Graduates will suitable attitude to recognize the need of the society and will be a citizen with strong ethics to protect the environment and with better commitment to serve the society.

PROGRAMME SPECIFIC OUTCOME (PSO'S)

PSO-1: AEROMODELLING Apply their Engineering knowledge of all the fundamental core subjects and the Hardware & Software skills in the development (Design, Fabrication, Analysis, Testing and Flying) of aero models (RC, UAV & DRONES)

PSO-2: AEROSPACE EXPOSURE Students will be given additional exposure in advanced development in the fields like Aerospace and helicopter designs

PSO-3: CAREER IMPROVEMENT THROUGH NETWORK Graduates will get quality Industrial exposure and carrier opportunity in the field of Aeronautics and Aerospace from eminent scientists of ISRO, NAL and DRDO taking advantage from the department strong network

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FACULTY DETAILS

PARTICULARS	QUANTITY
TEACHING FACULTY	13
NON TEACHING FACULTY	3
COMPLETED Ph.D	3
PURSUING Ph.D	2
M.E/M.TECH/M.S	8

STUDENTS DETAILS

PARTICULARS	QUANTITY
I-YEAR	57
II-YEAR	50
III-YEAR	36
IV-YEAR	51
TOTAL	134

Department is equipped with following laboratories:

- Aerodynamics Laboratory
- Propulsion Laboratory
- Structures Laboratory
- Energy Conversion Laboratory
- Mechanical Measurements and Metrology Laboratory
- Machine shop laboratory
- Design , Modeling and Analysis Laboratory
- Simulation Laboratory
- Foundry and Forging Laboratory
- Metallography and Material Testing Laboratory

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LABORATORY DETAILS



**Aerodynamics
Lab**



**Propulsion
Lab**



**Structures
Lab**



**Energy
conversion
Lab**

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LABORATORY DETAILS



**Mechanical
measurements &
Metrology Lab**



Machine Shop Lab



Design, Modeling & Analysis Lab



Simulation Lab



Foundry & Forging Lab



**Metallography & Material
Testing Lab**

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PROGRAMS ORGANIZED IN THE DEPARTMENT

Sl.No	EVENT	TITLE	DATE
1	Three days symposium	Mars summit 2K17	21/02/17 23/02/17
2	Two days Workshop	CANSAT Satellite workshop	21/02/17 23/02/17



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Society of Automotive Engineers India Office bearers

NAME	DESIGNATION	PHOTO
Mr. Neril lister lobo	Chair Person	
Mr. Nikil shankar	Secretary	
Ms. Nisarga	Treasurer	
Ms. Pooja sukand	Reception Chair	
Mr. Shakti parkash	Membership Chair	

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Society of Automotive Engineers India Office bearers

NAME	DESIGNATION	PHOTO
Mr. Rajesh franklin	Vice Chair Person	
Mr. Anoop Karpur A	Convener	
Ms. Vinila nadgouda	Assistant treasurer	
Mr. kaivaliya K	Publicity chair	
Mr. Vijaykumar S	Programme chair	

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PROGRAMME ORGANIZED IN THE DEPARTMENT BY SAEI (Bangalore)

Sl.No	PROGRAMME
1	Technical Talk on “Design of Commercial Satellite and CUBE-SAT” on 19 th October 2016 by Dr. N Nagarajan, NTU.
2	Technical Talk on “Oppurtunities in Higher Education and Course on Maintainance” on 20 th October 2016 by Dr. Deric O Brien, Chairman Obrien Institution of Aviation, Ireland.
3	Technical Talk on “Career advancement in Aerospace Technical Publications” on 23 rd September 2016 by Mr. Jasper Augustine Ramaswamy, CEO Gloinnt Solutions.



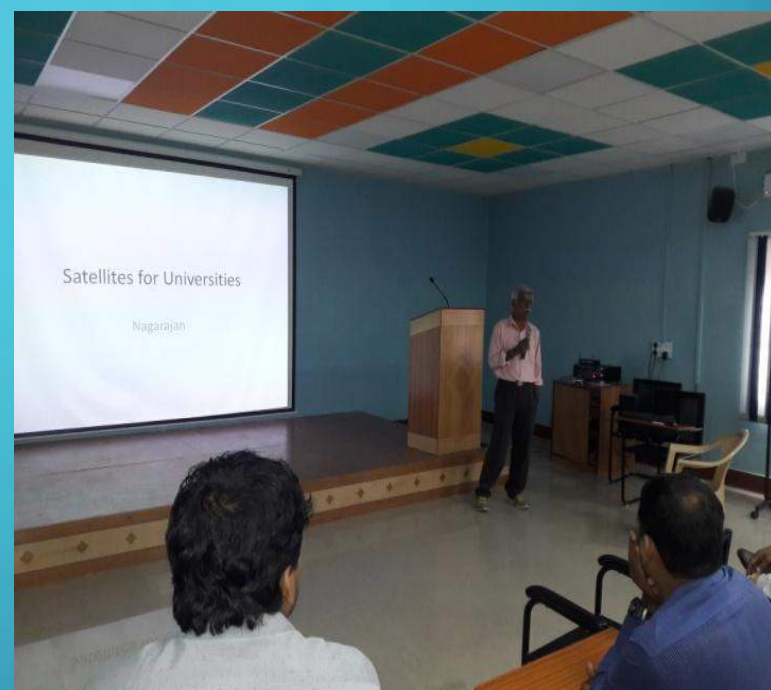
Technical Talk by Mr. Jasper Augustine Ramaswamy, CEO
Gloinnt Solutions

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PROGRAMME ORGANIZED IN THE DEPARTMENT BY SAEI (Bangalore)



Technical Talk by Dr. Deric O Brien



Technical Talk Dr. N Nagarajan,





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Institute of Engineers (India) Student Chapter OFFICE BEARERS

NAME	DESIGNATION	PHOTO
Mr.Pankaj P Hiremath	Chair Person	
Mr.Dhanush S	Secretary	
Ms.Vaishnavi G prasad	Treasurer	
Ms.Meghana a r	Reception Chair	
Mr.Udaya Raj D	Membership Chair	

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Institute of Engineers (India) Student Chapter OFFICE BEARERS

NAME	DESIGNATION	PHOTO
Mr. Praveen Kumar M	Vice Chair Person	
Mr. Jaganath N	Convener	
Ms. Shree B	Assistant treasurer	
Ms. Amreen Taj	Publicity chair	
Mr. Rudresh H M	Programme chair	

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PROGRAMME ORGANIZED IN THE DEPARTMENT BY IEI Student Chapter

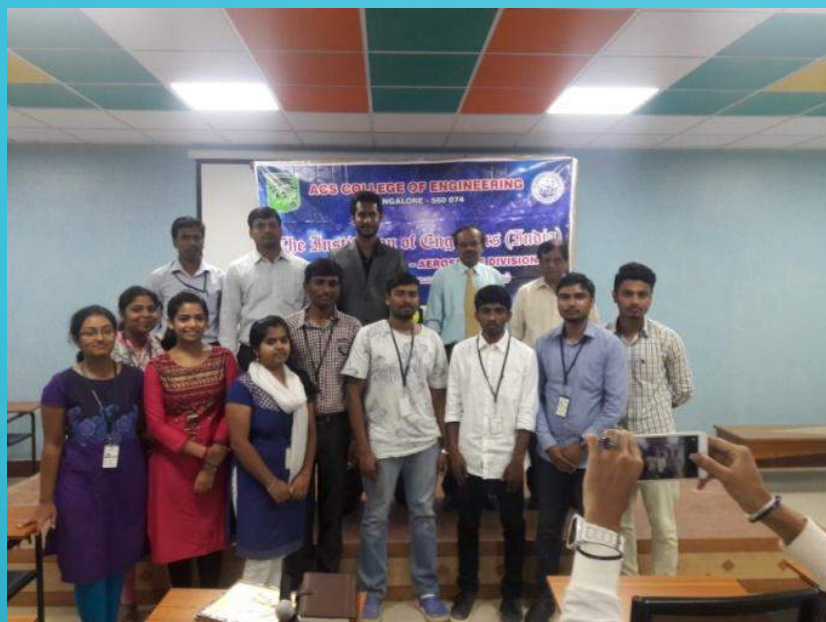
Sl.No	PROGRAMME
1	Technical Talk on “Recent Developments in Design software and 3D developments in design software” on 1 st September 2016 by Mr. Bhanuprakash Dixit, CEO, EDS Technologies
2	Guest Lecture on “Recent Advancements in Manufacturing Technologies in Aerospace Industries” on 20 th August 2016 by Mr. Ashok Chakravarthy, Founder, VCAN Aerospace Ltd.
3	Technical Talk on “Design, Selection of Materials & Processing: In Aerospace” on 10 th August 2016 by Mr. Madeva Nagaral, Design Engineer, HAL, ARDC Bangalore
4	Technical Talk on “Competency Mapping and Profile Research Project” on 15 th July 2016 by Mr. Vargheese, ComPAS Now Solutions Bangalore.

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**PROGRAMME ORGANIZED IN THE
DEPARTMENT BY IEI Student Chapter**



Technical Talk by Mr. Bhanuprakash Dixit



Guest Lecture by Mr. Ashok Chakravarthy

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FUNDED STUDENT PROJECTS

Sl.No	PROJECT TITLE	NAME	USN
1	CONCEPTUAL DESIGN AND PERFORMANCE ANALYSIS OF CHEVRON NOZZLE	HARSHITHA N	1AH13AE016
		K M INDUSHREE	1AH13AE024
		TANUSHREE B R	1AH13AE044
2	FLOW ANALYSIS OF SUPERCRITICAL AIRFOIL USING CIRCULATION CONTROL WING	LEKHA S	1AH13AE401
		MEENA N R	1AH13AE030

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CO-CURRICULAR AND EXTRA-CURRICULAR

Sl.No	PROGRAMME
1	Neril Lester Lobo has secured 'First Prize' in CAD Modelling contest held during Technical Fest at New Horizon College of Engineering, Bangalore.
2	Two Students (Raghavendra P and Mansi N) have participated in CAD Modelling contest held at New Horizon College of Engineering, Bangalore.
3	Two Students (Dhanush S and Vaishnavi G Prasad) have participated in Quiz Competition held during Technical fest at New Horizon College of Engineering, Bangalore.
4	Three Students (Bharath B, Bhavana Shetty and Shalvin Raj K H) have take part in the Music competition held during VTU Fest
5	Six Students (Shalvin Raj K H, Kaivallya K, Surabhi S Bharadwaj , Mansi N and Bharath B) have represented the college Basket ball Team in VTU Inter college Tournament
6	Three Students (Pankaj Panchakshari, Shalvin Raj K H) have represented the college Foot ball Team in VTU Inter college Tournament
7	Three Students (Udaya Raj D, Shakti Prakash and Achuthan G R) have represented the college Cricket Team in VTU Inter college Tournament
8	Three Students (Achuthan G R , Shalvin raj K H and Bhavana Shetty) have been a part of the college Athletics Team in VTU Inter college Tournament
9	Achuthan G R have represented college Volley ball team in VTU Inter college Tournament

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AEROMODELLING COMPETITIONS

Sl. No	NAME	EVENT	DATE	PARTICIPATION /PRIZE
1	Keshva.S Rajeshwari Sanjay.BM .Siddesh M.G	Conscientia (IIST trivandrum)	5 th March 2017	First prize (RC aircraft, Tech-glide, Tech-floght)
2	Keshva.S Rajeshwari. Sanjay.BM. Diksha .D	UDAAN (Nitte Meenakshi institute)	31 st march 2017	First prize
3	Jaganath Anoop Vijay Rudresh Divyashree	Shree Devi college of Engineering (Mangalore)	22 nd and 23 rd February 2017	First prize (RC aircraft, Hydro rocket, Glider)
4	Jaganath Anoop Vijay Rudresh	Conscientia IIST (Thiruvananthapu ram)	4 th March 2017	Second prize (RC aircraft)
5	Jaganath	Conscientia IIST (Thiruvananthapur am)	5 th march 2017	Second prize (Glider)

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Papers published in journals

Sl.No	NAME	TITLE OF THE PAPER
1	Prof. R.R. Elangovan	Concepts for Advanced Space Transportation architecture for Mars & Lunar Mission
2	Mr. Dhanya Prakash R Babu	Review of fatigue and fracture nature of materials
3	Dr. R. Mukesh	Composite Solid Propellants Using Micro and Nano Structured Catalysts
4	Mr. V. Ramji, Dr. R. Mukesh & M. Inamul Hasan	Design and Numerical Simulation of Convergent Divergent Nozzle
5	Ms. Archana T	Fracture toughness and fatigue behavior of spider silk and S-glass epoxy composites: An FEM approach
6	Mr. P. Radha Krishnan	Numerical Analysis of High Lift Devices
7	Dr. R. Mukesh, Prof. R.R. Elangovan, Sivasubramaniyam R, Abhinaya Sree R, Harish R, Rajashree D, Satish Kumar Kanhar	Studies on the Internal Ballistic of Composite Solid Rocket Propellants Incorporating Nano-structured Catalysts
8	Satyaki R Singha	Biomimetic Aircraft Wing Structure

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CLASS TOPPERS FOR THE YEAR 2016-2017

Sem	Name	USN	Percentage	
III	Naveen V	1AH15AE026	SGPA 8.6	
IV	Naveen v	1AH15AE026	SGPA 8.6	
V	Yashasvini V	1AH14AE049	72	
VI	Yashasvini V	1AH14AE049	81	
VII	Neril Lester L	1AH13AE033	86	
VIII	Gagana	1AH13AE015	77	

**I'LL JUST STAND IN
THE AIRPORT BY THE
ARRIVALS TERMINAL
UNTIL YOU GET BACK
BECAUSE I CAN'T
WAIT!**

*Have a safe
flight!*