



# ACS COLLEGE OF ENGINEERING

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



(A Unit of RajaRajeswari Group of Institutions)

Mysore Road, Bengaluru, Karnataka.



NAAC 'A'  
Accredited

## DEPARTMENT OF AEROSPACE ENGINEERING

**NEWSLETTER – (2021-22)**



### CHIEF PATRONS

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Special Officer

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### EDITORS

#### Chief Editor

**Dr. R. MUKESH**

Professor & Head

Department of Aerospace Engineering

#### Editor

**Mr. R. GANESH**

Tutor

Department of Aerospace Engineering

# ABOUT AEROSPACE DEPARTMENT

The Department of Aerospace Engineering was established in year 2017 under VTU, Belagavi. The course is approved by AICTE, New Delhi. Our Department aims to provide talented, motivated and competent students with Aerospace engineering curriculum of the highest quality, that will enable them to reach the global standard.

## VISION

The Aerospace Department seeks to nurture creativity among the students for shaping the next generation of aerospace systems.

## MISSION

**M1.** To provide capable, motivated, and high quality aerospace engineering students, that will enable them to reach their maximum potential in the technological world.

**M2.** To significantly advance the knowledge of the students and integrate them in aerospace related disciplines.

**M3.** To perform research that is timely and of importance to society, which coincide with relevant interests in the engineering community and the community at large.



## 2017-2021 BATCH





## FACULTY DETAILS

PARTICULARS	QUANTITY
TEACHING FACULTY	11
NON TEACHING FACULTY	03
COMPLETED Ph. D	04
PURSUING Ph. D	01
M.E/M.TECH/M.S	06

## STUDENT DETAILS

PARTICULARS	QUANTITY
I –YEAR	46
II – YEAR	38
III – YEAR	49
IV –YEAR	38
Total	171

## DEPARTMENT 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
- Avionics and Instrumentation Laboratory
- IRNSS Laboratory
- Navigation and Space research lab

## DEPARTMENT LABORATORIES



### AERODYNAMICS LABORATORY

*This lab is having a Low Speed Subsonic Wind Tunnel with maximum velocity of 20 m/sec in the rectangular test section. It is used for measurement of pressure distribution over airfoils, determination of boundary layer over flat plate, flow visualization over delta wing model etc.*

### PROPULSION LABORATORY

*The laboratory facilitates various experiments related to heat transfer, combustion, multiphase flow, propulsion and thermal engineering. The students can work with many flow, pressure and temperature measuring sensors/ associated data acquisition systems of industrial standards for their experiments.*



### STRUCTURES LABORATORY

*Objective of this lab is to reinforce the concepts of aerospace structures/mechanics of structures, which pose significant application in Aerospace Engineering. Wide range of experimental options using Column buckling apparatus, Unsymmetrical bending / shear Centre and cantilever beam apparatus etc., are made available in this lab.*

### ENERGY CONVERSION LABORATORY

*This lab will help students to see how energy can be converted from one form to another. Students will observe the loss in useful energy as a result of such a conversion and measure the efficiency for such conversions.*



## DEPARTMENT LABORATORIES



### MEASUREMENTS & METROLOGY LAB

*The purpose of this laboratory is; to familiarize students with laboratory measuring devices, to study the measurements methods, to learn proper measuring techniques through simple measurements and to learn to express the results of calculations*

### MACHINE SHOP LAB

*Students learn how to use different machines and are trained on developing various models. Understand integral parts of lathe, shaping and milling machines and various accessories and attachments used.*



### DESIGN, MODELING & ANALYSIS LAB

*This is a lab where the students get opportunity to familiarize various modelling, drafting and analysis software packages such as AutoCAD, CATIA, SOLIDWORKS, Autodesk Hypermesh, etc. The design and analysis experience gained through CAD lab mould our students capable of contributing meaningfully in the design/analysis of payload/satellite structures in various space projects at institute level.*

### SIMULATION LABORATORY

*This laboratory deals with simulation and Estimation of the aircraft performance for various flight maneuvering conditions and atmospheric condition. The aircraft performance analysis is carried out with the MATLAB code, developed based on flight mechanics analytical expressions. This lab will provide a hands on experience for the students to work on various design features of aircraft for achieving and enhancing specific flight mission requirements.*





## DEPARTMENT LABORATORIES



### FOUNDRY & FORGING LAB

*To provide an insight into different sand preparation and foundry equipment. To provide an insight into different forging tools and equipment and arc welding tools and equipment. To provide training to students to enhance their practical skills in welding, forging and hand moulding.*

### MATERIAL TESTING LAB

*Material testing lab is used to perform destructive testing of different kind of materials and make the students to get the experience the mechanical characteristics of sample materials on first-hand basis.*



### AVIONICS & INSTRUMENTATION LAB

*Flight simulator is an advanced training platform focuses on general aviation which forms the basic building block for students/trainees. Learn & practice the concept of manoeuvring, navigation under visual or instrument flight conditions. Digital Avionics Radio stack gives the best training environment to practice radio and Flight navigation procedures*



### IRNSS LABORATORY

*IRNSS lab is having two multi-constellation receivers used for monitoring GPS and IRNSS signals round the clock. The received signal is used for IRNSS Navigation Receiver Field Trail and Data Collection.*



## CUT SECTIONAL AIRCRAFT ENGINES

### Tumansky R – 25 – 300 Series Supersonic Jet Engine



The Russian Tumansky R – 25 – 300 Series Engine was built under license by HAL in India for MIG 21 BIS fleet aircraft. It is a supersonic jet engine with straight flow. The engine is having a feature of axial flow turbo jet engine with increased overall pressure ratio and airflow. It has a twin spool axial flow 8 stage compressor which comprises of 3 stage low pressure compressor and 5 stage high pressure compressors. The engine is having 10 can annular type combustion chambers.

### 14 Cylinder Radial Aircraft Engine



The **Pratt & Whitney R-1830 Twin Wasp** is an American air-cooled radial aircraft engine. Twin Wasp 2 Row 14 Cylinder Radial Engine is air cooled with Turbo Super Charger. Power Rating is 1350 HP at 2800 RPM at 2000 ft height. Engine is driven with a 3 Bladed Hamilton Standard Propellers through a 16:9 reduction gear. The engine was fitted on B-24 Bomber Aircraft used by US Navy for patrolling, anti-shipping and anti-submarine bombing mission.



## RESEARCH EQUIPMENTS DETAILS

### Multi View GNSS Receiver



## UPCOMING FACILITY DETAILS

### Supersonic Wind Tunnel



- Nozzles with Mach numbers 2 & 2.5
- Test Section Size 100mm (H) 100mm (W) 300mm(L)
- Schlieren setup with 6inch diameter parabolic mirrors and DSLR camera
- Computerised DAQ with Lab view analysis software, 8 channel data acquisition
- Steady state run time = 30 seconds (maximum)



**MEMORANDUM OF UNDERSTANDING SIGNED  
BY THE DEPARTMENT**

<b>S.No</b>	<b>Company/Organization/ Institution Name</b>	<b>Signed on</b>	<b>Validity</b>
<b>1.</b>	<b>Memorandum of Understanding with “SS Technologies, Bangalore”</b>	<b>12th July 2019</b>	<b>3 Years</b>
<b>2.</b>	<b>Memorandum of understanding with “Accord Software and Systems, Bangalore”</b>	<b>17th October 2019</b>	<b>5 Years</b>
<b>3.</b>	<b>Memorandum of understanding with “SANDI, Bangalore”</b>	<b>24th January 2020.</b>	<b>5 Years</b>
<b>4.</b>	<b>Memorandum of Understanding with “BridgeNow Academy, Bangalore”</b>	<b>08th June 2020</b>	<b>5 Years</b>
<b>5.</b>	<b>Memorandum of Understanding with “Ray Dynamics, Coimbatore”</b>	<b>29th December 2020</b>	<b>5 Years</b>
<b>6.</b>	<b>Memorandum of understanding with “Shanlax Journals, Madurai”</b>	<b>5th February 2021</b>	<b>5 Years</b>
<b>7.</b>	<b>Memorandum of understanding with “Unique Lab Equipment’s, Chennai”</b>	<b>22nd September 2021</b>	<b>5 Years</b>
<b>8.</b>	<b>Memorandum of understanding with “Barathi Enterprises, Chennai”</b>	<b>12th October 2021</b>	<b>5 Years</b>
<b>9.</b>	<b>Memorandum of understanding with “EdgeOpt, Thanjavur”</b>	<b>04th February 2020</b>	<b>5 Years</b>
<b>10.</b>	<b>Memorandum of understanding with “Aerolance, Marathahalli”</b>	<b>22nd June 2021</b>	<b>5 Years</b>

## MEMORANDUM OF UNDERSTANDING SIGNED BY THE DEPARTMENT



**MOU with Accord Software and Systems**



**PROGRAMME ORGANIZED IN THE DEPARTMENT**

<b>S.No</b>	<b>PROGRAMME</b>
<b>1</b>	<b>Quiz competition on “Basic Engineering and its Sciences” in association with COSMOS Explorer for First year Students – 16.11.2021</b>
<b>2</b>	<b>Guest Lecture on Integrated Avionic System – 16.12.2021</b>
<b>3</b>	<b>Technical Seminar on Applications of Drones and HAPS and Possible role of AI / Robotics – 17.12.2021</b>
<b>4</b>	<b>Hands on Training in Flight Simulator – 17.12.2021</b>
<b>5</b>	<b>Industrial Visit to Exhibition of Defence Products for General Public &amp; Students to Commemorate AZADI KA AMRIT MAHOTSAV, Bengaluru – 18.12.2021</b>
<b>6</b>	<b>Math Quiz event on National Mathematics Day – 22.12.2021</b>
<b>7</b>	<b>Technical Seminar on Practical aspects of Gas Turbine Design Process – 23.12.2021</b>
<b>8</b>	<b>Webinar on Internship. Project and Job Opportunities for Aerospace and Aeronautical Students – 12.01.2022</b>

**PROGRAMME ORGANIZED IN THE DEPARTMENT**

<b>S.No</b>	<b>PROGRAMME</b>
<b>9</b>	<b>Webinar on Awareness on Designing Software in Aerospace Engineering – 19.01.2022</b>
<b>10</b>	<b>Inaugural ceremony of Flight Simulator and Technical talk on Infrastructure and Sustainability focus areas at Airport – 16.02.2022</b>
<b>11</b>	<b>Motivational Speech – 26.02.2022</b>
<b>12</b>	<b>Innovative Projects Contest – National Science Day Celebration – 08.03.2022</b>
<b>13</b>	<b>Awareness session on Healthy Youth – Healthy Planet – World Health Day Celebration – 07.04.2022</b>
<b>14</b>	<b>Career Guidance Program on Aerospace Design – 12.04.2022</b>
<b>15</b>	<b>Seminar on Accomplishments in Space research and Applications – Global and Indian Scenario – 19.04.2022</b>
<b>16</b>	<b>Webinar on Career Prospects and Challenges in Airlines –International Pilot Day Celebration – 26.04.2022</b>



**PROGRAMME ORGANIZED IN THE DEPARTMENT**

<b>S.No</b>	<b>PROGRAMME</b>
<b>17</b>	<b>Technical talk on Career Prospects and Hands on training in UAV Design – 13.05.2022</b>
<b>18</b>	<b>Technical training on Aerospace Vehicle Design Tools – 27.05.2022</b>
<b>19</b>	<b>Technical talk on Jet Engines – 01.06.2022</b>
<b>20</b>	<b>Seminar on “Space Communication – A Practical Perspective” – 10-06-2022</b>
<b>21</b>	<b>Study Overseas – Options for Aerospace and Aeronautical Engineering – 8.7.2022</b>
<b>22</b>	<b>Mini Project Exhibition and Presentation - 28.7.2022</b>

# AEROSPACE DEPARTMENT NEWSLETTER



**ACS COLLEGE OF ENGINEERING**  
Affiliated to VTU, Approved by AICTE, New Delhi and Government of Karnataka  
[A Unit of RajaRajeswari Group of Institutions]  
Mysore Road, Bengaluru, Karnataka

Conducted by  
**DEPARTMENT OF AEROSPACE ENGINEERING**  
In Collaboration with  
**COSMOS EXPLORER**  
Presenting

**FRESHERS' DAY  
QUIZ COMPETITION**

Venue : 5<sup>th</sup> floor  
On 16<sup>th</sup> NOVEMBER 2021  
Topic : BASIC SCIENCE & ENGINEERING  
Top 3 Winners are Awarded with Certificates

Get Registered on  
  
www.cosmos-explorerz.org

Contact Us :  
9540706315  
9110226364  
E-mail : contact@cosmos-explorer.com

Registration Free

## Quiz on “Basic Engineering and its Sciences” – 16-11-2021

**ACS COLLEGE OF ENGINEERING**  
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Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**

Organizes Guest Lecture On  
**INTEGRATED AVIONICS**

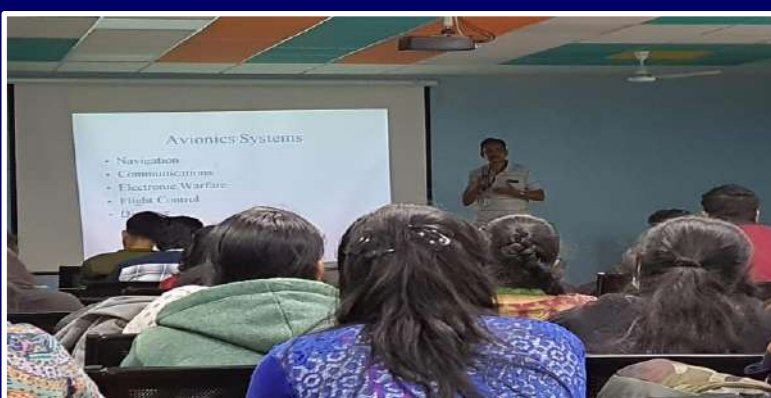
Resource Person:  
**Mr. Ramesh Babu**  
Managing Director,  
**RAY DYNAMICS,**  
**COIMBATORE.**

DATE: 16-12-2021  
TIME: 03:00 PM  
VENUE: SEMINAR HALL – FOURTH FLOOR

Event Coordinator  
**Dr. V. PARAMAGURU & Mr. J. SIVA**  
Ph:8667291504

Head of the Institution  
**Dr. M. S. MURALI**  
PRINCIPAL

\*E-Certificates will be issued



## Guest Lecture on “Integrated Avionics System” – 16-12-2021



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Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**

Organizes Seminar  
on  
**"Applications of DRONES and  
HAPS and possible role of  
AI/ROBOTICS"**

**Date : 17-12-2021**  
**Time : 10:00 AM**  
**Venue : Seminar Hall – Fourth Floor**

**Resource Person:**  
**Dr. K. RAMACHANDRA,**  
FORMER DIRECTOR,  
GTRE – DRDO.

**Event Coordinator**  
**Dr. C. SURESH & Mr. J. SIVA**  
Ph:8667291504

**Head of the Institution**  
**Dr. M. S. MURALI**  
PRINCIPAL

**\*E-Certificates  
will be issued**



## Seminar on “Applications of Drones and HAPS and possible role of AI/Robotics” – 17-12-2021



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Accredited with NAAC 'A' Grade, National Board of Accreditation & HLACT (UK)

**Flight Simulator - Hands on Training**  
**General Aviation Aircraft**  
**Department of Aerospace Engineering**

**Course Instructor**  
**Mr. R. Ramesh Babu**  
(BE, AIE, M(Aesi))  
Ex. Ground Engineer, Airport Authority of India,  
Managing Director, Ray Dynamics,  
Coimbatore.

**\*E-Certificates  
will be issued**

**Event Coordinator**  
**Dr. C. SURESH & Mr. J. SIVA**  
Ph:8667291504

**Date : 17-12-2021 Time : 02:00PM**  
**Venue: FLIGHT SIMULATOR LAB**

**Head of the Institution**  
**Dr. M. S. MURALI**  
PRINCIPAL

## Hands on Training in “Flight Simulator” – 17-12-2021





## Industrial Visit to “ Exhibition of Defense Products for General Public & Students to Commemorate AZADI KA AMRIT MAHOTSAV” at Bengaluru – 18-12-2021





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Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**  
Celebrates  
**NATIONAL MATHEMATICS DAY - 2021**  
**BIRTH ANNIVERSARY OF THE INDIAN MATHEMATICAL GENIUS "SRINIVASA RAMANUJAN"**

Event Coordinator  
**Dr. V. PARAMAGURU & Mr. J. SIVA**  
Ph: 8667291504

**03:00 PM**  
**22-12-2021**  
VENUE: SEMINAR HALL - FOURTH FLOOR

Head of the Institution  
**Dr. M. S. MURALI PRINCIPAL**



## Quiz Program in the event of National Mathematics Day – 22-12-2021



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Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**  
Organises SEMINAR on  
**PRACTICAL ASPECT OF GAS TURBINE DESIGN PROCESS**

\*E-Certificates will be issued

**10:30AM**  
**23-DEC-2021**  
VENUE: SEMINAR HALL - FOURTH FLOOR

Resource Person:  
**VINOD S CHAUDHARI**  
Technology Director and partner,  
**DHEYA ENGINEERING AND TECHNOLOGY Pvt Ltd.,**  
BENGALURU.

Head of the Institution  
**Dr. M. S. MURALI PRINCIPAL**

Event Coordinator  
**Dr. C. SURESH & Mr. J. SIVA**  
Ph: 8667291504

## Technical Seminar on “ Practical Aspects of Gas Turbine Design Process ” – 23-12-2021



**ACS COLLEGE OF ENGINEERING**  
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 Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**  
 In Association with ACS - SPACE CLUB

**WEBINAR ON**  
**"INTERNSHIP, PROJECT AND JOB OPPORTUNITIES for Aeronautical and Aerospace Students"**

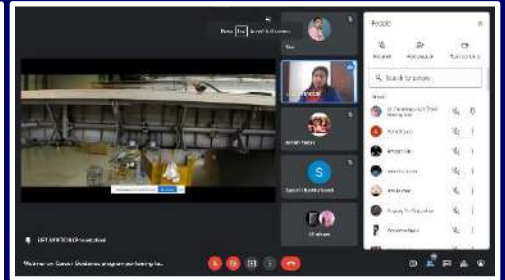
MeetLink  
<https://meet.google.com/qgc-rpmn-uet>  
 \*E-Certificates will be issued

Event Coordinator  
 Dr. C. SURESH &  
 Dr. V. PARAMAGURU  
 Ph:8870458839

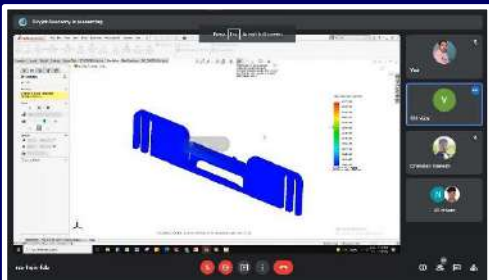
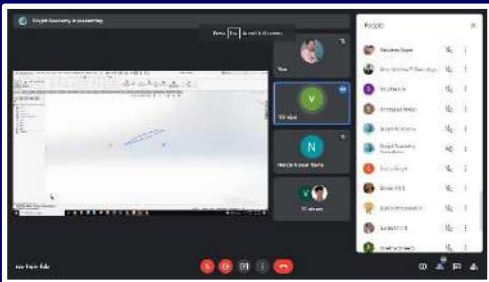
Date :12-01-2022  
 Time :10:45 AM

Head of the Institution  
 Dr. M. S. MURALI  
 PRINCIPAL

Resource Person:  
 Mrs. SRINITHYA R,  
 MANAGING DIRECTOR,  
 IJET AVIATION.



## Webinar on “Internship, Project and Job Opportunities for Aerospace and Aeronautical Students” – 12-01-2022



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**DEPARTMENT OF AEROSPACE ENGINEERING**  
 In Association with ACS - UAV & AEROMODELLING CLUB

**ORGANISES WEBINAR ON**  
**"AWARENESS ON DESIGNING SOFTWARES IN AEROSPACE ENGINEERING"**

Link: <https://meet.google.com/rzs-tqht-tdh>  
 \*E-Certificates will be issued

Event Coordinator  
 Dr. C. SURESH &  
 Mr. M. SIVARAMRAJ  
 Ph:9677752050

Date :19-01-2022  
 Time :11:45 AM

Head of the Institution  
 Dr. M. S. MURALI  
 PRINCIPAL

Resource Person:  
 Mr. T. VIJAY (Ph.D.),  
 LEAD DESIGNER,  
 SKY JET ACADEMY.

## Webinar on “Awareness on Designing Software in Aerospace Engineering” – 19-01-2022



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**ACS COLLEGE OF ENGINEERING**  
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8287, Kankaragere, Mysore Road, Bengaluru - 560 074  
*All are Cordially Invited for Inauguration of*

**"Flight Simulator" and Technical Talk on  
Infrastructure & Sustainability  
Focus Areas at Airport**

*Chief Guest*  
**Dr. A. C. Shanmugam**  
B.A.L.B. PIMSA, FRCS (Singapore, UK)  
Chairman  
Raja Rajawade Group of Institutions

*Chief Guest*  
**Er. A.C.S. Arun Kumar**  
B.Tech (Hons), LMSTE, MIT, UK, LMCI  
Vice Chairman  
Raja Rajawade Group of Institutions

*Chief Guest*  
**Mr. S. Lakshminarayanan**  
Vice President - Engineering & Maintenance BIAL  
Karnataka International Airport  
Bengaluru, Karnataka

**Date: 16-02-2022 Time: 11:00AM**  
**Venue: ACSCE Auditorium**

Dr. S. Vijayanand, M.Tech, Ph.D.    Sri C.N. Seetharaman (IISc)    Dr. S. Jayabalan, Ph.D.  
Executive Director, RRCI    Chief Executive Officer, RRCI    Special Officer, RRCI

Dr. M.S. Murali    Dr. R. Theerthakumar    Dr. R. Mukesh    Dr. G. Ramanan  
Principal, ACSCE    Prof & HOD, ACSCE    Prof & HOD,    Prof & HOD,  
Dept. of Aerospace    Dept. of Aerospace



## Inaugural ceremony of Flight Simulator and Technical Talk on "Infrastructure & Sustainability Focus areas at Airport" – 16-02-2022





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Mysore Road, Bengaluru, Karnataka

**DEPARTMENT OF AEROSPACE ENGINEERING**  
*Celebrates*  
**NATIONAL SCIENCE DAY – INNOVATIVE PROJECT CONTEST**

**ATTRACTIVE CASH PRIZES FOR BEST PROJECTS**

Event Coordinator  
**Mr. M. SIVARAMRAJ & Dr. C. SURESH**  
Ph: 9677752050

DATE : 08 – 03 – 2022  
TIME : 02 : 00 PM

Head of the Institution  
**Dr. M. S. MURALI PRINCIPAL**

VENUE : SEMINAR HALL – FOURTH FLOOR



## Webinar on “Innovative Project Contest in the event of National Science Day” – 08-03-2022



First Prize won by the project  
“Spark Induced Missile Launcher”  
done by Lakshmi, Megha and Poorvi M



Second Prize won by the project  
“Chandrayan II - PRAGYAN ROVER”  
done by Prajwal K, Parikshith,  
Darshan R and Amith Balakrishna.



Second Prize won by the project  
“Ingenuity Helicopter” done by  
Sujith Kumar V, Kuntaiah  
Raghavendra Krishna, Sanjay C and  
Athish Jeevan Yadav.





**Motivational Speech given by Mr. O. R. Ashwin Chandar,  
Scientist F, ASL, Hyderabad – 26-02-2022**

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**DEPARTMENT OF AEROSPACE ENGINEERING**

In Association with RRMCH Celebrates  
**WORLD HEALTH DAY 2022**  
By Organizing an awareness session on  
**"HEALTHY YOUTH – HEALTHY PLANET"**

**12:00 P.M.  
07-04-2022**

Resource Person:  
**Dr. R. PREMA,**  
PROFESSOR,  
DEPARTMENT OF PEDIATRICS,  
RAJAJESWARI MEDICAL  
COLLEGE AND HOSPITAL,  
BANGALORE – 560074.

VENUE: SEMINAR HALL – FOURTH FLOOR  
Event Coordinator: **Dr. C. SURESH**  
Head of the Institution: **Dr. M. S. MURALI**  
PRINCIPAL



**Webinar on “Healthy Youth-Healthy Planet” in view of world  
Health Day celebration” – 07-04-2022**



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**DEPARTMENT OF AEROSPACE ENGINEERING**  
&  
**AVISTRAT ACADEMY OF AEROSPACE AND DESIGN, BANGALORE**  
Jointly Organizing

**"CAREER GUIDANCE PROGRAM ON AEROSPACE DESIGN"**

**DATE: 12-04-2022**  
**TIME: 11:00 AM**  
**VENUE: SEMINAR HALL - FOURTH FLOOR**

**Resource Person:**  
**Mr. shashank Revel,**  
Programme Director

**AVISTRAT**  
INSTITUTE OF AEROSPACE AND DESIGN

**Event Coordinator**  
Dr. C. SURESH  
Ph:9840515678

**Dean**  
Dr. P. THEERTHAMALAI  
FORMER SCIENTIST - DRDO.

**Head of the Institution**  
Dr. M. S. MURALI  
PRINCIPAL

## Seminar on "Career Guidance Program on Aerospace Design" – 12-04-2022

**ACS COLLEGE OF ENGINEERING**  
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**DEPARTMENT OF AEROSPACE ENGINEERING**  
In Association With  
**ROCKETRY & SPACE PROPULSION CLUB**  
Organizes SEMINAR on

**"ACCOMPLISHMENTS IN SPACE RESEARCH AND APPLICATIONS – GLOBAL AND INDIAN SCENARIO"**

**Resource Person:**  
**Dr. G. RAJU,**  
FORMER PROJECT DIRECTOR,  
MEGHA - TROPICS  
CLIMATE SATELLITE  
ISRO SATELLITE CENTRE,  
BANGALORE.

**Date: 19-04-2022**  
**Time: 11:00 AM**

**VENUE: SEMINAR Hall - Fourth Floor**

**Event Coordinator**  
Mr. M VIJAY  
Dr. C. SURESH  
Ph:9840515678

**Dean**  
Dr. P. THEERTHAMALAI  
FORMER SCIENTIST - DRDO.

**Head of the Institution**  
Dr. M. S. MURALI  
PRINCIPAL



## Seminar on "Accomplishments in Space research and Applications – Global and Indian Scenario – 19.04.2022



**ACS COLLEGE OF ENGINEERING**  
 Affiliated to VTU, Belagavi, Approved by AICTE New Delhi and Govt. of Karnataka  
 (A Unit of RajaRajeswari Group of Institutions)  
 Mysore Road, Bengaluru, Karnataka. NAAC 'A' Accredited

**DEPARTMENT OF AEROSPACE ENGINEERING**  
 In Association With  
**UAV & AEROMODELLING CLUB**  
 Organizes Technical Webinar on

**“CAREER PROSPECTS AND CHALLENGES IN AIRLINES - COMMERCIAL PILOT LICENCE”**

**Resource Person:**  
**CAPTAIN VASUNDHARA RAJANNA,**  
 FIRST OFFICER, AIRLINE PILOT.

**DATE: 26-04-2022**  
**TIME: 02:30 PM**

**Head of the Institution**  
**Dr. M. S. MURALI**  
 PRINCIPAL

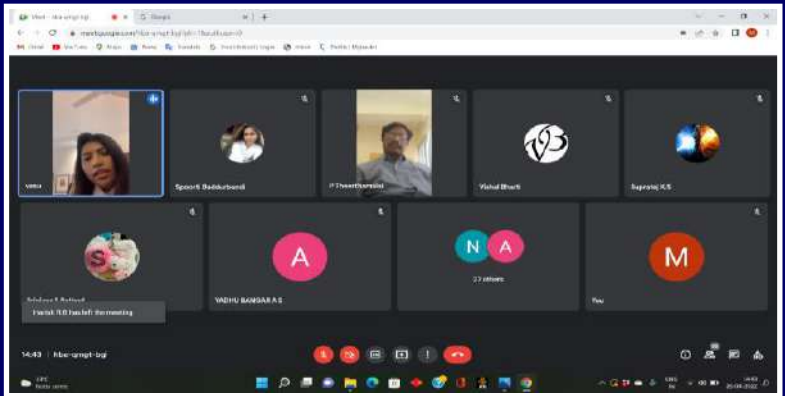
**Event Coordinator**  
**Dr. C. SURESH**  
 Ph:9840515678

**Dean**  
**Dr. P. THEERTHAMALAI**  
 FORMER SCIENTIST - DRDO.

**Meat Link: <https://meet.google.com/hba-qmgt-bgi>**

**26-Certificates will be issued**

**INTERNATIONAL PILOT DAY**

## Webinar on “Career Prospects and Challenges in Airlines – Commercial Pilot License” – 26-04-2022



**ACS COLLEGE OF ENGINEERING**  
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**DEPARTMENT OF AEROSPACE ENGINEERING**  
 In Association With **UAV CLUB** Organizes

**“TECHNICAL TALK ON CAREER ASPECTS AND HANDS ON TRAINING IN UAV DESIGN”**

**Resource Person:**  
**Mr. PRITAM ASHUTOSH SAHU,**  
 DIRECTOR, EDALLS SYSTEM,  
 BENGALURU.

**13th MAY 2022**  
**10:00 AM**

**VENUE: SEMINAR Hall - Fourth Floor**

**Event Coordinator**  
**Dr. C. SURESH**  
 Ph:9840515678

**DEAN**  
**Dr. P. THEERTHAMALAI**  
 FORMER SCIENTIST - DRDO.

**Head of the Institution**  
**Dr. M. S. MURALI**  
 PRINCIPAL



## Technical Talk on “Career aspects and Hands on training in UAV design” – 13-05-2022



**ACS COLLEGE OF ENGINEERING**  
Affiliated to VTU, Belagavi, Approved by AICTE New Delhi and  
Govt. of Karnataka  
(A Unit of RajaRajeswari Group of Institutions)  
Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**  
In Association with DMA CLUB  
ORGANIZES

**" TECHNICAL TRAINING ON AEROSPACE VEHICLE DESIGN TOOLS"**

DATE: 27.05.2022  
SESSION 1: CATIA  
(11 AM-12.30 PM)  
SESSION 2: SOLID WORKS  
(2 PM-3.30 PM)  
VENUE: IV FLOOR,  
SEMINAR HALL

**RESOURCE PERSON:**  
**Mr. M. SIVARAMRAJ**  
ASSISTANT PROFESSOR,  
DEPT. OF AEROSPACE, ACSCE

**EVENT COORDINATOR**  
Dr. C. SURESH  
Ph: 9840515678

**DEAN**  
Dr. P. THEERTHAMALAI  
FORMER SCIENTIST - DRDO

**HEAD OF THE INSTITUTION**  
Dr. M. S. MURALI  
PRINCIPAL



## Technical Training on "Aerospace Vehicle Design Tools" – 27-05-2022



**ACS COLLEGE OF ENGINEERING**  
Affiliated to VTU, Belagavi, Approved by AICTE New Delhi and Govt. of Karnataka  
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Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**  
In Association With  
**ROCKETRY & SPACE PROPULSION CLUB**  
Organizes TECHNICAL SEMINAR on

**" SPACE COMMUNICATION –  
A PRACTICAL PERSPECTIVE "**

DATE : 10 - 06 - 2022  
TIME : 11:00 AM  
VENUE : SEMINAR HALL - FOURTH FLOOR

**Resource Person:**  
**B.A. Subramani**  
Secretary & Station Director,  
Upagrah Amateur Radio Club,  
U. R Rao Satellite Centre,  
Bangalore.

**Event Coordinator**  
Dr. C. SURESH  
Mr. M. VIJAY

**Dean**  
Dr. P. THEERTHAMALAI  
FORMER SCIENTIST – DRDO.

**Head of the Institution**  
Dr. M. S. MURALI  
PRINCIPAL

## Seminar on "Space Communication – A Practical Perspective" – 10-06-2022



# AEROSPACE DEPARTMENT NEWSLETTER



**ACS COLLEGE OF ENGINEERING**  
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 (A Unit of RajaRajeswari Group of Institutions)  
 Mysore Road, Bengaluru, Karnataka.

**All are Cordially Invited for the Inauguration of**  
**"TUMANSKY SUPERSONIC JET ENGINE AND PRATT & WHITNEY RADIAL ENGINE CUT SECTIONS"**

**Chief Guests**

**Dr. K. RAMACHANDRA,**  
 Former Director,  
 CTR-DRDO

**Dr. S. V. RAMANA MURTY,**  
 Technical Director,  
 Turbine Group-CTRE

**Date: 01-06-2022 Time: 11:00 AM**  
**Venue: Research Lab - ACSCE**

**Dr. P. THEERTHAMALAI**  
 Former Scientist, DRDO  
 Prof & Dean, ACSCE

**Dr. M. S. MURALI**  
 PRINCIPAL, ACSCE



## Inaugural ceremony of "Tumansky Supersonic Jet engine and Pratt & Whitney Radial Engine Cut Sections" and Technical Talk on "Jet Engines" – 01-06-2022



**ACS COLLEGE OF ENGINEERING**  
 Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi and Govt of Karnataka  
 (A Unit of RajaRajeswari Group of Institutions)  
 Mysore Road, Bengaluru, Karnataka.

**DEPARTMENT OF AEROSPACE ENGINEERING**  
 (In Association with)

**AERONAUTICS & SPACE PROPULSION CLUB**

**Organized**

**"TECHNICAL TALK ON JET ENGINES"**

**Chief Guests**

**Dr. K. RAMACHANDRA,**  
 Former Director,  
 CTR-DRDO

**Dr. S. V. RAMANA MURTY,**  
 Technical Director,  
 Turbine Group-CTRE

**Date: 01-06-2022 Time: 11:30 AM**  
**Venue: ACSCE Auditorium**

**Dr. C. SURESH MURTHY**  
 Ex-Head, DRDO

**Dr. P. THEERTHAMALAI**  
 Former Scientist, DRDO  
 Prof & Dean, ACSCE

**Dr. M. S. MURALI**  
 PRINCIPAL, ACSCE







**ACS COLLEGE OF ENGINEERING**  
Affiliated to VTU, Belagavi, Approved by AICTE New Delhi and Govt. of Karnataka  
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Mysore Road, Bengaluru, Karnataka. NAAC 'A' Accredited

**DEPARTMENT OF AEROSPACE ENGINEERING**  
Organizes Seminar on  
**“Study Overseas - Options for Aerospace and Aeronautical Engineering”**

**Resource Person:**  
**MR. ROHITH SATHEESH,**  
DIRECTOR,  
MANCOMPOVERSEAS EDUCATION,  
BENGALURU.

**Event Coordinator:**  
Dr. C. SURESH  
Ph:9840515678

**Dean:**  
Dr. P. THEERTHA MALAI  
FORMER SCIENTIST - DRDO.

**Head of the Institution:**  
Dr. M. S. MURALI  
PRINCIPAL

**DATE: 08-07-2022**  
**TIME: 11:00 A.M**

## Seminar on “Study Overseas – Options for Aerospace and Aeronautical Engineering ”– 08-07-2022



## MINI PROJECT EXHIBITION AND PRESENTATION - 28.7.2022





## STUDENT'S CO- CURRICULAR ACTIVITIES



**Students participated in Airship Regatta & Competition 2022**

## NSS ACTIVITIES





## AICTE ACTIVITIES





## AICTE ACTIVITIES





<b>S.No</b>	<b>PROJECT DETAILS</b>
<b>1</b>	<b>Ice accretion analysis and De-icing on a Aircraft/UAV</b>
<b>2</b>	<b>Ice accretion analysis and De-icing on a Helicopter</b>
<b>3</b>	<b>Calculation of calorific values for different solid shapes and combination of propellants.</b>
<b>4</b>	<b>Small UAV design and development</b>
<b>5</b>	<b>Airfoil / wing shape optimization for Defence UAV</b>
<b>6</b>	<b>Ionospheric Studies using GNSS data</b>
<b>7</b>	<b>Prediction of ice accretion in aircraft by using surrogate model.</b>
<b>8</b>	<b>Preparation of composite materials for aerospace applications.</b>

Funded Projects

S.No	PROGRAMME	Duration	Amount Sanctioned
1	Conceptual Aerodynamic Design of Expendable attack UAV	2021-2022	9,58,990/-
2	Design and Optimization of Air Intake for 155mm Ramjet Projectile	2021-2022	9,63,470/-
3	Estimation of Aerodynamic Parameters from Telemeter Flight Data of Flight Vehicle in Matlab Environment	2021-2022	9,64,390/-
4	Estimation of Aerodynamic parameters from Telemeter Flight Data of UAV	2021-2022	9,67,493/-
5	AI and ML based forecasting model for prediction of Ionospheric TEC and EQ using GNSS data	2022-2024	7,25,000/-
6	Aerodynamic prediction code for canard controlled missile	2022-2024	14,81,726/-
7	Computational Identification and prediction of Covid-19 using AI and ML	2019-2020	90,000/-
8	Surrogate Model for Ionospheric Studies using IRNSS/GPS data	2017-2019	11,12,000/-



## STAFF ACHIEVEMENT

S.No	PUBLICATIONS
1	R. Mukesh, M. Vijay and D. Venkata Ratnam “Analysis of TEC values predicted by OKSM amongst low, mid and high latitude stations during X 9.3 Solar Flare”, Astrophysics and Space Science, <b>Springer</b> , 80-2021, <a href="https://doi.org/10.1007/s10509-021-03986-8">https://doi.org/10.1007/s10509-021-03986-8</a> . <b>ISSN: 1572-946X. (IF: 1.830).</b>
2	<b>R. Mukesh</b> and M. Vijay “Analysis of Ionospheric TEC variations due to X, M & C Class Solar Flares during the years 2003 to 2018 and comparison with IRI models”, Geomagnetism and Aeronomy, <b>Springer</b> , Accepted on 31.5.2022. <b>ISSN: 1555-645X. (IF: 0.701).</b>
3	<b>R. Mukesh</b> and M. Vijay “Influence of input parameters for prediction of GPS and IRNSS TEC by using OKRSM at Hyderabad Stations during solar flare event”, Acta Geophysica, <b>Springer</b> , 70-2022, <a href="https://doi.org/10.1007/s11600-021-00712-4">https://doi.org/10.1007/s11600-021-00712-4</a> . <b>ISSN: 1895-7455. (IF: 2.058)</b>
4	C. Suresh, “Study and Characteristics of Ordinary concrete structure with granite dust” Materials Today, 2022.
5	J. Siva, C. Suresh and V. Paramaguru, “Aerodynamic Investigation of Double Surface Airfoil” ACS Journal for Science and Engineering, 2021.

S.No	PROGRAMME/PRESENTATIONS
1	Mr. M Sivaramraj participated in 5 days FDP in Internet of things on Aerospace Engineering conducted by AICTE.
2	Dr V Paramaguru participated in National Level Webinar & Quiz on “World Environment Day 2021” - 28 July 2021" organised by Department of Production Engineering, AISSMS College of Engineering, Pune.
3	Mr. M. Vijay participated in 5 days FDP in Applications of Machine Learning Algorithms in Aerospace Engineering conducted by RV College of Engineering.
4	Dr V Paramaguru participated in IP Awareness/Training program under NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION.
5	Dr V Paramaguru participated in 5 days virtual workshop on “ Design and Development of Aero Propulsive Components using AxSTREAM Software” Organized by the Department of Aeronautical Engineering, Bannari Amman Institute of Technology, Tamilnadu.
6	Dr V Paramaguru completed a 30 days course in Master Class on Artificial Intelligence at Pantech Prolabs India Pvt. Ltd.

## PLACEMENT DETAILS - 2021



**ABHIRAMI.K**  
**(1AH17AS002)**  
**SONOVISION AETOS**  
**TECHNICAL SERVICES**  
**PVT.LTD**



**ARPITHA.M B**  
**1AH17AS007**  
**IDC ENGINEERING INDA**  
**PVT LTD.**



**R.SAI BHUVAN**  
**1AH17AS024**  
**CAPGEMINI**  
**TECHNOLOGY SERVICES**  
**INDIA LIMITED**



**JIJI C JOY**  
**1AH17AS015**  
**TECH MAHENDRA**  
**Tech**  
**Mahindra**



**YUKTHASHREE H M**  
**1AH17AS040**  
**TECH MAHENDRA**  
**Tech**  
**Mahindra**



**JAGADISH.J**  
**1AH17AS013**  
**PINAKA AEROSPACE**  
**SOLUTION PVT.LTD**



**CHANDU.C P**  
**1AH17AS010**  
**HECTRONICS**





PLACEMENT DETAILS - 2022



**ANURAG A  
SALUNKHE  
1AH18AS006  
FACE**



**ANUSHA R  
1AH18AS007  
FACE**



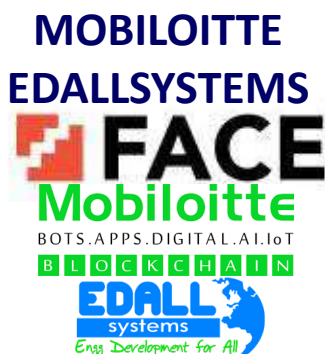
**CHANDRU B M  
1AH18AS012  
FACE**



**NAGARAJA M V  
1AH18AS020  
PENTAGON  
SPACE PVT.LTD**



**NITHYASRI B S  
1AH18AS021  
FACE**



**PAREEKSHITH TG  
1AH18AS023  
FACE**



PLACEMENT DETAILS - 2022



SHREEKRISHNA P  
GANESHGUDI  
1AH18AS028

BYJU'S

UMLAUT



RAKSHITH KUMAR G R  
1AH18AS026

FACE



SNEHA SINGH  
1AH18AS029

INFOSYS



SWETHA SHREE S  
1AH18AS032

FACE



PRAJWAL P N  
1AH19AS400

BYJU'S



PRIYANKA L P  
1AH18AS024

CAPEGEMINI

STRATOAGENT

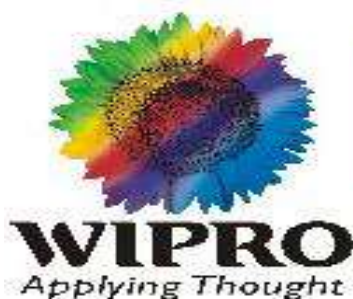
TECHNOLOGY SERVICES

Stratogent VRIZE





OUR RECRUITERS



CONSULTING.TECHNOLOGY.OUTSOURCING



## MEMBERSHIP OF PROFESSIONAL BODIES

S.No	PROFESSIONAL BODIES
1.	Dr. R. Mukesh, Professor is a member of IEEE, SAE and RAS
2.	Dr. C. Suresh, Associate Professor is a member of ISTE and IEI.
3.	Dr. V. Paramaguru, Associate Professor is a member of ISTE and IEI.

## CLASS TOPPERS

BATCH	I RANK	II RANK	III RANK
II YEAR			
2019 – 2023			
	POORVI M U 1AH20AS022	PRATHEEKSHA M 1AH20AS024	SRUJANA C 1AH20AS032
III YEAR			
2018 – 2022			
	D S RIYA 1AH19AS011	VEETHASMI A KUMAR 1AH19AS047	SANGEETHA G 1AH19AS034
IV YEAR			
2018 – 2022			
	SWETHASREE S 1AH18AS032	VIDYAKUMARI M N 1AH18AS037	SNEHA SINGH 1AH18AS029