

Mangalore Institute of Technology and Engineering (ISO 9001:2015 Certified Institution)

Department of Aeronautical Engineering

Different activities conducted in the Academic year 2017-18

| SL .N o | Date | Event Topic | | Resource person with designation |
|---------------|------------------------|---|---|--|
| 1 | 21/09/17to 22/09/17 | Workshop | RC Plane Modelling workshop: VAYUYANA | Team ARIENO and Faculty members Dept of AE MITE |
| 2 | 23/09/17 | Freshers welcome& Technical Talk | Student, Engineers, Technology – Scram Jet Propulsion | Mr. Venu G, Sr. Scientist from Propulsion Division, CSIR's National Aerospace |
| 3 | 14/10/17 | Invited Lecture | APJ Abdul Kalam Birth anniversary Working experience with APJ Abdul Kalam | Mr. Janardhan RaoISRO (Rtd Scientist) |
| 4 | 17/11/2017 | Invited talk | How to crack SSB interview? | Mr. Bharath Kumar Aircraft Training Officer |
| 5 | 19/02/18 | Invited talk | Technical talk on Unmanned Arial Vehicle: Applications, Innovations and Opportunities " | Mrs. Arul Jyothi- director executive,Ms. Krithiga - HR executive,Mr. Naveen -Research Executive,Ms.Gunasarami - Research Trainee of Jet Aerospace Aviation Research Centre- Palakkad |
| 6 | 24/02/18 | Technical Talk | Trends in Condition Monitoring and its application in industries | Dr. K P Ramachandran, Professor Caledonian College of Engineering.Muscat |
| 7 | 02/03/18 | Technical Talk | Engineering Education in a Flat World | Dr. Krishnaswami "Hari" Srihari, Binghamton University |
| 8 | 03/03/18 | Technical talk | The Application of the Science Manufacturing and Systems Engineering in the Healthcare Industry | Dr. Mohammad T Khasawneh, Binghamton University New York |
| 9 | 07/04/18 | Technical talk | Aerospace Systems Development and Prospective. | Mr. Janardhan Rao ISRO (Rtd Scientist) |



Mangalore Institute of Technology and Engineering (ISO 9001:2015 Certified Institution) Department of Aeronautical Engineering

| Stu | Student Participation in Competitions/ Events | | | | | | |
|----------|---|--|---|--|--|--|--|
| Sl No | Date | Event | Reward/ Prizes | | | | |
| 1 | 12-10-17 | Wright Flight(RC Plane competition) at NITK Surathkal | Team AIREINO Place secured : 3 rd | | | | |
| 2 | 27-10-17 to 29-10-17 | Avion-E (National level RC Plane competition) at NIT Warangal | Team AIREINO Place secured : 5 th | | | | |
| 3 | 30-10-17 to 31-10-17 | Udaan(National level RC Plane competition) at Nitte Meenakshi, Bangalore | Place secured: 3 rd | | | | |
| 4 | 31-10-17 | Aviation quiz at Nitte Meenakshi, Bangalore | Place secured: 1 st | | | | |
| 5 | 14-02-18 to 19-02-18 | Drone Tech at IIT BHU | Students of AE Place secured: 2 nd | | | | |
| 6 | 14-02-18 to 19-02-18 | La – Trajectria (RC- Plane) at IIT BHU | Students of AE Place secured: 4 th | | | | |
| 7 | 14-02-18 to 19-02-18 | Momentum (Water Rocket) at IIT BHU | Place secured: 6 th | | | | |
| 8 | 14-02-18 to 19-02-18 | Hovercraft at IIT BHU | Place secured: 8 th | | | | |



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| 1 | 21-09-17 to |
|---|-------------|
| | 22-09-17 |

Workshop VAYUYA NA

RC Plane Modelling workshop

Team ARIENO and Faculty members Dept of AE MITE

About Resource Person:

Technical Talk was given by Srinath R and Manas Jain, Assistant professors of Department of Aeronautical Engineering Where both the professor has a teaching experience of 5 years working as an Assistant Professor in the dept. of Aeronautical Engineering. Mr. Srinath R did his Masters of Specialization (M.S) from National Aerospace University, UKRAINE under the field of "Aerodynamic Design of Aircrafts and Helicopters" and Mr. Manas Jain did his M. Tech Aeronautical Engineering from Visvesvaraya Technological University in the field of "Aircraft Propulsion".





RC Plane Modelling -workshop

About the Event:

The final year students of Aeronautical Engineering made an association called ARIENO and conducted a two-day Remote-Controlled Plane Modeling workshop on 21st and 22nd of September, 2017. Students from various departments participated in the workshop. Totally 28 teams made airplanes and tested it for flying. The inauguration was done by Mr. Vedaprakash Saralaya, Retd. Air Force Officer. Faculties of the department of Aeronautical Engineering, Mr. Manas Jain and Mr. Srinath R gave a brief introduction for the workshop by explaining the basic parts and working of an aircraft.



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| 2 | 23-09-17 | Freshers welcome& Technical Talk | Student, Engineers, Technology – Scram Jet Propulsion | Mr. Venu G, Sr. Scientist from Propulsion Division, CSIR's National Aerospace |
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About Resource Person:

Mr. Venu G, who is a Sr. Scientist from Propulsion Division, CSIR's National Aerospace Laboratories, Bengaluru. He has around 14 years of professional experience in the field of Aerospace propulsion, gas dynamics, experimental evaluation of aerospace propulsive systems, design, fabrication and establishment of test facilities. He is a research scholar from Aerospace dept., IIT madras and a mechanical engineering graduate from Osmania University, Hyderabad

About the Event:

Mr. Venu G spoke about the propulsion of scramjet. He gave live examples and discussed about the challenges that he has come across, while working in NAL. He also shared his experience while he got selected for NAL and gave guidance for the students. He is an active researcher, inspired students to take up research and higher studies, He also spoke about the current research works taking place in NAL and other government aide laboratories. This gave an insight to the students about the opportunities available in these fields



Mr. Venu G delivered a talk on scramjet propulsion



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| 3 | 14-10-17 | Invited Lecture | APJ Abdul Kalam Birth anniversary Working experience with APJ Abdul Kalam | Mr. Janardhan Rao ISRO (RtdScientist) |
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About the Resource Person:

Prof. E JANARDHANA Rao have done his Engineering graduation from NITK Surathkal in 1968 and Post-Graduation (ME) in "Aeronautics" from Indian Institute of Science Bangalore in 1970. He joined Indian Space Research Organization (ISRO) during 1970 at Vikram Sarabhai Space Centre (VSSC), Trivandrum as Aerodynamic engineer. He worked on various aspects of rocket design and developments. Next, he joined the SLV -3 Project team as a "control Engineer" and worked for launch vehicle control system development. Sri APJ Abdul Kalam was the Project Director.

About the Event:

The Event was arranged by AURA in order to celebrate Dr.APJ Abdul Kalam, where the resource person shared his experience working along with him, He gave a brief talk on how Kalam's work determination and hard work made the nation prosperous, He also credited Kalam for his dream he had towards the Nation. It inspired students on what Dr.Kalam wanted the young generation to achieve. The students had a Debate competition on 13th October 2017. The chief guest did the prize distribution.



Mr. Janardhan Rao ISRO (Rtd Scientist)inaugurating APJ Abdul Kalam Birth anniversary



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| 4 | 17-11-2017 | Invited talk | How to crack SSB interview? | Mr. Bharath Kumar Aircraft Training Officer |
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About the Recourse person:

Mr. Bharath Kumar is an Aircraft Training Officer for Camo – 28 helicopter. He has got his B.E. from PES University, Bangalore and M. Tech from Naval Institute of Aeronautical Technology, Kochi.

About the Event:

Mr. Bharath Kumarhas given talk about cracking SSB Interview. The talk involved many points like, Personality Development, Picture Perception and Description Test, Group task exam, Commando Task Exam, Personal Interview, Situation Reaction Test, Training at Naval Academy etc. He also shared his experience on his selection process and the memories he came through the training, He stated that sheer determination and hard work will be the key to success. He Also shared some of his work place experience where he encounters certain tiring and thrilling tasks. He also motivated the students to take up SSB interviews through proper channels and guidelines.



Mr. Bharath Kumar is an Aircraft Training Officer delivered a talk on how to crack SSB interview



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| | | | | Mrs. Arul Jyothi- director |
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| | | | Technical talk on Unmanned | executive,Ms. Krithiga - HR |
| 5 | 19-02-18 | Invited talk | Arial Vehicle: Applications, | executive,Mr. Naveen -Research |
| 3 | 19-02-18 | mvned taik | Innovations and | Executive, Ms. Gunasarami - Research |
| | | | Opportunities " | Trainee of Jet Aerospace Aviation |
| | | | | Research Centre- Palakkad |

About the Resource Persons:

Mrs. Arul Jyothi, the HR executive of jet aerospace-Ms. Krithiga R.S, the research executive Mr. Naveen and the research trainee – Ms. Gunasarami Jet aerospace. Jet aerospace is an advanced Non-profit technological forum for researchers and scholars functioning alongside the ministry of skill development and entrepreneurship, government and national skill development cooperation.

About the Event

The talk which was mainly based on the topic "unmanned Aerial vehicles – application and its opportunities" covered a lot of topics which focused on the unmanned Aerial vehicles, unmanned Aerial systems, submarine vehicles, UAV propelling units, transfer using UAV technologies and lot more. Working with the Jet aerospace center provides the students many opportunities in the central government, state government and even in private sectors. The program, which was huge success, had definitely left an impact in the mind of all the students. The lively interaction between the dignitaries and students started by the director executive of jet aerospace, Mrs. Arul Jyothi quoting that "science is all about knowing engineering is all about doing".



Technical talk on Unmanned Arial Vehicle: Applications, Innovations and Opportunities



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| 6 | 24-02-18 | Technical Talk | Trends in Condition Monitoring and its application in industries | Dr. K P Ramachandran, Professor Caledonian College of Engineering.Muscat |
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About the Resource Person:

Dr. K.P.Ramachandran, services as Associate Dean in Caledonian College of Engineering Muscat. He has authored and co-authored multiple peer-reviewed scientific papers and presented works at many national and International conferences. He contributions have acclaimed recognition from honorable subject experts around the world. He is actively associated with different societies and academies.

About the Event:

Condition monitoring, is a maintenance philosophy that involves periodic measurement of the mechanical and process parameters that concerns a machine in order to gain a relative indication of the mechanical state of the machine. Penman and McEwan (1990) put it this way: condition monitoring of an item of a plant means the continuous assessment of the health of the plant throughout its working lifetime by the collection and examination of signals that typify the performance of the plant whilst it is operating.



Dr. K P Ramachandra delivered a talk on Trends in Condition Monitoring and its application in industries



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| 7 | 02 02 19 | Technical | Engineering Education in a Flat | Dr. Krishnaswami "Hari" |
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| / | 02-03-18 | Talk | World | Srihari,BinghamtonUniversity |

About the Resource Person:

Krishnaswami "Hari" Srihari was appointed executive vice provost for international initiatives and chief global affairs officer in June 2015. In addition to his vice provost duties, Dr. Srihari also serves as dean of the Thomas J. Watson School of Engineering and Applied Science at Binghamton University since June 2009. A prolific scientist, Srihari is known as an expert in many diverse aspects of electronics packaging and manufacturing.

About the Event:

Krishnaswami "Hari" Srihari spoke about the changes and need of Engineering education across the globe and his addresses were as follows. Two critical success factors for an engineer in the flat world are an ability to adapt to changes and to be able to work at the interface of different disciplines. Instead of educating traditional domain-specific and analysis-orientated engineers, the focus should be on educating and graduating strategic engineers who can realize complex systems for changing markets in a collaborative, globally distributed environment.



Dr. Krishnaswami "Hari" Srihari,BinghamtonUniversity delivered a talk on Engineering
Education in a Flat World



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| 8 | 03-03-18 | Technical talk | The Application of the Science Manufacturing and Systems Engineering in the Healthcare Industry | Dr. Mohammad T Khasawneh, Binghamton University New York |
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About the Resource Person:

Dr. Mohammad Khasawneh is a Professor in the Department of Systems Science & Industrial Engineering (SSIE) at Binghamton University. He received his Ph.D. in Industrial Engineering from Clemson University, South Carolina, in August 2003, and his B.S. and M.S. in Mechanical Engineering from Jordan University of Science and Technology, Jordan, in 1998 and 2000, respectively. He joined Binghamton University (SUNY) in the Fall of 2003. His research areas of interest are in human factors/ergonomics and modeling of healthcare delivery systems

About the Event:

Dr. Mohammad Khasawneh delivered a talk on the systems Engineering and its need Industrial and systems engineering has the potential to address many of the challenges faced by the health care system. Systems engineering is the process of identifying the system of interest, choosing appropriate performance measures, selecting the best modeling tool, studying model properties and behavior under a variety of scenarios, and making design and operational decisions for implementation. The basic concepts and tools of systems engineering and examples of ongoing work in their application to complex patients are discussed. Potential impediments were also discussed.



Dr. Mohammad Khasawneh delivered a talk on the Application of the Science Manufacturing and Systems Engineering in the Healthcare Industry



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| o | 07-04-18 | Technical | Aerospace Systems | Mr. Janardhan RaoISRO (Rtd |
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| | 07-04-18 | talk | Development and Prospective. | Scientist) |

About the Resource Person:

The respected speaker, Mr. Janardhana Rao who is a retired propulsion scientist, ISRO has indulged in many of the researches taking place at ISRO. He has been awarded many a title from ISRO as well as other organizations. He has even worked under the leadership of Dr. APJ Abdul Kalam for the development of GSLV.

About the Event:

The interactive talk held on 7thApril of 2018 was filled with interest as the speaker shared his vast knowledge among the student graduates. The talk began with the discussion based upon the 'history of development of Indian rockets' and 'rockets which are used by India'. The students acquired the knowledge of the working of PSLV, GSLV and the uses of it.

The talk went on when the speaker narrated about the detailed working of the satellites and their functions. The program ended in a high note as he gave the information about the future planned missions of India in the space industry. The session left an impact on the students as they were influenced by the various oddities of the industry.



Mr. Janardhan Rao ISRO (Rtd Scientist) delivered a talk on Aerospace Systems
Development and Prospective.



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Students Participation in National Events:

Department supports the formation of aeronautical clubs for technical, Co-curricular and Extra Curricular activities. The students for various positions held in the club will be nominated / Selected based on their academic performance and active participations in various events.



Team AERINO

Currently Aeronautical department club AIREINO and an association started by the students with the insight guidance of HOD and faculty Coordinator are conducting activities and participating in national wide events with the support of Institution and the department.

Faculty coordinator – Srinath R

AIREINO club was started in the year 2017 by the final year Aeronautical students under the guidance of faculty members with the vision as, "KINGDOM of AIR". Department supports it by providing adequate space, faculty guidance, Awareness about Exhibitions and workshops, Funds from the institution etc. Students who thrives the passion and talent towards the dream world of making RC planes, Aircraft Miniatures, Water Rockets, etc. can join the club after clearing the interview process. They successfully organized workshop on RC Modelling which had huge response throughout the department/ Institution.



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Glimpses of students participated in the national level events and other activities are shown below. Students from the team AIREINO actively participate in many events as such and bagged several prizes and in the events.

| Date | Name of the Event | Type of the Event | Students Participated | Prize Bagged |
|--|--|----------------------|--|--|
| 12/10/2017 | Wright Flight (RC Plane competition) at NITK Surathkal | National Level | 12/10/2017 | Team AIREINO Place secured: 3 rd |
| 30-31st Oct 2017 | Udaan (National level RC Plane competition) Nitte Meenakshi, Bangalore. | National Level | Mohammed Zain Khan Sudarshan Narsing Rao Prajwal Prabhakar Dinakar Keerhi K S Vikas N S | 3 rd Position |
| 14 th to 19 th Feb 2018 | Drone Tech at IIT BHU | National Level | Keerhi K S Priyanka M Prathika P Shetty Suman BM Mohd Zain khan Apoorva S H | 2 nd out of 65 competitors |
| 14 th to 19 th Feb 2018 | La – Trajectria (RC- Plane) at IIT BHU | National Level | Keerhi K S Priyanka M Prathika P Shetty Suman BM Mohd Zain khan Apoorva S H | 4 th out of 80 competitors |
| 14 th to 19 th Feb 2018 | Momentum (Water Rocket) at IIT BHU | National Level | Prathika P Shetty Suman BM Mohd Zain khan Prajwal P Poojary Vikas N S | 6 th Total no. of participants = 25 teams |
| 14 th to 19 th Feb 2018 | Hovercraft at IIT BHU | National Level | Priyanka M Prathika P Shetty Mohd Zain khan Prajwal P Poojary Vikas N S | 8 th Total no. of participants = 42 teams |