



ACS COLLEGE OF ENGINEERING BENGALURU

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

DEPARTMENT OF AEROSPACE ENGINEERING *NEWSLETTER*

2019-2020



Chief Patrons

Sri A.C. Shanmugam

Chairman

Moogambigai Charitable & Educational Trust

Sri A.C.S. Arunkumar

Vice Chairman

RajaRajeswari Group of Institutions

Patrons

Dr. S. Vijayanand

Executive Director

RajaRajeswari Group of Institutions

Dr. S. Jeyabalan

Special Officer

RajaRajeswari Group of Institutions

Chief Editor

Dr. R. Mukesh

Professor & Head

Department of Aerospace Engineering

Editors

Mr. R. Ganesh

Tutor

Department of Aerospace Engineering

ABOUT AEROSPACE DEPARTMENT

The Department of Aerospace Engineering 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.

COURSES OFFERED

B.E – AEROSPACE 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 Aerospace Engineering was established in year 2017 with under Graduate Course in Bachelor of Engineering in Aerospace Engineering under VTU, Belgaum. The course is approved by AICTE, New Delhi



2017– 2021 batch Aerospace Engineering Students

FACULTY DETAILS

PARTICULARS	QUANTITY
TEACHING FACULTY	6
NON TEACHING FACULTY	1
COMPLETED Ph. D	2
PURSUING Ph. D	1
M.E/M.TECH/M.S	3

STUDENT DETAILS

PARTICULARS	QUANTITY
I –YEAR	51
II – YEAR	39
III – YEAR	30
Total	120

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
- Flight Simulator
- Navigation Lab

LABORATORY DETAILS



Aerodynamics lab



Propulsion lab



Structures lab



Energy Conversion lab



**Mechanical Measurements
& Metrology lab**



Machine Shop lab

LABORATORY DETAILS



Design, Modeling & Analysis Lab



Simulation Lab



Foundry & Forging Lab



Metallography & Material Testing Lab



Flight Simulator



Navigation Lab

MEMORANDUM OF UNDERSTANDING SIGNED BY THE DEPARTMENT

S.No	Company/Organization/Institution Name
1	Accord Software and Systems
2	SS Technologies (STK Software)
3.	Simulation and Innovation (SANDI) Engineering Solutions



MOU with Accord Software and Systems

**GUEST LECTURES DELIVERED BY THE
FACULTIES**

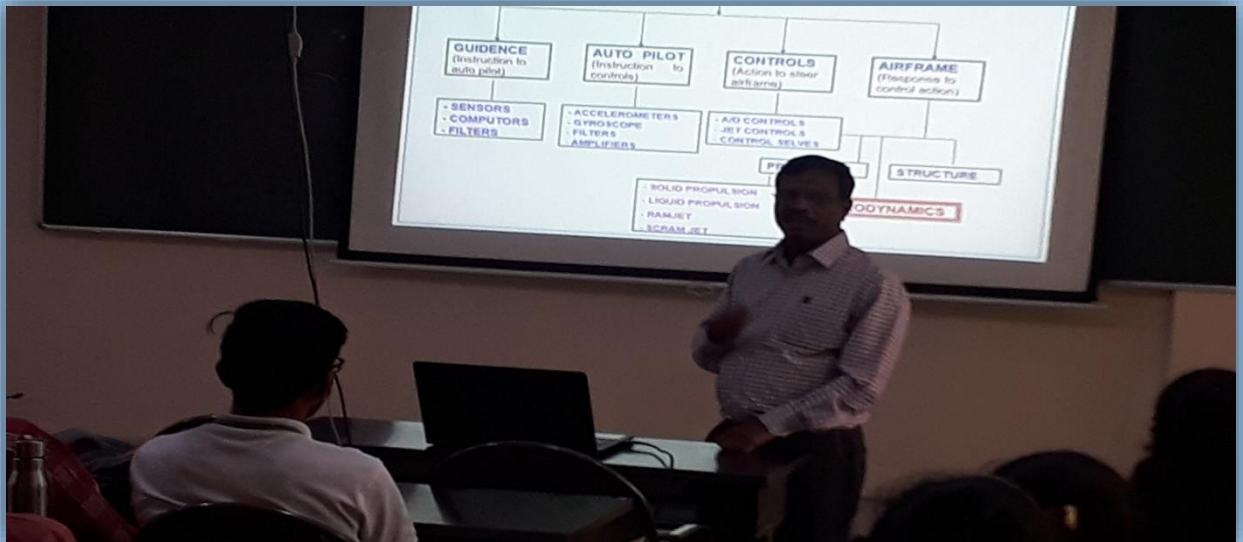
S.No	DETAILS OF GUEST LECTURES
1	Dr. P. Theerthamalai delivered a Technical Talk on “Grid Fin Aerodynamics” in the Applied Aerodynamics, QIP Short term Course held at IISC, Bangalore during 20-24 January 2020 in IISC, Bangalore.
2	Dr. R. Mukesh delivered a guest lecture in the “Trends of Millennials' Contributions and Challenges in Aerospace Engineering” during 27-29 July, 2020 conducted by the Department of Aeronautical Engineering, Acharya Institute of Technology.

PROGRAMME ORGANIZED IN THE DEPARTMENT

S.No	PROGRAMME
1	Seminar on “Basic Aerodynamics”- 26.08.2019
2	Seminar on “Mechanics of Fluids”- 26.09.2019
3	Seminar on “Introduction to GNSS”- 03.10.2019
4	Aero vision Seminar-14.10.2019
5	Seminar on “Small UAV’s – Growing Opportunities in Universities Seminar”- 17.10.2019
6	EDUCADD Seminar-12.11.2019
7	Seminar on “Design and Development of UAV’s” - 22.11.2019

PROGRAMME ORGANIZED IN THE DEPARTMENT

S.No	PROGRAMME
8	Workshop on “Rocket Propellant Preparation”- 23.11.2019
9	Guest Lecture on “Fluid Mechanics” -13.12.2019
10	Guest Lecture on “Mechanics of Materials”- 16.12.2019
11	Technical Talk on “Aircraft Icing and its Effects” - 02.03.2020
12	Project Discussion and Training on “Aircraft Icing analysis and Removal by anti-icing and deicing”- 02.03.2020
13	One-day workshop on “CFD and its Applications” - 04.03.2020



Seminar on "Basic Aerodynamics"



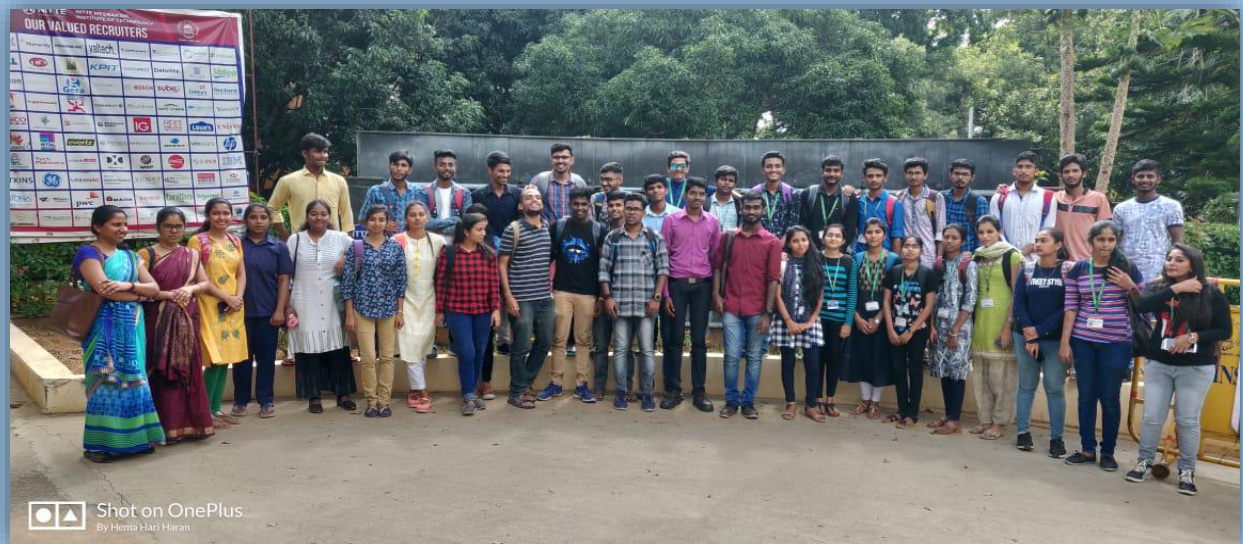
Seminar on "Mechanics of Fluids"



Seminar on "Introduction to GNSS"



Aero vision Seminar



Aero vision Seminar



Seminar on “Small UAV’s – Growing Opportunities in Universities Seminar”



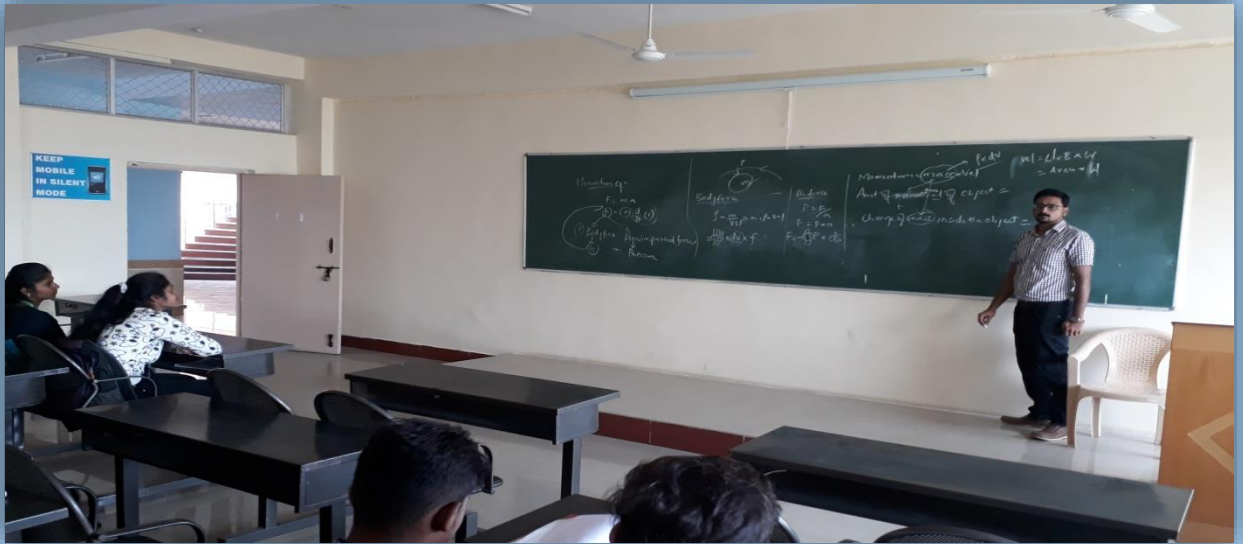
Educadd Seminar



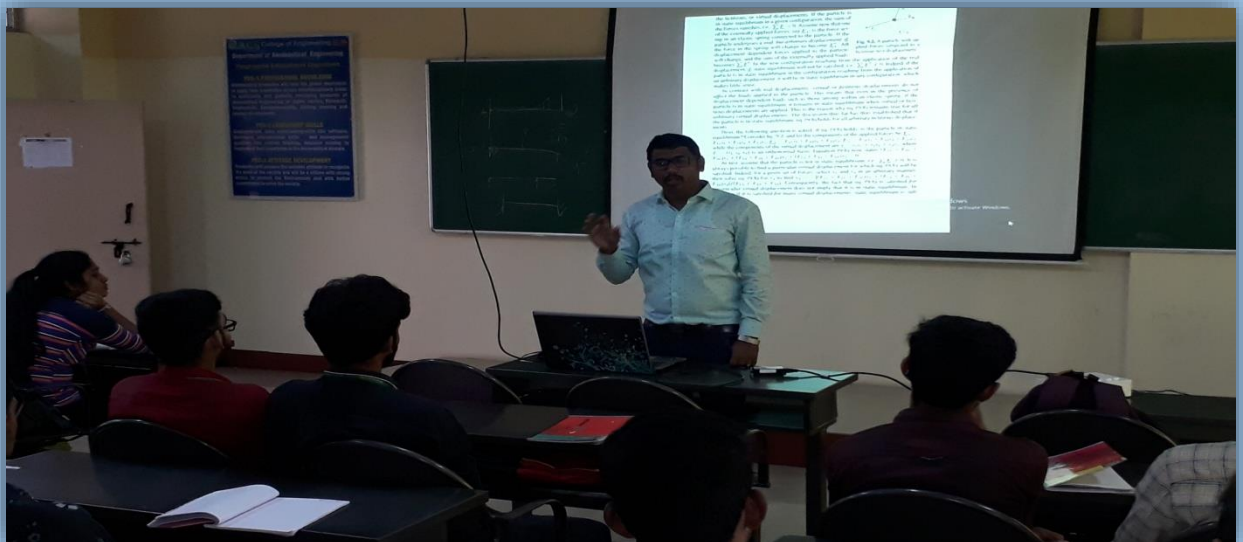
Seminar on "Design and Development of UAV's"



Workshop on "Rocket Propellant Preparation"



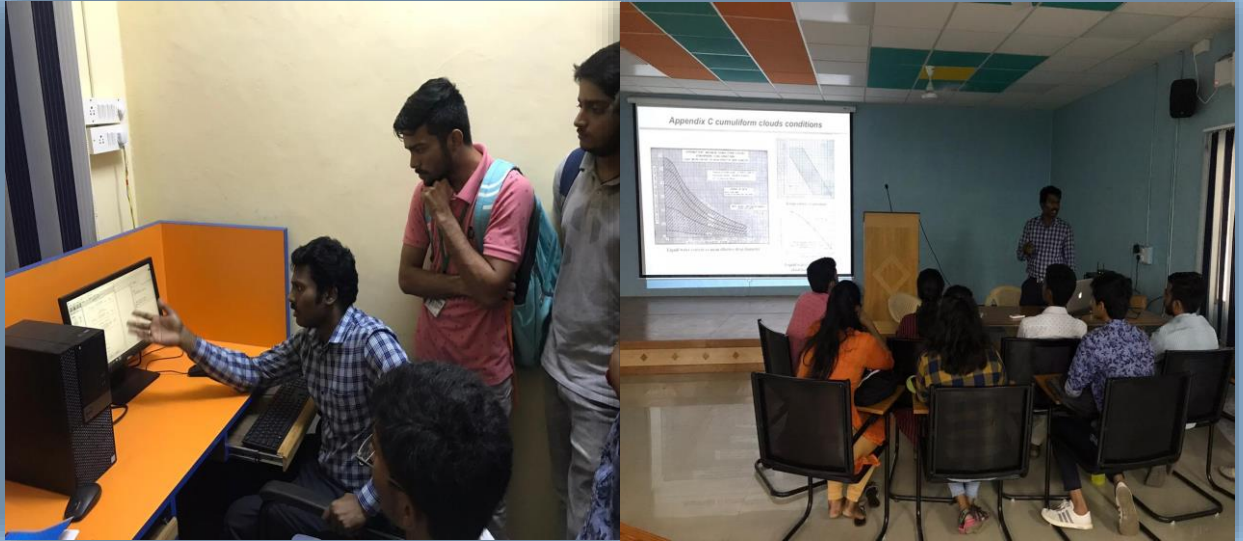
Guest Lecture on "Fluid Mechanics"



Guest Lecture on "Mechanics of Materials"



Technical Talk on "Aircraft Icing and its Effects"



Project Discussion and Training on "Aircraft Icing analysis and Removal by anti-icing and deicing"



One-day workshop on "CFD and its Applications"

WEBINARS ORGANIZED IN THE DEPARTMENT

S.No	PROGRAMME
1	Webinar on “Composite materials and their applications”- 18-05-2020
2	Webinar on “Finite Element Analysis and limitations”- 18-05-2020
3	Webinar on “Career Opportunities for Aeronautical Engineering Graduates”-19-05-2020
4	Webinar on “Missile Aerodynamics”- 20-05-2020
5	Webinar on “CFD and its Applications”- 22-05-2020
6	Webinar on “Grid Fin Aerodynamics”- 28-05-2020
7	Webinar on “POST COVID-19 Challenges & Opportunities for Aerospace Engineering”- 29-05-2020
8	Webinar on “Emerging Global Trends In Space Systems”- 01-06-2020

PROGRAMME ORGANIZED IN THE DEPARTMENT

S.No	PROGRAMME
9	Webinar on “Satellite Navigation-Past , Present and Future”- 08-06-2020
10	Webinar on “AI & ML for Aerospace Engineering” – 14-06-2020
11	Webinar on “Ionospheric Forecasting models for Global Navigation Satellite System Users” – 15-06-2020
12	Webinar on “Structural Design & Analysis with Application in Offshore and Marine Industry” - 27-06-2020
13	Webinar on “Introduction to GNSS Simulator” – 06-07-2020
14	Webinar on “Present Scenario & Future Challenges on Healthcare Field - Research Perspective” – 18-07-2020
15	Webinar on “ARINC 702A Advanced Flight Management Computer System” - 08-08-2020
16	Webinar on “State of the Art of Small Satellites & A Student-run Cubesat Program at Nanyang Technological University” – 22-08-2020



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Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi and GOVT. of Karnataka
Department of Aerospace Engineering
Presents Online Webinar for 4th sem Aerospace students



On
18th May 2020

Timing
9.30am-10.30am



"Composite Materials and Their Applications"


Resource person
Mr. Charles G Martin




Contact
Miss. Vidya shree K R
E-MAIL: Vshreekram@gmail.com
Contact: 8123922462

Website: www.acsce.edu.in

Webinar on "Composite materials and their applications"

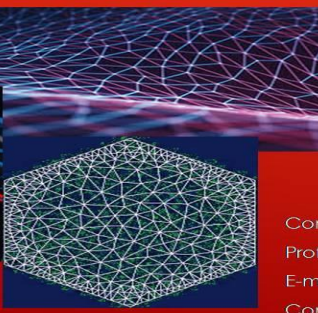


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Department of Aerospace Engineering
Presents Online Webinar for 6th Sem Aerospace students




On
18th May 2020

Timing
2.00pm-3.00pm




"Finite Element Analysis Applications and Limitations"

Resource person
Mr. Yogesh Joshi




Contact
Prof. D. Suresh
E-mail: rpt1suresh@gmail.com
Contact: 9353315392/8148212482

Webinar on "Finite Element Analysis and limitations"



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Department of Aerospace Engineering
Presents Online Webinar for 4th and 6th sem Aerospace students




On
19th May 2020

Timing
10.00am-11.00am



"Career Opportunities For Aeronautical Engineering Graduates"

Resource person
Dr. KISHOR KUMAR BRAMHA



Contact
Prof. D. Suresh
E-mail: rpt1suresh@gmail.com
Contact: 9353315392/8148212482
Miss. Vidya shree K R
E-mail: Vshreekram@gmail.com
Contact: 8123922462

Website: www.acsce.edu.in

Webinar on "Career Opportunities for Aeronautical Engineering Graduates"



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Department of Aerospace Engineering

Presents online Webinar on

MISSILE AERODYNAMICS





RESOURCE PERSON:
Dr. P. Theerthamalai,
(Former Director, Aerodynamics, DRDO)
Dean, COE, ACSCE

on
20th May
2020

Time:
10-11 AM

Registration Free

E-mail : vsmprm@gmail.com
Website : www.acsce.edu.in

Prof. J. SIVA
Contact : 8667291504.

Zoom Link: <https://us04web.zoom.us/j/71092670109?pwd=ejN5UWtVS2poeUJ1MmprYXZqTnpadz09>

Ref: 93148 43170

Webinar on “Missile Aerodynamics”



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Department of Aerospace Engineering

Presents online Webinar on

CFD and its Applications





RESOURCE PERSON:
Dr. S.K. Maharana, Professor and Dean,
Department of Aeronautical Engineering,
Acharya Institute of Technology, Bangalore.

on
22th May
2020

Time:
2-3 PM

Registration Free

E-mail : sivaero87@gmail.com
Website : www.acsce.edu.in

Prof. J. SIVA
Contact : 8667291504.

Registration: <https://forms.gle/9BrpWH1Thq98eJT68>

Ref: 93148 43170

Webinar on “CFD and its Applications”



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Department of Aerospace Engineering

Presents online Webinar on

Grid Fin Aerodynamics





RESOURCE PERSON:
Dr. P. Theerthamalai,
(Former Director, Aerodynamics, DRDO)
Dean, COE, ACSCE

on
28th May
2020

Time:
10-11 AM

Registration Free

E-mail : sivaero87@gmail.com
Website : www.acsce.edu.in

Prof. J. SIVA
Contact : 8667291504.

Zoom Link: <https://us04web.zoom.us/j/77498331163?pwd=YVFWNWFzR043Kzd0V0RHR1RsdTdtZD09>

Ref: 93148 43170

Webinar on “Grid Fin Aerodynamics”



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Department of Aeronautical & Aerospace Engineering
Presents Webinar On
“POST COVID-19 Challenges & Opportunities for Aerospace Engineering”
Date: 29th May 2020 (Friday)
Time: 10:30AM to 12:00PM

Resource Person
Padma Shri Dr. Mylsamy Annadurai
Vice President - Tamilnadu State Council for Science & Technology
Former Director - ISRO Satellite Centre (URSC)

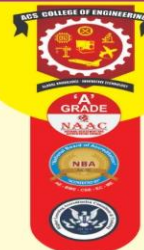


Registration Link
<https://tinyurl.com/webinar-Post-Covid-19>

Contact
Mr. J. Siva Ph: 08667291504
Dr. G. Ramanan Ph: 09965418124

Head of Institution
Dr. M. S. Murali
Principal

Webinar on “POST COVID-19 Challenges & Opportunities For AEROSPACE Engineering”



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CET Code : E186 | COMED-K: E003 | PGCET: T918
Department of Aerospace & Aeronautical Engineering
Presents Webinar On
“Emerging Global Trends In Space Systems”




Padma Shri R.M. Vasagam
Former Director, ISRO, Bangalore
Former Vice-Chancellor,
Anna University, Chennai

Date: 1st June 2020 (Monday)
Time: 11:00AM to 12:00PM

Registration Link: <https://tinyurl.com/webinar-Trends-In-Space-System>
E-mail: admission@acsce.edu.in Website: www.acsce.edu.in

Contact
Mr. J. Siva Ph: 08667291504
Dr. G. Ramanan Ph: 09965418124

Webinar on “Emerging Global Trends in Space Systems”



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CET Code : E186 | COMED-K: E003 | PGCET: T918
Department of Aeronautical & Aerospace Engineering
Presents Webinar On
“Satellite Navigation - Past, Present and Future”



Prof. P. Soma
Former Deputy Director - Navigation systems Area, ISTRAC
Former Project Director (G-S) for IRNSS and GAGAN, ISRO
Associate Professor, Dept. of Aeronautical Engineering, ACSCE

Date: 8th June 2020 (Monday) Time: 03:00PM to 04:00PM

Registration Link: <https://tinyurl.com/webinar-navigation>
E-mail: aeronautical.acsce@gmail.com Website: www.acsce.edu.in

Contact
Mr. J. Siva Ph: 08667291504
Dr. G. Ramanan Ph: 09965418124

Webinar on “Satellite Navigation – Past , Present and Future”

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Department of Aerospace Engineering

Presents Online Webinar on
AI & ML for Aerospace Applications










Resource Person
Dr. U. Selvakumar
N-Side, Senior Data Science Consultant
Noesis Solutions, ML Development Engineer, Belgium

Registration Free
<https://tinyurl.com/ai-and-ml>
Contact: **Mr.J.Siva** Ph:08667291504

Date : 14th June 2020
Time: 2.00PM - 3.00PM

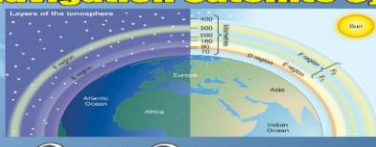
Webinar on “AI & ML for Aerospace Applications”


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Department of Aerospace Engineering

Presents Online Webinar on
**Ionospheric Forecasting models
for Global Navigation Satellite System Users**





Resource Person
Dr. D. Venkata Ratnam
Professor
KLEF Deemed to be University, Guntur, Andhra Pradesh

Registration Free
<https://tinyurl.com/ionospheric-forecasting-models>
Contact: **Mr.J.Siva** Ph:08667291504

Date : 15th June 2020
Time: 11.00 AM - 12.00 PM

Webinar on “Ionospheric Forecasting Models”

**ACS COLLEGE OF ENGINEERING**
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Department of Aerospace Engineering

Presents Online Webinar On
**Structural Design & Analysis with Application in
Offshore and Marine Industry**





Resource Person
Mr. P. Bernard Adaikalaraj., M.S. (NTU)
Senior Engineer
Keppel Marine and Deep Water Technology
Singapore

Event Co-Ordinator
Mr.J. Siva
Ph: 08667291504

Head of the Institution
Dr.M.S. Murali
Principal

Date: 27th June 2020
Time: 11.00 am to 12.00 pm

Kindly register using this link given below
<https://tinyurl.com/y843gdpr>
*E-Certificate will be provided for all the active participants

Webinar on “Structural Design & Analysis with Application in offshore and Marine industry”



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Department of Aerospace Engineering

PRESENTS WEBINAR ON

"Introduction to GNSS Simulator"



GNSS Simulator

GNSS Test Instrument





Resource Person

Ms. Sangeetha S
Senior Executive
Business Development
Accord Software & Systems Pvt. Ltd.
Bangalore

Date: 6th July 2020 **Time:** 2.00PM to 3:00 PM
Registration link: <https://tinyurl.com/y8kq5ke3>

Event Co-Ordinator
Mr. J. Siva
Ph: 08667291504

Head of the Institution
Dr.M.S. Murali
Principal



INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

Webinar on "Introduction to GNSS Simulator"



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Department of Aerospace Engineering

Presents Webinar On

"Present Scenario and Future Challenges on Healthcare Field - Research Perspective"





Resource Person

Dr. S. Mythili
Professor & Convenor
Special Interest Research Group-Medical Electronics
ECE Department
PSNA College of Engineering and Technology
Dindigul, Tamilnadu

Date: 18th July 2020 **Time:** 2:00PM to 3:00PM
Registration Link: <https://tinyurl.com/y99genaf>
* E-Certificate will be Provided


Event Co-Ordinator
Mr. J. Siva
Ph: 08667291504

Head of the Institution
Dr.M.S. Murali
Principal



INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

Webinar on "Challenges on Healthcare Field – Research Perspective"




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Department of Aerospace Engineering

PRESENTS WEBINAR ON

"ARINC 702A Advanced Flight Management Computer System"





Resource Person


Mr. S. Ramesh Raju
Lead Application Engineer
Honeywell Aerospace, Bengaluru

Registration Free
<https://tinyurl.com/y3e5rnv9>
*E-Certificate will be issued


Date: 08-08-2020 (Saturday)
Time: 11:00AM to 12:00PM

Event Co-Ordinator
Mr. J. Siva
Ph: 08667291504

Head of the Institution
Dr.M.S. Murali
Principal



HIGHER EDUCATION DIGEST



INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

Webinar on "ARINC 702A Advanced Flight Management Computer System"



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#207, Kambipura, Mysore Road, Bengaluru - 560 074



Department of Aerospace Engineering

Presents Webinar On

State of the art of small satellites and A student-run CubeSat Program at Nanyang Technological University

on 22nd August 2020 @ 3 PM to 4 PM



Resource Person

Mr. S. Shanmugasundaram

Research Engineer,
Satellite Research Centre,
NTU, Singapore

Event Coordinators
Head of the Institution

Mr. J. Siva | Ph: 08667291504
Dr. M.S. Murali | Principal | ACSCE

Registration Link: <https://tinyurl.com/yymwnjd2> | *E-certificate will be provided



Webinar on “State of the art of small satellites and a student-run Cubesat Program”

STUDENT PROJECT WORK

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

INDUSTRIAL VISIT, IN-PLANT TRAINING & INTERNSHIPS

S.No	PROGRAMME
1	National Aerospace Laboratories Visit on 7.11.2019



NAL Visit







STAFF ACHIEVEMENT

S.No	PROGRAMME/PUBLICATIONS/PRESENTATIONS
1	R. Mukesh , P. Soma, V. Karthikeyan and P. Sindhu “Cokriging based statistical approximation model for forecasting Ionospheric VTEC during high solar activity and storm days”, Astrophysics and Space Science, Springer , 08-2019, 364:131, https://doi.org/10.1007/s10509-019-3612-2 . ISSN: 1572-946X. (IF: 1.681)
2	R. Mukesh , P. Soma, V. Karthikeyan and P. Sindhu “Analysis of signal strength, satellite visibility, position accuracy and ionospheric TEC estimation of IRNSS”, Astrophysics and Space Science, Springer , 11-2019, 364:196, https://doi.org/10.1007/s10509-019-3502-7 . ISSN: 1572-946X. (IF: 1.681)
3	R. Mukesh , P. Soma, V. Karthikeyan and P. Sindhu “Forecasting of ionospheric TEC for different latitudes, seasons and solar activity conditions based on OKSM”, Astrophysics and Space Science, Springer , 1-2020, 365:13, https://doi.org/10.1007/s10509-019-3502-7 . ISSN: 1572-946X. (IF: 1.681)
4	R. Mukesh , K. Lingadurai, H.S. Siddesha, R. Sivasubramaniyam and V. Yashaswini, “On the use of laser beam welding for Austenitic steel type 316L and stainless steel type 304 for aerospace applications” In: International Journal of Innovative Technology and Exploring Engineering, 2020, Volume 9, Issue: 3, PP: 1546-1554. ISSN: 2278-3075.

MEMBERSHIP OF PROFESSIONAL BODIES

S.No	Description
1	Dr. R. Mukesh, Associate Professor is a member of IEEE, SAE and RAS

CLASS TOPPERS

BATCH	I RANK	II RANK	III RANK
III SEMESTER			
2018 – 2022			
	SWETHASREE	NITYASRI	VIDYAKUMARI
V SEMESTER			
2017 – 2021			
	CHANDU	DHANSINGH	SARVESH

OUR RECRUITERS

