



DEPARTMENT NEWS LETTER

YEAR: 2021 -2022

SEM: ODD

SONIC BOOM





Bharath Institute of Science and Technology (BIST) started with Sri Lakshmi Ammal Educational Trust as the first self-financing Engineering College in Tamil Nadu in 1984 by Dr. S. Jagathrakshakan. The trust then established SreeBalaji Dental College and Hospital in 1989. SreeBalaji Dental College and Hospital was first recognized as a Deemed to be University by MHRD in July 2002, under section 3 of UGC Act 1956 and placed under the purview of new trust of Bharath Institute of Higher Education and Research (BIHER). The Bharath Institute of Science and Technology (BIST) and other institutions (below) was then brought under the ambit of Bharath Institute of Higher Education and Research (BIHER).

- Bharath Institute of Science and Technology
- SreeBalaji College of Nursing, Chennai
- SreeBalaji Medical College and Hospital (SBMCH), Chennai
- SreeBalaji College of Physiotherapy, Chennai

- Sri Lakshmi Narayana Institute of Medical Sciences (SLIMS), Pudhucherry

Thus, Bharath Institute of Higher Education and Research (BIHER) is providing multi-stream, multi-cultural and high-quality education to nearly 10000 students from all around the world. It is functioning in a sprawling area of 603 acres of land with 1.3 crore sq.ft buildings located in six Campuses both in Tamil Nadu and Pudhucherry, equipped with the state of the art infrastructure facilities. Their teaching Faculty members are well-qualified and have vast experience in research to teach and supervise various UG and PG programmes.

Vision of the institute

“Bharath Institute of Higher Education & Research (BIHER) envisions and constantly strives to provide an excellent academic and research ambience for students and members of the faculties to inherit professional competence along with human dignity and transformation of community to keep pace with the global challenges so as to achieve holistic development.”

Mission of the institute

- To develop as a Premier University for Teaching, Learning, Research and Innovation on par with leading global universities.
- To impart education and training to students for creating a better society with ethics and morals.
- To foster an interdisciplinary approach in education, research and innovation by supporting lifelong professional development, enriching knowledge banks through scientific research, promoting best practices and innovation, industry driven and institute oriented cooperation, globalization and international initiatives.
- To develop as a multi-dimensional institution contributing immensely to the cause of societal advancement through spread of literacy, an ambience that provides the best of international exposures, provide health care, enrich rural development and most importantly impart value based education.
- To establish benchmark standards in professional practice in the fields of innovative and emerging areas in engineering, management, medicine, dentistry, nursing, physiotherapy and allied sciences.
- To imbibe human dignity and values through personality development and social service activities.

Chancellor Message

I am happy that you are joining our Institute for pursuing the course of study of your choice. This introduction to our Institution speaks of those features that reaffirm our faith in, and commitment to, the essential task of helping you transform yourself into a careerist in dental, medical, engineering and technology

I am sure you will make the best use of the programmes offered, facilities provided and opportunities created here in your interest. I am quite confident that you will address yourself to the tasks of learning with a tremendous sense of involvement and come out successful with flying colours in your cherished endeavour.

Let me greet you at the beginning of an academic journey towards the goal of a rewardingly prosperous career.

Chancellor

Department of Aeronautical Engineering



B.Tech- Aeronautical Engineering & Aerospace Engineering

About the Department

Twenty first century is poised to become a century of space explorations and manned missions to other planets. It will be a time of space stations and robotic probes. The world will continue to need aerospace scientists, engineers, technologists and technicians to accomplish these highly exciting and challenging missions. Keeping this in mind the Department of Aeronautical Engineering was started in Bharath University in the year 2012.

The Aeronautical Engineering students are encouraged to actively involved in research projects and come out with innovative ideas. With constant support extended by the Management, the basic infra-structure needed for regular curricular programs as well as for fundamental and applied research is being established in the Department.

The Department provides a conducive academic environment for both students and faculty to bring out the best outcome from them.

Vision of the Department

Department of Aeronautical Engineering will endeavor to accomplish worldwide recognition with a focal point of Excellence in the field of Aeronautics by providing quality Education through world class facilities, enabling graduates turning out to be Professional Experts with specific knowledge in Aeronautical & Aerospace engineering.

Mission of the Department

- To be the state of art Teaching and Learning center with excellent infrastructure and empowered Faculties in Aeronautical & Aerospace Engineering.
- To foster a culture of innovation among students in the field of Aeronautics and Aerospace with updated professional skills to enhance research potential for sponsored research and innovative projects.

To Nurture young individuals to be knowledgeable, skilful, and ethical professionals in their pursuit of Aeronautical & Aerospace Engineering.

HOD DESK

Aeronautical Engineering is a fascinating and high-technology discipline more than 100 years old, still requiring much more contribution by engineers and scientists to broaden its scope and application to develop next generation aircrafts.

Aeronautical engineering is an ever-developing discipline full of exciting opportunities and challenges with several private players entering the aeronautical industry, the opportunities are going to be better and better. Job opportunities for an Aeronautical Engineer in India lies with government owned air service, aircraft manufacturers and research centres.



Dr.M.Sundararaj
Assot.Prof. & Head, Aeronautical Engineering

Many of the Aeronautical Engineers get better placement opportunities in the private and public manufacturing sectors and contribute well for the development of the efficient products. The Faculty and students of our department are engaged in acquiring cutting edge technology and the excellent infrastructural facilities available in the department allowing them to delve into pushing the boundaries of the state of the art of technology.

Aeronautical department boasts of dedicated faculty who are committed in providing highest quality students in today's professional workforce. Our programs complement not only the student learning experience, but also business, government and industry. Through internship, research, and innovation we are committed to challenging, mentoring and providing an exceptional learning experience for our students.

I look forward for developing and implementing strategic initiatives which will further enhance the professional education of all our students. BIHER has a strong tradition of integrity, diversity, access, responsibility and excellence. I fully support this initiative of bringing out this souvenir, which is the resultant output of the unwavering dedication of all who had worked for it.

My best wishes and greetings to all the students who are aspiring to become Aeronautical Engineers and take India to the forefront of developed nations.

DEPARTMENTAL ACTIVITIES

ACADEMIC EVENTS DETAILS FOR THE ACADEMIC YEAR 2021-2022

Academic Year: 2021-2022

Sem: ODD

No.of Events: 20

S.No	Guest Lecture/Workshop/Webinar/Seminar Title	Duration	Resource Person
1	Role of Leadership in Marketing	15.05.2021	Mr. Thyagavel.V, Manatec Electronics Pvt Ltd., Puducherry
2	CFD: Approach, application and future prospects	02.06.2021	Dr. Brajesh Tripathi, Rajasthan Technical University, Kota
3	Skill Development: Learning Quadcopter Controls and Robotics	07.06.2021	1. Dr.K.Sidhardha 2. Mr. Ankit Jaiswal, Q Wings, Dehradun, Uttarakhand
4	Fundamentals of Combustion and Propulsion Systems	09.06.2021	Dr. Arun Balakrishnan, Waterloo, Iowa, USA
5	Product Design Based on Computer aided Engineering Techniques	10.06.2021	Mr. Thillai Lakshmi Venkatesh, TATA Aerospace and Defence Pvt Ltd, Bengaluru
6	Bioinspired Aerodynamics	11.06.2021	Dr. D.J. Bruce Ralphin Rose, Anna University, Tirunelveli
7	Fundamentals of Constitution of India	11.06.2021	Mr. Saleem Ahmad, Bharath LAW college
8	Critical Systems of Launch Vehicles and satellites	12.06.2021	Mr. Sumod Kurup, AADYAH Aerospace Pvt Ltd., Bengaluru
9	Career Opportunities in Aerospace Technical Publications	27.07.2021	Mr. K.Tamilarasu, Aerotics Technologies, Bengaluru
10	Computational Fluid Dynamics and it's Industrial Application	04.08.2021	Mr. Raju Govindharajan, Global Nodes Engineering Solutions Pvt. Ltd., Chennai

11	Demonstration of Technical Engagements to solve Space problems	21.09.2021	Mr. Dhanish Abdul Khader, SS Technologies, Bengaluru
12	IPR- Intellectual Property Rights	01.10.2021	Mr. Arun Shourie Rajangam, Airbus, Germany
13	NDE- Non-Destructive Evaluation	05.10.2021	Mr. S.Dwarakanathan, Flowserve India Pvt Ltd, Chennai
14	Session on SIEMENS-NX Certification	08.10.2021	Mr. Kiran Hebbar, KH Designs Pvt Ltd., Bangalore
15	Space Exploration	11.10.2021	Ms. Janet Ivey, Janet's Planet, USA
16	online keynote address on Dr. A.P.J. Abdul Kalam Birth Anniversary	21.10.2021	Mr.S.K. Varshney, International Cooperation Department of Science and Technology, New Delhi
17	Open FOAM	31.10.2021	Mr. B. Dinesh, SKYWARD Experimental Rocketry, MILAN, Italy
18	Flight Dynamics and Attitude Control System of Unmanned Aircraft System	12.11.2021	Mr. Vasantharaj Rajagopal, Anna University, Chennai
19	Wind Engineering and its Applications	17.12.2021	1. Dr. P.Kangavel, National Institute of Wind Energy, Govt. of India, Chennai, 2. Dr. Sanjay.K.Mittal, IIT Kanpur 3. Dr. Kumaravel, Deutshe Windguard, Chennai
20	GATE preparation for Aero students	24.12.2021	Mr. Hero Hemaraj, JNF Academy, Bangalore

Demonstration of Technical Engagements to solve Space problems

Demonstration of Technical Engagements to Solve Space Problems

01:04:32

Request control

Participants

Invite someone or dial a number

Share invite

Attendees (127)

RohithReddy (Guest)

Sai Iwan (Guest)

Shahid U18AE125 (Guest)

U18AE001-Sai Prasanna (Guest)

U18AE001-Shashank (Guest)

U18AE001-Gunavanth (Guest)

U18AE006-Aad (Guest)

U18AE009-Suryansh (Guest)

U18AE010-Brown Varshad (G...)

AGI Software Selected by Insitu for UAS Control System

Published: 18 Jun 2019 | Author: Mike Reiss

Technology

Analytical Graphics, Inc. (AGI), the producer of commercial modeling and analysis software for the space, defense and intelligence communities, today announced that Insitu Inc. is using its Systems Tool Kit (STK) software for its new Insitu Common Open-Mission Management Command and Control Station (ICOMC2) Unmanned Aircraft System (UAS) control system. The flexible ICOMC2 system can be augmented with software plug-ins to incorporate existing, mission-critical technology such as vehicle-specific modules, map overlays, geographic information systems and video processing systems. Insitu, a wholly owned subsidiary of The Boeing Company, will use AGI's STK Components development software to add the ability to predict radio frequency (RF) communications links into ICOMC2.

"The ability to show a predictive map of RF link coverage, from ground stations to air vehicles and also when the air vehicle is in a congested airspace mode, is a key feature for

IPR- Intellectual Property Rights

Guest Lecture on "IPR- Intellectual Property Rights"

24:32

Participants

Invite someone or dial a number

Presenters (1)

Mute all

Attendees (138)

DASHOK GORI (U18AE026) (L...)

Go to PC settings to activate Windows

kalamani

Intellectual Property Rights

Arun Shourie Rajangam
Patent Engineer - Airbus

Online Lecture to Aeronautical/Aerospace Engineering students of
Bhaskar Institute of Higher Education and Research - School of Aeronautical Engineering
on 31-Oct-2023

NDE- Non-Destructive Evaluation

NDE-Non-Destructive Evaluation

01:00:26

About Myself

Name : S.DWARAKANATHAN, DME,AMIE, MBA

Specialization : Certified Trainer in *AMERICAN SOCIETY OF NON DESTRUCTIVE TESTING*,

Discipline held : ULTRASONIC TESTING, MAGNETIC PARTICLE TESTING, DYE PENETRANT TESTING, & RADIOGRAPHIC TESTING, Reg.No: 224959

Industrial Experience : 30 + Years

Current Employment : Supervisor –QA, Flowserve India Controls Pvt Limited.

Participants: kartikeyanarayanan, U19AE049, S. Dwarakanath, U19AE102, U19AE085, marikanda, +123, E

Session on SIEMENS-NX Certification

Session on SIEMENS-NX Certification

25:45

Industrial Revolution

Stage 1 First mechanical tools
First mechanical tools
2784

Stage 2 First assembly line (Mass production)
First assembly line (Mass production)
1870

Stage 3 First programmable high production
First programmable high production
1950

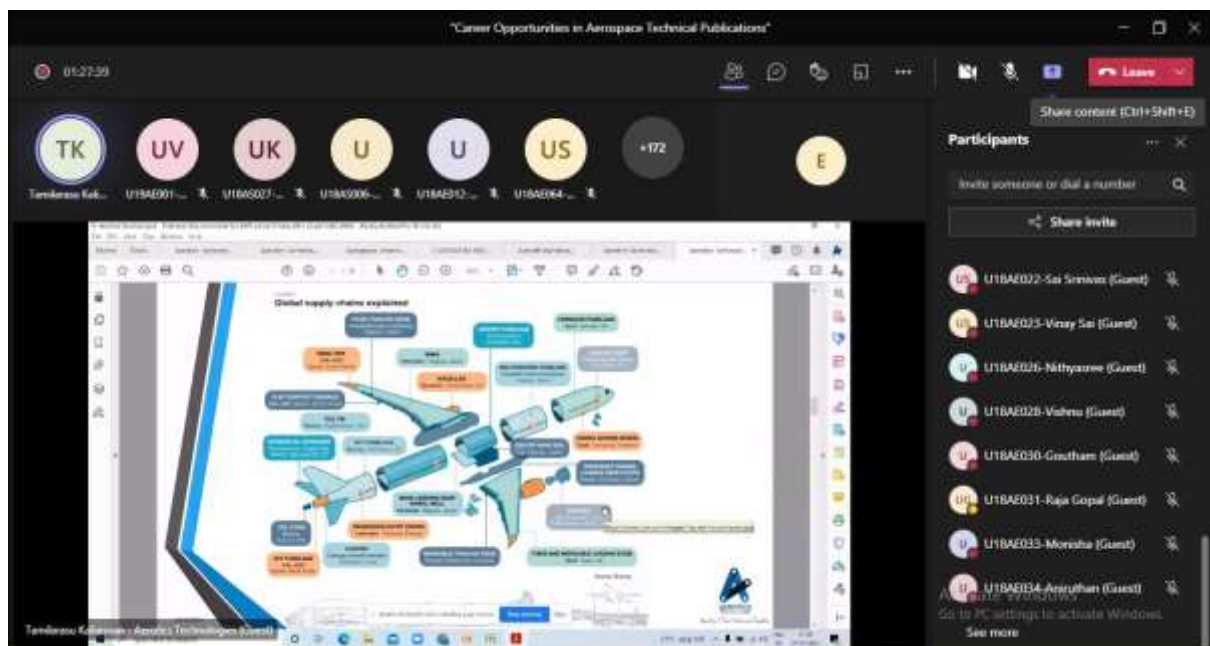
Stage 4 First assembly line (Mass production)
First assembly line (Mass production)
1950

Participants: Dr. C. Suresh, Kiran Hebbar, U19AE089, U19AE028, U19AE105, rajamunugan, +12, E

Space Exploration



Career Opportunities in Aerospace Technical Publications



Computational Fluid Dynamics and it's Industrial Application



Wind Engineering and its Applications



Student Activities:**Academic Year: 2021-2022****Sem: ODD****No.Of.Students: 95**

S.No	Student Name	Event Name	Organized By	Date of Event	Award/ Recognition
1.	Yashwanth	Internship	Verzeo	01-06-2021 to 31-07-2021	Participation
2.	Ravurianilbabu	E-Quiz	Dhanalakshmisrinivasan engg College	05-06-2021	Participation
3.	Vamshigadela	E Quiz	Dhanalakshmisrinivasan engg College	05-06-2021	Participation
4.	Pratikgaikwad	Foundation Course	Google	14-07-2021	Participation
5.	Eleena Basil	Internship	Jet Aerospce, Kerala	19-07-2021 to 17-08-2021	Participation
6.	Kavin	Internship	Jet Aerospce, Kerala	19-07-2021 to 17-08-2021	Participation
7.	Kaviyachelvan	Internship	Jet Aerospce, Kerala	19-07-2021 to 17-08-2021	Participation
8.	Gopikannan M	Internship	Jet Aerospce, Kerala	19-07-2021 to 17-08-2021	Participation
9.	Kirankoushik	Internship	Jet Aerospce, Kerala	19-07-2021 to 17-08-2021	Participation
10.	Pratikgaikwad	Foundation Course	Google	04-07-2021	Participation
11.	Pratikgaikwad	Foundation Course	Google	23-07-2021	Participation
12.	Prasannalakshmi N	Autodesk	UDEMY	28-07-2021	Participation
13.	Prasannalakshmi N	Maths Competition	All India Council Technical Skill Development	03-08-2021	Participation
14.	Jayaprakashchandran G S	Online Workshop	IIRS	11-08-2021	Participation
15.	Sathishkumar A	Workshop	Cybernaut	17-08-2021	Participation
16.	Kirankoushik	Course	ISB	02-09-2021	Participation

17.	Gopikannan M	Global Navigatiom Satellite System	Jet Aerospce, Kerala	13-09-2021 to 24-09-2021	Participation
18.	Kirankoushik	Global Navigatiom Satellite System	Jet Aerospce, Kerala	13-09-2021 to 24-09-2021	Participation
19.	Manickam N	Global Navigatiom Satellite System	ISRO	13- 09-2021 to 24-09-2021	B+ Grade
20.	Peddibharagav	Internship	Jet Aerospace, Kerala	30-09-2021 to 14-10-2021	Participation
21.	V Udaykiran	Internship	Internshala	01-10-2021	Participation
22.	Prasannalakshmi N	Internship	Airports Authority Of India	11-10-2021 to 09-11-2021	Participation
23.	Kirankoushik	Seminar	Bharath University	17-10-2021	Participation
24.	B Rahulrayal	Seminar	Bharath University	17-10-2021	Participation
25.	Sridurgaprasad	Seminar	Bharath University	17-10-2021	Participation
26.	Anithaspandana	Internship	Agni Aero Sports Adventure Academy	25-10-2021 to 25-11-2021	Participation
27.	V Udaykiran	Training	Internshala	28-10-2021	Participation
28.	C Dillibabu	Software Training	Ss Technologies Bangalore	01-11-2021	Participation
29.	C Dillibabu	Training	Abyom	1-11-2021 to 01-02-2022	Participation
30.	Kavin	Foundation Course	Vandeerbiltunviersity	09-11-2021	Participation
31.	V Udaykiran	Training	Internshala	23-11-2021	Participation
32.	Vinaykumarreddy	Employabili ty Skills Under Lifeskills	Rubicon	24-11-2021 to 03-12-2021	Participation
33.	Hemanth	Employabili ty Skills Under Lifeskills	Rubicon	24-11-2021 to 03-12-2021	Participation
34.	Peddibharagav	Employabili ty Skills Under Lifeskills	Rubicon	24-11-2021 to 03-12-2021	Participation

35.	R Tharun	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
36.	Syedwaseemkhadri	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
37.	V Udaykiran	Employability Skills Under Lifeskills	Rubicon	24-11-2021 to 03-12-2021	Participation
38.	B Rahulrayal	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
39.	Kareenachandini	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 3-12-2021	Participation
40.	Gopikannan M	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
41.	Mohamedabdulirfan	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
42.	Farhatfatma	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
43.	Dheerajgp	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
44.	Akanshjain	Employability Skills Under Life Skills	Rubicon, Chennai	24-11-2021 to 03-12-2021	Participation
45.	V.Ashmitha	ATC, NCC Camp	Mcc College	22-11-2021 to 26-11-2021	Participation
46.	V Udaykiran	Seminar	Bharath University	17-12-2021	Participation
47.	Jagadeesh	Seminar	Bharath University	17-12-2021	Participation
48.	Srivanthasv	Seminar	Bharath University	17-12-2021	Participation
49.	Pamulavenkatesh	Seminar	Bharath University	17-12-2021	Participation

50.	Vamshigadela	Seminar	Bharath University	17-12-2021	Participation
51.	Nagendra M	Seminar	Bharath University	17-12-2021	Participation
52.	Vinaykumarreddy	Seminar	Bharath University	17-12-2021	Participation
53.	Mohamedabdulirfan	Seminar	Bharath University	17-12-2021	Participation
54.	Farhatfatma	National Seminar	Bharath University	17-12-2021	Participation
55.	Gundudivya	Seminar	Bharath University	17-12-2021	Participation
56.	Vamshigadela	Seminar	Bharath University	17-12-2021	Participation
57.	Neelakumar	Seminar	Bharath University	17-12-2021	Participation
58.	Kirankoushik	Internship	Gurugram	june-july 2021	Participation
59.	Akanshjain	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
60.	Ch.Srianutejreddy	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
61.	Dheerajgp	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
62.	As Durgaprasad	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
63.	Gopikannan M	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
64.	Mohamedabdulirfan	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
65.	Kareenachandini	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
66.	Prasannambika	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass
67.	B Rahulrayal	Nptel Exam	IIT Kanpur	july-september 2021	Pass
68.	Sailaja	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Silver
69.	R Tharun	Nptel Exam	IIT Kanpur	JULY - SEPTEMBER 2021	Pass

70.	Arunaachalam	Nptel	IIT Kanpur	july-september 2021	Pass
71.	Narapareddyrenukasai	Nptel	IIT Kanpur	july-september 2021	Pass
72.	Preethambalajivina yraj Kumar	Nptel	IIT Kanpur	JULY - september 2021	Pass
73.	Deborah	Nptel	IIT Kanpur	JULY - september 2021	Pass
74.	C Dillibabu	Nptel	IIT Kanpur	july-september 2021	Pass
75.	Hemanth	Nptel	IIT Kanpur	JULY - september 2021	Pass
76.	Lalalishashaik	Nptel	IIT Kanpur	JULY - september 2021	Pass
77.	Vinaykumarreddy	Nptel	IIT Kanpur	JULY - september 2021	Pass
78.	Kavya	Nptel Exam	IIT Kanpur	JULY - OCTOBER 2021	Pass
79.	Mythilhi	Nptel Exam	IIT Kanpur	JULY - OCTOBER 2021	Silver
80.	Neelakumar	Nptel Exam	IIT Kanpur	JULY-OCTOBER 2021	Pass
81.	P Charan	Nptel Exam	IIT Kanpur	JULY-OCTOBER 2021	Pass
82.	Prasannalakshmi N	Nptel Exam	IIT Kanpur	JULY-OCTOBER 2021	Pass
83.	Pushpalathasubbiah	Nptel Exam	IIT Kanpur	JULY - OCTOBER 2021	Pass
84.	Rakshitha	Nptel Exam	IIT Madras	JULY-OCTOBER 2021	Silver
85.	Sailaja	Nptel Exam	IIT Kanpur	JULY - OCTOBER 2021	Eilte

86.	Sreenidhi	Nptel Exam	IIT Madras	july-october 2021	Silver
87.	Balajiakash	Nptel	IIT Madras	july - october 2021	Elite
88.	Arpitkumarkourav	Nptel	IIT Kharagpur	july - october 2021	Elite
89.	Jagadeesh	Nptel	IIT Madras	july-october 2021	Pass
90.	Gundudivya	Nptel	IIT Madras	july - october 2021	Pass
91.	Kallurugiri	Nptel	IIT Madras	july - october 2021	Pass
92.	Sagar A	Nptel	IIT Madras	july - october 2021	Silver
93.	Vamshigadela	Nptel	IIT Madras	july - october 2021	Elite
94.	Krishnamurthy	Nptel	IIT Madras	july - october 2021	Elite
95.	Mahesh	Nptel	IIT Madras	july - october 2021	Eilte
96	Preethambalajivina yrajkumar	NPTEL	IIT KANPUR	JULY - September 2021	pass
97	Gundudivya	NPTEL	IIT madras	July - October 2021	pass

Academic Year: 2021-2022

Sem: EVEN

No.Of.Students: 20

S.No	Student Name	Event Name	Organized By	Date of Event	Award/ Recognition
1.	kirankoushik	nanosatelite	sairamengg	28-01-2022	participation
2.	c dillibabu	conference	Iconference new delhi	20-02-2022	participation
3.	prasannalakshmi n	aerospace materials	tomsk state university	16-03-2022	participation
4.	hemanth	international conference	SRM ,kattankulathur	24-03-2022 to 26-03-2022	participation
5.	kirankoushik	conference	srm,kattankulathur	24-03-2022 to 26-03-2022	participation
6.	monisha a	paper presentation	rajalakshmiengineerinmg college	22-04-2022 to 23-04-2022	participation
7.	v.ashmitha	TSC CAMP ,NCC	1 TN GIRLS BN NCC	23-04-2022 to 02-05-2022	participation
8.	shrikanthavinashjadhav	CATC NCC CAMP	dhanalakshmisrinivasan college chennai	25-04-2022 to 04-05-2022	participation
9.	sriram m	international conference	nehru institute of engineering	28-04-2022 to 29-04-2022	best paper award

10.	durgasaikumar	conference	nehru institute of engineering	28-04-2022 to 29-04-2022	participation
11.	ch.srianutejreddy	technical quiz	jeppiaarengg college	29-04-2022	participation
12.	Kareenachandini	cad modelling	jeppiaarengg college	29-04-2022	participation
13.	kirankoushik	aero modeling	jeppiaarengg college	29-04-2022	1st prize
14.	syamsanjaygupta	aero modeling	jeppiaarengg college	29-04-2022	1st prize
15.	sravanthreddy	aeromodelling	jeppiaarengg college	29-04-2022	1st prize
16.	shrikanthavinashjadhav	ncc camp	VIT University vellore	09-05-2022 to 18-05-2022	participation
17.	lakshmi c h	poster presentation	MIT	13-05-2022	participation
18.	vinaykumarreddy	air crash investigation	MIT	13-05-2022	3rd prize
19.	v.ashmitha	B CERTIFICATE EXAM NCC	DGNCC	FEBUARY 2022	A Grade
20.	ram krishn	NPTEL EXAM	IIT KANPUR	february- march 2022	pass