



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]

Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

ANNUAL REPORT 2020-2021

Ladies and gentlemen, annual day is an occasion to look back and rejoice at our accomplishments, cherish the fond memories, introspect on our shortcomings and resolve to be come a better version of ourselves in the forthcoming years.

It's been over a year since educational institutions were forced to close due to the pandemic. Everything around us has changed tremendously in recent years, and teaching and learning has become entirely virtual. I am really proud of my team and students for fast adapting to the difficult circumstances, not only to survive but also to triumph. I'm also grateful to the management for their assistance in making it feasible. I give the annual report, which details our actions and successes from July 2020 to May 2021, with great pride

New Initiatives

I place on record that this academic year we have added yet another feather to our cap. We have started offering a new programme, Artificial Intelligence and Data Science. Five start up studios listed below has been launched virtually to benefit students, faculty and other stakeholders

- Aerial Bots
- Trust Greenz
- ASIC Play
- Fresh Story



A MoU was signed with M/S Amphisoft technologies for ICT based learning and assessment environment (E-Box). All the students and the members of faculty were trained in Tech Enabled Teaching and Learning through E-Box Platform.

Rankings & Recognitions

Our tech enabled online platform and quality teaching have enabled us to secure top academic positions among the engineering colleges. The students of 1st year have secured a pass percentage of 97 in the end semester examination conducted by Anna University, Chennai.

Remote Teaching – Learning- Successful Planning and Execution

In this new normal, change has occurred in all aspects, and our management encouraged us to fast adapt to online teaching. We recognised the need to determine the availability of essential infrastructure among professors and students, and select a Learning Management System (LMS). We emphasised on creating appropriate e-materials and assessment strategy.

- Faculty Members equipped themselves with skills for teaching through E-Box platform quickly and effectively.
- Demo session on conducting virtual lab was arranged.
- The course materials prepared by faculty was reviewed by senior faculty and approved by Principal.

These initiatives helped us to conduct lessons and internal assessment tests for theory and practical courses effectively.




PRINCIPAL
Kathir College Of Engineering
Neelambur,
Coimbatore - 641 062.

Events Organized

S.No	Year	Name of the workshop/ seminar	Number of Participants	Date From - To
1.	2020-2021	Recent Trends in Applied research.	70	29.05.2021
2.	2020-2021	How to write good proposal for Funded Research Projects	70	30.09.2020
3.	2020-2021	Awareness Programme on Intellectual Property rights	40	17.03.2021
4.	2020-2021	One-Day workshop on Applications of Industrial Robotics	50	19.01.2021
5.	2020-2021	Workshop on "Build Your Own Business-An Entrepreneurial Review"	45	17.03.2021
6.	2020-2021	Talk on Industry relation, Research & Development	40	30.09.2020
7.	2020-2021	Seminar on "How to write Research Papers for Journal Publications"	60	06.03.2021

Extension/Outreach Programmes


S.No	Name of the activity	Organising unit/ agency/ collaborating agency	Name of the scheme	Year of the activity	Number of students participated in such activities
1.	Healthy Sustainable Practices for Women's Health	E-Box Amphisoft Technologies	Out reach programme	2021	50
2.	Being fit	E-Box Amphisoft Technologies	Out reach programme	2020	50
3.	Current Banking trends in Agricultural credit	E-Box Amphisoft Technologies	Out reach programme	2020	60
4.	Let's Learn French	E-Box Amphisoft Technologies	Out reach programme	2020	72
5.	Weave your story	E-Box Amphisoft Technologies	Out reach programme	2021	40

6.	Impact of Behavioral Finance on Capital Allocation	E-Box Amphisoft Technologies	Out reach programme	2020	75
7.	Thiruvalluvar Vizha	E-Box Amphisoft Technologies	Out reach programme	2021	200
8.	Badaga Carnival	E-Box Amphisoft Technologies	Out reach programme	2021	200
9.	Introduction to e-learning and Career guidance program for Government School students	E-Box Amphisoft Technologies	Out reach programme	2021	35

Capacity Building /Skill Enhancement Initiatives

S.No	Name of the capability enhancement program	Date of implementation (DD-MM-YYYY)
1.	Bootcamp on Applications of Python / Series - I and Series - II	22/02/2021 - 26/02/2021
2.	Creative Engineering Design bootcamp	09/12/2020 to 16/12/2020
3.	Bootcamp on Application of Engineering Mathematics Series - I	04/01/2021 to 09/01/2021
4.	Being Fit	27-11-2020
5.	Learn French	04-12-2020
6.	Cloud Computing	11-12-2020
7.	Writing in style	17-12-2020
8.	Impact of Behaviour finance on capital allocation	22-02-2021
9.	Semiconductor Industry technology, trends and opportunities	20-03-2021
10.	Healthy Sustainable Practices for Women's Health Webinar	20-03-2021
11.	Electrical and Electronics Engineering Department Association- GENTRANDIST	17-03-2021




PRINCIPAL
 Kathir College Of Engineering
 Neelambur,
 Coimbatore - 641 062.

MoU's Signed

We have been signing MoUs with leading industries and institutes for job placement and higher education. This year we signed MoU with,

S No	Organisation with which MoU is signed	Name of the institution/ industry/corporate house	Year of signing MoU	Duration
1	Amphisoft Technologies Private Limited, Kattoor Rd, P N Palayam, Coimbatore- 641037	EBOX OFFICE, KATTOOR RD, P N PALAYAM, TAMIL NADU- 641037	2020	Valid until expressly terminated


Research Contributions:

1) Journal Publication

S.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number
1.	A fan-beam stacked array X-band radar antenna	Dr. R Udaiyakumar	ECE	Springer: National Academy Science Letters	2020	ISSN 2250-1754
2.	Exploring refractive index ultra compact nano sensor using photonic crystal resonant cavities	Dr. R Udaiyakumar	ECE	American Scientific Publishers: Journal of Computational and Theoretical Nanoscience	2020	ISSN 1546-1955 (Print); ISSN 1546-1963 (Online)
3.	Combustion and emission analysis of hydrogenated waste polypropylene pyrolysis oil blended with diesel	Dr. V.L.Mangesh	MECH	Journal of Hazardous Materials (Elsevier)	2020	3043894
4.	Experimental investigation to identify the type of waste plastic pyrolysis oil suitable for conversion to diesel engine fuel	Dr. V.L.Mangesh	MECH	Journal of Cleaner Production (Elsevier)	2020	0959-6526

5.	Clean energy from plastic: production of hydroprocessed waste polypropylene pyrolysis oil utilizing Ni-Mo/Laponite catalyst	Dr. V.L.Mangesh	MECH	Energy&Fuels	2020	0887-0624 (print) 1520-5029 (web)
6.	Green Energy: hydroprocessing waste polypropylene to produce transport fuel	Dr. V.L.Mangesh	MECH	Journal of Cleaner Production	2020	0959-6526
7.	COx-free hydrogen generation via decomposition of ammonia over Al, Ti and Zr-Laponite supported MoS ₂ catalysts	Dr. V.L.Mangesh	MECH	International Journal of Hydrogen Energy	2020	0360-3199
8.	Mg/SiO ₂ -Al ₂ O ₃ supported nickel catalysts for the production of naphthenic hydrocarbon fuel by hydro-de-oxygenation of eugenol	Dr. V.L.Mangesh	MECH	International Journal of Hydrogen Energy, 2020, Vol 44, 2020, 25607-25620. (Elsevier)	2020	ISSN 0360-3199
9.	Platinum incorporated mordenite zeolite modified glassy carbon electrode used for selective electrochemical detection of mercury ions	Dr. V.L.Mangesh	MECH	Microporous and Mesoporous Materials	2020	1387-1811
10.	Hydrogenation of dicyclopentadiene into endo-tetrahydrodicyclopentadiene over supported different metal catalysts	Dr. V.L.Mangesh	MECH	Microporous and Mesoporous Material, 2020, Vol 290, 109678. (Elsevier)		1387-1811
11.	Effect of copper on NiCu bimetallic catalyst supported on SBA-16 for the catalytic hydrogenation of 5-hydroxymethylfurfural to 2,5-dimethylfuran	Dr. V.L.Mangesh	MECH	Biomass and Bioenergy,	2020	9619534
12.	Isomerization of alkanes over ionic liquids supported on SBA15	Dr. V.L.Mangesh	MECH	Energy & Fuels	2020	0887-0624 (print) 1520-5029 (web)




PRINCIPAL
 Kathir College Of Engineering
 Neelambur

13	Liquid phase hydrodeoxygenation of furfural over laponite supported NiPMoS nanocatalyst: Effect of phosphorus addition and laponite support	Dr. V.L.Mangesh	MECH	Journal of Solid State Chemistry	2021	0022-4596
14	Effects of Elasticity Number and Time Constant Ratio on Breakup and Droplet Formation of Viscoelastic Planar Liquid Sheet Co-flowing with Gases of Equal Velocities	Dr. Debayan Dasgupta	MECH	Journal of Fluid Mechanics	2021	0022-1120
15	Influence of Al ₂ O ₃ , SiC and B ₄ C Covalent Multilayer PVD Coating on Surface Properties of HSS Rod	Prof. Manivannan.R	MECH	Materials Today proceedings	2020	2214-7853
16	Performance, Environment and Cost-benefit Analysis of a Split Air Conditioning Unit Using HC-290 and HCFC-22	Dr. A. Lalitha Saravanan	MECH	Environmental Progress & Sustainable Energy	2021	1944-7442
17	Experimental Investigation on the Performance of Condenser for Charge Reduction of HC-290 in a Split Air-Conditioning System	Dr. A. Lalitha Saravanan	MECH	Heat Transfer Engineering	2020	1521-0537
18	Investigations on effect of process parameters on GTAW of aluminium alloy welding using full factorial design technique	Mr.D.Sathish kumar	MECH	Materials Today proceedings (Elsevier)	2020	2214 - 7853
19	Finite Element Analysis of Glass Fibre Reinforced-Fibre Metal Laminate Composite with Different Stacking Arrangements	Mr.D.Sathish kumar	MECH	SAE International	2020	0148-7191
20	A Numerical Investigation of Variably Heated Enclosure to Enhance its Heat Transfer Rate using CFD	Mr.D.Sathish kumar	MECH	IOP Conference Series: Materials Science and Engineering	2020	1757-899X
21	Fabrication of Lumbar Vertebrae by Polymer using Rapid Prototyping	Mr.D.Sathish kumar	MECH	Test Engineering and management	2020	0193-4120

22	A Numerical Investigation of Automotive Lambda Sensor to Improve the Life Span of the Sensor using CFD	Mr.D.Sathish kumar	MECH	IOP Conference Series: Materials Science and Engineering	2020	1757-899X
23	Upgrading the Quality of Power Using TVSS Device and PFC Converter Fed SBLDC Motor	Arun Kumar U and Dr.C.S.Ravichandran	EEE	Arabian Journal for Science and Engineering	2021	2193-567X
24	Power Factor Correction Using Sensorless Brushless DC Motor with Bridgeless Converter Topology	Arunkumar, U.; Radhakrishnan, G.; Boobalan, S.; Kishore, J	EEE	Journal of Computational and Theoretical Nanoscience	2020	1546-1955
25	Upgrading the Quality of Power Using Hybrid Controller Based PFC Converter Fed SBLDC Motor Drive	Arun Kumar U and Dr.C.S.Ravichandran	EEE	Interciencia	2021	0378-1844
26	Combined phase balancing and reconfiguration for unbalanced distribution system optimization through hybrid fuzzy MFOA	Mahendran. G and C.Govindaraju	EEE	Journal of Ambient Intelligence and Humanized Computing	2021	1868-5137
27	Two Stage Power Conversion of Photovoltaic-Ultra capacitor Configuration for efficient Operation Two Stage Power Conversion of Photovoltaic-Ultra capacitor Configuration for efficient Operation	M.Ramkumar and Sahla E. Y.	EEE	International Journal of Research in Engineering and Science	2021	2320-9364




PRINCIPAL
 Kathir College Of Engineering
 Neelambur,
 Coimbatore - 641 062.

2) Book and Conference Publications

Sl. No.	Name of the teacher	Title of the book/ chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	Year of publication	ISBN/ISSN number of the proceeding
1	Mr. Nithya Sai S		Development of peanut separator and thruster	International Virtual conference on Robotics, Automation, Intelligent Systems and Energy (IVC-RAISE 2020)	International Virtual conference on Robotics, Automation, Intelligent Systems and Energy (IVC-RAISE 2020)	2020	17578981
2	Mr.U.ArunKumar	Basic Electrical, Electronics and Instrumentation Engineering	Basic Electrical, Electronics and Instrumentation Engineering			2021	978-93-91405-92-2
3	Mr. U.ArunKumar	Artificial Intelligence	Artificial Intelligence			2021	978-93-90614-89-9
4	Mr. U.Arunkumar	Regenerative Braking System of Electric Vehicle Driven By BLDC Motor	Regenerative Braking System of Electric Vehicle Driven By BLDC Motor			2020	978-620-2-52457-5
5	Dr. Prabhakaran Balakrishnan		Fuel cell to reuse hydrogen by sending proton activator	Proceedings of the International Conference on Renewable Energy Utilization (ICREU-2020)		2020	

6	Dr. R Udaiyakumar	An Innovative Extended Method of Optical Pattern Recognition for Medical Images With Firm Accuracy —4f System-Base d Medical Optical Pattern Recognition	Machine Vision Inspection Systems, Volume 2: Machine Learning-Ba sed Approache s			2021	9781119 786092
---	----------------------	--	---	--	--	------	-------------------

Training and Placement

S.No	Name of student placed and contact details	Program graduated from	Name of the employer with contact details	Pay package at appointment
1.	Ashwin S	Electronics and Communication Engineering	Infosys, Mysore, System Engineer Trainee	3.6 LPA
2.	Aathersh	Electronics and Communication Engineering	Byju's Business Development Trainee, Coimbatore	3 LPA
3.	Surender	Electronics and Communication Engineering	Incture Technologies Pvt Ltd, Bangalore	3 LPA
4.	Ramya Nandhini	Electronics and Communication Engineering	KASADARA Technology Solutions Private Limited, AGT Business Park, 25, Avinashi Road, TNHB colony, Indira Nagar, Civil Aerodrome Post, Electronics Estate, Coimbatore-641014	1.5 LPA
5.	Divya R	Electronics and Communication Engineering	Zappyworks, Zoho office , Irugur	1.2 LPA

6.	Vasuki Devi	Computer Science and Engineering	RFPIO	4 LPA
7.	Padma priya	Computer Science and Engineering	Cybervault	2.5 LPA
8.	Ramya A	Computer Science and Engineering	Cybervault	2.5 LPA
9.	Vinothini	Computer Science and Engineering	Mobius knowledge services	2 LPA
10.	Nithya shree	Computer Science and Engineering	Acidus Tech	2.4 LPA
11.	Sunu Prasad	Computer Science and Engineering	Capgemini	3.8 LPA
12.	Karthikeyan	Computer Science and Engineering	Ceiyone	2.76 LPA
13.	Saran N B	Computer Science and Engineering	Vallift Tech	2 LPA
14.	Indhumathi R	Computer Science and Engineering	Saucelabs	3.6 LPA
15.	Thabasum	Computer Science and Engineering	Saucelabs	3.6 LPA
16.	K Selvabharathi	Mechanical Engineering	L.G.B	3.25 LPA
17.	G P Abhishek	Mechanical Engineering	L.G.B	3.25 LPA
18.	P Sivasuriya	Mechanical Engineering	L.G.B	3.25 LPA
19.	G P Abhishek	Mechanical Engineering	Linga Technologies	2.75 LPA
20.	S Parthiban	Mechanical Engineering	Linga Technologies	2.75 LPA
21.	M Pugalanthi	Mechanical Engineering	Linga Technologies	2.75 LPA
22.	J Sudharsan	Mechanical Engineering	Linga Technologies	2.75 LPA
23.	S Antony Vinod Babu	Mechanical Engineering	Linga Technologies	2.75 LPA
24.	B Raghu	Mechanical Engineering	Garuda Aerospace	1.8 LPA
25.	M Pugalanthi	Mechanical Engineering	Garuda Aerospace	1.8 LPA
26.	Conciliya	Electrical and Electronics Engineering	Foxconn Technologies	2.5 LPA



PRINCIPAL
Kathir College Of Engineering
Neelambur,
Coimbatore - 641 062.

CSR Initiatives

- School Connect Programmes
- Scholarships & Stipends

Name of the activity	Name of the Award/ recognition	Name of the Awarding government/ government recognised bodies	Year of award
FREE NEET COACHING FOR GOVT. SCHOOL STUDENTS AND TEACHERS	CERTIFICATE OF APPRECIATION	AMPHISOFT TECHNOLOGIES PRIVATE LIMITED	2020

Conclusion

In the words of Max McKeown, "Adaptability is about the powerful difference between adapting to cope and adapting to win". Although the epidemic has had a significant impact on us, it has also provided us with fresh opportunities. It has equipped us to meet and overcome difficult situations. Let us continue to take use of the opportunities that the epidemic has exposed even after we have defeated it.



PRINCIPAL
Kathir College Of Engineering
Neelambur,
Coimbatore - 641 062.