

# KIT - DIGIBYTES

ACADEMIC YEAR 2020 - 2021 ODD

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

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# Institution

## Mission

1. Establishing state-of-the-art infrastructure, effective procedures for recruitment of competent faculty and innovative teaching practices.
2. Creating a conducive environment for nurturing innovative ideas and encouraging research skills.
3. Inculcating social and ethical values through co-curricular and extra-curricular activities.

## Vision

To impart quality technical education emphasizing innovations and research with social and ethical values.

# Department

1. Establishing state-of-the-art facilities in the field of Electronics and Communication Engineering and enriching the knowledge of faculty through continuous improvement process.
2. Adopting innovative teaching learning practices and facilitating industry institute partnership for professional development.
3. Inculcating ethical and social values through extension activities.

## Mission

## Vision

To produce technically competent and socially responsible Electronics and Communication Engineers to meet industry needs.

# Department Activities

## Webinar on Funding Opportunities for Entrepreneurs

Organized Webinar on Funding Opportunities for Entrepreneurs on 10 November 2020. The resource person of the webinar Mr. S. Venkataramanan, Rtd. Divisional Manager, Lead District, Bank, Canara Bank, delivered valuable information on funding to a startup company. 86 students actively participated in the webinar.

## Webinar / Seminar



### Webinar on RF MEMS Devices

Organized a Webinar on RF MEMS Devices on 9 October 2020. Dr. B. Nataraj, Associate Professor, Department of ECE, Sri Ramakrishna Engineering College, Coimbatore, explored applications of RF MEMS devices in wireless networks. He also highlighted about career opportunities in RF MEMS fields. 74 students attended the program and were benefitted.



### Seminar on Recent Trends in Bio Medical Instrumentation

Organized IETE sponsored seminar on Recent Trends in Bio Medical Instrumentation on 8 October 2020. The resource person of the webinar Dr. C. Ram Kumar, Assistant Professor, Department of Biomedical Engineering, Dr. NGP Institute of Technology, Coimbatore, delivered about the recent wearable devices, medical technologies and the role of biomedical engineers in medical field. 62 students actively participated in the webinar.



### Webinar on Self Branding for Best Placements

Webinar on Self Branding for Best Placements on 30 September 2020. The resource person of the webinar Dr. M.R. Vanithamani, Professor & Director, Faculty of Management Studies, Karpagam College of Engineering, Coimbatore, delivered the important mantras or tips to the participants on being a successful individual brand. The webinar helped the students in realizing the basics of building a personal brand and also emphasized on identifying the factors that impact an individual to be different from others and on the key elements required for personal branding. 82 students actively participated in the program.

# Department Activities



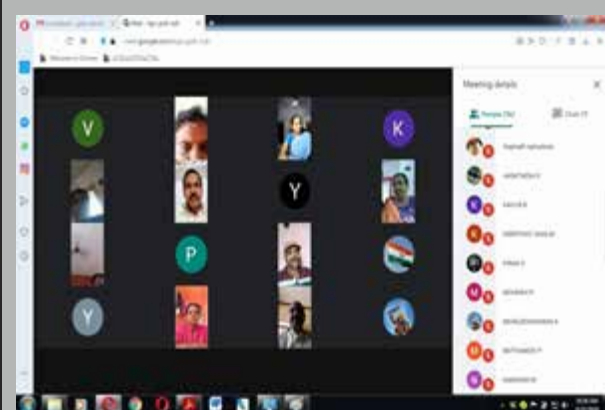
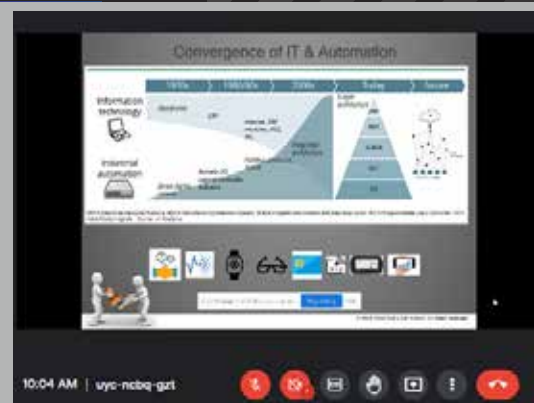
Webinar on DSP applications on 17 October 2020. The resource person of the webinar Dr. R. Michaelraj Kingston, Associate Professor, Department of ECE, Sri Eshwar College of Engineering, Coimbatore, delivered the fundamentals of digital signal processing. He also highlighted the scope and features of signal processing in real-time applications. 64 students actively participated.

The Engineer has been, and is, a maker of history

Science can amuse and fascinate us all, but it is engineering that changes the world

## Seminar on Recent Digital Communication Techniques

Virtual seminar on Recent Digital Communication Techniques on 3 October 2020. Dr. K. Vinoth Kumar, Associate Professor, Department of ECE, SSM Institute of Engineering and Technology, Dindigul was the resource person. He explored the the recent techniques of digital communication and methods. He also highlighted on career opportunities in the networking field. 52 students attended the program and actively participated.



## Webinar on Smart way to Crack Bank Exams

Virtual seminar on Recent Digital Communication Techniques on 3 October 2020. Dr. K. Vinoth Kumar, Associate Professor, Department of ECE, SSM Institute of Engineering and Technology, Dindigul was the resource person. He explored the the recent techniques of digital communication and methods. He also highlighted on career opportunities in the networking field. 52 students attended the program and actively participated.



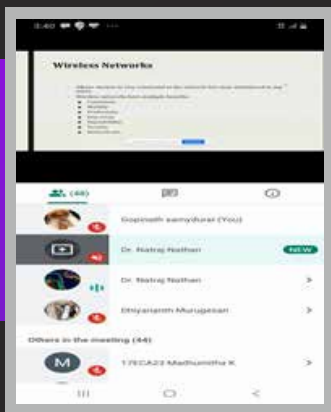
# Department Activities

## Virtual Workshop on PCB Hardware Description Language



Department of ECE organized a Virtual workshop on PCB Hardware Description Language on 9 September 2020. The resource person Mr. Sundaramoorthy, CEO, Sunshiv Electronics Pvt. Ltd., Coimbatore gave hands on practice on PCB design to the students. He also highlighted the importance of studying HDL in industries. 63 students actively participated in the program.

## Webinar / Seminar



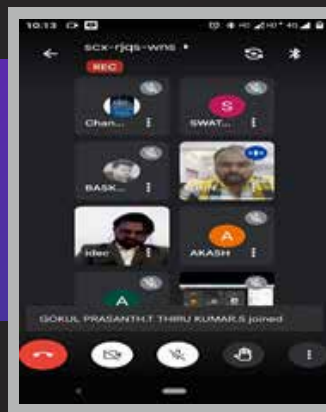
### Webinar on Security Challenges and Approaches in Ad hoc Networks

Webinar on Security Challenges and Approaches in Ad hoc Networks on 24 September 2020. Dr. N. A. Natraj, Associate Professor, Department of ECE, Kathir College of Engineering, Coimbatore, resource person of the webinar, explored his view on security issues in ad hoc networks and highlighted the usage of encryption approaches in recent trends. 53 participants attended the program.



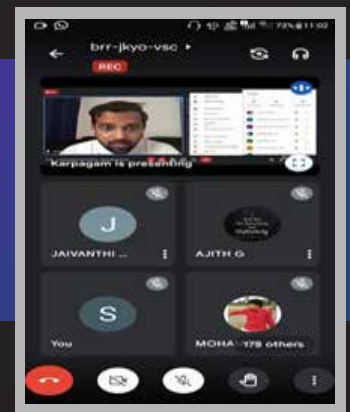
### Virtual Seminar on Regulated Power Supplies

Virtual seminar on Regulated Power Supplies on 17 September 2020. The resource person of the webinar Dr. A. Kishore Kumar, Associate Professor, Department of ECE, Hindusthan College of Engineering and Technology, Coimbatore, pointed out the importance of power supplies in industries and design layout as well as procedures. 82 students actively participated in the webinar.



### Virtual Seminar on PCB designing and verification

Virtual seminar on PCB designing and verification on 15 September 2020. The resource person of the webinar Dr. K. Kalirajan, Associate Professor, Department of ECE, KPR Institute of Engineering and Technology, Coimbatore, delivered the fundamentals of PCB and the designing concepts. He also highlighted the verification of design layout through simulation. 52 students actively participated and got benefitted by the program.



### Virtual Seminar on Recent Trends and Approaches in Wireless Networks

Virtual seminar on Recent Trends and Approaches in Wireless Networks on 15 September 2020. The resource person of the webinar Dr. C. Arvind, Professor, Department of Electronics and Telecommunication Engineering, Karpagam College of Engineering, Coimbatore, delivered a talk on network security, routing protocols and architecture of 4G and 5G networks. 63 students actively participated in the seminar.

# Faculty Achievements

## Journal Publication

Dr.S.Gopinath published a paper titled Reliability Integrated Intrusion Detection System for Isolating Black Hole Attack in MANET in Journal of Scientific and Industrial Research, Volume No.79, Issue No.10, 2020, Page No. 905-908 indexed by SCI.

Dr.M.S.Gowtham published a paper titled Congestion Control using Efficient Bandwidth Aware Routing scheme in Ad-Hoc Network in Journal of critical reviews, ISSN :2394-5125, Vol. 7, Issue. 19, August 2020, Page No. 5012-5018 indexed in SCOPUS.

Dr. M.S.Gowtham filled a patent titled Solar Power Organic Compost Machine with file no. 331564-001 on 01.08.2020

Dr. S. Gopinath & Mr. N. Dinesh Babu filled a patent titled Self Monitoring Fake Agricultural Burning System with file no. 202041048751A on 13.11.2020

## Patent Publication

## Awards & Recognition

Dr. S. Syed Jamaesha received **Distinguished Young Researcher Award** from **Green Thinkerz** on 06.10.2020.

Dr.S.Gopinath & Dr.D.Bhanu published a book chapter in Mangalam Publications, New Delhi in 2020 under the topic "Impact of 5G on Internet of Things" with ISBN 978-81-945125-0-9.

Dr.S.Gopinath published a book chapter in Anvi Books and Publishers, Delhi in 2020 under the topic "Design and Development of Voice Command Based Intelligent Wheelchair using IoT" with ISBN 978-81-941281-9-9.

Dr. M. S. Gowtham & Dr. S. Syed Jamaesha published a book chapter in Saliha Publications, Tirupattur in 2020 under the topic "Wireless Network Technology for Process Automation" with ISBN 978-81-948131-0-1.

Dr.S.Gopinath & Mr. S. Pragadeswaran published a book chapter in Saliha Publications, Tirupattur in 2020 under the topic "Reliable Energy Aware Multi-Hop Routing for WSN" with ISBN 978-81-948131-0-1.

## Book Chapter Publication

# Faculty Participation

Seminars / Workshops / Summer / Winter Schools/ Training Programmes Attended

S. No.	Name of the Faculty	Title of the Conference / Seminar / Workshop / FDP/ STTP Attended	Date	Institution
1.	Dr. S. Gopinath	NITTTR Online Training Programme on NAAC Accreditation Process	23.11.2020 to 27.11.2020	NITTTR, Chennai
		AICTE Sponsored One Week Online Short Term Training Program (STTP) on RADARS and SONARS: In Academic, Industrial and Defence Perspectives	19.10.2020 to 24.10.2020	PSG College of Technology
2.	Mr. A. G. Paranthaman	AICTE Online workshop on Universal Human Value on the theme Inculcating Universal Human Values in Technical Education	02.11.2020 to 06.11.2020	AICTE
		NPTEL - AICTE Faculty Development Programme on Digital VLSI Testing	September 2020 to December 2020	IIT Bombay
3.	Ms. R. Ramya	Virtual Faculty Development Programme on EC8701- Antennas and Microwave Engineering	22.06.2020 to 26.06.2020	Saveetha Engineering College
		Virtual Faculty Development Programme on Evolutionary Optimization Techniques	15.06.2020 to 17.06.2020	SSN College of Engineering
4.	Mr. S. Pragadeswaran	NITTTR Online Training Programme on NAAC Accreditation Process	23.11.2020 to 27.11.2020	NITTTR
		NPTEL Online Certification Course on Demystifying Networking	Sep- Oct 2020	IIT Bombay

# Student Participation

Seminars / Workshops / Summer / Winter Schools/ Training Programmes Attended

S. No.	Name of the Student	Title of the Conference /Symposium Seminar / Workshops	Date	Institution
1.	Priya.B	National Level Online Quiz On "Statistics And Research Methodology	06.12.2020	Periyar Maniammai Institute of Science & Technology
2.	Subhasri R	PPG Cricathon Quiz Competition	07.11.2020	PPG Institute of Technology
3.	P.Bhuvaneswari	Iginnovate 3.0 - Startup Opportunities In Media Industry	26.10.2020	Centre For Entrepreneurship Development (CED), Anna University
4.	S. Nishalini	Webinar on RF MEMS Devices	09.10.2020	Karpagam Institute of Technology, Coimbatore
5.	P. Nivetha	Webinar on RF MEMS Devices	09.10.2020	Karpagam Institute of Technology, Coimbatore
6.	S. Dinesh Kumar	Webinar on RF MEMS Devices	09.10.2020	Karpagam Institute of Technology, Coimbatore
7.	G. M. Janani	Webinar on Recent Trends In Bio Medical Instrumentation	08.10.2020	Karpagam Institute of Technology, Coimbatore
8.	K. Jeevanantham	Webinar on Recent Trends In Bio Medical Instrumentation	08.10.2020	Karpagam Institute of Technology, Coimbatore
9.	M. Sangeetha	Webinar on Recent Trends In Bio Medical Instrumentation	08.10.2020	Karpagam Institute of Technology, Coimbatore
10.	B. Tharunkumar	Webinar on Recent Trends In Bio Medical Instrumentation	08.10.2020	Karpagam Institute of Technology, Coimbatore



# Student Participation

Seminars / Workshops / Summer / Winter Schools/ Training Programmes Attended

S. No.	Name of the Student	Title of the Conference /Symposium Seminar / Workshops	Date	Institution
11.	R. Sakthivel	Webinar on Recent Trends In Bio Medical Instrumentation	08.10.2020	Karpagam Institute of Technology, Coimbatore
12.	T. Santhosh	Webinar on Recent Trends In Bio Medical Instrumentation	08.10.2020	Karpagam Institute of Technology, Coimbatore
13.	Vibisha Muthu Sri V	National Level Webinar On Placement Hackathon	28.09.2020	Nehru Institute of Engineering and Technology
14.	S. Keerthivasan	Webinar on Smart Way to Crack Bank Exams	26.09.2020	Karpagam Institute of Technology, Coimbatore
15.	B. Kishore	Webinar on Smart Way to Crack Bank Exams	26.09.2020	Karpagam Institute of Technology, Coimbatore
16.	P. Rakshitha	Webinar on Security Challenges and Approach in AD HOC Networks	24.09.2020	Karpagam Institute of Technology, Coimbatore
17.	B. Kaviya	Webinar on Security Challenges and Approach in AD HOC Networks	24.09.2020	Karpagam Institute of Technology, Coimbatore
18.	R. Subhasri	Webinar on Udal Mozhi	19.09.2020	Karpagam Institute of Technology, Coimbatore
19.	Poorani M	Programming Fundamentals	09.08.2020	Duke University
20.	Sathyanarayanan S	Programming Fundamentals	30.7.2020	Duke University
21	David Conqueror P	COVID Innovation Challenge 2020	28.09.2020	Pondicherry Engineering College
22	Janani G M	COVID Innovation Challenge 2020	28.09.2020	Pondicherry Engineering College