

KIT - DIGIBYTES

NEWSLETTER 2018 - 2019 ODD

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Institution Vision

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

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.

Department Vision

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

Department Mission

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.

Department Events



A workshop on “Design Thinking in IoT and Embedded Systems” was organized by the Department of ECE on 11 August 2018. Mr.A-Boobalan, Managing Director, Roboking-Cultivating Future Innovators, Erode, the resource person of the webinar, addressed on the qualification to utilize Design Thinking methods to create a successful IoT product. He also addressed about using Design Thinking to minimize problems arising throughout the development of Embedded Systems. 72 students attended the workshop and got benefitted by the workshop.



A Guest Lecture on “Radiation Characteristics of Monopole Antenna” was arranged for our ECE students on 3 August 2018. The resource person Dr.R.Malathy, Professor, Department of ECE Sri Krishna College of Technology, Coimbatore handled the session. The session focused on radiation, imaging principle and radiation patterns of Monopole antenna. 52 students participated in the guest lecture and got benefitted by the lecture.



Seminar on “Writing Effective research articles” was organized by Department of ECE on 25 August, 2018. The resource person Dr. R. Michaelraj Kingston, Associate Professor Department of ECE, Sri Eshwar Engineering College, Coimbatore, addressed gathering on choosing the right topic , Reading various sources and keeps shortlisting from a thesis, Proofreading and editing. 62 students attended the program and were benefitted by the program.

Department Events



One day Guest lecture on “Digital Signal Processing” on 29 September 2018. The session was handled by Dr.V.R. Vijay Kumar, Associate Professor Department of ECE Anna University Regional Campus Coimbatore. Students actively participated and understood about Signal sampling, Time and frequency domains, Z-plane and Autoregression analysis, Empirical mode decomposition and implementation through the lecture.

Seminar on Characteristics and behavior of Communication Channel on 13 July 2018. Dr. S. Karpagam, Professor, Department of ECE, Sri Krishna College of Engineering and Technology, Coimbatore, the resource person, addressed about analog and digital channel models, Multi-terminal Channels and its applications. 80 students actively attended the program and got benefitted.



A Guest Lecture on Sampling theorem and techniques was organized by ECE department on 28 July 2018. Dr. S. N. Sivanandam, Professor Emeritus, Department of CSE, Karpagam College of Engineering, Coimbatore, the resource person, highlighted about the importance of sampling from analog to digital conversion, sampling process, types of sampling, aliasing, aperture effect and its practical application. 82 students attended and were benefitted.

Workshop on “How to develop effective Communication skills” on 14 July 2018. The session was handled by Mr.Ronald Hadrian, Managing Director, Inlit Academy Erode. He explained about Improving listening skills, including empathetic listening perception, Constructing 3-part assertion messages for effective expression and effective communication. 53 students actively attended the program and got benefitted.



Department Events



ISTE Sponsored one Day Workshop on Circuit Simulation using PSPICE and MULTISIM on 29 September 2018. The session was handled by Mr. M. Sanjeev, Technical Head, Caliber Embedded Technologies Pvt. Ltd., Coimbatore. The workshop highlighted PSPICE proprietary software tool suite used primarily for electronic design automation and MULTISIM, printed circuit board tools. In the session he addressed modelling, analyzing and simulating tools in that software. The students were trained to design without error, and debugging the errors. 50 participants actively participated in the program and got benefitted.

IETE Sponsored One Day Workshop on “Embedded System Design” on 13 October 2018. The session was handled by Mr. B. Karthikeyan, Managing Director, Thick India Pvt., Ltd., Coimbatore. The aim of the workshop was to train the students in the areas of Embedded C programming using ARM Boards. The topics covered during the workshop were ARM Core Instruction and Instruction Level programming, I/O Programming in ARM (LCD, LED, MOTORS, Keypads), Sensor Interfacing (ADC,DAC), UART Interfacing with Wireless Transceivers (Zigbee Protocols, GSM, GPS), Timers, PWM, PLL, Interrupt Internal Programming, Communication Protocols Interfacing using SPI, I2C, USB and Mini-Project execution. 43 participants actively participated and got benefitted by the program.



The Department of Electronics and Communication Engineering organized One day workshop in “Embedded System Design” on 18.08.2018. This workshop dealt with general introduction to PIC Microcontroller, I/O ports, Timers, Sensor Interfacing, PWM. The session was handled by Mr. B. Karthikeyan, Managing Director, Thick India Pvt. Ltd., Coimbatore.

Department Events



IETE Sponsored One Day Workshop on Image Processing Using MATLAB on 06-10-2018. The session was handled by Mr. K. Mohan, DSP Programmer, PANTECH Solutions, Coimbatore. The goal of the Workshop was to learn about Image processing techniques like detection, segmentation, and feature extraction using MATLAB software. The session highlighted about Importing and Visualizing Images, Preprocessing Images, Improving Segmentation, Detecting Edges and Shapes and Automating Image Registration with Image Features. The Lecture also explored the use of MATLAB software in computer vision. 61 participants actively participated and got benefitted by the workshop.

One day “Technical Quiz on VLSI Design” on 18.08.2018.

40 students of Final year and Third year participated in this program. Technical quiz on VLSI RTL design was conducted. The students actively participated and understood the ways to prepare for a Interview.



Lecture with discussing “Working principle of UPS” on 11 August 2018. The session was handled by Mr.S.Syed Jamaesha, Assistant Professor, Department of ECE Karpagam Institute of Technology, Coimbatore. He explained various tasks of RTOS and its usages in embedded systems. He explained about uninterrupted power source and the working principles with filter, rectifier, and switch. He also addressed about online UPS and Offline UPS. 53 students were present in the program and actively participated

Events organized through Professional Societies

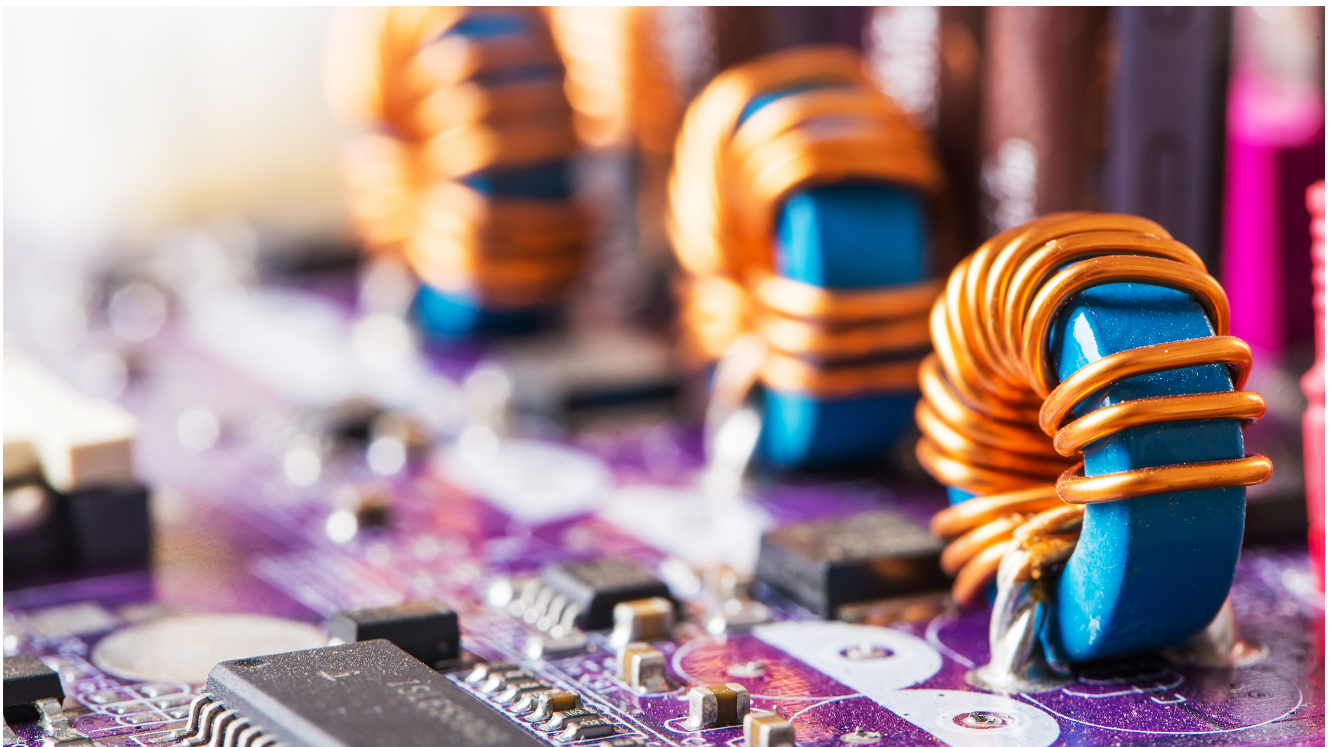
S. No.	Subject	Topic	Action Taken	Date-Month-Year	Resource Person with Designation
1	Electronic Circuits-I	ISTE Sponsored One Day Workshop on Circuit Simulation Using PSPICE and MULTISIM	Workshop	29-09-2018	Mr. M. Sanjeev Technical Head Caliber Embedded Technologies Pvt. Ltd., Coimbatore
2	Signals and Systems	ISTE Sponsored Guest Lecture on Signals and LTI systems	Guest Lecture	11-09-2018	Dr. S.N. Sivanandam Professor Emeritus Karpagam Academy of Higher Education Coimbatore
3	Principles of Digital Signal Processing	IETE Sponsored One Day Workshop on Image Processing Using MATLAB	Workshop	06-10-2018	Mr. K. Mohan DSP Programmer PANTECH Solutions Coimbatore
4	Embedded and Real time Systems	IETE Sponsored One Day Workshop on Embedded System Design	Workshop	13-10-2018	Mr. B. Karthikeyan Managing Director Thick India Pvt., Ltd., Coimbatore

Awards, Recognition, Journal & Conference Reviewer, Editor, MOUs Signed

Sl. No.	Faculty name	Date	Activity	Awarding Institution / Organization / Journal
1	Dr. S. Gopinath	29.08.2018	Memorandum of Understanding	Vland Best Hub Pvt. Ltd., Coimbatore
2	Mr. S. Syed Jamaesha	01.08.2018	Memorandum of Understanding	Pantech ProEd Pvt. Ltd., Coimbatore

Journal Publication

S.No.	Name of the Faculty members	Title of the Paper	Name of the Journal	Vol.No., Issue No., page No., DOI No.	Journal Indexed
1	S.Gopinath, N.A.Natraj, N.Suresh Kumar	An Effective Reliable Secure Data Gathering and Intrusion Detection Scheme for WSN	International Journal of Engineering and Advanced Technology (IJEAT)	2249-8958 Vol. 8 Issue. 2 December 2018 Page No. 13-17	Scopus
2	S.Gowtham, Dr.S.Gopinath, Dr.N.Sureshkumar	Investigation of Energy Meter Billing Systems Based on Performance Metrics	International Journal of Advance and Innovative Research	2394-7780 Vol. 5 Issue. 4(XII) October-December 2018 Page No. 134-137	Peer Review



Faculty NPTEL Certifications

S.No.	Name of the Faculty	Title of the Course	Status
1	Mrs.T.G.Ramabharathi	Hardware modeling using Verilog	Completed
2	Mr. M. S. Gowtham	Introduction to Wireless and Cellular Communications	Completed
3	Ms.T. Arthi	Hardware modeling using Verilog	Completed
4	Mr. A. G. Paranthaman	Hardware modeling using Verilog	Completed
5	Ms.Ramya.R	Embedded systems Design verification and Test	Completed
6	Ms.Meenakshi.S	Hardware modeling using Verilog	Completed
7	Ms.Honeymol Mathew	Principles of signal estimation for MIMO/OFDM Wireless communication	Completed
8	Ms.T.Priya	Digital Image Processing	Completed
9	Ms.Madhumitha.S	Digital Image Processing	Completed
10	Mrs.A.Suganya	Embedded systems Design verification and Test	Completed
11	Mr.N.Dinesh Babu	Embedded systems Design verification and Test	Completed
12	Ms.M.Muthamilselvi	Principles of signal estimation for MIMO/OFDM Wireless communication	Completed

Books Publication

S.No	Faculty name	Department	Title of the Book	Name of the Publisher	Year	ISBN
1.	Dr. S. Gopinath	ECE	Linear Integrated Circuits	Charulatha Publications	2018	9789388335423

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

Sl. No.	Faculty name	Title of the Conference / Seminar / Workshop / FDP/ STTP Attended	Date	Place	Sponsoring Authority
1	Ms. S. Madhumitha	Introduction to Data Analytics	28.07.2018	Karpagam College of Engineering, Coimbatore	NIL
2.	Mr. M. S. Gowtham	How to write Effective Research Articles for SCI Journals and Fundamental Steps in Thesis Writing	30.08.2018	Karpagam Academy of Higher Education, Coimbatore	NIL
3.	Mr. M. S. Gowtham	Recent Advancements in Bio-Fuel and Bio-Energy Future and Challenges	06.07.2018	Hindustan Institute of Technology, Coimbatore	CSIR
4.	Mr. A. G. Paranthaman	NPTEL Faculty Development Programme on Hardware Modelling using Verilog	August to October 2018	NPTEL	IIT BOMBAY
5.	Ms. R. Ramya	Introduction to Robotics	27.06.2018	Bannari Amman Institute of Technology, Erode	NIL
		FDP on Embedded Systems-Design Verification and Test	July – November 2018	NPTEL	IIT BOMBAY

Participation outside the state (2018-2019)

S. No.	Date	Name of the students	Name of the Events/ Contests	Name of the Institution	Achievements/ Prizes
1	15.9.2018	Niresh S	Project Competition	Sri Manakula Vinayagar Engineering College	Participation
2	15.9.2018	John Antony P	Project Competition	Sri Manakula Vinayagar Engineering College	Participation
3	15.9.2018	Yoganathan	Project Competition	Sri Manakula Vinayagar Engineering College	Participation
4	15.9.2018	Visalashi B	Project Competition	Sri Manakula Vinayagar Engineering College	Participation
5	15.9.2018	Vinodhini K	Project Competition	Sri Manakula Vinayagar Engineering College	Participation
6	15.9.2018	Vidhyaprakash K	Project Competition	Sri Manakula Vinayagar Engineering College	Participation
7	15.9.2018	Tharani N	Project Competition	Sri Manakula Vinayagar Engineering College	Participation
8	15.9.2018	Madhumitha V G	Project Competition	Sri Manakula Vinayagar Engineering College	Participation

Paper Presentation in Conference

S. No	Year of Study	Title	Name of the Students	Name of the Event	Name of the Organizing Institution / Publication	Award Fetched/ Paper Published
1	2018-2019	Multipurpose Robotic Vacuum Cleaner	Aswin Ayyappan S Devi Sathya.S Karthick S Monica.R	National Conference on Recent Innovation in VLSI, Communication & Signal Processing (RIVCS-2K19)	Er. Perumal Manimekalai College of Engineering	Paper Presented
2	2018-2019	An Optimum Data Gathering Scheme for WSN Based on Location Accuracy	Arthi J K Dharun N Jenitha M Karthikeyan M	National Conference on Recent Innovation in VLSI, Communication & Signal Processing (RIVCS-2K19)	Er. Perumal Manimekalai College of Engineering	Paper Presented
3	2018-2019	Self Configurable Highway Lighting System	Ajaysomaraj A Deepak Suriya N Gowri Shyam .J Guhan R Mathiyalagan .M	National Conference on Recent Innovation in VLSI, Communication & Signal Processing (RIVCS-2K19)	Er. Perumal Manimekalai College of Engineering	Paper Presented
4	2018-2019	An Optimized Data Transmission Mechanism in an AIR AD HOC Network	Pragathi S Rama K Visalashi B Barani Dharan C K	National Conference on Recent Innovation in VLSI, Communication & Signal Processing (RIVCS-2K19)	Er. Perumal Manimekalai College of Engineering	Paper Presented

Students Participation

S.No.	Date	Name of the Students	Name of the Events/ Contests	Name of the Institution	Achievements/ Prizes
1	04.09.2018	R.Deepak	Spoken English	Amritha Institutions, Coimbatore	Certificate of Merit - Distinction
2	29.09.2018	Aathira A.R	Table Tennis	Anna University Sports Board	Runners
3	Dec 2018	Angayarkkanni P	All India Essay Writing Event 2018	Shri Ram Chandra Mission	Participation
4	18.9.2018	P.David Conqueror	National level technical symposium Electrovision 2k18	Perumal manimekalai college of Engineering	Participation
5	18.9.2018	V.Pruthiviraj	National level technical symposium Electrovision 2k18	Perumal manimekalai college of Engineering	Participation
6	18.9.2018	M.Lakshmanasri	National level technical symposium Electrovision 2k18	Perumal manimekalai college of Engineering	Participation
7	18.9.2018	T.Prince	National level technical symposium- Electrovision 2k18	Perumal manimekalai college of Engineering	Participation
8	18.9.2018	I.Ishin	National level technical symposium- Electrovision 2k18	Perumal manimekalai college of Engineering	Participation
9	18.9.2018	R.Harshini	National level technical symposium- Electrovision 2k18	Perumal manimekalai college of Engineering	Participation
10	12.9.2018 to 14.9.2018	K.Anandapadmanaban	Electronic system design and micro controllers -work shop	Perumal manimekalai college of Engineering	Participation

Students Participation

S.No.	Date	Name of the Students	Name of the Events/ Contests	Name of the Institution	Achievements/ Prizes
11	12.9.2018 to 14.9.2018	R.Lakshmi	Electronic system design and micro controllers-work shop	Perumal Manimekalai College of Engineering	Participation
12	12.9.2018 to 14.9.2018	V.Sowntharya	Electronic system design and micro controllers-work shop	Perumal Manimekalai College of Engineering	Participation
13	12.9.2018 to 14.9.2018	K.Vellaidurai	Electronic system design and micro controllers-work shop	Perumal Manimekalai College of Engineering	Participation
14	12.9.2018 to 14.9.2018	S.Devisathya	Electronic system design and micro controllers-work shop	Perumal Manimekalai College of Engineering	Participation
15	12.9.2018 to 14.9.2018	S.Aswin Ayyappan	Electronic system design and micro controllers-work shop	Perumal Manimekalai College of Engineering	Participation
16	12.9.2018 to 14.9.2018	A.Prawin	Electronic system design and micro controllers-work shop	Perumal Manimekalai College of Engineering	Participation
17	12.9.2018 to 14.9.2018	K.Vinodhini	Electronic system design and micro controllers-work shop	Perumal Manimekalai College of Engineering	Participation