KARPAGAM
INSTITUTE OF TECHNOLOGY
Inspiring Innovation
Approved by AICTE and Affiliated to Anna University

DIGIBYTES
NEWSLETTER 2018 - 2019

January - May, 2019

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

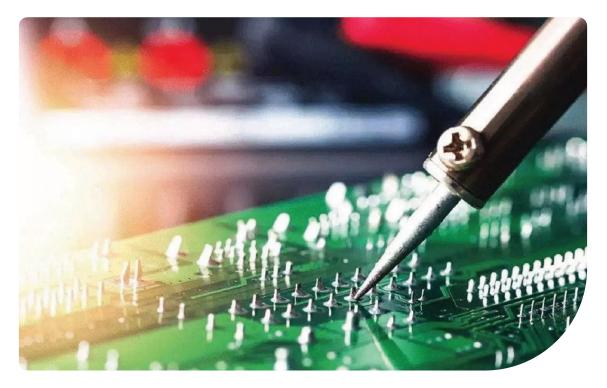**KARPAGAM INSTITUTE OF TECHNOLOGY**

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.

INSTITUTION 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

GUEST LECTURE ON "ERROR CONTROL CODING" SMART PHONE TROUBLESHOOTING

GUEST LECTURE ON "ERROR CONTROL CODING" WAS ORGANIZED BY THE DEPARTMENT OF ECE ON 21 MARCH 2019. MR.BALAMURUGAN, TECHINICAL HEAD, APEX INTEGRATED SYSTEM, COIMBATORE THE RESOURCE PERSON OF THE WEBINAR ENLIGHTENTED ABOUT THE NEED OF ERROR CORRECTION AND DETECTION. HE ALSO ADDERESSSED ABOUT DIFFERENT TECHNIQUES LIKE LINEAR BLOCK CODES, CONVOLUTION CODES, SYSTEMATIC CODES AND HAMMING CODES.

SEMINAR ON "DIGITAL SIGNALING TECHNIQUES"

SEMINAR ON "DIGITAL SIGNALING TECHNIQUES" WAS ARRANGED FOR OUR ECE STUDENTS ON 4 JANUARY 2019. DR. S. KAVITHA, PROFESSOR, DEPARTMENT OF ECE, HINDUSTHAN INSTITUTE OF TECHNOLOGY, COIMBATORE HANDLED THE SESSION. THE SESSION FOCUSED ON REALIZED ABOUT SIGNAL SAMPLING, TIME AND FREQUENCY DOMAINS, Z-PLANE AND AUTOREGRESSION ANALYSIS, EMPIRICAL MODE DECOMPOSITION AND IMPLEMENTION. 46 STUDENTS ACTIVELY GOT PARTICIPATED IN THE PROGRAM.

DEPARTMENT EVENTS

SEMINAR ON "FEEDBACK CONTROL SYSTEM"

A One day Seminar on "Feedback control System" was organized by the Department of ECE on 12 February 2019. The resource personce Mr.Sagayam, Senior Manager, KR Systems, Coimbatore addressed about Feedback control as well as Feed-forward control, Positive and negative feedback, Open loop and Closed loop with its application. 53 students actively got participated in the program.

INTERACTIVE LECTURE ON INTERFACING OF STEPPER MOTOR WITH 8051 MICROCONTROLLER

An Interactive lecture on Interfacing of stepper motor with 8051 Microcontroller on 27 February 2019. The session was handled by Ms.S.Ramya, Assistant Professor, Department of ECE, Karpagam Institute of Technology, Coimbatore. She explained about the basics of Stepper motor and microcontroller. She demonstrated the full drive mode and half drive mode. 61 students actively got participated in the program.

DEPARTMENT EVENTS

GUEST LECTURE ON NETWORK SECURITY

ORGANIZED A GUEST LECTURE ON NETWORK SECURITY ON 14 MARCH 2019. DR. T. PURUSOTHAMAN, PROFESSOR/C-SE, GOVERNMENT COLLEGE OF TECHNOLOGY, COIMBATORE ADDRESSED ON THE BASICS OF FIREWALL, HONEYPOT, TYPES OF ATTACK. 64 STUDENTS ATTENDED THE LECTURE AND UNDERSTOOD THE IMPORTANCE OF SECURITY IN NETWORK SYSTEMS AND GOT BENEFITTED.

WORKSHOP ON "INDUSTRY ETHICS"

WORKSHOP ON "INDUSTRY ETHICS" WAS ORGANIZED BY ALL DEPARTMENTS ON 27 FEBRUARY 2019. MR.M.JAGATHA-GURU, TECHNICAL HEAD, ROBERT BOSCH PVT LTD, COIMBATORE WAS THE RESOURCE PERSON. HE HIGHLIGHTED THE ETHI-CAL PRINCIPLES AND OF ETHICAL PROBLEMS IN THE INDUSTRIAL WORLD. HE EXPLORED THE METHODS TO ANALYZE PHILOSO-PHICAL ARGUMENTS, APPLY SPECIFIC ETHICAL THEORIES TO CURRENT SOCIAL ISSUES AND SUMMARIZE COMPLEX READINGS IN ETHICAL MANNER. 146 STUDENTS ATTENDED THE INAUGURATION PROGRAMME AND GOT BENEFITTED.

DEPARTMENT EVENTS

WORKSHOP ON "MICROPROCESSOR BASED COST EFFECTIVE PRODUCT DEVELOPMENT"

ORGANIZED A WORKSHOP ON "MICROPROCESSOR BASED COST EFFECTIVE PRODUCT DEVELOPMENT" ON 9 FEBRUARY 2019. THE SESSION WAS HANDLED BY MR. B. SARAVANA KUMAR, DESIGN ENGINEER, CALIBER EMBEDDED PVT., LTD., COIMBATORE. HE EXPLAINED HOW MICROPROCEESOR BASED DEVICES CAN BE USED TO REDUCE THE COST AND INCRESE THE OVERALL EFFICIENCY OF THE SYSTEM. HE ALSO HIGHLIGHTED SUCH TYPE OF SYSTEMS ARE DIRECTLY BASED ON CONSUMER NEEDS AVOIDING REJECTION RATE. IN THE PROGRAM 62 STUDENTS ACTIVELY PARTICIPATED AND GOT BENEFITTED.

SEMINAR ON INDUSTRIAL MANAGEMENT

DEPTARTMENT OF ECE JOINTLY WITH IETE ORGANIZED A SEMINAR ON INDUSTRIAL MANAGEMENT ON 5 FEBRUARY 2019. THE SESSION WAS HANDLED BY DR. A. DHARMARAJ, ASSOCIATE PROFESSOR, DEPARTMENT OF MANAGEMENT, KARPAGAM ACADEMY OF HIGHER EDUCATION, COIMBATORE. THE AIM OF THE SEMINAR WAS TO PROVIDE KNOWLEDGE OF INDUSTRIAL MANAGEMENT DEALING WITH INDUSTRIAL DESIGN, CONSTRUCTION, MANAGEMENT, AND ENGINEERING PRINCIPLES, TO IMPROVE THE ENTIRE INDUSTRIAL INFRASTRUCTURE AND INDUSTRIAL PROCESSES. THE SESSION FOCUSED ON THE SCOPE, DIFFERENT APPROACHES DEVELOPMENT AND APPLICATIONS OF INDUSTRIAL MANAGEMENT. 54 PARTICIPANTS ACTIVELY PARTI-CIPATED IN THE PROGRAM AND CLARIFIED THEIR DOUBTS.

DEPARTMENT EVENTS

SEMINAR ON "RECENT SECURITY MECHANISMS IN WIRELESS NETWORKS"

THE DEPARTMENT OF ECE JOINTLY WITH IETE ORGANIZED A SEMINAR ON "RECENT SECURITY MECHANISMS IN WIRELESS NETWORKS" ON 23 JANUARY 2019. THE SESSION WAS HANDLED BY DR. K. VINOTH KUMAR ASSISTANT PROFESSOR DEPARTMENT OF ECE, SSM INSTITUTE OF TECHNOLOGY, DINDIGUL. THE INTEND OF THE SEMINAR WAS TO ELABORATE ON WIRELESS NETWORKS SECURITY AND RECENT TRENDS. THE SESSION COVERED MAJOR FAULTS THAT SMART PHONES ARE LIKELY TO DEVELOP, SHOWING WAYS TO IDENTIFY THE PROBLEM AND METHODS TO REPAIR OR REPLACE THE FAULTY PARTS. THE STUDENTS WERE TAUGHT TO REPAIR MORE DEVICES, WITHOUT ERROR, RESULTING IN SELF-EMPLOYMENT. 50 PARTICIPANTS ACTIVELY PARTICIPATED AND GOT BENEFITTED BY THE PROGRAM.

FACULTY ACTIVITIES

JOURNAL PUBLICATION DETAILS

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	K.B.Gurumoorthy, S.Gopinath, K.Vinoth Kumar	Ant Colony Optimization and Genetic Algorithm Integrated Load Balancing Approach for MANET	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	2278-3075 Vol. 8 Issue. 5 March 2019 Page No. 399-405	Scopus

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	Dr. S. Gopinath	Network Modeling and Simulation using OPNET Modeler	07.03.2019 to 08.03.2019	Sri Ramakrishna Engineering College, Coimbatore	-
		Next Generation Wireless Networks	29.04.2019 to 03.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		Mobile Broadband Transformation	13.05.2019 to 17.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		System Designing with Smart Controllers	27.05.2019 to 31.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
2.	Dr. S. Syed Jamaesha	Next Generation Wireless Networks	29.04.2019 to 03.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		Mobile Broadband Transformation	13.05.2019 to 17.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		System Designing with Smart Controllers	27.05.2019 to 31.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR

FACULTY ACTIVITIES

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
3.	Dr. M. S. Gowtham	Network Modeling and Simulation using OPNET Modeler	07.03.2019 & 08.03.2019	Sri Ramakrishna Engineering College, Coimbatore	NIL
		Next Generation Wireless Networks	29.04.2019 to 03.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		Mobile Broadband Transformation	13.05.2019 to 17.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		System Designing with Smart Controllers	27.05.2019 to 31.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
4.	Mr. A. G. Paranthaman	Next Generation Wireless Networks	29.04.2019 to 03.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		Mobile Broadband Transformation	13.05.2019 to 17.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		System Designing with Smart Controllers	27.05.2019 to 31.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		NPTEL Faculty Development Programme on Modern Digital Communication Techniques	January to April, 2019	NPTEL	IIT BOMBAY
5.	Ms. R. Ramya	Introduction to Robotics	27.06.2018	Bannari Amman Institute of Technology, Erode	NIL
		Embedded System Design with ARM	January – March 2019	NPTEL	IIT BOMBAY

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
6.	Ms. S. Meenakshi	Next Generation Wireless Networks	29.04.2019 to 03.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		Mobile Broadband Transformation	13.05.2019 to 17.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		System Designing with Smart Controllers	27.05.2019 to 31.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
7.	Honeymol Mathew	Next Generation Wireless Networks	29.04.2019 to 03.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		Mobile Broadband Transformation	13.05.2019 to 17.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR
		System Designing with Smart Controllers	27.05.2019 to 31.05.2019	Karpagam Institute of Technology, Coimbatore	NITTTR

STUDENT PARTICIPATION

S.No.	Date	Name of the Students	Name of the Events/ Contests	Name of the Institution	Achievements/ Prizes
1	09.02.2019	R.Ramya	Workshop on E-resources in academic Research and Institutional Ranking	Sri RamaKrishna Engineering College	Participation
2	09.02.2019	J.Swathi	Workshop on E-resources in academic Research and Institutional Ranking	Sri RamaKrishna Engineering College	Participation
3	09.02.2019	M.Vishnu	Workshop on E-resources in academic Research and Institutional Ranking	Sri RamaKrishna Engineering College	Participation
4	09.02.2019	T.Vinitha	Workshop on E-resources in academic Research and Institutional Ranking	Sri RamaKrishna Engineering College	Participation
5	09.02.2019	M.Vinoth	Workshop on E-resources in academic Research and Institutional Ranking	Sri RamaKrishna Engineering College	Participation
6	09.02.2019	R.Yogesh	Workshop on E-resources in academic Research and Institutional Ranking	Sri RamaKrishna Engineering College	Participation
7	29.03.2019	S.Deepak	Workshop on Artificial Intelligence and Signal Processing using Matlab	Sri RamaKrishna Engineering College	Participation
8	29.03.2019	S.Deepak Raaj	Workshop on Artificial Intelligence and Signal Processing using Matlab	Sri RamaKrishna Engineering College	Participation

STUDENT PARTICIPATION

S.No.	Date	Name of the Students	Name of the Events/ Contests	Name of the Institution	Achievements/ Prizes
9	29.03.2019	J.K.Arthi	Workshop on Artificial Intelligence and Signal Processing using Matlab	Sri RamaKrishna Engineering College	Participation
10	29.03.2019	R.Balakumar	Workshop on Artificial Intelligence and Signal Processing using Matlab	Sri RamaKrishna Engineering College	Participation
11	29.03.2019	P.Abishek	Workshop on Artificial Intelligence and Signal Processing using Matlab	Sri RamaKrishna Engineering College	Participation
12	29.03.2019	S.Ajietha	Workshop on Artificial Intelligence and Signal Processing using Matlab	Sri RamaKrishna Engineering College	Participation
13	18.2.2019 & 19.2.2019	S.Sivasankaran	Optimization of VLSI circuit using ASIC GUI	Perumal Manimekalai College of Engineering	Participation
14	18.2.2019 & 19.2.2019	M.Pavithra	Optimization of VLSI circuit using ASIC GUI	Perumal Manimekalai College of Engineering	Participation
15	18.2.2019 & 19.2.2019	J.Jeba Jones Stallon	Optimization of VLSI circuit using ASIC GUI	Perumal Manimekalai College of Engineering	Participation
16	18.2.2019 & 19.2.2019	R.Dharshni	Optimization of VLSI circuit using ASIC GUI	Perumal Manimekalai College of Engineering	Participation
17	18.2.2019 & 19.2.2019	S.Niresh	Optimization of VLSI circuit using ASIC GUI	Perumal Manimekalai College of Engineering	Participation
18	18.2.2019 & 19.2.2019	M.Jayasri	Optimization of VLSI circuit using ASIC GUI	Perumal Manimekalai College of Engineering	Participation

STUDENT PARTICIPATION

EVENTS ORGANIZED THROUGH PROFESSIONAL SOCIETIES

S. No.	Subject	Topic	Action Taken	Date-Month-Year	Resource Person with Designation	Relevance to POs, PSOs
1	Wireless Communication	IETE Sponsored Two Days Hands on Training on Smart Phone Troubleshooting	Hands on Training	21-02-2019 & 22-02-2019	Mr. B. Krishnakumar Managing Director New Technologies Pvt. Ltd., Coimbatore	PO1,PO2,PO3,PO4,PO5,PO12, PSO1,PSO2
2	Principles of Management	IETE Sponsored Seminar on Industrial Management	Seminar	05-02-2019	Dr. A. Dharmaraj Associate Professor Department of Management Karpagam Academy of Higher Education, Coimbatore	PO1,PO2,PO3,PO4,PO5,PO8,PO9, PO11,PO12,
3	Wireless Networks	ISTE Sponsored Seminar on Recent Security mechanisms in Wireless Networks	Seminar	23-01-2019	Dr. K. Vinoth Kumar Assistant Professor Department of ECE SSM Institute of Technology Dindigul	PO1,PO2,PO3,PO4,PO5,PO12, PSO1,PSO2

PARTICIPATION OUTSIDE THE STATE

S. No.	DATE	NAME OF THE STUDENTS	NAME OF THE EVENTS/ CONTESTS	NAME OF THE INSTITUTION	ACHIEVEMENTS/ PRIZES
1	13.2.2019	Soundhariya C	Line Follower	Nehru College of Engineering and Research Centre Thrissur	Participation
2	13.2.2019	Afrudeen	Line Follower	Nehru College of Engineering and Research Centre Thrissur	Participation
3	13.2.2019	Suresh A S	Line Follower	Nehru College of Engineering and Research Centre Thrissur	Participation
4	13.2.2019	Shobana G	Line Follower	Nehru College of Engineering and Research Centre Thrissur	Participation

STUDENT PARTICIPATION

PARTICIPATION OUTSIDE THE STATE

S. No.	DATE	NAME OF THE STUDENTS	NAME OF THE EVENTS/ CONTESTS	NAME OF THE INSTITUTION	ACHIEVEMENTS/ PRIZES
5	3.5.2019	Nitha Chandran	Conference	Marian Engineering College, National Conference, Thiruvananthapuram, Kerala	Participation
6	3.5.2019	Madhumitha V G	Conference	Marian Engineering College, National Conference, Thiruvananthapuram, Kerala	Participation
7	23.2.2019	Lokesh L	Robo War	Jyothi Engineering College	Participation
8	23.2.2019	Vellai Durai K	Robo War	Jyothi Engineering College	Participation
9	23.2.2019	Pavithra M	Robo War	Jyothi Engineering College	Participation
10	23.2.2019	Nitha Chandran	Robo War	Jyothi Engineering College	Participation
11	23.2.2019	Pavithra M	Robo War	Jyothi Engineering College	Participation
12	5.4.2019	Lakshmi R	Circuit Debugging	College of Engineering Adoor	Participation
13	5.4.2019	Kaviya K	Circuit Debugging	College of Engineering Adoor	Participation
14	5.4.2019	Jayakumar K	Circuit Debugging	College of Engineering Adoor	Participation
15	5.4.2019	Aswitha P	Circuit Debugging	College of Engineering Adoor	Participation

STUDENT PARTICIPATION

PARTICIPATION OUTSIDE THE STATE

S. No.	DATE	NAME OF THE STUDENTS	NAME OF THE EVENTS/ CONTESTS	NAME OF THE INSTITUTION	ACHIEVEMENTS/ PRIZES
16	5.4.2019	Anandapadma naban K	Circuit Debugging	College of Engineering Adoor	Participation
17	7.3.2019	Dinesh Kumar S	IOT Challenge	Viswajyothi College of Engineering and Technology	Participation
18	7.3.2019	Harsha B	IOT Challenge	Viswajyothi College of Engineering and Technology	Participation
19	7.3.2019	Dinesh S	IOT Challenge	Viswajyothi College of Engineering And Technology	Participation
20	7.3.2019	Deepak R	IOT Challenge	Viswajyothi College of Engineering And Technology	Participation
21	3.4.2019	Arsadha C	Code Quest	Srinivas University College of Engineering And Technology	Participation
22	3.4.2019	Abirami P C	Code Quest	Srinivas University College of Engineering And Technology	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
1	2018-2019	Inundation Foretell and Prior Deterrent Structure Using PIC Microcontroller	Gowtham S Janani S Jayasri.M Kodimalar P	Artificial Intelligence, Smart Grid and Smart City Applications	PSG College of Technology
2	2018-2019	Token Based Smart Ration System	Deepak S Gowsigan S Janani S Karthick Shanmugam B	International Conference on Cyber Physical Systems ICCPS'19	R.M.K. Engineering College

STUDENT 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
3	2018-2019	Automatic EB Bill Measuring System using IoT	Hariharan K Iswarya G Karthick V Keerthana D	9th International Conference on Science and Innovative Engineering 2019	Jawahar Engineering College
4	2018-2019	High Speed Data Communication using Li-Fi System (LIGHT FIDELITY)	Abishek P Balakumar R Dhanabal P Jose Atlan Lazarus H Kannan .R	International Conference on Cyber Physical Systems ICCPS'19	R.M.K. Engineering College
5	2018-2019	Efficient Clustering and Routing based Secure Data Dissemination in Mobile AD HOC Network	Gopinath M Hari Shankar S Lokeshwaran P Malarvizhi S Maragatham R	Artificial Intelligence, Smart Grid and Smart City Applications	PSG College of Technology
6	2018-2019	Verification and Distribution of Surplus Edibles using IoT	Gomathi Dharani.V Gowsika R Gunasundari P Muthu Meenatchi S	International Conference on Cyber Physical Systems ICCPS'19	R.M.K. Engineering College
7	2018-2019	IOT Based Water Distribution System	Deepak Raaj S Dinesh A Bharath Kishan S V Afrudeen A	Artificial Intelligence, Smart Grid and Smart City Applications	PSG College of Technology

STUDENT 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
8	2018-2019	Cluster based Multicast Routing for Balancing Stability and Energy Efficiency in MANET	Narayani Priyadharshini N P Niresh S Srinath M Prasanna V	9th International Conference on Science and Innovative Engineering 2019	Jawahar Engineering College
9	2018-2019	Real Time Crop Monitoring System	Ranjitha K N Sowmiya M Sowmiya P Venkatesh B	9th International Conference on Science and Innovative Engineering 2019	Jawahar Engineering College
10	2018-2019	Mobile Avoidance for Safe Driving using Embedded System	Revvathi B N Vigneshwari V Vivek Panduranganm John Antony P	9th International Conference on Science and Innovative Engineering 2019	Jawahar Engineering College
11	2018-2019	Automatic Vehicle Speed Controlled Using RFID Technology	Praveen Kumar A Vidhyaprakash K Vijay M Yoganathan V	9th International Conference on Science and Innovative Engineering 2019	Jawahar Engineering College