

KIT - DIGIBYTES

NEWSLETTER – 2019-2020 (ODD)

Institution Vision

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

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 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 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.

EDITORIAL TEAM

Mr. E. Veera Boopathy, AP/ECE

K. Anandapadmanaban, IV year ECE - A
S. Vinusha, IV year ECE – B
N. Shanmathi, III Year ECE
S. Srinivasan, II Year ECE



Workshop on "Cognitive Radio Technology"

Workshop on "Cognitive Radio Technology" on 28 September 2019. The resource person of the workshop Dr. N. Sureshkumar, Professor, Department of ECE, PACE Institute of Technology & Sciences, Ongole, AP, India highlighted the features and scope of self configuring network and software defined radio applications. 52 students actively participated in the event.



Workshop on Electronic Product development and Marketing

Workshop on Electronic Product development and Marketing on 5 September 2019. Mr.A.Boobalan, Managing Director, Roboking-Cultivating Future Innovators, Erode, resource person, shared valuable information on electronic product development and solutions to improve branding through marketing. 58 students actively participated in the workshop.



Recent medical systems and devices

Seminar on Recent medical systems and devices on 12 September 2019. Dr. D. Nirmal, Professor, Department of ECE, Karunya Institute of Technology and Sciences, Coimbatore highlighted recent assist devices for health care applications and recent advancements in medical sector. 67 students actively participated in the seminar and benefitted by the program.



Seminar on Industry practices

Seminar on Industry practices on 30 August 2019. The resource person Mr. A. Arunachalam, Project Manager, HCL Private Ltd., Chennai shared few points on ethical issues and rules followed in industry. He has also highlighted the best practices to be followed in institution which will give an impact on industrial environment. 64 students actively attended and got benefitted.



Design and Analysis of DSP system with Gaussian noise removal using various filters on 12 August 2019. Mr. E. Veeraboopathy, AP/ECE, resource person, addressed the students on conceptual view of DSP filters using MATLAB software through hands on training.



Seminar on design thinking of electronic product development on 20 August 2019. Dr.S.Syed Jamaesha, Associate Professor, Department of ECE, Karpagam Institute of Technology highlighted some innovative ideas to develop products which will be useful to the society. 51 students actively participated.



Hands on training “Networks Simulation Protocols using NS2”

Hands on training on Networks Simulation Protocols using NS2 on July 27, 2019. Dr. S. Gopinath, Associate Professor, Department of ECE, Karpagam Institute of Technology shared technical concepts and methods on networks and simulation of ad hoc routing protocols using network simulation tool (NS2). 52 students actively participated in the hands on training.



Workshop on Microstrip Antenna design

Workshop on Microstrip Antenna design on 25 July 2019.

Dr. V. Rajeshkumar, Assistant Professor, School of Electrical Engineering, VIT, Vellore, resource person, shared the fundamentals concepts and views on antenna design. 54 students actively participated in the workshop and were benefitted.



Seminar on Low Power VLSI Design

Seminar on Low Power VLSI design on 18 July 2019.

Dr. H. Mangalam, Professor, Department of ECE, Sri Ramakrishna Institute of Technology, Coimbatore, resource person, shared the knowledge on low power design and its usage in industrial sector. 59 students actively participated in the seminar.



Guest lecture on Microwave Engineering on 6 August 2019. Dr.R.Vinod Kumar, Professor/ECE, Sona College of Technology, Salem, resource person, shared technical fundamentals of antennas and microwave engineering. 62 students actively attended the program and got benefitted.



Seminar on Seminar on Communication Coding Techniques in 4G on 10 July 2019. Dr. K. R. Kavitha, Professor, Department of ECE, Sona College of Technology, Salem delivered the talk on various coding techniques used in 4G networks. 52 students actively attended in the seminar.

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 | Dr. W. R. Salem Jeyaseelan, Dr. S. Gopinath, N. A. Natraj, M. Prabhakaran S.Madhusudhanan | Implementation of Weather Detection Band Using IoT | Bioscience Biotechnology Research Communications | 2321-4007 Vol. 12 Issue. 6 November 2019 Page No. 161-165 | Web of Science |
| 2 | P. David Conqueror, Dr. S. Gopinath, Dr. S. Syed Jamaesha, Prof. N. Dinesh Babu | Design and Implementation of Digital Power Monitoring System using IoT | Journal of Engineering, Computing and Architecture | 1934-7197 Vol. 9 Issue. 10 October 2019 Page No. 26-28 | Peer Review |
| 3 | M.S. Gowtham, Dr.Kamalraj Subramaniam, M.Anandapriya | Semi-Supervised Non-Linear Dimensionality Reduction Technique for Sentiment Analysis Classification | International Journal of Innovative Technology and Exploring Engineering (IJITEE) | 2278-3075 Vol. 8 Issue. 9 July 2019 Page No. 1721-1725 | Scopus |
| 4 | M. S. Gowtham, Dr. Kamalraj Subramaniam, M. Anandapriya | Performance of Optimized Data Transmission Mechanism in Air Ad-Hoc Networks | International Journal of Engineering Research and Technology | 2278-0181 Vol. 8 Issue. 6 June 2019 Page No. 1-4 | Scopus |
| 5 | P. Sasikala, Dr. S. Gopinath, G.Premananthan | Deep Learning Based Data Management in IOT Model for Home Power Systems of Solar | Test Engineering and Management | ISSN: 0193-4120 Vol. 83 Issue. March-April 2020 Page No. 6086-6095 | Scopus |
| 6 | G. R. Mahendra Babu, Dr. S. Gopinath, E. Arunkumar | A Review on Alzheimer Disease based on Segmentation | Test Engineering and Management | ISSN: 0193-4120 Vol. 83 Issue. March-April 2020 Page No. 2293-2296 | Scopus |
| 7 | G. R. Mahendra Babu, S. Gopinath, E. Arunkumar | An Intelligent EOG System using Fractal Features and Neural Networks | Test Engineering and Management | ISSN: 0193-4120 Vol. 83 Issue. March-April 2020 Page No. 9920-9925 | Scopus |

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 |
|------|--|---|---|--|-----------------|
| 8 | R. Sangeetha, T. G. Ramabharathi | Modeling of Intelligent Mechanical System for Detection and Mitigation of Air Pollution using IIOT Sensor | Test Engineering and Management | ISSN: 0193-4120 Vol. 83 Issue. March-April 2020 Page No. 6140-6146 | Scopus |
| 9 | J. Shafiq Mansoor, T. G. Ramabharathi | IoT based Smart Manhole Coverage system for Urban Areas | Test Engineering and Management | ISSN: 0193-4120 Vol. 83 Issue. March-April 2020 Page No. 2306-2309 | Scopus |
| 10 | J. Shafiq Mansoor, T.G.Ramabharathi, Devipriya N | Eye Movement Classification System using Spectral Features and Neural Networks | Test Engineering and Management | ISSN: 0193-4120 Vol. 83 Issue. March-April 2020 Page No. 9936-9941 | Scopus |
| 11 | Dr. S. Gopinath, Dr. N. Suma | Fuzzy enhanced Cluster based Energy Efficient Multicast Protocol for Increasing Network Lifetime in WSN | Journal of Scientific & Industrial Research | ISSN :0975-1084 Vol. 79 Issue. February 2020 Page No. 99-102 | SCI |
| 12 | Dr. S. Gopinath, Dr. D. Bhanu T. Yawanikha | Certain Investigation On Energy Based Fuzzy Enhanced Multicast Routing In WSN | International Journal of Scientific & Technology Research | SSN:2277-8616 Vol. 9 Issue. 1 January 2020 Page No. 2994-2998 | Scopus |
| 13 | Ms.A.Mahalakshmi, C. Kalpana, E. Saranya, M. Sudha & Dr. S. Gopinath | An Efficient Energy Based Data Gathering Scheme For Increasing Network Lifetime In WSN | International Journal of Scientific & Technology Research | ISSN 2277-8616 Vol. 9 Issue. 1 January 2020 Page No. 1896-1900 | Scopus |
| 14 | Dr.S. Gopinath, Dr. N. Suresh Kumar, Prof. S. Madhumitha, Dr.N.A Natraj | TSRP: A Trust Based Secure Routing Protocol for Authentication and Load Balancing in MANET | International Journal of Advanced Science and Technology | ISSN: 2005-4238 Vol. 29 Issue. 1 January 2020 Page No. 486-493 | Scopus |

Patent Publication

| S.No | Name of the Faculty/ Student | Title of the Patent | Patent File No. | Publication Date |
|------|---|---------------------|-----------------|------------------|
| 1 | Dr. S. Gopinath & Mr. K. Anandapadmanaban | Smart Glucometer | 201941023467 | 21.06.2019 |
| 2 | Dr. S. Gopinath & Mr. K. Anandapadmanaban | Kali Maker | 201941030491 | 09.08.2019 |

Book Publication

| S.No. | Name of the Faculty | Title of the Book | Name of the Publisher | Year | ISBN |
|-------|---------------------|-----------------------|-------------------------|------|---------------|
| 1. | Dr. S. Gopinath | Digital Communication | Charulatha Publications | 2019 | 9789389051407 |

Ph.D. Completed Status

| S.No | Name of the Faculty | Year of Award/Date | Title of the Thesis | University |
|------|----------------------|--------------------|---|--|
| 1 | Dr. S. Syed Jamaesha | 2019/12.08.2019 | Improved Location Aware routing Security Protocol to Improve the Performance of Metrics | Karpagam Academy of Higher Education, Coimbatore |

NITTTR Programmes Organized

| S. No. | No. of Faculty members Participated | Title of the Programme | Date | Organizing Institution |
|--------|-------------------------------------|---|---------------------------|------------------------|
| 1 | 15 | Blue Ocean Strategy- Concepts, Principles and Application | 15.07.2019 to 19.07.2019 | NITTTR Chandigarh |
| 2 | 22 | Research Oriented Project Work | 05.08.2019 to 09.08.2019 | NITTTR Chandigarh |
| 3 | 14 | Next Generation Communication | 19. 08.2019 to 23.08.2019 | NITTTR Chandigarh |

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

| Sl. No. | Name of the Faculty | Date | Activity | Awarding Institution / Organization / Journal |
|---------|----------------------|------------|--------------------------------------|--|
| 1 | Dr. S. Gopinath | 30.09.2019 | Preeminent Researcher Award | International Institute of Organized Research I2OR-2019 |
| 2 | Dr. S. Syed Jamaesha | 10.10.2019 | Distinguished Young Researcher Award | Green Thinkerz |
| 3 | Dr. S. Gopinath | 03.10.2019 | Reviewer | Defence Science Journal |
| 4 | Dr. S. Gopinath | 01.07.2019 | Reviewer | International Journal of Engineering Research & Technology (IJERT) |

Seminars / Workshops / Summer / Winter Schools/ Training Programmes

| S. No. | Name of the Faculty | Title of the Conference / Seminar / Workshop / FDP/ STTP Attended | Date | Place |
|--------|----------------------|--|--------------------------|--|
| 1. | Ms. S. Madhumitha | FDP on Technical applications for managing solid wastes from Industries and Educational Institutions for bio energy generation | 15.09.2019 to 28.09.2019 | Karpagam College of Engineering, Coimbatore |
| 2. | Ms. S. Madhumitha | Journal Writing, IPR and Patent Drafting | 13.12.2019 | Karpagam College of Engineering, Coimbatore |
| 3. | Mr. E. Veeraboopathy | FDP on Analog and Digital Design Using Cadence EDA tools | 31.07.2019 to 01.08.2019 | Karpagam Academy of Higher Education, Coimbatore |
| | | FDP on Innovation and Entrepreneurship Development | 16.07.2019 to 18.07.2019 | Anna University Regional Campus, Coimbatore |
| | | AICTE Sponsored Six Days FDP on 'EC8651-Transmission Lines & RF Systems | 02.12.2019 to 07.12.2019 | PSGi Tech, Coimbatore |
| 4. | Dr. M. S. Gowtham | Data Analytics in Biomedical Engineering | 14.12.2019 to 19.12.2019 | - |

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|--------|-----------------------|--|--------------------------|---|
| 5. | Mr. A. G. Paranthaman | Faculty Development Programme on Sensors and Actuators | July to October 2019 | NPTEL, IIT Bombay |
| | | Short Term Course on Blue Ocean Strategy-Concept, Principles and Application | 15.07.2019 to 19.07.2019 | - |
| | | Short Term Course on Research Oriented Project Work | 05.08.2019 to 09.08.2019 | - |
| | | Short Term Course on Next Generation Communication | 19.08.2019 to 23.08.2019 | - |
| 6. | Ms. R. Ramya | Workshop on Robotics and its Real Time Application using LEGO mindstrom EV3 | 11.10.2019 | Sri Ramakrishna Engineering College, Coimbatore |
| | | Faculty Development Programme on Microelectronics: Devices to Circuits | July to October 2019 | NPTEL, IIT Bombay |
| 7. | Dr. S. Gopinath | Workshop on Robotics and its Real Time Application using LEGO mindstrom EV3 | 11.10.2019 | Sri Ramakrishna Engineering College, Coimbatore |

Journal Publication

| S.No | Name of the Student | Title of the Paper | Name of the Journal | Volume No, Month/ Year, Page Nos. | Indexed by Thompson/ Scopus etc. |
|------|---------------------|--|--|-----------------------------------|----------------------------------|
| 1 | P. David Conqueror | Design and Implementation of Digital Power Monitoring System using IoT | Journal of Engineering, Computing and Architecture | Vol.9, Issue 10, 2019, pp.26-28. | UGC |

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

| S. No. | Name of the Student | Title of the Conference /Symposium Seminar / Workshop / FDP/ STTP Attended | Date | Place |
|--------|--|--|--------------------------|---|
| 1 | Ranjith. J, Venkateshprasath P, Vishnu M and Arun V | Two days workshop on recent trends in digital SCENT technology | 01.08.2019 to 02.08.2019 | KGISL Institute of Technology, Coimbatore |
| 2 | David Conqueror.P, Kowsik.R, Sreenivasan.S, Pruthviraj.N, Harish.R | Seminar on VLSI | 23.09.2019 | Sri Ramakrishna Engineering College, Coimbatore |
| 3 | David Conqueror.P, Kowsik.R, Pruthviraj.N | Hands on Training on Robotics | 11.10.2019 | Sri Ramakrishna Engineering College, Coimbatore |
| 4 | David Conqueror.P, Janani G.M, Karthinee N.K, Kousik.R, Vibisha Muthu Sri.V, Pruthviraj.N, Sreenivasan.S | The National Science and Technology Fair 2019 | 29.08.2019 to 31.08.2019 | Codissia, Coimbatore |
| 5 | S.Abhishek | Student Solar Ambassadors Workshop | 02.10.2019 | Karpagam Institute of Technology, Coimbatore |
| 6 | S.Sudharshan | Anna University Zonal Athletic Meet | 10.10.2019- 12.10.2019 | Kongunadu College of Engineering and Technology |
| 7 | T.Vinitha | Anna University Zonal Athletic Meet | 10.10.2019- 12.10.2019 | Kongunadu College of Engineering and Technology |

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

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|--------|---|--|---------------------------|---|
| 8. | P.David Conqueror,S.Keerthivasan, M.Manish Kumar, N.Pruthviraj, M.Sangaiya, D.Sakthi Saravanan | Seminar on Recent Trends in Future 5G Technology | 10.12.2019- 12.12.2019 | Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College |
| 9. | Aathira A R | Technical Festival :Paper Presentation | 27.9.2019 | CMR Institute of Technology |
| 10. | Abarna S | Technical Festival :Paper Presentation | 27.9.2019 | CMR Institute of Technology |
| 11. | Vellai Durai K | Technical Festival :Paper Presentation | 27.9.2019 | CMR Institute of Technology |
| 12. | Nithya Veena S | Technical Festival :Paper Presentation | 27.9.2019 | CMR Institute of Technology |
| 13. | Nitha Chandran | Technical Festival :Paper Presentation | 27.9.2019 | CMR Institute of Technology |
| 14. | Lavanya R | Project Exhibition | 27.9.2019 | CMR Institute of Technology |
| 15. | Madhumitha S | Project Exhibition | 27.9.2019 | CMR Institute of Technology |
| 16. | Sebavincy J | Project Exhibition | 27.9.2019 | CMR Institute of Technology |
| 17. | Kousick R | Project Exhibition | 27.9.2019 | CMR Institute of Technology |
| 18. | Ravaniga R S | Robot Soccer Game Competition | 27.9.2019 | CMR Institute of Technology |
| 19. | Geetha P | Robot Soccer Game Competition | 27.9.2019 | CMR Institute of Technology |
| 20. | Janani G M | Robot Soccer Game Competition | 27.9.2019 | CMR Institute of Technology |
| 21. | Kowshik B | Robot Soccer Game Competition | 27.9.2019 | CMR Institute of Technology |