

Er.PERUMAL MANIMEKALAI COLLEGE OF ENGINEERING



Accredited by NAAC with 'B++' Grade / ISO 9001:2015 Certified Institution)
NH-7, 17th Km, Hosur - Krishnagiri Highways, Koneripalli, HOSUR - 635 117.
Website: www.pmctech.org

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Dr.S.Chitra, M.E.,Ph.D. Principal
Dr.V.Vijayakumari, M.E.,Ph.D

ANNUAL NEWSLETTER 2021

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INSTITUTION AT A GLANCE

PMC Tech institution was established in the year 1996 by the founder chairman Er.PERUMAL & sponsored by Er.PERUMAL MANIMEKALAI Telugu minority educational and charitable trust situated next to the industrial hub Hosur. The institution is branched with engineering college, polytechnic college, ITI and matriculation school.

PMC TECH ENGINEERING COLLEGE AT A GLANCE

Established in the academic year 2002 and 2003 approved and affiliated by AICTE and Anna university respectively, the college is inculcating values of education into the young generation attained outstanding results and there by created name for itself in the region as a leading institution.

ABOUT THE DEPARTMENT

Embarked on the PMC Tech engineering college, the Department of Electronics and Communication Engineering has a steady growth in almost all the aspects. On the strength factor, the intake started with 40 seats in 2002, gradually increased to 60 seats in 2004 and 120 seats from 2006 onwards. The department offers a regular four year B.E programme in "Electronics and Communication Engineering" and from June 2012 started two year M.E programme in Applied Electronics"

The department has well equipped laboratories such as VLSI design, DSP, Microwave, RF Communication system, Microprocessor, Microcontroller, Linear and digital IC and Electronics Labs. The department has two level quality assessment rating for teaching and also reputation for research, registered tremendous growth in teaching /research and has attained its recognition at National and International levels.

The department with its experienced faculties ensure that the students concerned thoroughly acquire subjects knowledge (hard skills). Simultaneously soft skill training with internal/External team, glimpse of industrial visits, Seminars Workshops etc are provided from time to time and thus students are gainfully employed in reputed organizations.

VISION AND MISSION OF THE INSTITUTE

VISION

PMC TECH strives to achieve excellence in technical education through innovative teaching, learning and applied multidisciplinary research with professional and ethical practices.

MISSION

PMC TECH will endeavor

- To become the state of art teaching and learning centre for Engineering and Technology, Research and Management Studies.
- To have world class infrastructure for providing quality education and research towards creativity, self-discipline and ethical values.
- To associate with industry, R&D and business organizations and to have connectivity with the society.
- To create knowledge based professionals to enrich their quality of life by empowering self and family.

VISION AND MISSION OF THE DEPARTMENT

VISION

To impart excellent technical knowledge in Electronics and Communication Engineering with interdisciplinary and innovative approach to address global and societal needs.

MISSION

M1: To provide quality infrastructure, resources and education in Electronics and Communication Engineering through innovative methods of teaching with practical orientation for a successful career.

M2: To prepare Electronics and Communication Engineering graduates to meet global challenges by implementing Engineering values and quest for modern technologies.

M3: To inculcate leadership qualities among students for self and societal growth.

M4: To develop skills for lifelong learning to solve societal problems.

PEO's

PEO1: Graduates will have good technical knowledge and skills in Electronics and Communication Engineering for successful careers, higher studies leading to research and innovation.

PEO2: Graduates will work in multi-disciplinary areas to meet contemporary requirements of the industry and society.

PEO3: Graduates will exhibit leadership qualities, ethics with good team spirit, use modern tools a engage themselves in continuous learning

- **PO1 Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- **PO2 Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO3 Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO4 Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO5 Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- **PO6** The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **PO7 Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8 Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9 Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10 Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO11 Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one,,s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO 12 Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

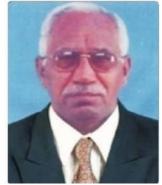
PSO's:

PSO1: An ability to provide innovative solutions through the knowledge in Electronics Engineering domains namely Embedded, VLSI, Signal Processing and Networking.

PSO2: An ability to take challenges associated with implementations of ad hoc and sensor network applications, RF and antennas.

PSO3: An ability to determine the kinds of tools and equipment needed to do a project in Electronics and Communication engineering as per the requirements of the society.

CHAIRMAN'S MESSAGE



"Next inimportant to freedom and justice ispopular education, withoutwhich neither freedom nor justice can be permanently maintained

It is the high time to realize your dream which is in the main stream of your professional career and to feel proud to be part of this most prestigious Institution. PMC Tech has a history of more than 10 years. Degree in the technical education like engineering has become the foremost academic qualification for all leading industries. Academicians and Industrialists alike have recognized the value of the degree in the developing challenges of the rapidly changing technical environment. Equip the student with advanced knowledge in the field of Electronics and Communication Engineering as well as professional skills which is necessary to face the challenges of the future. Engineer them to engage in research activities leading to innovative applications of technology for the benefit of mankind. Enable them to become responsible citizens of the country with willingness to serve the society.

SECRETARY'S MESSAGE



"Education is better safeguard of liberty than a standing army"

My heart felt compliments to the issue of "Annual ECE NEWS Letter". It is a new way for us to communicate with our constituents - students, college members, alumni and industrial partners. The newsletter reflects the board activities of ECE Dept of our college. True education indeed paves the path for the children to learn new things in a correct manner. It helps them to broaden their perspectives and enrich their knowledge to face the globally competitive era. The Department has a global reach with its wide and strong alumni network. It includes among them Entrepreneurs, Teaching professionals, Managers, Scientists and Administrators at the highest levels in their respective fields. We hope this newsletter will serve as a useful resource as you get to know the department.

TRUSTEE'S MESSAGE



"Education is the manifestation of the perfection which is already inman"

PMC TECH works towards preparing highly qualified team of technocrats not only by making them technically fit as well. Yes, we at PMC Engineering College stress also upon human values and professional ethics besides making them technically sound. Our students find their teachers as role models and believe in posing ethics instead of posing illusion. The Goal of the ECE Department is to impart technical knowledge and expertise to the students in the field of Electronics and Communication Engineering to enable them in understanding the real - world problems and solve them for the betterment of society. We strive for excellence and interaction opportunities with scholars and this is being amply reflected in this fifth issue of annual newsletter. I congratulate the editorial team to come up with issue of annual newsletter PMC ECE newsletter and wish them All the Best.



"Education is not all about studying and getting good marks. It is really a means to discover new things which we don't know about and increase"

An educated person has the ability to differentiate between right and wrong or good and evil. A person becomes perfect with education as he/she is not only gaining something from it, but also contributing to the growth of Nation. Therefore it is the foremost responsibility of a society to educate its citizens and PMC TECH goes a step further by ensuring that its students surmount in their field of studies. This is possible but because of the best efforts of the Department concerned and obviously exhibiting their developmental activities as newsletter is most welcome and my complements to ECEfor instant commencement.

PRINCIPAL'S MESSAGE



"Education is the most powerful weapon which you can use to changethe world"

To educate a student in mind and in morals is the most significant need of the hour. We at PMC TECH provide quality education adhered to discipline that composes every student to realize the self and inspires them to build their career with greater confidence in this ever changing competitive society. PMC TECH has a long list of achievements in providing quality education while meeting the basic criteria of affordability, accessibility and quality, " Tell me and I'll forgot, show me and I may not remember, Involve me and I'll understand." I am delighted to know the Electronics and Communication Department has released a newsletter. The initiative by students and faculty members show the attachment and commitment to this Engineering profession. I am sure this newsletter will be a strong resource to the student and researchers and keep them in touch with attachment in this area. I wish all the best and promise all possible support for ECE Department.

HOD'S MESSAGE



"Education is the key to unlock the golden door of freedom"

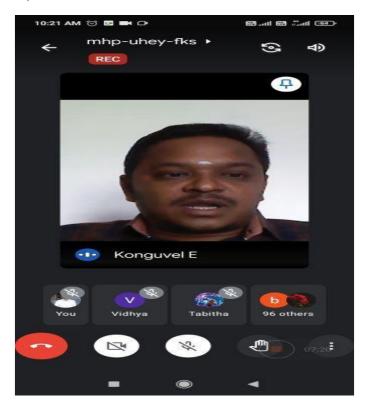
Electronics and Communication Engineering is the branch that deals with designing and testing circuits which use the electromagnetic property of electronics components such as resistors, capacitors, inductors and transistors to achieve a particular functionality. The theoretical, together with the practical content of the course provides a thorough knowledge of the core concepts relating to transmission of signals along globe. Our aim is to develop young technocrats, ability to solve design oriented problems in electronic circuits, communication systems and signal processing. Electronics and Communication engineers have good employment opportunity in Smart Phones. Microwave. Satellite communication. Telecommunication, Embedded systems, VLSI Design and IT domain.

<u>VIRTUAL NATIONAL CONFERENCE ON RECENT INNOVATION IN VLSI.</u> <u>COMMUNICATION AND SIGNAL PROCESSING (RIVCS 2K21)</u>

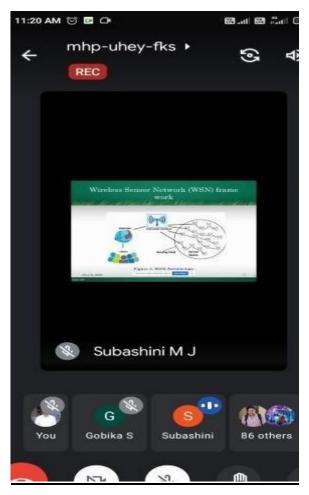
On 08th May 2021, Virtual National Conference on Recent Innovation in VLSI, Communication and Signal Processing (RIVCS2K21) was organized by our department

The Chief Guest Dr. Konguvel.E.,Ph.D, Assistant Professor (Sr. Grade), School of Electronics Engineering (SENSE), Vellore Institute of Technology(VIT), Vellore. Er.P.Perumal the Chairman, Smt.P.Mallar the Trustee, Er.P.Kumar the Secretary and Dr.S.Chitra the Principal, of our college, Dr.V.Vijayakumari Hod were present for the Inaugural Function.

In this program, papers from various colleges in Tamilnadu, Karnataka and Andra Pradesh were presented in the area of VLSI Design, Communication System, Digital Signal Processing, Image Processing and Real Time Embedded Systems etc.,



Chief guest Dr. Konguvel.E., Ph.D., addressing the students "RIVCS 2K21"



Presentation by the participant "RIVCS 2K21"

CONFERENCE DETAILS

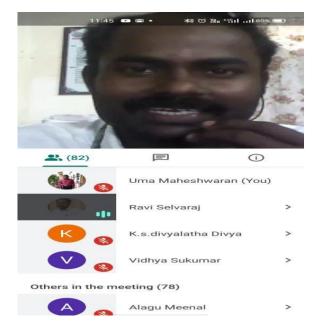
| S.NO | PROGRAMME CHIEF GUEST | | PARTICIPANTS | DATE |
|------|-----------------------|--|---|------------------------------|
| 1 | RIVCS 2K21 | Dr. Konguvel. E.,Ph.D Assistant Professor (Sr. Grade), School of Electronics Engineering (SENSE), Vellore Institute of Technology(VIT), Vellore, | Various college students and PMC College Students | 08 th May 2021 |

VIRTUAL NATIONAL LEVEL TECHNICAL SYMPOSIUM 2K20

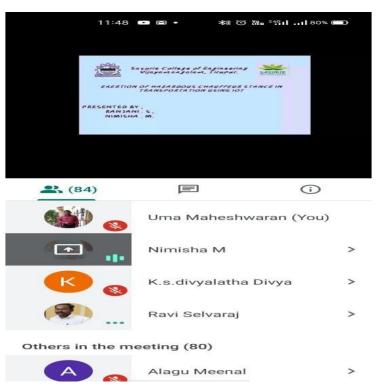
On 07th October 2020 the National Level Technical Symposium ELECTROVISION -2K20 was organized by our department .

The Chief Guest Dr.S. Ravi, Associate Professor, Gudlavalleru Engineering College, Krishna District, AndhraPradesh,Er.P.Perumal the Chairman, Smt.P.Mallar the Trustee, Er.P.Kumar the Secretary and Dr.S.Chitra the Principal, of our college, Dr.V.Vijayakumari Hod were present for the Inaugural Function.

In this programme, Paper Presentations of various colleges from Tamilnadu, Karnataka and Andra Pradesh were presented in the area of VLSI Design, Communication System, Digital Signal Processing, Image Processing and Real Time Embedded Systems etc.,



Chief guest Dr. Ravi.S, Ph.D, addressing the students "National Level Technical Symposium 2k20"



Presentation by the participant "National Level Technical Symposium 2k20" SYMPOSIUM DETAILS

| S.NO | PROGRAMME CHIEF GUEST | | PARTICIPANTS | DATE |
|------|------------------------------------|---|--|-------------------------------------|
| 1 | SYMPOSIUM ELECTROVISION 2K20 | Dr.S. Ravi, Associate Professor, Gudlavalleru Engineering College, Krishna District, Andhrapradesh. | Various Other College Students and PMC College Students | 07 th October 2020 |

<u>VIRTUAL FACULTY DEVELOPMENT PROGRAMME On "ADVANCES IN VLSI, EMBEDDED</u>

AND SIGNAL PROCESSING"

Three days Virtual Faculty Development Programme on "Advances in Vlsi, Embedded and Signal Processing" was organized by ECE department on 04th June 2021, 05th June 2021 and 07th June 2021. In this program, faculties from various colleges from Tamilnadu, kerala and Andra Pradesh were presented. The chief guests shared their knowledge related to recent advancement in the technology.





SESSION 01

"Internet of things for Sustainable Development" "Computer Vision Algorithms for Virtual Reality

Dr.G.R. Kanagachidambaresan

Associate Professor, Department of CSE, Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai.

SESSION 02

"Computer Vision Algorithms for Virtual Reality

Applications"

Dr. K.Martin Sagayam

Assistant Professor ,Department of ECE ,Karunya Institute of Technology and Sciences, Coimbatore

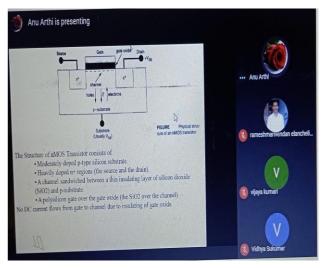


SESSION 03

"Asynchronous Techniques in Digital Circuits"

Dr.M.Santhi

Professor & Head, Department of ECE SaranathanCollege of Engineering, Trichy.

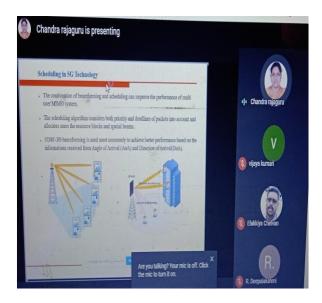


SESSION 04

" Historical Perspective and Future trends in CMOS VLSI Design"

Dr.C.Aarthi,

Associate Professor & HOD Department of ECE, Sengunthar Engineering College Tiruchengode



SESSION 05

"Research Challenges in 4G & 5G Technology"

Dr. I. Chandra,

Professor ,Department of ECE Rajalakshmi Institute Of Technology, Chennai

VIRTUAL ALUMNI CONNECT

Alumni meet was organized by ECE department on 24th Jan2021 to create a new idea and relationship between current students and alumnis. Some of the alumnis shared their experience and guided the current students about current expectation in the industry to make them industry ready persons.



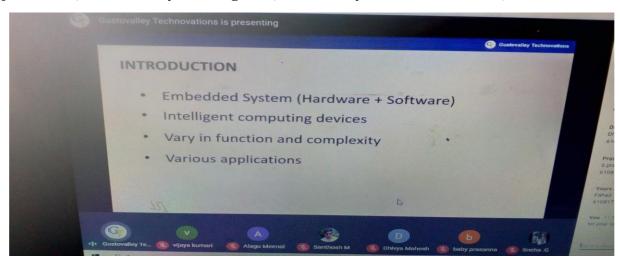


ADD-ON COURSES

| S.N | PROGRAMME TOPIC | RESOURCE PERSON PARTICIPANTS | | DATE |
|-----|--|---|--------------------------|--|
| 1 | Embedded systems using 8266 | Mr. Ejaz Ahmed, Embedded System Engineer, Gustovalley Technovations LLP, Hosur | IV Year ECE Students | September 2020 & 13 th September 2020 |
| 2 | PCB designing and Mobile Circuits Mr. B.Krishnakumar, Managing Director, New Technology, Coimbatore. IIYear ECE Students | | | 18 th September 2020 & 19 th September 2020 |
| 3 | Industrial Applications of Python | Dr. Cyril Prasanna Raj P. M.Tech, Ph.D, Director, Sanarys Pvt Ltd, Bangalore. | III Year ECE Students | 25 th September 2020 & 26 th September 2020 |
| 4 | Digital Image Processing | Mr.Avinash, Product Developer –Digital Image Processing, Gustovalley TechnovationsLLP, Hosur, | IV Year ECE Students | 22 rd march2021. & 03 rd April 2021 |
| 5 | Aurdino tools with IOT Mr. Ejaz Ahmed, Embedded System Engineer, Gustovalley TechnovationsLLP, Hosur, | | II Year ECE Students | 10 th May2021 |

1. Add-On course on "Embedded systems using 8266" – 12.09.2020 & 13.09.2020

Two days Add-on course on "Embedded systems using 8266" was conducted on 12th September 2020 and 13th September 2020. The *Add-On course* is using embedded kit 8266. Around 65 students of ECE IVth year participated in this program. We have invited the resource person Mr. Ejaz Ahmed, Embedded System Engineer, Gustovalley Technovations LLP, Hosur.





Add-On Course on "Embedded systems using 8266"

2. Add-On course on "PCB designing and Mobile Circuits" – 18.09.2020 & 19.09.2020

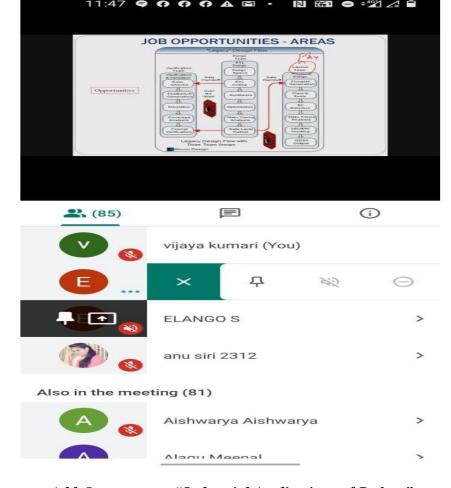
Two days *add-On course* on "*PCB designing and Mobile Circuits*" was conducted on 18th September 2020 and 19th September 2020. The session is about PCB designing and mobile circuits trouble shooting .Around 55 students of ECE II year had participated in this program. We have invited the resource person Mr. B.Krishnakumar, Managing Director, New Technology, Coimbatore.



Add-On course on "PCB designing and Mobile Circuits"

3. Add-On course on "Industrial Applications of Python" – 25.09.2020 & 26.09.2020

Two days *add-On course* on "*Industrial Applications of Python*" was conducted on 25th September 2020 and 26th September 2020. The addon course is about applications of python in the industry Around 62 students of ECE III year had participated in this program. We have invited the resource person Dr. Cyril Prasanna Raj P. M.Tech, Ph.D,Director, Sanarys Pyt Ltd,Bangalore



Add-On course on "Industrial Applications of Python"

4. Add-On course on "Digital Image Processing" – 22.03.2021 & 03.04.2021

Two days *add-On course* on "Digital Image Processing" was conducted on 22nd March 2021 and 03rd April 2021. The addon course is about the tools used in Digital Image Processing. Around 78 students of ECE IV year had participated in this program. We have invited the resource person Mr.Avinash,

Product Developer -Digital Image Processing, Gustovalley Technovations LLP, Hosur.



Add-On course on "Digital Image Processing"

5. Add-On course on "Aurdino tools with IOT" - 10.05.2021

One day *add-On course* on "Aurdino tools with IOT" was conducted on 10th May 2021 .The addon course is about using aurdino board for IoT applications. Around 52 students of ECE IInd year had participated in this program. We have invited the resource person Mr. Ejaz Ahmed, Embedded System Engineer ,Gustovalley Technovations LLP, Hosur.



Add-On course on "Aurdino tools with IOT"

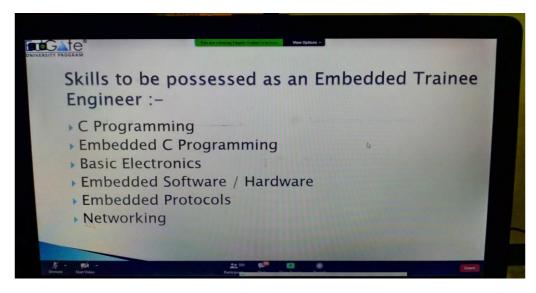
WEBINARS

| S.N | PROGRAMME TOPIC | RESOURCE PERSON | PARTICIPA NTS | DATE |
|-----|--|--|------------------------------|----------------------------------|
| 1 | Embedded Skill Development | Mr. Javad Baig. D, Embedded Engineer, Edgate Technologies, Texas Instruments University Program, Bangalore | IV Year ECE Students | 14 th August 2020 |
| 2 | VLSI EDA Tool & Implementation Methodology | Mr.S.Ellango M.E, (Ph.D), Assistant Professor, Bannari Amman Institute of Technology Sathiyamangalam | III & IVYear ECE Students | 17 th August 2020 |
| 3 | Introduction to 5G Technologies | Dr. K.C. Sriharipriya M.E., Ph.D, PDF, Associate Professor, SENSE, Vellore Institute of Technology, Vellore | III Year ECE Students | 29 th August 2020 |
| 4 | Digital Circuits | Dr.S.Ravi Ph.d, Associate Professor, Gudlavalleru Engineering College Krishna District, Andhrapradesh | II Year ECE Students | 01 st October 2020 |
| 5 | Security of Wireless Networks | Dr.R.Sudarmani Ph.D., Associate Professor, Department of ECE, Avinashilingam University, Coimbatore | III Year ECE Students | 14 th March2021 |

| 6 | Trends in wireless Communication | Dr.Kamalraj Subramaniam Ph.D., Head of the Department, Department of Biomedical Engineering,, Karpagam Academy of Higher Education, Coimbatore. | III Year ECE Students | 20 th March2021 |
|----|---|---|--------------------------------------|-------------------------------|
| 7 | Applications of integrated circuits | Mr.G.Jaisarathy, Embedded Engineer, One yes Technology, Chennai. | II ,III & IV Year ECE Students | 03 rd May 2021 |
| 8 | Advancement in microprocessor and microcontroller | Mr.B.Lingeswaran, Senior Project Trainner, Indian Institute of Hardware Technology, Bangalore | III Year ECE Students | 04 th May 2021 |
| 9 | Electromagnetic sensors | Dr.P.Rajasekar, Professor, Department of ECE, Narayana Engineering College, Gudur,Andrapradesh. | II Year ECE Students | 08 th May 2021 |
| 10 | Recent technology in image processing | Ms. P. V. Ashwathy Devraj M.E,(Ph.D), Assistant Professor, Department of Computer Science and Engineering, Karpagam College of Engineering, Coimbatore. | II & IV Year ECE Students | 12 th May 2021 |
| 11 | Applications of Communication systems | | | 21 st May 2021 |
| 12 | Application of VLSI circuits using ASIC GUI | Dr.C.Aarthi M.E., Ph.D, Associate Professor & HOD Department of ECE, Sengunthar Engineering College Tircuchengode. | III Year ECE Students | 31 st May 2021 |

1. Webinar on "Embedded Skill Development" – 14.08.2020

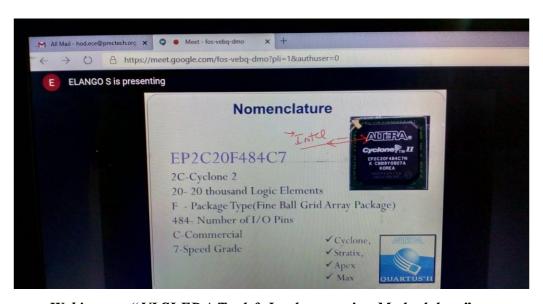
Webinar on "Embedded Skill Development" was conducted on 14th August 2020 .It was about various developments in emdedded systems. Around 102 students of ECE IVth year had participated in this program. We have invited the resource person Mr. Javad Baig. D, Embedded Engineer, Edgate Technologies, Texas Instruments University Program ,Bangalore



Webinar on "Embedded Skill Development"

2. Webinar on "VLSI EDA Tool & Implementation Methodology" – 17.08.2020

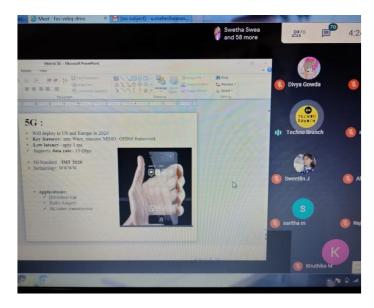
Webinar on "VLSI EDA Tool & Implementation Methodology" was conducted on 17th August 2020 .It was about vlsi software tools. Around 107 students of ECE IIIrd & IVth year had participated in this program. We have invited the resource person Mr.S.Ellango M.E, (Ph.D), Assistant Professor, Bannari Amman Institute of Technology, Sathiyamangalam



Webinar on "VLSI EDA Tool & Implementation Methodology"

3. Webinar on "Introduction to 5G Technologies" – 29.08.2020

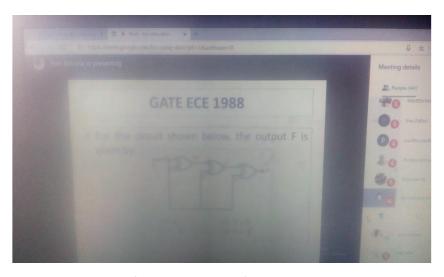
Webinar on "Introduction to 5G Technologies" was conducted on 29th August 2020 .It was about upcoming 5G technology. Around 73 students of ECE IIIrd year had participated in this program. We have invited the resource Dr. K.C. Sriharipriya M.E., Ph.D, PDF, Associate Professor, SENSE, Vellore Institute of Technology, Vellore



Webinar on "Introduction to 5G Technologies"

4. Webinar on "Digital Circuits" - 01.10.2020

Webinar on "Digital Circuits" was conducted on 01st October 2020 .It was about applications of digital circuits . Around 35 students of ECE IInd year had participated in this program. We have invited the resource Dr.S.Ravi Ph.d, Associate Professor, Gudlavalleru Engineering College Krishna District, Andhrapradesh



Webinar on "Digital Circuits"

5. Webinar on "Security of Wireless Networks" - 14.03.2021

Webinar on "Security of Wireless Networks" was conducted on 14th March 2021 .It was about applications of digital circuits . Around 73 students of ECE IIIrd year had participated in this program. We have invited the resource Dr.R.Sudarmani Ph.D., Associate Professor, Department of ECE, Avinashilingam University, Coimbatore.



Webinar on "Security of Wireless Networks"

6. Webinar on "Trends in wireless communication" - 20.03.2021

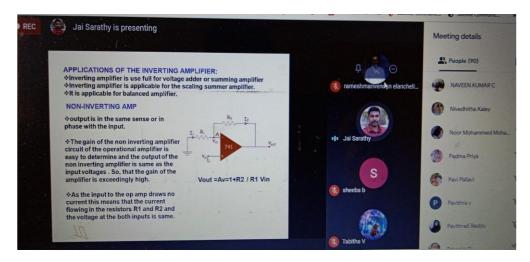
Webinar on "Trends in wireless communication" was conducted on 20th March 2021 .It was about applications of digital circuits . Around 73 students of ECE IIIrd year had participated in this program. We have invited the resource Dr.Kamalraj Subramaniam Ph.D., Head of the Department, Department of Biomedical Engineering, Karpagam Academy of Higher Education, Coimbatore.



Webinar on "Trends in wireless communication"

7. Webinar on "Applications of integrated circuits" - 03.05.2021

Webinar on "Applications of integrated circuits" was conducted on 03^{rd} May 2021 .It was about applications of digital circuits . Around 90 students of ECE II^{nd} , III^{rd} and IV^{th} year had participated in this program. We have invited the resource Mr.G.Jaisarathy, Embedded Engineer, One yes Technology, Chennai.



Webinar on "Applications of integrated circuits"

8. Webinar on "Advancement in microprocessor and microcontroller" - 04.05.2021

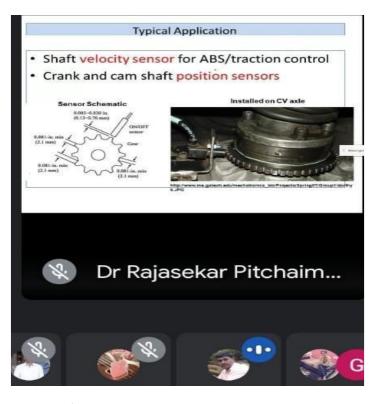
Webinar on "Advancement in microprocessor and microcontroller" was conducted on 04th May 2021 It was about advancements and applications of microprocessors and microcontrollers. Around 55 students of ECE IIIrd year had participated in this program. We have invited the resource Mr.B.Lingeswaran, Senior Project Trainner, Indian Institute of Hardware Technology, Bangalore



Webinar on "Advancement in microprocessor and microcontroller"

9. Webinar on "Electromagnetic sensors" - 08.05.2021

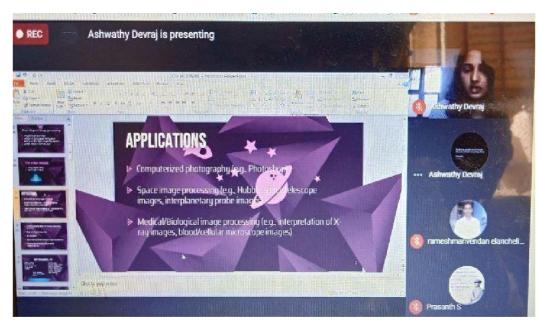
Webinar on "Electromagnetic sensors" was conducted on 08^{th} May 2021 It was about various sensors using electro magnets . Around 58 students of ECE IInd year had participated in this program. We have invited the resource Dr.P.Rajasekar, Professor, Department of ECE, Narayana Engineering College, Gudur, Andrapradesh



Webinar on "Electromagnetic sensors"

10. Webinar on "Recent technology in image processing" - 12.05.2021

Webinar on "Recent technology in image processing" was conducted on 12th May 2021 It was about image processing techniques used in various fields. Around 122 students of ECE IInd and IVth year had participated in this program. We have invited the Ms. P. V. Ashwathy Devraj M.E, (Ph.D), Assistant Professor, Department of Computer Science and Engineering, Karpagam College of Engineering, Coimbatore



Webinar on "Recent technology in image processing"

11. Webinar on "Applications of Communication systems" – 21.05.2021

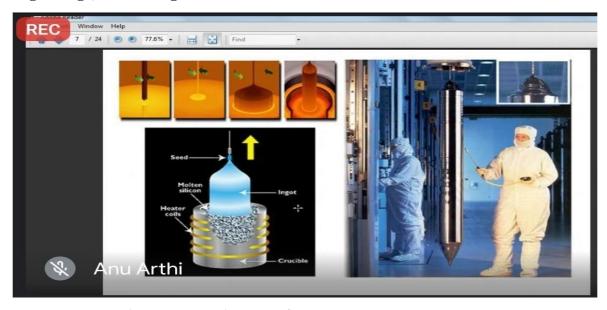
Webinar on "Applications of Communication systems" was conducted on 21st May 2021 It was about applications of communication systems in various fields. Around 56 students of ECE IInd year had participated in this program. We have invited the Dr. V. Dinesh Ph.D, Associate Professor, Department of ECE, Kongu Engineering College, Perundurai, Erode



Webinar on "Applications of Communication systems"

12. Webinar on "Application of VLSI circuits using ASIC GUI" - 31.05.2021

Webinar on "Application of VLSI circuits using ASIC GUI" was conducted on 31st May 2021 It was about ASIC . Around 53 students of ECE IIIrd year had participated in this program. We have invited the Dr.C.Aarthi M.E., Ph.D, Associate Professor & HOD, Department of ECE, Sengunthar Engineering College, Tircuchengode.



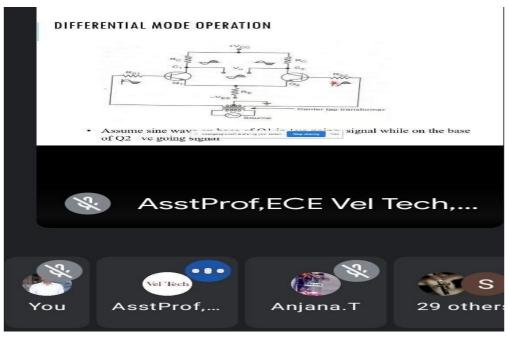
Webinar on "Application of VLSI circuits using ASIC GUI"

GUEST LECTURE

| S.NO | PROGRAMME CHIEF GUEST | | PARTICIPANTS | DATE |
|------|-------------------------------|--|-------------------------|------------------------------|
| 1 | Linear Integrated Circuits | Dr. J. Mohanraj Ph.D, Associate Professor, Department of ECE, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai. | II Year ECE Students | 20 th May 2021 |

1. Guest Lecture on "Linear Integrated Circuits" - 20.05.2021

Guest Lecture on "Linear Integrated Circuits" was conducted on 20th May 2021. Around 53 students of ECE IInd year had participated in this program. We have invited the Dr. J. Mohanraj Ph.D, Associate Professor, Department of ECE, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai.



Guest Lecture on "Linear Integrated Circuits"

MEMORANDIUM OF UNDERSTANDING (MOU)

The ECE Department of PMCTECH made MOU with SANARYS Private Limited, Bangalore, for providing Workshops, Seminars, add on courses and training programs

PROFESSIONAL BODIES



THE INSTITUTION OF ELECTRONICS & TELECOMMUNICATION ENGINEERING



FACULTY ACTIVITIES

BOOK PUBLICATION

| S. No | Author Name | Name of the Book/Chapter | Details of Publication | Year |
|----------|----------------|--|---|--|
| 1. | Mr.M.Kumar | Micro Controller Based System Design (ISBN: 978-93-86590-14-5) | Sri Krishna Hitech publishing company private limited | First edition june2017 Second edition Jan2021 |

JOURNAL PUBLICATIONS

| S.No | Faculty Name | Title of the Publication | Publisher | Year |
|------|---|--|---|------------|
| | | Aadhaar Enabled Patient Monitoring Using IOT | International Journal of Multidisciplinary Educational Research | 2021 |
| 1 | Dr. V. Vijayakumari | Smart Monitoring of Electrical Parameters Using Clustering Mechanism Based On Battery Threshold And Fuzzy Logic | Journal of Electrical Engineering | 2021 |
| | | Home Security Based on Face Detection And Recognition Using Labview | Journal of Huazhong University of Science and Technolog Vol:50,issue :03 | March 2021 |
| 2 | Mr.E.Rameshmarivendan An Efficient Patient Health Monitoring System Using IOT For Health Care Applications | | Waffen-Und Kostumkunde Journal Vol .11 Issue.08, | August2020 |

| | | | Pages 219 -222 | |
|---|----------------------|---|---|------------|
| | | The Effect of Stop Word Removal and Stemming In Data preprocessing | Annals of the Romanian Society for Cell Biology Vol .25 Issue.06, Pages 739-746 | May2021 |
| 3 | Ms.Merline Magrina M | Recognition of Ancient Tamil Characters from Epigraphical Inscriptions using Raspberry Pi based Tesseract OCR | International Journal of Scientific Research in Computer Science, Engineering & Information Technology, Vol .07 Issue.02, Pages 118-127 | April 2021 |
| 4 | Mr.P.Sudarsan | IoT-based Entrance for COVID-19 Indoor Safety Monitoring | International Journal of Research and Analytical Reviews, Vol.08 issue 02, Pages: 451-455 | June2021 |
| 5 | Mr.G.Umamaheshwaran | Analysis of cepstral and linear prediction in various speech signal | International Research Journal of Engineering and Technology | 2021 |

FACULTY PARTICIPATION IN WORKSHOP/FDP/STTP

| S.N | Name of the faculty | Title of the program | Date | No.of.days | organized by |
|-----|---------------------|---|--------------------------|------------|---|
| | | FDP -Recent trends in circuit and communication | 19.02.21 - 232.21 | 5 | Department of ECE,Jaipur Engineering College and Research Center.Jaipur |
| 1 | Dr.V.Vijayakumari | Orientation program on Integration of pedagogical strategies with ICT for transformation of engineering Education | 25.02.21 - 0303.21 | 7 | PSG Institute of Technology and Applied Research,Coimbato re. |
| | | Artificial Intelligence and | 15-03-2021 | 6 | Department of Computer Science |
| | | its Global | 20-03-2021 | | ,University of |

| | | Applications | | | Kerala |
|---|-----------------------|---|-------------------------------|---|--|
| | | Workshop on NAAC Assessment Accreditation a step by step process FDP on Recent Trends In Digital Image Processing | 27-05-2021 - 29.05.2021 | 3 | Chadalawada Ramanamma Engineering College, Andhrapradesh. |
| | | FDP on "Recent Trends In Digital Image Processing | 07-06-2021 - 1106-2021 | 5 | Poornima Institute of Engineering & Technology |
| 2 | | FDP -How teachers can make a difference | 15.06.2020 - 19.06.2020 | 5 | Rajalakshmi Engineering college,Chennai and AICTEMargdarsha n |
| | Mrs.S.Vidhya | FDP -7 Qc tools for education excellence | 22.06.2020 - 26.06.2020 | 5 | QCFI,Rajalakshmi Engineering college,Chennai and AICTE Margdarshan |
| | | FDP -Recent trends in circuit and communication | 19.02.2021 - 2302.2021 | 5 | Department of ECE,Jaipur Engineering College and Research Center.Jaipur |
| | Mr.E.Rameshmarivendan | FDP -Real-Time IoT Applications using Node MCU and Raspberry Pi Controllers | 25.01.21 - 30.01.21 | 4 | Department of ECE, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, chennai |
| 3 | | FDP -Recent trends in circuit and communication | 19.02.21 - 23 2.21 | 5 | Department of ECE,Jaipur Engineering College and Research Center.Jaipur |
| | | FDP -Signal Processing Systems & Optical Communication | 17.05.2021 - 21.05.2021 | 5 | Department of Electronics and Communication Engineering, SRM Valliammai |

| | | | | | Engineering College,Chennai |
|---|--------------------|--|----------------------------|---|---|
| | | FDP –Recent Research Trends in Communication Engineering | 24.05.2021- 28 .05.2021 | 5 | Indra Ganesan College of Engineering ,Trichy. |
| | | FDP -PHP and MY SQL | 18.06.20 - 24.06.20 | 7 | Department of CSE ,V.K.R, V.N.B & A.G.K College of Engineering, Gudivada, Andhra Pradesh. And in associatin with STP, IIT ,Bombay |
| | | FDP -Recent Trends in ECE | 13.07.20 - 18.07.20 | 7 | Department of ECE, Balaji institute of Technolgy and Science, Warangal, Telangan a |
| 4 | Ms.Merline Magrina | FDP -AI, ML and Datascience | 17.07.2020 - 19.07.2020 | 3 | Department of CSE,Visvesvaraya College of Engineering and Technology ,Rangareddy ,Telagana |
| | | FDP -Block chain and cyber security | 09.07.2020 - 12.07.2020 | 4 | Department of CSE, Vikas group of Institutions ,Krishna ,AP And Association with Trylogic |
| | | FDP -Recent trends in circuit and communication | 19.02.21 - 23 2.21 | 5 | Department of ECE,Jaipur Engineering College and Research Center.Jaipur |
| | | FDP -Signal Processing Systems & Optical Communication | 17.05.2021 - 21.05.2021 | 5 | Department of Electronics and Communication Engineering, SRM Valliammai Engineering College,Chennai |

| | | FDP –Recent Research Trends in Communication Engineering | 24.05.2021- 28 .05.2021 | 5 | Indra Ganesan College of Engineering ,Trichy. |
|---|-------------------------|---|----------------------------|---|--|
| | | FDP –Recent Research Trends in Computing | 31.05.2021- 04 .06.2021 | 5 | Indra Ganesan College of Engineering ,Trichy. |
| | | Emerging research opportunities in electrical engineering | 11.06.2020 - 13.06.2020 | 3 | Department of EEE,J.B. institute of Engineering and Technology,Hyderb ad. |
| 5 | Mr.S.Prasannavenkatesan | FDP -Recent trends in circuit and communication | 19.02.21 - 23 2.21 | 5 | Department of ECE, Jaipur Engineering College and Research Center. Jaipur |
| | | FDP -Cyber security technique and tools | 15.06.2020 - 19.06.2020 | 5 | Department of I.T ,sri Sairam Engineering college,Chennai |
| | | FDP -Recent trends in circuit and communication | 19.02.21 - 23 2.21 | 5 | Department of ECE,Jaipur Engineering College and Research Center.Jaipur |
| 6 | Mr.M.Kumar | FDP -Real-Time IoT Applications using Node MCU and Raspberry Pi Controllers | 25.01.21 - 30.01.21 | 4 | Department of ECE, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, chennai |
| | | STTP on FPGA based Digital system design with HDL | 03.05.2021 - 08.05.2021 | 6 | Department of ECE,Vel Tech Multi Tech Dr.Rangarajan Dr.Sagunthala Engineering College chennai |
| | | FDP -Signal Processing Systems & Optical Communication | 17.05.2021 - 21.05.2021 | 5 | Department of Electronics and Communication Engineering, SRM Valliammai Engineering College,Chennai |

| | | FDP –Recent Research Trends in Communication Engineering | 24.05.2021- 28 .05.2021 | 5 | Indra Ganesan College of Engineering ,Trichy. |
|---|----------------------|---|----------------------------|---|--|
| | | FDP -Internet of Things | 24.08.20 - 28.08.20 | 5 | PowerTraining Institute,Neiveli and Sponsored by AICTE |
| 7 | Mrs.S.Geetha | Workshop on Data Analytics with NLP for health Care Applications | 08.02.2021 - 12.02.2021 | 4 | Mepco Schlenk Engi neering College |
| | | FDP on Modern Techniques for Wireless Communication | 17.05.2021- 21.05.2021 | 5 | Madhav Institute of Technology & Science, Gwalior. |
| | | FDP –Internet of Things | 19.02.2021 25.02.2021 | 6 | Motilal Nehru Govt. Polytechnic college ,Pondicherry. |
| | Mr.Umamaheshwaran. G | FDP –Recent Research Trends in Communication Engineering | 24.05.2021- 28 .05.2021 | 5 | Indra Ganesan College of Engineering ,Trichy |
| 8 | | FDP - Embedding AI in Smart Sensors" | 07.06.2021 - 11.06.2021 | 5 | Sri Ramakrishna Engineering College. |
| | | FDP -Signal Processing Systems & Optical Communication | 17.05.2021 - 21.05.2021 | 5 | Department of Electronics and Communication Engineering, SRM Valliammai Engineering College,Chennai |
| | Mr.P.Sudarsan | STTP - Emerging Trends and Research Challenges in Next Generation Wireless Networks | 15.03.2021 to 20.03.2021 | 6 | Department of Electronics & Communication Engineering, Kongunadu College of Engineering and Technology, Trichy |
| 9 | | FDP -Recent Trends and opportunities for | 24.05.2021 - 28.05.2021 | 5 | Goa College of Engineering |

| | Research in Electronics and Computer Science Engineering | | |
|--|--|--|--|
| | | | |

FACULTY PARTICIPATION IN CONFERENCE

| S.N | Name of the faculty | Title of the event and paper | Date | No.of.days | organized by |
|-----|-------------------------|--|--------------------------|------------|---|
| 1 | Mr.S.Prasannavenkatesan | 7 th International eConfernce on Latetest trends in science ,Engineeering and Technology " ATM security withFace Recoginzation" | 26.03.2021 27.03.2021 | 2 | Karpagam Institute of Technology, Coimbatore |
| | | International eConfernce on Recent Developments in,Engineeering and Technology "ATM security withFace Recoginzation" | 03.04.2021 | 1 | Dhaanish Ahmed Institute of Technology ,Coimbatore. |
| 2 | Mrs.S. Geetha | International eConfernce on Recent Developments in,Engineeering and Technology " Automatic attendance register using face Recoginzation" | 03.04.2021 | 1 | Dhaanish Ahmed Institute of Technology ,Coimbatore. |

| 3 | Mrs.S.Vidhya | 7th International eConfernce on Latetest trends in science ,Engineeering and Technology " Voice communication based shopping tool" 7th International eConfernce on Latetest trends in science ,Engineeering and Technology "Pest trap to help farmers to avoid pesticides using light" 7th International eConfernce on Latetest trends inscience Engineeering and Technology "Rescuing sewage cleaner usingWrist band" | 26.03.2021 27.03.2021 | 2 | Karpagam Institute of Technology, Coimbatore |
|---|--------------|--|--------------------------|---|--|
|---|--------------|--|--------------------------|---|--|

STUDENTS PARTICIPATION IN WEBINARS

| S.N | Student Name | Year | Webinar | Organized By | Date |
|-----|--------------|------|--|---|------------|
| 1. | Divya.M | IV | Sentimental Analysis using RNN | Sridevi Women"s Engineering College in association with Pantech E- learning | 16-06-2020 |
| 2. | Divya.M | IV | Robotic Process Automation | Sridevi Women"s Engineering College in association with Pantech E- learning | 19-06-2020 |
| 3. | Divya.M | IV | Concepts in machine Learning using Python | University College of Engineering in association with Pantech E-learning | 05-06-2020 |
| 4. | Divya.M | IV | ThingSpeak Cloud & Internet of Things | Quaid E-Millath Govt College for Women in association with Pantech E- learning | 02-06-2020 |

| 5. | Divya.M | IV | Python Programming & Industrial Applications | Ethiraj College for Women in association with Pantech E-learning | 09-06-2020 |
|-----|---------|----|---|--|------------|
| 6. | Divya.M | IV | Data Science Using Python | Siddhartha Group of Institutions in association with Pantech E-learning | 13-06-2020 |
| 7. | Divya.M | IV | 5G Communications | DMI College of Engineering in association with Pantech E-learning | 10-06-2020 |
| 8. | Divya.M | IV | PCB Design | Narasimha Reddy Engineering College, Hyderabad in association with Pantech E-learning | 12-06-2020 |
| 9. | Divya.M | IV | Deep Learning &AI | Gopalan College of Engineering & Management, Bangalore in association with Pantech E-learning | 07-06-2020 |
| 10. | Divya.M | IV | Arduino Using Proteus | Sreenidhi Institute of Science & Technology in association with Pantech E-learning | 01-06-2020 |
| 11. | Divya.M | IV | Python Programming for IoT Enabled Biomedical Applications | Bharathi Womens" College in association with Pantech E- learning | 05-06-2020 |
| 12. | Divya.M | IV | Smart Vehicles-IoT Enabled Vehicular Communications | Tagore Engineering College in association with Pantech E-learning | 04-06-2020 |
| 13. | Divya.M | IV | LABVIEW | Karpagam College of Engineering in association with Pantech E-learning | 17-06-2020 |
| 14. | Divya.M | IV | MQTT Protocols and Hands-On | Anurag University in association with Pantech E-learning | 04-06-2020 |
| 15. | Divya.M | IV | Natural Language Processing | St.Peters" Engineering College in association with Pantech E-learning | 18-06-2020 |
| 16. | Divya.M | IV | Cognitive Radio Networks | Ganapathy Tulsi Jain Engineering College in association with Pantech E- learning | 12-06-2020 |
| 17. | Divya.M | IV | Mastering Machine Learning -An introductory Guide with MATLAB | Tamilnadu College of Engineering in association with Pantech E-learning | 01-06-2020 |
| 18. | Divya.M | IV | AI Using Python | Vishwakarma Institute of Information Technology, Pune in association with Pantech E-learning | 16-06-2020 |
| 19. | Divya.M | IV | A Machine Learning Approach for Power Management | Sathyabama Institute of Science & Technology in association with Pantech E- learning | 06-06-2020 |
| 20. | Divya.M | IV | Build your Own Regression Model in | MLR Institute of Technology, Hyderabad in | 06-06-2020 |

| | | | Machine Learning | association with Pantech E- learning | |
|-----|----------------|-----|---|---|-------------------------------|
| 21. | Divya.M | IV | Automation of Car Using Embedded Systems | Jeppiaar Engineering College in association with Pantech E-learning | 18.06.2020 |
| 22. | Divya.M | IV | Clock Domain Crossing Techniques and Clock Gating Design (VLSI) | Mahatma Gandhi Institute of Technology in association with Pantech E-learning | 14.06.2020 |
| 23. | Divya.M | IV | Gesture Recognition | Vardhaman College of Engineering in association with Pantech E-learning | 08.06.2020 |
| 24. | Divya.M | IV | Cloud Computing | Ethiraj College for Women in association with Pantech E-learning | 15.06.2020 |
| 25. | Divya.M | IV | Applying Convolutional Neural Networks-A Deep Learning | Kalasalingam Institute of Technology in association with Pantech E-learning | 02.06.2020 |
| 26. | Thriranjani.J | IV | Renewable Sources of Energy | Mohammed Sathak AJ College of Engineering | 11.07.2020 |
| 27. | Roopasri.S | IV | MATLAB Workshop | Vaanam Vasappadum-An Organization for Students | 05.12.2020 & 06.12.2020 |
| 28. | Manjula.G | IV | EV Battery Recycling Technology | SKYY Rider Institutions | 14.10.2020 |
| 29. | Divyalatha.K.S | III | National Level Virtual Hackathon 2020 | One Yes Technologies | 06.09.2020 |
| 30. | Ayisha Iliyas | IV | Engineering: Undergraduate & Masters Asia Virtual Experience Program | Microsoft | 23.08.2020 |
| 31. | Manjula.G | IV | Engineering: Undergraduate & Masters Asia Virtual Experience Program | Microsoft | 30.09.2020 |
| 32. | Manjula.G | IV | Data Analytics Virtual Experience Program | Quantium | 01.10.2020 |
| 33. | Manjula.G | IV | Data Analytics Consulting Virtual Internship | KPMG | 02.10.2020 |
| 34. | Tejavathi.S | IV | Computer Skills | Ganadipathy Tulsi"s Jain Engineering College, Vellore | 11-7-2020 |
| 35. | Rajagopal.V | IV | Math Ninjas | A.V.C College of Engineering | 5-12-2020 |

STUDENTS PARTICIPATION IN CONFERENCE

| S.N | Name of the student | Year | Title of the event and paper | Date | No.of.days | organized by |
|-----|---|------|--|--------------------------|------------|--|
| 2 | B.Baby Prasanna Aswini.C Anusha.R K.Jothi Haridoss.S Fahad Khan.M Mohan Kumar.B Harish.G | IV | International eConfernce on Latetest trends in science ,Engineeering and Technology "Pest trap to help farmers to avoid pesticides using light" 7th International eConfernce on Latetest trends in science ,Engineeering and Technology "Rescuing sewage cleaner usingWrist band" | 26.03.2021 27.03.2021 | 2 | Karpagam Institute of Technology, Coimbatore |
| 3 | Roopasri.S Sweetlin.J Shiyamala.S | IV | 7th International eConfernce on Latetest trends in science ,Engineeering and Technology "Voice communication based shopping tool" | 26.03.2021 27.03.2021 | 2 | Karpagam Institute of Technology, Coimbatore |

| 4 | Komalavalli, Ashwine.M Ilakiyabharathi | IV | International eConfernce on Recent Developments in,Engineeering and Technology "ATM security withFace | 03.04.2021 | 1 | Dhaanish Ahmed Institute of Technology ,Coimbatore. |
|---|--|----|---|------------|---|---|
| | | | "ATM security withFace Recoginzation" | | | |

INTERNSHIP

| S.No. | STUDENT NAME | YEAR | COMPANY NAME | PERIOD | NO OF DAYS |
|-------|---|------|--|--------------------------------|---------------|
| 1. | Thriranjani.J K.Punithavalli, Tharani, Shyamala, RamyaLakshmi, A.Prathisa | IV | GustoValley Technovations LLP ,Hosur | 14-09-2020 to 14-10-2020 | 30 |

TRAINING &PLACEMENT

ECE epartment always believed in equipping students with the right talent and personality to face to the industry requirements.

Our focus on appropriate training through internal as well external resources, exploring / creating new approaches on placement to attract the best from the industry, have given outstanding results.

ECE department, the placement & training cell and selectively deployed personal function with the primary aim of placing students in top – notch companies.

The department deployed team goes all out to train the students to meet the high industry expectations and attained a creditable record of placement of its final year ECE students.

The following is the placement record of the department of ECE for the past few years:

| ACADEMIC YEAR | NO OF STUDENTS PLACED |
|---------------|--------------------------|
| 2016 – 2017 | 98 |
| 2017 – 2018 | 52 |
| 2018 – 2019 | 63 |
| 2019-2020 | 45 |
| 2020-2021 | 51* |

(* as on May 2021)

| S.NO. | NAME OF THE COMPANY | NO. OF STUDENTS PLACED |
|-------|--------------------------------------|---------------------------|
| 1 | Connect | 2 |
| 2 | Prematix Software Solution Pvt. Ltd. | 3 |
| 3 | HCL | 1 |
| 4 | Altrust | 15 |
| 5 | Eureka Forbes Limited | 10 |
| 6 | Allsec Technologies Limited | 2 |
| 7 | Surtherland | 3 |
| 8 | Raising star | 5 |
| 9 | Krish Auto | 2 |
| 10 | Aquasub group | 2 |
| 11 | TCS | 6 |



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ECE | EEE | MECH |
MECHATRONICS | IT

M.E. AERO | APPL. ELECTRONICS | CSE |
ENGG. DESIGN | POWER ELECT. & DRIVES
MBA | MCA
Research Centres

POLYTECHNIC COLLEGE

Ph.D Computer Science & Engineering
Management Studies

Diploma CHEMICAL | CIVIL | CSE | ECE | EEE |
MECH | MECH (T&D) | E-ROBOTICS

- INDUSTRIAL TRAINING INSTITUTE
- MATRICULATION SCHOOL



















Technology Learning
Centre of WIPRO





NH-7, 17th Km, Hosur - Krishnagiri Highways, Koneripalli, HOSUR - 635 117.