

*DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING*

SPECTRUM
TECHNICAL MAGAZINE

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March
Volume-8

 **NARASARAOPETA**
NEC ENGINEERING COLLEGE
(AUTONOMOUS)

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Ms. K. Siva Ranjani, II Year

MESSAGES



Chairman's message

It gives me great happiness to note that the department of Electronics and Communication Engineering, NEC is bringing out the volume-8 of the department technical magazine, "SPECTRUM". From the first edition, I understand that this magazine is intended to bring out the hidden literary talents in the students and also to inculcate leadership skills among them. The newsletter has served as a platform for the students to share their knowledge and ideas. I expect the contributions to this magazine to be of high standard and quality. I wish all the success for this venture.



Vice Chairman's message

I feel extremely delighted to observe that the department of ECE is coming out with a magazine this year also with the dedicated and committed efforts of the faculty and the students of the Editorial Board. The activity depicts the commitment and involvement of students and their thirst for knowledge.

I congratulate the efforts of the members of the Editorial Board in bringing out the volume-8 of the magazine. It is because of their selfless and untiring efforts that we see the magazine enriched with variety of articles.



Principal's message

The magazine of the department is the reflection of the creativity of the students, involved in multifarious activities. It speaks about their imaginative creativity through the medium of a language given in literary and artistic shape.

I feel gratified to see that the department is doing its best in carrying out the mission of grooming the students as such professionals who are not only competent enough to combat the challenges in their life but also become good human beings with moral excellence and social sensitivity



HOD's message

I feel privileged in presenting the volume-8 of our department association magazine. I would like to place my sincere and heartfelt thanks to all those who have contributed to make this effort a success. My special thanks to the Management, for their guidance which enabled us to bring out this volume.

The magazine has a variety of articles endowed with different subjects contributed by the students of our department and their participation in various activities round the year.

I extend my gratitude to the entire team of the Editorial Board for their constant exertion, revision and support in bringing out the magazine in the present form.

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DRONES IN BLOOD DELIVERY

There is in need of a device which delivers blood packs during emergency situation at the times of flood, in areas where there is heavy traffic and to the tribal villages where medical camp has been set up and vehicles take more time in reaching the spot. Hence for this purpose hex copters can be used. It is a six-propeller device that carries a camera and features four leg shaped skis. These skis allow the device to be stable when it lands. It has more lifting power than quad copters and reaches higher altitudes. The main advantage is that it keeps flying even if one propeller blade fails, by placing the propeller blades powering the motor 120 degrees apart. They can be controlled by the pilot by using the transmitter if any problem occurs and they can be operated in dual mode. The weight of the drone is 700 gram and the payload weight is 5600 grams and speed is 21m/s (approx.). It is more cost efficient than drones using wings.

By means of INAV and N8N flight controller GPS module is fixed which makes the copter to reach its destination and return back to the source automatically. Ultrasonic sensor is used for obstacle detection. Blood packets are safely placed in a box and they are scanned to find the blood groups of the packet delivered and scan code is provided by the pilot to check whether the blood packet has been taken by the person in need. Hence there is safe landing and delivery of other critical medicines on time.

Altimeters, accelerometers, gyro meters are used to maintain the altitude and fly in the direction of the wind. The flight time is 15-30 min depending on the cargo and vertical takeoff and landing is used for safe delivery.

**G. Manoj Ram,
II Year ECE**

INDUCTORS IN INTEGRATED CIRCUITS

Most of the analog and digital circuits are possible to be implemented in Integrated Circuits, but it is still not possible to put inductor inside Integrated circuits. This is because that inductor occupies a comparatively huge area in IC than all other components being fabricated inside it. Also, the induced magnetic field affects the nearby components and changes the properties of the corresponding components. Normally in ICs, pseudo inductors (i.e.) resistors and capacitors are used instead of inductors and they perform more similar like real inductors. But in some applications (i.e.) for Radio Receivers and Satellite Communications. So, there is a need to miniaturize inductors and design them into ICs to allow for low real state requirement on PCBs. The efficient solution for this problem is the use of bond wires. Inductors can be fabricated through bond wires connecting the core die and package pins. In addition, to provide good isolation and to reduce EMI/EMC problems, Guard rings are placed around inductors. Bond wires can be made of any material like gold, silver, copper and aluminum. But gold is used mostly where performance is meant to be important criteria. If properly designed, wire bonding can be used at frequencies above 100 GHz. Bond wires are usually of 15um thickness. So, we can miniaturize the size of inductors with the help of them. As guard rings provide better isolation between neighboring components, there will be no such effect of electromagnetic interference (EMI) at high frequencies. In this way, inductors can be miniaturized and fabricated inside ICs meant for high frequency and satellite communications.

**Ch. Sai Lakshmi,
II Year ECE**

WASTE MANAGEMENT

Dust plays a dominant role in cement industry. It mostly affects the worker health such as silicosis (lung cancer) and heart attack. Hence it leads to decrease the efficiency of the machine. Our aim is to sense the dust in the Grinding sector and settle it by spraying the chemicals (Ion carboxylic foam) in the atmosphere. During cement production 1.4% of total production has been wasted in the form of dust. It affects the worker health and efficiency of the machine. In Cement manufacturing during grinding process more dust is produced by the machines, it leads to tremendous health issues (Silicosis, Heart attack) and decreasing the efficiency of the product as well as machine. We came to know that 46,000 peoples were died by silicosis due to the inhale of tiny particles of silica. By the emission of dust, it leads to damage the expensive machines that results in decrease its efficiency and also workers health are at risk. The intensity of dust is also measured by Dust Sensor. Based on sensed value, the chemical quantity is decided by the controller. Then chemical is sprayed in atmosphere using sprayer.

T. Lavanya,
III Year ECE

E-MOBILITY

The importance of e Mobility is increasing rapidly for the automotive industry and for people who want to **go green**. In 2018 there were 3.3 million battery electric vehicles on the streets worldwide. One of those measures is the Clean **Hydrogen Fuel Cell** which provides clean electricity and reduces dependency on diesel generators.

The Hydrogen (H₂) is made from water in an electrolyze, powered by 100% renewable energy (from a wind farm or solar panels), so it does not pollute the atmosphere with fumes or carbon dioxide. The fuel cell combines hydrogen with oxygen from the air to create **150kW** of electrical energy, which then powers the electric cars.

The automotive industry has certainly been getting a lot of flak in recent decades for being one of the primary contributors to environmental degradation, particularly in **air pollution**. And one of their moves is to produce more environment-friendly vehicles. Electric cars are seen to be one of the best solutions, and this spurred the introduction of electric mobility – or e-mobility – technologies.

Even a 1979 vintage Volkswagen Bull-E showcased at the festival runs on electric power.

“That supports the way we want to live - happily, sustainably and in harmony,”

Benefits of E-mobility:

- E-mobility will help reduce the amount of energy required and utilized by the transportation sector.
- E-mobility challenges car makers and manufacturers to think outside the box. As the threat of competitors' coming out with more efficient electric vehicles increase, they are also likely to put in more effort and resources into making vehicles that are better – more energy-efficient, lighter, and offer higher performance.
- E-mobility will create employment opportunities. The automotive industry will be more confident in the development
- Globalized standards and e-mobility technology will minimize barriers to trade, allowing for harmonious working relationships among manufacturers and among nations.

**T. B. V. Arun Kumar,
IV Year ECE**

NEXT ON SMART HOMES: AN EAR TO INTERNET

Technology is the campfire around which we tell our stories!

Houses have been getting progressively **smarter** for decades, but the next generation of smart homes may offer two cases what scientists are calling an **Internet of Ears**. Today's smart home features appliances, entertainment systems, security cameras and lighting, heating and cooling systems that are connected to each other and the Internet. They can be accessed and controlled remotely by computer or smart-phone apps. **The technology of interconnecting commercial, industrial or government buildings, someday even entire communities, is referred to as the "Internet of Things," or IoT.**

We are using principles similar to those of the human ear, where vibrations are picked up and our algorithms decipher them to determine your specific movements. That's why we call it the **Internet of Ears**.

There is actually a constant 60 Hz electrical field all around us, and because people are somewhat conductive, they short out the field just a little. So, by measuring the disturbance in that field, we are able to determine their presence, or even their breathing, even when there are no vibrations associated with sound. They expect the system could provide many benefits.

- The first advantage will be energy efficiency for buildings, especially in lighting and heating, as the systems adjust to how humans are moving from one room to another, allocating energy more efficiently.
- Another benefit could be the ability to track and measure a building's structural integrity and safety, based on human occupancy, which would be critical in an earthquake or hurricane.

Also, on the disadvantage we are trying to predict if there is going to be structural damage because of the increased weight or load based on the number of people on the floor or how they are distributed on that floor.

Modern Technologies make people try to do everything at once....!

**P. Bala Tejaswi,
IV Year ECE**

ELECTRONIC PILLS AND THEIR APPICATIONS

Electronic pills are the holy grail of health care technology. Ever since the past microelectronic pill was developed by Prof. Jon Cooper and Dr. Erik Johansson from Glasgow University in 1972.

An electronic pill is a multichannel sensor use for remote biomedical measurements in the body. They can specifically deliver drugs to certain parts of the body to target different types of cancer, stimulated damage tissues, tract gastric problems and measure biomarkers.

CURERENT PRODUCTS ON THE MARKET:

- **Philips intelligent pill:**

This electronic pill is a plastic capsule which is usually taken with solid food or water. Normally. It is meant to be transported through the digestive system in a natural manner. This is usually done within 24 hours and as this is done, the drug is dispensed to different parts of the body. The size is about that of a plump multivitamin and the drug can even carry out specialized actions based on the pH level of the patient.

- **Intellicap drug:**

It is rightly described as an electronic pill acting as a drug delivery and a monitoring device. It is made up of a drug reservoir, wireless communication systems, electronic controllers, sensors and a delivery pump. It takes a very minuscule form and upon ingestion, it travels through the gastro intestinal tract. The presence of onboard electronics means that the drug delivery is both precise and flexible.

**N. Chandhrika,
II Year ECE**

WIRELESS POWER TRANSFER

Wireless power transfer is transmission of electrical without wires as a physical link. In a wireless power transmission system, a transmitter device is driven by electric power from a power source, generates a time. Varying electromagnetic field, which transmits power across space to a receiver device, which extracts power from the field and technology of wireless power transmission can eliminate the use of the wires and batteries, thus increasing the mobility, convenience and safety of electronic device for all users.

Wireless power transfer is useful to power electrical devices where interconnecting wires are inconvenient, hazardous or are not possible. These devices mainly fall into two categories, near field and far field. In near field or non-radiative techniques, power is transferred over short distances by magnetic fields inductive coupling between coils of wire or by electrical fields using capacitive coupling between metal electrodes. Inductive coupling is the most widely used wireless technology; its applications include charging handheld devices like phones and electric toothbrushes, RFID tags, induction cooking and wirelessly charging or continuous wireless power transfer in implantable medical devices like artificial cardiac pacemakers or electric vehicles.

In far-field or radiative techniques also called power beaming, powers transferred by beams of electromagnetic radiation, like microwaves or laser beams. These techniques can transport energy longer distances but must be aimed at the receiver proposed applications for this type are solar power satellites and wireless powered drone aircraft with all wireless power system is limiting the exposure of people and others living things to potentially injurious electromagnetic fields.

Largest application of WPT is the production of power by placing satellites with giant solar arrays in geo synchronous earth orbit and transmitting the power as microwaves to the earth known as solar power satellites (SPS). WPT is used in moving targets like fuel free electric vehicles, fuel-free airplanes, fuel-free rockets and moving robots. The other applications of WPT are wireless power adaptive rectifying circuits and wireless sensors. WE can design wireless power transfer system for simple devices like mobile charger, mobile phones etc.

B. Banu Kalyani,
III Year ECE

VOICE OVER LTE, VOLTE TECHNOLOGY

VOLTE, voice over LTE is an IMS-based specification. Adopting this approach, it enables the system to be integrated with the suite of applications that will become available on LTE. When 3GPP started designing the LTE system, prime focus was to create a system which can achieve high data throughput with low latency and at the same time it has the capability to guarantee an end-to-end quality of service (QoS). LTE is an all-IP network and during the initial phases of its development, the ability to carry traditional service like the voice was not given much importance. Therefore, the LTE network to carry traditional circuit-switched voice calls, a different solution was required. This solution to carry voice over IP in LTE networks is commonly known as VOLTE. Basically, VOLTE systems convert voice into the data stream, which is transmitted using the data connection. In the VOLTE solution with voice services now sharing the data pipe with other data enabled services like web browsing, video streaming and social media, the ability to manage the speed, quality and volume of data along with associated signaling is critical for providing a positively differentiated user experience. This is achievable in the LTE network by way of exploiting capabilities of the IMS infrastructure, which provides a definite framework for ensuring end-to-end QoS for different applications including voice.

Dr. V. Venkata Rao
Professor & HOD
ECE Dept.,

USING SMART ANTENNAS TO SMOOTH OUT AND SPEED UP CONNECTIVITY

Reconfigurable antennas aren't new, but past research mostly focused on their use with single-hop networks involving one-to-one direct connections. In a multi hop wireless network, or MWN, data travels through a series of connection points – modems, routers, servers or satellites – hopping from one link to another until it reaches its destination.

MWNs are frequently used in military operations because of their security and range, but their locations in sometimes remote areas of the world often strain network capabilities. Like traditional wireless networks, MWNs are susceptible to interference, and with more links for the data to hop through, there's more potential for transmission delays and signal loss along the way.

Li's algorithm is expected to boost an MWN's ability to send data quickly and reliably without congested signals. Further, the small size of the reconfigurable antenna lends itself to portability, making network setup more efficient and cost-effective than with larger antennas. "With a multi hop network and a reconfigurable antenna, we could set up a network quickly with little money and without the need to build fixed infrastructure like a radio tower," explained Li. Using this system, "we could, for example, monitor the health of multiple soldiers in the field using sensors on their uniforms to transmit biomedical data back to a home base in real time."

**Mr. P.S.S. Chakravarthy,
Professor,
ECE Dept.,**

SHRINKING DIGITAL DATA FOR SPEEDIER DIAGNOSES

Technology has made it easier to create high-quality digital images, but at a cost – huge file sizes. Big data becomes a big challenge when applied to health records or imaging results needed by health care workers in remote areas or with limited technological resources. “We’re in a global transition to digitize biomedical data, but there’s a lot of it out there, and it’s in files too large to be transmitted, stored or retrieved. Compressing this data is essential to speed diagnoses and save more lives.

Bilgin is the principal investigator on a \$1.3 million project with the National Institutes of Health to develop open-source software that compresses medical slide images up to 100 times without losing detail or resolution. The resulting size will enable doctors, pathologists and other health care workers across the globe to access and analyze patients’ digital files more easily, leading to quicker second opinions and diagnoses.

“Let’s say a pathologist sees a large cluster of a certain cell type in their digital image. The software can display all digital pathology samples with a similar cellular feature,” Bilgin said. “This has tremendous potential to improve our ability to quickly identify disease.” Perhaps most revolutionary, the software can customize the compressed images for specific tasks. “A pathologist and a research scientist would have different goals in examining an image: one to check for signs of cancer, the other to identify the types of cancer cells,” Bilgin explained. “Our technology will tailor the size and format of the digital image so neither receives extra data they don’t need.”

**N. Sayedu Khasim
Asst. Professor
ECE Dept.,**

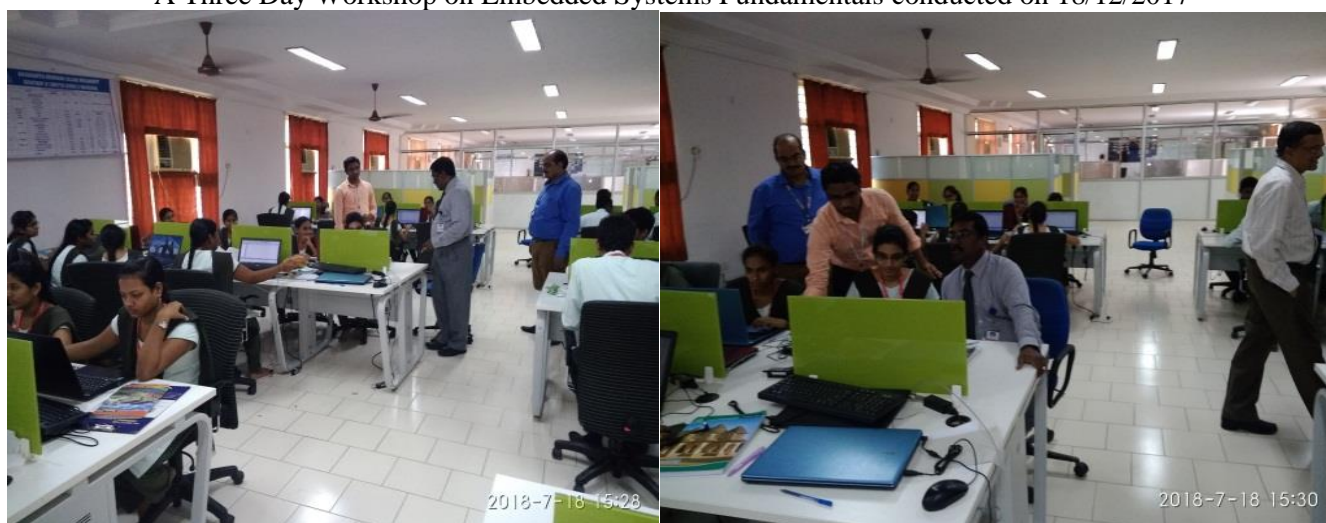
WORKSHOP DETAILS

S.No	Dept.	Name of the Training Programme/Seminar/Workshop/Conference	Name of the Resource Person and Organization	Name of the Co-Ordinator	Date/s of the event	No. of Participants
1	E.C.E	A Guest Lecture on VLSI Technology Challenges & Career Opportunities	Dr. Usha Rani Nelakuditi, Professor, VFSTR University, Guntur	Dr. A. V. Nageswara rao, Associate Professor, ECE Dept.	23/03/2018	65
2	E.C.E	A Five Day Short Term Course on Embedded Systems	Dr. Kanika Sharma, Dr. Anil Kumar, Dr. Bhaskar Gupta, Dr. Amod Kumar, Dr. S.S.Dhami, Mr. Sandeep Singhai	Dr. Prakash Kodali, Associate Professor, ECE Dept	19/03/2018 to 23/03/2018.	41
3	E.C.E	A Personality Development Training Programme	Mr. Sk. Shakir, Personality Development Trainer, Empower Training Solutions, Hyderabad.	Dr.V.Venkata Rao, Professor & Head of ECE	13/03/2018	172
4	E.C.E	A 11 day E-Learning on Python Programming	Mr. K. Naga Kumar, MD Metro Labs , Mr.M.Trilok Chowdary, Senior Technical Member, MetroLabs, Hyderabad Shrikant Bhisade, Design Engineer II, AMD India	Dr.V.Venkata Rao, Professor & Head of ECE	05/03/2018 to 22/3/2018	65
5	E.C.E	A Guest Lecture on Devop-Trics	Mr. Mathu Murty Ronanki, Advisor and Mentor for Devop-trics and Mr. P.V. Anantharamaiah, CEO for Devop-trics, Hyderabad	Dr.V.Venkata Rao, Professor & Head of ECE	23/02/2018	80
6	E.C.E	Online Programme on SCILAB Introduction & Programming	Ms.Suman, Sri Sukhmani Group of Institutions, Derabassi, Chandigarh	Dr.V.Venkata Rao, Professor & Head of ECE	22/02/2018	113
7	E.C.E	A Guest lecture on Present Trends on IoT, Industry Requirements in Current Technology	Mr. D. Rama Krishna, Founder and CEO of Efftronics Systems Private Limited, Vijayawada	Dr.V.Venkata Rao, Professor & Head of ECE	17/02/2018	30

8	E.C.E	A Webinar on Awareness on Microsoft Certifications	K. Naga Kumar, Managing Director, METRO LABS, HYDERABAD	Dr.V.Venkata Rao,Professor & Head of ECE	12/02/2018	144
9	E.C.E	A Guest Lecture on Artificial Intelligence & Analytics	Mr. Jitendra Chakravarthy, Vice President, AI & Analytics, Cognizant Technology Solutions	Dr.V.Venkata Rao,Professor & Head of ECE	10/02/2018	86
10	E.C.E	Guest Lecture on Emerging Technology Trends and New Generation Jobs	Mr. T. Srinivas, CEO, Transynt, Moghalrajpuram, Vijayawada	Dr.V.Venkata Rao,Professor & Head of ECE	25/01/2018	114
11	E.C.E	Short Term Training Programme on VLSI	Mr. V. Kishore & Mr. V. Ravi Teja, Training Member & Training Assistant, Chinmaya Micro Technologies, ECIL, Hyderabad	Dr.V.Venkata Rao,Professor & Head of ECE	05/01/2018 to 11/01/2018	80
12	E.C.E	Guest Lecture on VLSI Architecture for Signal Processing	Dr. Sk. Rafi Ahmed, Associate Professor, IIT Guwahati.	Dr.V.Venkata Rao,Professor & Head of ECE	04/01/2018	104
13	E.C.E	Seminar on Personality Development & Career Guidance	Mr. ROL. Sarma, Communication Skills Trainer, Rama Krishna Math, Hyderabad	Dr.V.Venkata Rao,Professor & Head of ECE	29/12/2017	118
14	E.C.E	Short Term Training Programme on IoT Application	Mr. Sk.Ahmed, Business Development Manager, Smart Bridge Private Limited. Hyderabad.	Dr.V.Venkata Rao,Professor & Head of ECE	27/12/2017 to 30/12/2017	75
15	E.C.E	Seminar on Career Guidance & Career Planning	Mr. K. Rambabu, Senior Project Manager, TCS, Hyderabad..	Dr.V.Venkata Rao,Professor & Head of ECE	26/12/2017	146
16	E.C.E	A Three Day Workshop on Embedded Systems Fundamentals	Andhra Pradesh State Skill Development Center,Dept of Skill Development, Government of Andhra Pradesh .	Dr.V.Venkata Rao, Professor & Head of ECE	18/12/2017 to 20/12/2017	59
17	E.C.E	A Faculty Development Program on Outcome Based Education	Dr. S. Baskar, Professor, EEE department, Tyagarajar College of Engineering, Madurai.	Dr.V.Venkata Rao, Professor & Head of ECE	28/10/2017 & 29/10/2017	33
18	E.C.E	A Four Day Workshop on Mobile Application Development	Andhra Pradesh State Skill Development Center,Dept of Skill Development, Government of Andhra Pradesh .	Dr.V.Venkata Rao, Professor & Head of ECE	25/10/2017 to 28/10/2017	39
19	E.C.E	Webinar on Free Open	Dr. Kannan	Dr.V.Venkata	12-10-2017	35

		Source Softwares – Scilab	Moudgalya, Professor, Department of Chemical Engineering, IIT Bombay.	Rao, Professor & Head of ECE		
20	E.C.E	Workshop on How to build an IoT System	Mr. Uday Kumar.	Dr.V.Venkata Rao, Professor & Head of ECE	10-10-2017	122
21	E.C.E	Interactive session on Opportunities for Higher Education in India & Abroad	Mr. K. Seshu Babu, Process Manager, Center for International Admissions and Visas, Guntur.	Dr.V.Venkata Rao, Professor & Head of ECE	21-09-2017	142
22	E.C.E	Online Programme during Pandit Deendayal Upadhyaya's centenary celebrations	Mr.Narendra Modi, Prime Minister of India.	Dr.V.Venkata Rao, Professor & Head of ECE	11-09-2017	190
23	E.C.E	Awareness Program on Abroad Education	Mr. M. Prem Chandra, Branch Manager, IDP Education India Pvt Ltd, MG Road, Vijayawada.	Dr.V.Venkata Rao, Professor & Head of ECE	18/07/2017	140
24	E.C.E	Guest Lecture on Genetic Algorithms And Its Applications To Image Water Marking	Dr. K. Ramanjaneyulu, Professor, ECE Department, PVP Siddhartha Institute of Technology, Vijayawada.	Dr. A. V. Nageswara rao, Associate Professor, ECE Dept.	14/07/2017	186

A Three Day Workshop on Embedded Systems Fundamentals conducted on 18/12/2017

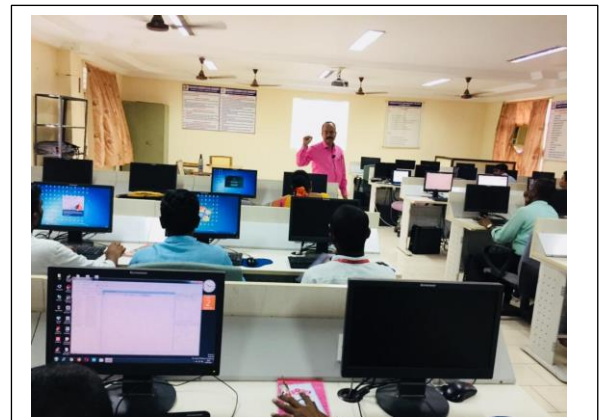




Guest Lecture on Genetic Algorithms and Its Applications to Image Water Marking conducted on 14/07/2017



Workshop on How to build an IoT System conducted on 10-10-2017



A Faculty Development Program on Outcome Based Education conducted on 28/10/2017

STUDENT TOPPERS

I-I ECE Toppers (2017 Batch):

 CHERUKULA KASI MAITHRI 17471A0409 9.75	 MOHAMMED ZAHIR HUSSAIN KHAN 17471A0481 9.42	 VALCHERLA VSWARUPACHARI 17471A0488 9.38	 YANDAPALLI N.V.S. MALIKA BRAMARAMBIKA 17471A0442 9.38	 SHAK AFRIDI 17471A0445 9.29	 NARISSETTI UMAMAHESWARI 17471A0489 9.25
 JANAPATI YASASWINI JAYA BHARATHI SAHITHI 17471A0468 9.25	 SADINENI SOWJANYA 17471A04F2 9.17	 GOUDUNURI VYAYA SAI DILEEP KUMAR REDDY 17471A0476 9.04	 PANCHUMARTHI DILEEP KUMAR 17471A0482 9.04	 NBALOINNE YVHA YASHASWINI 17471A0417 9.00	 SHAK ABHISHEK 17471A0481 9.00
				 BHOJANAPALLI TEJASWINI 17471A04E0 9.00	

II-I ECE Toppers (2016 Batch):

 HIGURUPATI SRAVANI 16471A0441 9.25	 KODURU KASI VSWANATH 16471A04C8 9.25	 THUNIGUNTLA LEE LAVANYA 16471A0414 9.45	 B.V.L.N. VISHNU BHARGAVA 16471A0429 9.32	 SUNKARA DINESHWAR RAO 16471A0421 9.23	 RESHMA 15471A04E3 9.18
 SUJARAPOLU MALA JASMINE 16471A0427 9.18	 KUNCHALA SRINADH 16471A0432 9.18	 KATTAMURI APARNESWARI 16471A0458 9.18	 NAIDU CHANDRIKA 16671A0485 9.18	 CHINAMI PUJJA VAISHNAVI 16471A04D8 9.18	 GANGADHARI MANOJHARY 16471A04E4 9.18
					 SHAK SRINADH 16471A0485 9.18

III-I ECE Toppers (2015 Batch):

 BANDI BANU KALVANI 15471A0402 87.99 %	 TALLURI LAVANYA 15471A04D7 86.54 %	 SYED RESHMA 15471A0411 85.33 %	 TAMMINENI HARIVARDHAN REDDY 15471A0477 84.36 %	 POTTURI VIJAYA 15471A0455 82.42 %
 KANNEGANTI DNYYA 15471A0476 82.42 %	 DASARI PAVAN KUMAR 16478A0428 82.12 %	 SUKHAMANCHI SRI VARSHINI 15471A04C8 81.21 %	 POLA SAI RAMYA 15471A0420 80.84 %	 T. L. SOEJANYA 15471A04H8 80.48 %

IV-I ECE Toppers (2014 Batch):

 REDDY RAMA HARITHA 12471A0428 77.73 %	 DESU GIRIDHAR TEJA 14471A0402 77.46 %	 SHAK SABEEHA 14471A0487 74.53 %	 LEILAPALLI VENKATA SAI NAGA LAKSHMI AKHILA 15475A0407 74.40 %	 PUDOTA BALATEJASWI 14471A04A1 73.73 %	 CHILAKALA HEBANTHI 14471A0435 73.80 %
 SHAK SHALINI 14473A0437 73.46 %	 PATHAN ARIF KHAN 14471A0477 73.46 %	 DOODA SADU LAKSHMI 14471A0463 73.33 %	 PATAN APSARA 14471A0485 73.33 %	 PINNIKA RAJYALAKSHMI 14471A0483 73.33 %	 MEDICHERLA LAKSHMI KAMESHWARI MANOGNA 14471A0431 72.66 %

I-II ECE Toppers (2017 Batch):



NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

I ECE, II Semester, ECE Toppers List (2017 Batch)

 CH. K. MAITHRI 17471A0409 9.69	 M.D.Z. HUSSAIN KHAN 17471A04B1 9.46	 N.V.S.L. BRAMARAMBIKA 17471A04A2 9.13	 S.K. AFRIDI 17471A04A5 9.06	 N. UMAMAHESWARI 17471A0419 9.0
 A. SARATH SAI 17471A04C3 8.94	 J.Y.J.B. SAHITHI 17471A0468 8.94	 S. SOWJANYA 17471A04F2 8.94	 G.V.S.D.K. REDDY 17471A0475 8.92	 CH. VAMSI KRISHNA 17471A04K1 8.81

Management, Principal, HOD & Faculty Express their Hearty Congratulations to Toppers in I ECE II Sem

II-II ECE Toppers (2016 Batch):

NEC NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
II ECE, II Semester, ECE Toppers List (2016 Batch)

 K.K. VISWANATH 16471A04C8 9.72	 CH. SRIVANI 16471A0441 9.54	 T. LEE LAVANYA 16471A0414 9.45	 SK. RESHMA 15471A04E3 9.32	 K. APARNESWARI 16471A0436 9.17
 A. MOUNIKA 16471A0409 9.15	 K. KUSALA 17475A0402 9.11	 G. MANOCHAKRI 16471A04E4 9.10	 D.L.M. REDDY 16471A0461 9.09	 K. SRINADH 16471A0432 9.07

Management, Principal, HOD & Faculty Express their Hearty Congratulations to Toppers in II ECE II Sem

III-II ECE Toppers (2015 Batch):

S.No	Regd.No.	Name of the Student	Marks
1	15471A04D7	TALLURI LAVANYA	686
2	16475A0401	GUDLURI LAVANYA	668
3	15471A04H8	THUMMALA LAKSHMI SOWJANYA	662
4	15471A0402	BANDI BANU KALYANI	660
5	15471A0476	KANNEGANTI DIVYA	652
6	15471A04C8	SUKHAMANCHI SRI VARSHINI	651
7	15471A0420	POLA SAI RAMYA	648
8	15471A04E1	ANNAPUREDDY KOMALI	644
9	15471A04A6	SHAIK AAZAM	641
10	15471A0477	TAMMINENI HARIVARDHAN REDDY	631

IV-II ECE Toppers (2014 Batch):

S. No.	H.T. No.	Name of the Candidate	Marks
1	14471A0435	CHILAKALA HEMANTH	496
2	14471A0406	KAKUMANU BHAVANA	491
3	14471A04A1	PUDOTA BALATEJASWI	482
4	14471A0437	SHAIK SHALINA	474
5	14471A0472	SHAIK SHABBIR	455
6	14471A04B7	SHAIK SABEEHA	464
7	14471A0434	PERUMALLA LAHARI NAGA SUREKHA	470
8	14471A0402	DESU GIRIDHAR TEJA	483
9	14471A0423	JALASUTRAM VAMSI KRISHNA	494
10	14471A0413	ARE JAHNAVI	479

NPTEL CERTIFICATION DETAILS

S.No	Name of the Staff Member	Registered Online Course	Type of Certificate
1	B Padmavthi	Networks and Systems	Elite
2	A Charles Stud	Networks and Systems	Successfully Completed
3	V R Krishna Reddy	Hardware Modelling Using Verilog	Elite
4	Y V Lakshmaiah	Dseign for Internet of things	Successfully Completed
5	A Ravindra Babu	Analog Communications	Successfully Completed
6	Ch Krishna Priya	Analog Communications	Successfully Completed
7	N Srin ivas Rao	Analog Communications	Elite
8	G Sai Ganesh	Dseign for Internet of things	Elite
9	Ch Karthik	Hardware Modelling Using Verilog	Successfully Completed
10	N Rajeev Reddy	Dseign for Internet of things	Successfully Completed
11	P Vasanthi	Modern Digital Communications	Elite
12	T Indira	Modern Digital Communications	Successfully Completed
13	K Siva Kumari	Hardware Modelling Using Verilog	Elite
14	E V Santhi	Dseign for Internet of things	Elite
15	Javvaji V.K. Ratnam	Basic electronics	Successfully Completed
16	P.S.S.Chakravarthy	Basic electronics	Successfully Completed
17	Jupalli Narasimha rao	Basic electronics	Successfully Completed
18	A.V.Nageswa ra rao	MP&MC	Elite
19	N.Sayedu khasim	Antennas	Elite
20	A.Charles stud	MP&MC	Elite

21	E.Narendra	Research writing	Elite
22	Annepaka Raveendra babu	MP&MC	Successfully Completed
23	CH.Krishna priya	Antennas	Elite
24	Zuber basha shaik	IOT	Elite
25	M.Srinivasa rao	MM&TSP	Successfully Completed
26	G.Sai Ganesh	IOT	Elite
27	T.Ravi kanth	Biomedical sgl processing	Successfully Completed
28	SHAIK CH Nagurshareef	MP&MC	Successfully Completed
29	P.Vasanthi	basic electronics	Successfully Completed
30	T.Indira	Basic electronics	Elite

