

Newsletter

e-Orbit

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Jul- Dec 2018

Volume - I

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COLLEGE

Vision of the Institute

To be one of the nation's premier Institutions for Technical and Management Education and a key contributor for Technological and Socio-economic Development of the Nation.

Mission of the Institute

To produce technically competent Engineers and Managers by maintaining high academic standards, world class infrastructure and core instructions.

To enhance innovative skills and multi disciplinary approach of students through well experienced faculty and industry interactions.

To inculcate global perspective and attitude of students to face real world challenges by developing leadership qualities, lifelong learning abilities and ethical values.

ECE Department

Vision of the Department

To produce technically competent and creative engineers who can cater to the industry and societal requirements in the field of Electronics & Communication Engineering.

Mission of the Department

M1: To impart quality engineering education to students to enhance ability to pursue knowledge by providing core competency and state of the art infrastructure.

M2: To provide industry oriented learning for empowering and facilitating the learner through industry institute interaction and leadership qualities.

M3: To promote participation in research and extension activities for addressing the social needs by providing value based education along with life-long learning abilities.

Program Educational Objectives (PEOs)

- PEO 1: Attain professional excellence or gain higher degree to face challenges posed by industry and society.
- PEO 2: Address complex problems in a responsive and innovative manner.
- PEO_3: Gain reputation by functioning effectively to address social and ethical responsibilities.

Program Outcomes (POs)

Engineering Graduates will be able to:

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. 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.
- 3. 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.
- 4. 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.

- 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. 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.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. 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.
- 11. 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.
- 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.

PSOs of the Department

- 1. Domain Specific Knowledge: Implement electronic systems related to Electronics Devices & Circuits, VLSI, Signal processing, Microcomputers, Embedded and Communication Systems to fulfill the solutions to real world challenges.
- 2. Hardware Product Development: Apply the software and hardware tools in Analog and Digital Electronic circuit design to address complex Electronics and Communication engineering problems.

A THREE DAY WORKSHOP ON ENGINEERING APPLICATIONS WITH "MATLAB"

The department of ECE has organized "A Three Day Workshop on Engineering Applications with MATLAB" from 15/11/2018 to 17/11/2018. Total 35 faculty members from ECE & EEE Departments were participated. The Pesource person was Mr.J.Prem Kumar, Senior Application Engineer, Capricot Technologies, Hyderabad.

This workshop is intended for the broader academic community who seeks to explore the impact of MATLAB in the industry and Academics. It also provides participants with a perr sonalized experience that is rich with technical knowledge.



SEMINAR ON INDUSTRIAL AUTOMATION

The Department of Bectronics and Communication Engineering organized a seminar on "Industrial Automation" for IV B.Tech ECE Students on 08.8.2018. Mr.R Krishna Chaitanya, Director, RK Automation, Guntur was the resource person for the seminar. He is an automation engineer having 3 years of experience in 'Industrial Automation' with wide applications. He is an expert in PLC with more number of International brands.

He explained about the components of industrial automation such as field instruuments, control hardware and control software. The session was good and students gained knowledge in industrial automation and sure it will be useful for their projects.





A TECHNICAL SEMINAR ON RECENT TRENDS IN VLSI & NETWORKING

The department of ECE has organized "A Technical Seminar on Recent Trends in VLSI & NETWORKING" on 27/08/2018. Students of III & IV Year B.Tech ECE participated in this seminar. Mr. M. Shanmuga Kumar & Mr.M.Dayala Kumar, Ph.D Scholars from IIIT DM Kancheepuram were the resource persons.

The objective of the seminar is to introduce the latest semiconductor devices to the students.





A FIVE DAY FDP ON "SIGNAL PROCESSING APPLICATIONS USING NI LABVIEW MULTISIM"

Department of Electronics & Communication Engineering, Narayana Engineering College, Nellore, organized a five-day faculty development program on "Signal Processing Applications using NI LabVIEW Multisim" in Association with National Instruments(Techlabs,Hyderbad) from 17th to 21st December 2018. In this FDP, 55 faculty members have participated. Mr. N. Viswanath, Sr.Application Engineer, Techlabs, Hyderbad, Dr K Murali, Prof & HOD-ECE, M. Muralidhar, R&D In-Charge were the resource persons.

The Principal of NECN addressed the staff members. FDPs will provide resources which will help the faculty to develop as scholars.

Mr. N.Viswanath addressed the staff on technological developments on signal processing methods & algorithms.

On all five days the participants were given an opportunity for hands on training in understanding of signal processing in the computer lab practicing on NI LabVIEW software.

The FDP came to an end with valedictory function where Sri. N. Viswanath was the chief guest, who has appreciated Academic Staff College and Dept.ECE, NECN for organizing this kind of FDPs. FDP came to an end with a vote of thanks proposed by Dr. K.Santhi Sagar Reddy, Coordinator for the FDP.

All the sessions were of great benefit for the participants as the topics match with the current working domain.





GUEST LECTURE ON MICRO-ELECTRO-MECHANICAL SYSTEMS (MEMS)

The department of ECE has conducted "Guest Lecture on Microo Electro-Mechanical Systems (MEMS)" on 25/10/2018. Students of III B.Tech ECE participated in this guest lecture. The resource person was Dr.Sai Krishna Santhosh.G, Associate Professor, Department of ECE, KL Deemed to be University, Vijayawada.

In the first session, the students were introduced to MEMS, and issues concerning miniaturization.

The second session deals with the fundamental fabrication methods of MEMS including photolithography, bulk micromachinn ing, surface micromachining and high-aspect-ratio micromachinn ing; assembly, system integration and packaging.

The third session reviewed the range of MBMS sensors and actuators, The final session illustrates the challenges facing the MBMS industry for the commercialization and success of MBMS.



CERTIFICATE COURSE ON EMBEDDED SYSTEMS

The department of ECE has organized "A Four day Certificate course on Embedded Systems" in association with APSSDC, Amaravathi from 09.09.2018 to 12.09.2018. Total 78 students from III Year B.Tech ECE participated in this four day course. Mr. M.Umamaheswara Rao & Mr.D.Kalyan Kumar, APSSDC, Amaravathi were the resource persons for the course.

This Certificate course aims at imparting job-oriented training on Microcontroller architectures and concepts of Embedded C language from an industry perspective. In this course students will use Embedded C for programming the microcontroller.



CERTIFICATE COURSE ON NI LABVIEW

Department of Electronics and Communication Engineering (ECE) has conducted "A Four day Certificate course on NI LabVIEW" in association with Andhra Pradesh Information Technology Academy (APITA), Vijayawada from 29th October 2018 to 1st November 2018. 63 students of III Year B.Tech ECE attended the course.



MOCK INTERVIEWS

To provide IV B.Tech students with an opportunity to practice interviewing skills in an environment similar to an actual interview and familiar with interview questions and its pattern the Dept of ECE organized "Mock Interview" session on 11.08.18. Mrs.A. Praveena, HR, UST GLOBAL, Bangalore was invited for conducting mock interviews.

Some of the interview questions asked in the session is, 1. What are your strengths? Weaknesses? Can you give an example of each?, 2. How do you come out of your weaknesses? "A mock interview provides the interviewee both an opportunity to practice and prepare for an interview", the resource person stated while concluding the session.



STUDENTS ASSOCIATION ACTIVITIES

Group Discussion

The department of ECE has Conducted "Group Discussion" on behalf of "AKHYANA" (students association) on 01/09/2018. Students of II and III Year B.Tech ECE students participated in this event. The topic for the GD is "De-monitization"





Role Play

ELECTRONICS AND COMMUNICATION ENGINEERING departs ment has Conducted "Pole Play" on behalf of "AKHYANA students association" on 03/11/2018. Students of II Year B.Tech ECE-B participated in this event wherein they played the role of

interaction between two strangers from two different countries; This activity enhanced their communicaa tion skills and boosted their morale.



Quiz

The department of ECE has Conducted "Quiz Competition" on behalf of "AKHYANA" (students association) on 04/08/2018. 48 Students of II and III Year B.Tech ECE students are participated in this event. The Quiz event had five rounds and finally the prizes and certificates were distributed to the wineers and runners by the HOD-ECE.





JAM & What's a good word

The department of ECE has Conducted "JAM & What's a good word" on behalf of "AKHYANA" (students association) on 18/08/2018. Total of 18 Students from II and III Year B.Tech ECE students participated in this event. In this event, students are asked to speak on a topic of their choice or on a given topic for a minute, to improve their communication skills.





Paper Presentation

ECE department has Conducted "PAPER PRESENTATION" on behalf of "AKHYANA" (students association) on 25/08/2018. Total of 15 Students of II and III Year B.Tech ECE participated in this event.

The objective of this event to add flavor of presentation skills to students and enhance communication skills and confidence levels in the students.



Aptitude Test

The department of ECE has Conducted "Aptitude Test" on behalf of "AKHYANA" (students association) on 27/10/2018. 15 Students of II and III Year B.Tech ECE participated in this event.



General Quiz

The department of ECE has Conducted "General Quiz Competii tion" on behalf of "AKHYANA" (students association) on 29/09/2018. Total of 68 Students of II and III Year B.Tech ECE participated in this event.





PROFESSIONAL SOCIETY ACTIVITIES

Circuit Club Inuaguration

The department of ECE has Inaugurated "CIRCUITS CLUB" on 03/08/2018. Students of II, III & IV Year B.Tech ECE are participated in this Inauguration function. P.Aparna, AGM, BSNL, Nellore and Dr Shaik Shafee, JTO, BSNL, Nellore were the resource persons for the event.

The main objective of the club is to explain the concepts of electronics in a practical way and to provide a platform for the students develope innovative ideas.





National Broadcasting Day

ECE department has celebrated "National Broadcasting Day" on 12/11/2018 in Narayana Engineering College, Nellore. All the III B.Tech ECE Students actively participated in this occasion.

Dr. Shaik Shafee, JTO, BSNL, Nellore, Andhra Pradesh was the resource person to the event.Dr. Sk. Shafee started his speech by stating that, "This Day is observed to remember that historic day when the Father of the Nation Mahatama Gandhi visited Delhi Station of All India Padio for the first and only time to record a Message for the grief-stricken refugees, in the aftermath of the Partition.

Dr.K.Murali, Head Dept. of ECE has given speech on this auspii cious occasion and given clarity on the important terms Pluralism and diversity, Independence, Quality & Accessibility.





World Television Day

The department of ECE has celebrated "World Television Day 2018" on 21/11/2018 in Narayana Engineering College, Nellore. All the IV B.Tech ECE Students participated in this event. Mr. Muralidhar Thota, Anchor, ACT TV, Nellore, Andhra Pradesh was the resource person.

The Pesource Person Mr. Muralidhar Thota, said that "In recognii tion of the increasing impact television has on decision-making by bringing world attention to conflicts and threats to peace and security and its potential role in sharpening the focus on other major issues, the United Nations General Assembly proclaimed 21 November as World Television Day (through resolution 51/205 of 17 December 1996)".

Prof. M.Muralidhar, R&D Incharge, ECE department said that, World Television Day highlights the links that exist between the broadcast media and democracy as a whole. He also stated that "Television not only provides all of us with vital information about our world, but it also helps to strengthen our democracies by getting this information directly into the hands of the people. This is why World Television Day is observed every year".





SEMINAR ON LATEST TRENDS IN SOFTWARE INDUSTRY

Mr. CH PRADEEP, working as Software Engineer, Techaffinity Global Solutions Pvt. Ltd, Chennai gave an awareness program on latest trends in software Jobs on 28th July, 2018. He is alumni of Narayana Engineering College in ECE passed in 2014.He spoke about recent trends in different software's and motivated students towards technical education.



SEMINAR ON HR MANAGEMENT ACTIVITIES

The department of ECE organized seminar on HR management activities on 28th July, 2018 for IV B.tech ECE Students. Mr. Y. SIVA KUMAR, working as Software Engineer, Amazon, Hyderabad and he is an alumnus of Narayana Engineering College in ECE passed in th year 2010. He spoke about HR management activities in software.



AWARENESS PROGRAM ON CAREER OPPORTUNITIES IN SOFTWARE TESTING

Department of ECE, NECN organized an Awareness program on "Career Opportunities in Software Testing" on 18-08-2018 by the Alumni Mr. Shameer Hussain, QA Analyst, Infor. He had 2 years experience in Software Testing.

Mr. Shameer Hussain stated that "The purpose of Software Testing and Quality Assurance is to provide the means and also the measures for testing all the aspects of a software solution, both functionally and technically. Finally he discussed the various opportunities and job roles in testing field.



CAREER GUIDANCE ON GRE

Department of ECE, NECN organized a "Career Guidance on GRE" on 16-11-2018 by the Alumni Mr. Ch.SRINATH, Software developer, MOLEX, Chicago.

Mr Ch Srinath explained the different aspects of the GRE exam, including but not limited to – the question pattern, sections, scoring pattern, the content asked, the skills required.

Students were appreciative of the information received about GRE and how to get in the top colleges abroad. Various queries that the students had were also solved by the resource person.





WOMEN'S FORUM

Awareness Program on Women Equality

The ECE department of Narayana Engineering College, Nellore organized an awareness program titled "WOMEN EQUALITY" on 27-8-18.

Mrs. A Prashanthi, Senior Assistant, R&B Department was the chief guest to the program. In her address to the students, she said that, nowadays women have equal participation in every sector



and are walking in par with men with dignity. She laid emphasis on the importance of self defense. She also interacted with the students and answered their queries and gave them solutions to overcome their day to day problems. It was a very fruitful session for the students.

Awareness Program on Improving Interpersonal Skills

Department of ECE has organized an awareness program titled "IMPROV-ING INTERPERSONAL SKILLS" on August 10th, 2018 behalf of Women's forum of Narayana Engineering College, Nellore. Mrs.A. Praveena, HR, UST GLOBAL, Bangalore has delivered a speech on improving interpersonal skills. She said that "Interpersonal Skills are



achieved only when students are focusing their thoughts to improve the communication between the fellow student in the interviews attended by the students. Students of IV year ECE were participated in the awareness program.

Awareness Program on "Women Hygiene"

Department of ECE, NECN organized an Awareness program on "Women Hygiene" on 03-11-2018 at MJPAPBCW Residential School for Girls, Golagamudi. Total 4 staff members were attended the event.

The outcome of this programme is Minimization of the medical illnesses related to infections in women and girls. Women groups are educated on the proper usage and disposal of sanitary pads as well.





FRESHER'S DAY

Continuing with the proud tradition of the college, senior students and newcomers of the college mingled with each other at the fresher's welcome party held on 25th August



2018 organized by the department of ECE at Visweswaraya Auditorium. Dr. K Murali, HOD ECE inaugurated the event and started the event with a welcome address to the Students and staff members.

It was a fun filled event at which the fresher's got an opportunity not only to showcase their talents and but also to interact with the seniors. Several cultural events were conducted like singing, dancing, talent display etc.

RASHTRIYA EKTA DIWAS – RUN FOR UNITY

The Run for Unity was organized on 31-10-18 by the department of ECE as part of the celebrations for Sardar Vallabhbhai Patel's birth anniversary in our college. This day is being commemorated as National Unity Day (Rashtriya Ekta Diwas). Dr G Srinivasulu Reddy, Principal, NECN flagged off the race from college premises. All teachers lent their presence to the cause by participating in the run. Students were carrying banners having slogans on national unity.





INDUSTRIAL VISITS

Industrial Visit to Nippo **Batteries**

Department of ECE arranged an "Industrial Visit to Nippo 💵 Batteries, Tada" on 13-10-18 for II ECE students. There students have learnt about the different types of batteries



that were manufactured by Nippo used for different household appliances. They have also seen the different stages of electrode manufacturing - mixing, coating and compressing, Battery cell manufacturing - Drying, Slitter, Assembly, Filling, Grading and Packing.

Industrial Visit to UX Business Solutions

Department of ECE organized an "Industrial Visit to UX Business Solutions, Chennai" on 09-10-2018 for III ECE students. The student batch of 60 members was visited accompanied by 4 faculty members.





Industrial Visit to SHAR

Department of ECE arranged an "Industrial Visit to SHAR" on 24-10-18 for IV ECE students. There were a total of 47 students, 4 Staff members.

The students and staff members were taken to a central building where a video was shown on 'Gateway to Space' - on the ISRO, its history, and the current facilities available and then visited Mission Control centre they told about satellite tracking and controlling while launching the SLV. The Students and staff were also taken to the Launchpad I & II and finally to the assembling centre.



Industrial Visit to APGENCO

Department of ECE organized an "Industrial Visit to Sri Damodaram sanjeevaiah Thermal Power Station, Nelaturu" on 06-10-2018 for II ECE students. The student batch of 61 members was visited accompanied by 4



faculty members. The visit enables the students to practically visualize the functioning boilers, their mounting and accessories. Material handling equipment, Cooling towers, Ponds, working of steam turbine, condensers and also generation of electricity by the use of electrical generators. The students got the practical knowledge on Electrical generators and motors which will cover in the course Electrical Technology.

Industrial Visit to NARL

The ECE department of Narayana Engineering College, Nellore organized a one day industrial visit to "NATIONAL ATMO-SPHERIC RESERCH LABORATORY" (NARL) ,Gadanki ,chittor on 28-9-18.

As a part of visit the students visited MST Radar, ICON Tower, LIDAR, Rayleigh/Mie lidar. The technical information provided by the NARL team is so informative and upgraded the students with radar technology.



PRESS CLIPS

గుండె జబ్బలపై అప్రమత్తంగా ఉండాలి

నెల్మారు (విద్య) సెప్టెంబరు 29 : గుండెజ బ్బులపై అప్రమత్తంగా ఉండాలని నారాయణ వైద్య కళాశాల గుండెవ్వాధి నిపుణులు డాక్టర్ ద్వారకానాథ్ హెచ్చరించారు. శనివారం నగరంలోని నారాయణ ఇంజనీరింగ్ కళాశాలలో ప్రపంచ గుండె దినోత్సవ కార్యకమాన్ని నిర్వహించారు. ఆయన మాట్లాడుతూ

గతంలో 50 ఏళ్లకు పైబడిన వారికే గుండె జబ్బులు వచ్చేవని, నేడు 30 ఏళ్లలోపు వారు అందుకు గురువు తున్నారన్నారు. రోజువారీ ఆహారపు అలవాట్లు, శారీ రక వ్యాయామం ద్వారానే గుండెను ఆరోగ్యంగా ఉಂచుకోవచ్చని తెలిపారు. కార్యక్రమంలో కళాశాల డైరక్టర్ ఏవీఎస్.బ్రసాద్, ట్రిన్సిపాల్ డాక్టర్ శ్రీనివాసు లరెడ్డి, డాక్టర్ మురళి, కోఆర్డినేటర్ ఎస్.గిరీష్ణాంధీ, అధ్యాపకులు, విద్యార్తులు పాల్గొన్నారు.

నారాయణలో లాబ్వ్రూ వర్మ్షేషాప్

నెల్లూరు (విద్య) అక్టోబరు 31: నగరంలోని నారాయణ ఇంజనీరి కళాశాలలో బుధవారం ఈసీసీ విభాగం ఆధ్వర్యంలో లాబేహ్య అ బంశంపై వర్క్షేషాప్ నిర్వహించారు. ఈ కార్యక్రమానికి లాబేహ్య అనో ల్ల మృ_{గా}వా దర్శమాగు. ఈ వ్యాఖంగిన రాంజ్స్తాని 2 వరుపర్స్ గీళుకో ఎమ్.లావ్యూ అరిధిగా పోల్గొని మాక్షాదా? యద్ ఫోన్స్లలో ఎరిమీగించే ఎలక్ట్రానిక్ పరకరాలను ఎలా కండ్రాలో 7, ఆలాగే పరిశ్రములో కూడా ఈ కొక్సాంటీందే ఎమమాగిస్తా డాట్వ్యూ సౌక్షెవేర్సు ఉపయోగించి ఎటువంటి కాంహొసెంట్స్ డాట్వ్యూ సౌక్షెవేర్సు ఉపయోగించి ఎటువంటి కాంహొసెంట్స్ ీ బ్లోగామింగ్ చేయవచ్చని వివరించారు. ఈ కా న డ్రాగ్రామంగ చయిపెద్చన పెపరంచారు. ఈ కా డైరెక్టర్ డాక్టర్ ఏమీఎస్,డసాద్, డ్రిన్సిపాల్ డాక్టర్ స్టార్ సాంబశివరావు, ఈనీఈ విభాగాధిపతి డాక్టు టర్ జే సునీల్కుమార్, తదితరులు పాల్గొన్నారు.

'నారాయణ'లో ముగిసిన వర్మ్షేషాపు నెల్లురు (టౌన్): నారాయణ ఇంజినీరింగ్ కళాశా

లలో మూడు రోజుల నుంచి జరుగుతున్న ల్యాబ్ వ్యూ వర్క్ష్మేషాపు బుధవారంతో ముగిసింది. కార్య క్రమానికి ముఖ్యఅతిథిగా సర్టిఫైడ్ ల్యాబ్ వ్యూ అసోసియేట్ డెవలపర్ లావణ్యశ్రీ ₹688.C యారు. ఆండాయిడ్ పోనలో ఎంపీ 3. మీడియా ప్లేయర్స్, గేమింగ్ డివైజెస్, గృహాల్లో ఉపయో చేసేందుకు ఎలా ఉపయోగిస్తారో వివరించారు. విభాగాధిపతి మురళి, కోఆర్థినేటర్ సునీల్క కళాశాల రిజి,స్టార్ సాంబశివరావు, డైరెక్టర్ మార్, తదితరులు పాల్గొన్నారు



ఎల్మ్రానిక్ పరికరాలను కంట్రోల్ ప్రసాద్, డ్రిన్సిపల్ శ్రీనివాసులురెడ్డి, ఈసీఈ