NARAYANA ENGINEERING COLLEGE NELLORE (AUTONOMOUS)

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Newsletter e-Orbit

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

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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.

FDP on "Latest Trends in VLSI Design and Implementation using EDA Tools"

Department of Electronics & Communication Engineering, Narayana Engineering College, Nellore, organized a "FDP on Latest Trends in VLSI Design and Implementation using EDA Tools". The FDP was conducted on the following dates: 06 – 04 – 2021 to 10 – 04 – 2021. The total number of participants attended the faculty development program is 30. The purpose of this FDP is to bring together researchers & PG students from Academia and Engineers & Scientists from industry and R&D institutes to have discussions on the latest trends in VLSI Design and Implementation using EDA Tools.

The inaugural function of the workshop started with a welcome address by Dr. K Murali, HOD-ECE and he presented the theme of the FDP and said that VLSI Design using EDA Tools is playing an important role in various applications. He addressed the participants and said that FDPs will help for the growth of the faculty in all facets of their professional lives. FDP will provide resources which will help the faculty to develop as scholars, to publish and share at professional conferences, and to improve their performance in the class room.
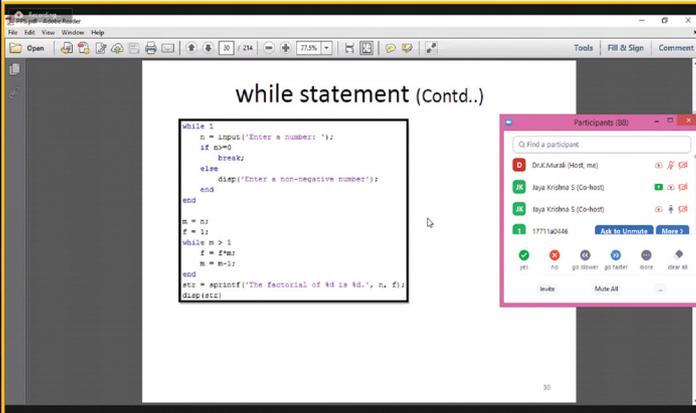
The resource person DR VIKRAM KUMAR PUDI,Assistant Professor – ECE, Department of Electrical Engineering,Indian Institute of Technology, Tirupathi. covered the following topics, Latest trends in VLSI design,,Introduction to various tools used in VLSI-Cadence virtuoso, Synopsis,Mentor Graphics,Xilinx, Tanner, Electric,rchitectural design such as CLK, RST, DATA_IN, DATA_OUT
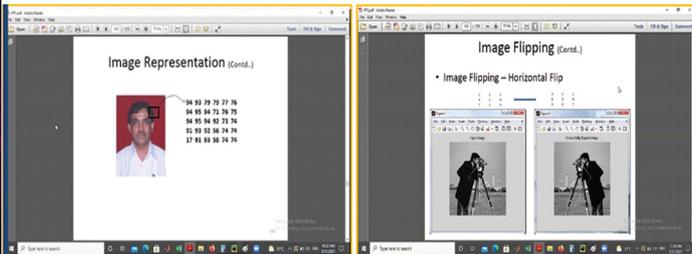
GUEST LECTURES

Guest Lecture on "MATLAB Programming"

The Electronics and Communication Engineering department has 0organized a Guest Lecture on "MATLAB Programming" from 10/05/2021 to 21/05/2021, The Resource person is Mr. Jaya Krishna Sunkara, ATD Engineer, Samsung(R&D), Bangalore. The III B.Tech students from the ECE department had attended this Lecture. Total of 123 students attended to this session.
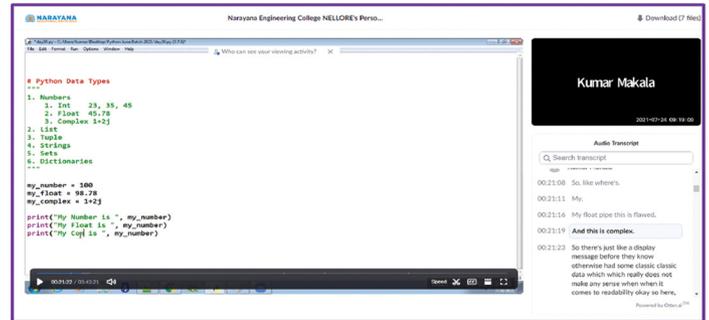

The MATLAB program files which contain code for more than one function, and the function file and main function importance and difference also explained by him. The objective of this guest lecture is to provide an opportunity for students to enrich their knowledge and skill in developing various solutions for solving engineering problems in the society. This program serves as a platform for students to work with the recent trends in Electronic simulation related areas.

Guest Lecture on "Python Programming"

The ECE department has organized a Guest Lecture on "Python Programming" from 16/06/2021 to 29/06/2021, The Resource person is Mr. M. Kumar, Sofware Engineer, KXN IT Solutions, Hyderabad. The II B.Tech students from the ECE department had attended this Lecture. Total of 138 students attended to this session.

Resource person begin with, the various Programming languages and their advantages were discussed Mr. M. Kumar emphasized that, in addition to learning the academic curriculum, students should attempt to learn the latest programing languages which are trending
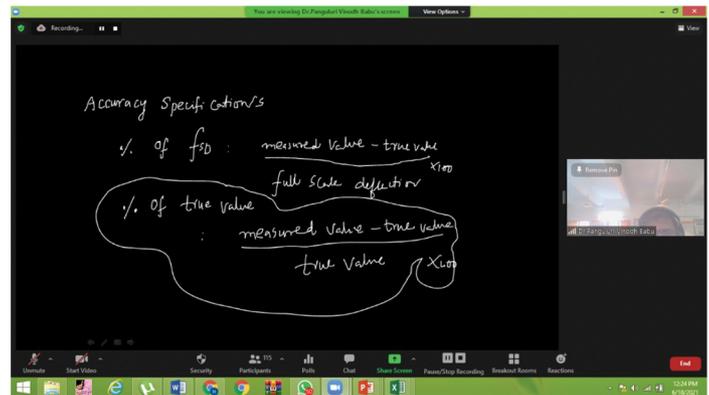

Mr. M. Kumar shared information on the Python Programming Language and its scope. He described the difference between Python and other Programming Languages. He also explained the students on how to get started with Python and define functions, library files available etc.
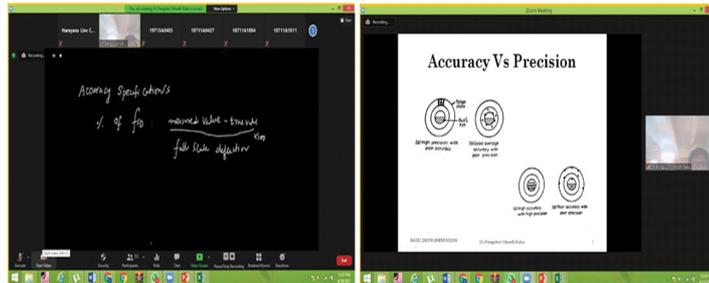

Guest Lecture on "Electronic Measurements & Instrumentation"

The guest lecture held on 18.06.2021 on behalf of "IETE" gave a deep insight to "Electronic Measurements & instrumentation". The interactive session focused on effective communication and participation and involvement of students in the session so that the agenda of the whole lecture is reached out to the students effectively.

Resource person covered topics- Sensors and trans-ducers,Measurement of displacement,Force, pressure, and temperature

SEMINARS

Awareness Program on GATE EXAM

The department of Electronics and Communication Engineering has conducted "Awareness Program on GATE EXAM" on behalf of "GSN academy" on 15/2/2021. Dr. K. Murali, Head of the Department welcomed the Mr. K. Sai Pavan, Faculty of GSN Academy, Tirupati. Students of II,III AND IV Year B.Tech students who are interested in Gate Exam came forward to participate in this event.

The topics on which took place are:
1. Gate exam.
2. how to prepare
3. topics.
4. time management

A Seminar on "Enterprise Application and Integration"

Department of Electronics and Communication engineering has conducted a seminar on "Enterprise Application and Integration" under IIIC for IV B-Tech students on 03-04-2021. The Resource Person for the event is Mr. Kumar Mukala, Founder, KXN Technologies, Hyderabad
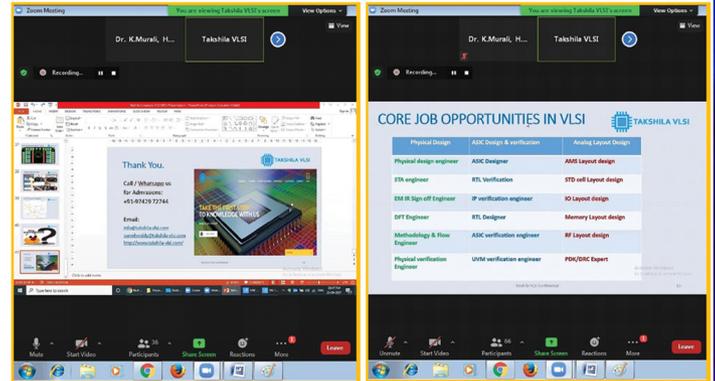

The Resource person presented a lecture almost for three hours regarding what is going on in the outside industries and also explains clearly about the working of online applications like g-Pay, Phone pay etc….

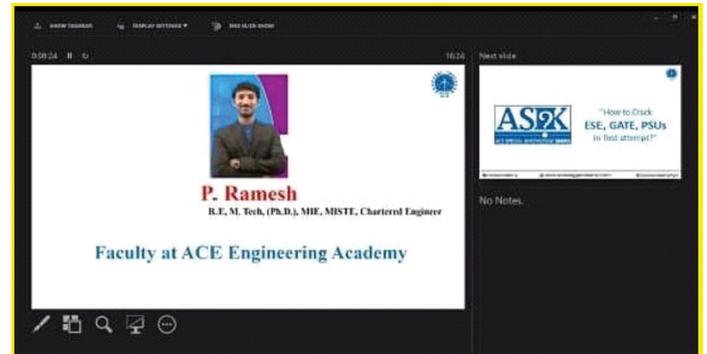## A webinar on "Career Awareness in Semiconductor Industries"

Department of Electronics and Communication Engineering has conducted a webinar on "Career Awareness in Semiconductor Industries" under IIIC for III B-Tech students on 23-04- 2021. The Resource Person for the event is Mr.Veeranji Reedy, Physical Design Engineer, Intel Technologies India Pvt. Ltd., Bangalore.

The resource person given a brief introduction on semiconductor industries, top 20 product based companies, VLSI service companies, Eligibility criteria for VLSI Jobs in Industry, Core Job Opportunities in VLSI, Courses offered on online @Takshila VLSI, Unique Features, Industry salaries Scope for freshers, Course fee structure for online, 100%placements after completing the Course.

Webinar on Career Opportunities after B.Tech

The department of Electronics and Communication Engineering has conducted "Webinar on Career Opportunities after B.Tech "on behalf of "ACE Academy, Hyderabad" on 20/05/2021. participate in this event. Students of II,III AND IV Year B.Tech came forward to participate in this event. In this competition world all the companies are looking for graduates who have higher education and have additional skills, career guidance cell is training the students by conducting this activity. Skills needed to succeed in these exams are provided ACE Academy, Hyderabad who are collaborating with Narayana.

The resource person is Pabba Ramesh, B.E, M.Tech, (PhD), as a faculty - ACE Engg. Academy and Motivational speaker- Career guidance)

Webinar on Career Guidance and Soft skills

A Program on "Webinar on Career Guidance and Soft skills " was organized by Electronics & Communication Engineering department, in association with Prolific Systems and Technology Pvt Ltd, and AI Tanmiya Group (Kuwait) Company, Hyderabad and ISTE on 28th May, 2021. A total of 31 students were benn efitted by the Seminar. Dr. K. Murali, HOD, Dept. of ECE, extended welcome and gave introduction about the proo gramme. The Program was chaired by Mrs. Suman RamiSetty, Deputy General Manager, Banka Bioloo Ltd.

Webinar on
"Future Trends in Industry: Impact of Covid-19"

Department of Electronics and Communication engineering has conducted a online webinar on "Future Trends in Industry: Impact of Covid-19" under IIIC for III B-Tech ECE & EIE students on 26-06-2021. The Resource Person for the event is Mr. M. Ravi Teja, Team Lead, KPMG International Limited, Bangalore

STUDENTS ASSOCIATION ACTIVITIES

QUIZ" on behalf of "AKHYANA"

The department of ECE has conducted "QUIZ" on behalf of "AKHYANA" (students association) on 21/01/2021. B.Tech ECE students exhibited their talents by participating in this event. Quiz competitions are always interesting and informative, which provide excitement among the students and also make them aware of current affairs.

Paper / Poster presentation Contest

The department of Electronics and Communication Engineering has conducted Paper / Poster presentation Context on behalf of "IETE" (students association) ISF on 11-6-2021. All ECE students came forward to participate in this event.

Paper presentation (PPT) plays a predominant role in this modern world, especially B.Tech students should add flavor of presentation skills to their resume as a good company look for it. A poster presentation provides a visual representation of your research through text, charts, graphs, and other visual aids. A poster presentation allows viewers to read your research material at their own leisure and to interact with you—perhaps asking questions about your methods or your findings.

WINNERS LIST
PANEL 1 (PAPER PRESENTATION)

S. No	Name of the Student	Roll Number	Prize
1.	Kodi Mahesh Babu	20711A0467	FIRST
2.	Akuluru V Kusumitha Lakshmi	20711A0405	SECOND
3.	Pagadala Charan Kumar	20711A04B2	SECOND

PANEL 2 (PAPER PRESENTATION)

S. No	Name of the Student	Roll Number	Prize
1.	Shaik Tameem Ruksar	20711A04F4	FIRST
2.	Syed Noorjahan	20711A04G8	SECOND

PANEL 3 (PAPER PRESENTATION)

S. No	Name of the Student	Roll Number	Prize
1.	Neelapareddy mahija	20711D5709	FIRST
2.	Kedari venkat	18711A04B3	SECOND

STUDENTS EXTERNAL PARTICIPATIONS

✔ Durgam V S S Revanth, Kante Bhanuteja, Katari Vaishnavi, Syed Arshad Ahmed, Naga Sivarithwik Reddy, Vanama Yuva Srilakshmi and Kuppachi Sai Gnana Harshitha of IV ECE participated in " Picture Puzzle" organized by Sona College of Technology, Salem, Tamil Nadu on 29-03-2021.

✔ Majjari Rama Devi, Medaballi Susmitha, Kante Bhanuteja and Katari Vaishnavi of IV ECE participated in " Picture Puzzle" organized by Sona College of Technology, Salem, Tamil Nadu on 29-03-2021.

✔ Vennapusa Kalyani and Patan Chandni of III ECE participated in " Just a Minute " organized by Sona College of Technology, Salem, Tamil Nadu on 29-03-2021.

✔ Magunta Dhanya Reddy, Shaik Khajaliyakhath, Shaik Masthanbasha, Sunkari Vinay Kalyan and Ravala Sreelekha of IV ECE participated in " Just a Minute " organized by Sona College of Technology, Salem, Tamil Nadu on 29-03-2021.

✔ Jaladanki Jahnavi, SK.Arshiya, G.Swapna, G.Umesh Teja Chowdary, D.Sravani, Galla Likhitha, K.Bhargavi, T.Asha, and Sk. Reshma of II ECE participated in " TATTVA 2.0 an Online Signal Processing " organized by IEEE Signal Processing Society student branch chapter GITS, Nellore on 13-06-2021.

✔ SK.khashifa Samrin, Samala Honitha, Polipaka Manasa and Paladugu Sai Priyanka of III ECE participated in " National level Online Quiz Electrical Machines" organized by Geethanjali Institute of Science & Technology,Gangavaram, Nellore St on 15-06-2021.

✔ Kovuru Pavithra and Kakani Nissy Catherin of II ECE participated in " National level Online Quiz Electrical Machines" organized by Geethanjali Institute of Science & Technology, Gangavaram,Nellore on 15-06-2021.

✔ N.Sri Poojitha, S.Nikhitha, Basivireddy Bavitha Reddy, P. Sadhana Koteswari, V.Pragna Chaitanya, Telugu Srivani, Varada Harshitha and Siddhi Aparna of II ECE participated in " National Level Quiz on Python Programming " organized by Andhra Loyola Institute of Engg & Tech, Vijayawada on 26-06-2021.

✔ G.Swapna , Chilakapati Maneesha, Chunchu Gayathri and K. Bhargavi of II ECE participated in " BRAINIACS an Online Signal Processing " organized by IEEE Signal Processing Society student branch chapter GITS, Nellore on 30-06-2021.

WOMENS FORUM

A Seminar on "Teenage Health Issues in Women"

The Narayana engineering college, Nellore Department of ECE conducted a seminar on "TEENAGE HEALTH ISSUES IN WOMEN" which was organized by women's forum of the ECE department on 30-01-21 at Vishweshwaraya Auditorium, B-Block, NEC Nellore.

The resource persons, Dr.M.PRATHYUSHA, B.D.S, Dental Surgeon & Smt.METHUKU RAJESWARI, Ramisetty Venkata Subbarao charitable trust shared their ideas with the students and discussed with the students. Dr.M.PRATHYUSHA garu insisted her speech that all should have good and better health because health is wealth

A Seminar on "Market Limitations on Women's Career"

The Narayana engineering college, Nellore Department of ECE conducted a seminar on "MARKET LIMITATIONS ON WOMENS CAREER" was organized by women's forum of the ECE department on 08-04-21 at CSE Auditorium, A-Block, NEC Nellore.

The resource person Mrs. A. Praveena, HR, UST GLOBAL, Bangalore, to the gathering. Later the resource person discussed with the students how to the women must be bold enough to face the society and supress the surrounding situations

A Seminar on "Beti Bachao Beti Padhao"

The Narayana engineering college, Nellore Departt ment of ECE conducted a seminar on "BETI BACHAO BETI PADHAO" which was organized by women's forum of the ECE department on 16-06-21 at CSE Auditorium, A- Block, NEC Nellore.

The resource person Dr.K.NARASIMHA REDDY, Senior lecturer, personality development trainer and motivaa tor discussed "BETI BACHAO BETI PADHAO " with the students

VALUE ADDED COURSES

IOT Applications and Challenges

The Electronics and Communication Engineering department has organized a Value added course on "IOT Applications and Challenges" from 4/1/2021 To 12/2/2021. The resource person was Dr.K.Murali, Professor & HOD of ECE Department, Narayana Engineering College, Nellore. The III B. Tech students from the ECE department have attended this value added course.
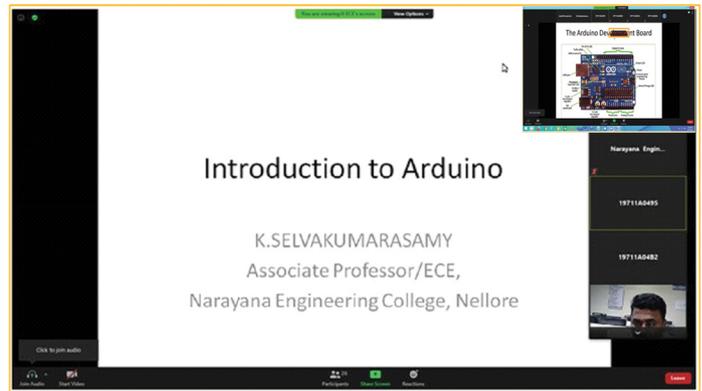

CERTIFICATE COURSES

Certificate course on "PYTHON 3.4.3"

The Electronics and Communication Engineering department has 0organized a Certificate course on "PYTHON 3.4.3" from 14/06/2021 To 17/06/2021, in Association with Spoken Tutorial IIT. The II B.Tech students from the ECE department had attended this Certificate course. Total of 100 students participated in this course. The final test was conducted on 22. 02.2021.

Introduction to Arduino Board

The Electronics and Communication Engineering department has organized a Value added course on "Introduction to Arduino Board" from 18/01/2021 To 23/01/2021. The resource person was K.Selvakumarasamy Associate Professor of ECE Department, Narayana Engineering College, Nellore. The II B.Tech students from the ECE department have attended this value added course.

STAFF EXTERNAL PARTICIPATION

1. Dr. K. S. Sagar Reddy Participated in five day faculty development program on "Formal verification of digital designs" organized by PES University, Bangalore.

2. Dr. K. S. Sagar Reddy Participated in six day faculty development program on "Artificial Intelligence Using Python" organized by Govt. College of Engineering and Ceramic Technology, West Bengal.

3.Dr. K. Murali Participated in five day faculty development program on "VLSI &Embedded system Design For Aerospace and Defence Applications" organized by Sri Venkateswara College of Engineering and Technology, Tirupati.

4. Dr. K. Murali Participated in five day faculty development program on "Recent Trends and opportunities for Research in Electronics and Computer Science Engineering" organized by Goa College of Engineering, Goa.

5. Mr. A. Siva Sai Kumar Participated in five day faculty development program on " Modern Techniques for wireless communication" organized by Madhav Institute of technology & science, Gwalior, Madhya Pradesh.

6. Mr. A. Siva Sai Kumar Participated in five day faculty development program on " IOT in 5G Technology" organized by Silicon Institute of Technology, Bhubaneswar, Odisha.
7. Mrs. M. Shanthi Participated in five day faculty development program on " machine learning in image processing applications" organized by AICTE(ATAL).

NSS CAMP

Awareness Program on World Earth Day

Department of ECE of Narayana Engineering College, Nellore in Association with Pinakini Youth Welfare Association, Nellore organized an Awareness Program on World Earth Day at our campus on 22-04-2021 . Dr.Murali, HOD, ECE stated that, World Earth day is observed every year on April 22 to create awareness about pollution and to celebrate the environment of the blue planet. This year, it will be 51st Anniversary of Earth Day. The theme of the day this year is "Restore Our Earth". We distributed saplings and done plantation too. About 5 staff members and 72 students have actively participated in the event.

PROFESSIONAL SOCIETY ACTIVITIES

Webinar on Roles and Responsibilities of Engineers to save Earth from EM pollution-Motivation towards Green Engineering

The dept. of Electronics and Communication Engineering has conducted "webinar on "Roles and Responsibilities of Engii neers to save Earth from EM pollution- Motivation towards Green Engineering" on behalf of "IETE" (students association) ISF on 31/ 5/ 21.

The Resource person Dr. Hemalatha Mahalingam is graduated in Electronics and Communication Engineering, post graduated in Information Technology and received her doctoral degree in Broad Band W ireless Communication Systems. The interacc tive session began by the introduction of speaker by the Head of the department Dr. K. Murali.

The speaker gave an extremely insightful talk on responsibilii ties of present engineers to save earth from green pollution. According to the speaker, the past few decades have seen growing realization that the present model of development is unsustainable.

The current generation, in the process of satisfying their basic needs and enjoying a better quality of life, is going to deprive the future generations of quality of life. From the loss of biodii versity with the depletion of rainforests or over-fishing to the negative effect our consumption patterns are having on the environments and climate, our way of life is placing an increasing burden on the planet. The increasing stress we put on resources and environmental systems such as water, land, and air cannot go on forever. Especially as the world populaa tion continues to increase and we already see a world where over a billion people live on less than a dollar a day

STUDENT ACHIEVEMENTS

✓ K. Pavithra of II B.Tech ECE secured Second Prize in the event "National Level E Quiz on Electrical Machines" organized by Geethanjali Institute of Science & Technology, Nellore on 15th June 2021.

✓ C. Sai Teja of III B.Tech ECE secured Third Prize in "Picture Puzzle" organized by Sona College of Technology, Chennai on 23rd March 2021.

✓ K. Bhanuteja & K. Vaishnavi of IV B.Tech ECE secured Second Prize in "Quiz" organized by Sona College of Technology, Chennai on 23rd March 2021.

✓ N. Sai Sumanth & Sk. Khajaliyakhath of IV B.Tech ECE secured First Prize in "Poster Presentation" organized by Acharya Institute of Technology, Bangalore on 15th March 2021.

✓ D. V. S. S. Revanth of IV B.Tech ECE secured Second Prize in "Group Discussion" organized by Acharya Institute of Technology, Bangalore on 15th March 2021.

INTERNSHIP (2020-21)

Name of the Industry / Company	Number of Students Attended	Duration (from-to)
letslearn.guru **Lets Learn Educational Society**	07	15-03-2021 to 30-03-2021
II Club, Hyderabad	20	12-04-2021 to 08-05-2021
EdGate TECHNOLOGIES	01	23-04-2021 to 07-05-2021
APPLY VOLT **APPLY VOLT, Vijayawada** www.applyvolt.com	01	29-05-2021 to 29-06-2021
ROBOSOL **ROBOSOL, MUMBAI** - For a care	39	07-06-2021 to 25-06-2021