NARAYANA ENGINEERING COLLEGE
NELLORE (AUTONOMOUS)

Newsletter

e-Orbit

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Jul- Dec 2022

Volume - IX

Editorial Board Member

Dr. K. Murali

Professor & HOD, Dept. of ECE

Student Editors

T. HARSHIT, IV ECE
A. SAI VISHNU, IV ECE
A. HARINI, III ECE
B. SAI TEJA, III ECE

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.

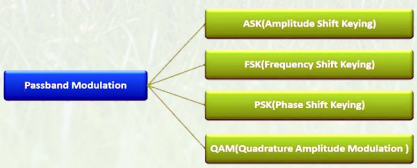
2. Hardware Product Development: Apply the software and hardware tools in Analog and Digital Electronic circuit design to address complex Electronics and Communication engineering problems.

EXPERT LECTURE ON BAND PASS DATA TRANSMISSION

The department of Electronics and Communication Engineering has conducted partial deliver by Industrial expert lecture on "Band Pass Data Transmission" on behalf of IETE which is held from 22.11.2022 to 25.11.2022. All III B.Tech ECE students need to participate in this event.

Industries are looking for graduates who have good roles and responsibilities and have additional skills in their core domain. With the motive of enhancing the students skills, the expert lecture has been organized by The Institution of Electronics and Telecommunication Engineers (IETE) of ECE department. Dr.K.Murali, HoD ECE welcomed the gathering. Mr. C. Sateesh Kumar Reddy, Convener, introduced the resource person and invited Dr. Sk. Shafee to discuss on Band Pass Data Transmission.

Dr. Sk. Shafee explained the passband transmission, the amplitude, phase or frequency of the carrier signal is regulated to transmit the bits. The incoming data stream is modulated onto a carrier and then transmitted over a band-pass channel. The types of passband transmission are illustrated as –



In ASK, the amplitude of the signal is varied to represent the signal levels, while frequency and phase remains constant. In order to represent 0 and 1, two different amplitudes are used. In FSK, the frequency of the signal is modulated to represent the signal levels, while amplitude and phase remains constant. To represent the signal levels 0 and 1, two different frequencies are used. In PSK, the phase of the carrier signal is modulated to represent the signal levels, while amplitude and frequency remains constant. Binary Phase Shift Keying (BPSK) is the simplest form of PSK where there are two signal elements represented by two different phases. In Quadrature PSK (QPSK), two bits of information are transmitted per symbol by using four different phases. QAM is a combination of ASK and PSK. Here, both the amplitude and the phase are are varied to transmit more bits per symbol. Dr. Sk. Shafee addressed the Passband Data Transmission concerns the Transmission of the Digital Data over the real Passband channel and also different categories of digital communication and focus on power, bandwidth. All the Students of III year B.Tech ECE actively involved in the session where they recollected, related the information and effectively shared their knowledge.

After Completing the Expert lecture on Band Pass Data Transmission session, Dr. K. Murali, HoD ECE appreciated the students for their active participation in the event. Mr. C. Sateesh Kumar Reddy, Convener delivered the vote of thanks.

Guest Lecture on "Antennas"

The department of Electronics and Communication Engineering has conducted "Guest lecture on "Antennas" on behalf of IETE which is held on 16/12/2022. Dr. R. Ramana Reddy, Vice Principal, JNTUA College of Engineering Pulivendula, Andhra Pradesh is thte resource person for this event. All ECE III year students came forward to participate in this event.

In this world all the companies are looking for graduu ates who have fann tastic grip responsibilities of engineers and have additional skills in their core domain. With the motive of enhancing the students skills, the area of Antennas has been organized by The Institution of Electronics and Telecommunication Engineers (IETE) of ECE department. Dr.K.Murali, HoD ECE welcomed the gathering. Mr. C. Sateesh Kumar Reddy, Convener, introduced the resource person and invited Dr. R. Ramana Reddy to discuss on Antennas. Dr. R. Ramana Reddy explained the different wireless services that operate a wide frequency range, they show significant promise in addressing new system requirements, necessary topics the students need to concentrate, the job opportunities in antennas and wireless communications and latest research in antenna design. All the Students of III year B.Tech ECE actively involved in the session where they recollected, related the inforr mation and effectively shared their knowledge.

After the Guest lecture on Antennas session, Dr. K. Murali, HoD ECE appreciated the students for their active participation in the event.

Mr. C. Sateesh Kumar Reddy, Convener delivered the vote of thanks.

Guest Lecture on "FPGA Architectures and its Applications"

The department of Electronics and Communication Engineering has conducted "Guest lecture on "FPGA Architectures and its Applications" on behalf of IETE which is held on 01/10/2022. The resource person for this event is Dr. K. Venkata Ramanaiah, Professor and Principal, YSR Engineering College of YVU, Proddatur, Andhra Pradesh. All ECE IV year students came forward to participate in this event.

Industries are looking for graduates who have good roles and responsibilities and have additional skills in their core domain. With the motive of enhancing the students skills, the guest lecture in the area of VLSI has been organized by The Institution of Electronics and Telecommunication Engineers (IETE) of ECE department.

Industries are looking for graduates who have good roles and responsibilities and have additional skills in their core domain. With the motive of enhancing the students skills, the guest lecture in the area of VLSI has been organized by The Institution of Electronics and Telecommunication Engineers (IETE) of ECE department. Dr.K.Murali, HoD ECE welcomed the gathering. Mr. C. Sateesh Kumar Reddy, Convener, introduced the resource person and invited Dr. K. Venkata Ramanaiah to discuss on FPGA Architectures and its Applications.

Dr. K. Venkata Ramanaiah explained the different types of FPGA based on Applications i.e., Low –end FRGA, Mid-range FPGAs and high-end FPGAs. FPGAs have gained rapid growth over the past decade because they are useful for a wide range of applii cations. Specific application of an FPGA includes digital signal processing, bioinformatics, device controllers, software-defined radio, random logic, ASIC prototyping, medical imaging, computer hardware emulation, integrating multiple SPLDs, voice recognition, cryptography, filtering and communication encoding and many more.

Usually, FPGAs are kept for particular vertical applications where the production volume is small. For these low-volume applii cations, the top companies pay in hardware costs per unit. Today, the new performance dynamics and cost have extended the range of viable applications. Dr. K. Venkata Ramanaiah addressed the topics to students need to concentrate, the job opportunities in digital and analog design of trending new era of VLSI. All the Students of IV year B.Tech ECE actively involved in the session where they recollected, related the information and effectively shared their knowledge.

After the Guest lecture on FPGA Architectures and its Applications session, Dr. K. Murali, HoD ECE appreciated the students for their active participation in the event. Mr. C. Sateesh Kumar Reddy, Convener delivered the vote of thanks.

One Day Professional Development Program on ARDUINO Board

The Narayana Engineering College, Nellore Department of ECE organized a one day PDP Program “ARDUINO Board and its usage in projects development" on 25-11-2022 at IOT Lab, B-Block, NEC Nellore.

The objectives of this PDP is to give introduction and teach the advantage of Arduino board to the non teaching faculty members towards the development of projects. In this session Dr.K.Murali , HOD of ECE addressed the gathering and introo duced the resource person Mr. Samarth, Embedded System Engineer, EdGate Technologies to the gathering.

Dr. G. Srinivasulu Reddy, Principal had said few words about the importance of projects in the academics. Later the resource person given the Introduction about the arduino board and its features. He has explained about the advantage of arduino and its usage in designing the projects.

He also discussed the working of the board, software tools required to use the board. A few example programs also diss cussed to make the technicians to understand the applications of the arduino.

In the evening session, Hands on lab was conducted by the resource person. Few faculty Members also joined in the lab sessions .

Finally, The Professional Development Program ended with a vote of thanks and group photo with HOD .

PROFESSIONAL SOCIETY ACTIVITIES

Power Point Presentation Competition

The department of ECE has conducted "Powerpoint Presentation Competition" on behalf of "IETE Student Forum (ISF)" on 26/09/2022. Students of III and IV Year B.Tech ECE students exhibited their talents by participating in this event.

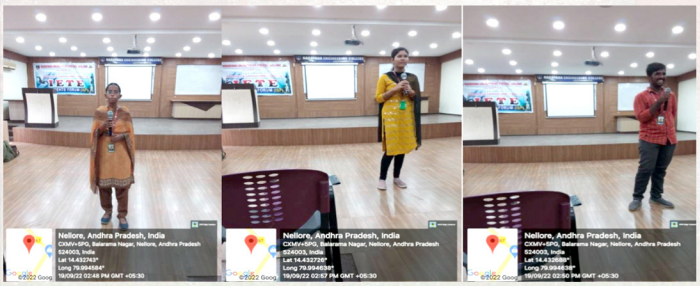
Powerpoint Presentation Competition plays a predominant role in this modern world, especially B.Tech students should add flavor of presentation skills to their resume as a good company look for it. Students given presentation on IOT applications & Machine Learning.

Winners list of Powerpoint Presentation Competition

S. No	Roll No	Name of the Student	Class	Prize
1.	19711A04A9	Syed Javid	IV ECE-B	I
2.	20711A04G8	Sd. Noorjahan	III ECE-C	II
3.	20711A04H2	T. Likitha	III ECE-C	III

Project Idea Presentation

The department of ECE has Conducted "Project Idea Presentation" on behalf of "IETE Student Forum (ISF)" on 19/09/2022. Students of II and III Year B.Tech ECE students are participated in this event. A project proposal is a document that details a new project idea. Its main objective is to communicate the idea, and what is needed to make it happen. In its most basic form, it contains a title, initial and end dates, objectives, goals and the overall main achievement pursued at completion of the project.



Winners list of Project Idea Presentation Competition

S. No	Roll No	Name of the Student	Class	Prize
1.	20711A04F9	S. Keshava	III ECE-C	I
2.	20711A04G8	Sd. Noorjahan	III ECE-C	II
3.	20711A04H2	T. Likitha	III ECE-C	III

SMART goals are a staple for planning and executing successful projects. It takes a deeper look into the finer details your audiences care about, such as:

Project plan and schedule
Resources
Project timelines
Milestones Potential roadblocks and more

Students will naturally be motivated to study more and pay attention during class if they know that later they will be tested on the material in front of their peers. Add further motivation by explaining to students before the lesson that the winners of the project presentation will be rewarded with nohomework passes or extra credit on an upcoming test.

Technical Quiz

The department of ECE has Conducted "Technical QUIZ" on behalf of "IETE Student Forum (ISF)" on 29/08/2022. Students of II and III Year B.Tech ECE students are participated in this event. Educators can use classroom quiz shows as a motivational tool for students. Students will naturally be motivated to study more and pay attention during class if they know that later they will be tested on the material in front of their peers. Add further motivation by explaining to students before the lesson that the winners of the classroom quiz show will be rewarded with no-homework passes or extra credit on an upcoming test. Classroom quiz shows can be beneficial to students for many reasons. Hands-on activities, rather than a lecture-based style of learning, help students maintain focus and develop essential problem- solving skills. Students will find a classroom quiz show to be engaging and exciting.

Winners list of Technical Quiz Competition

S. No	Roll No	Name of the Student	Class
1.	20711A0480	M. Rohit	III ECE-B
2.	20711A0499	M. Saketh Kumar	III ECE-B
3.	20711A04A4	N. Raghav Harshit	III ECE-B
4.	20711A04B2	P. Charan Kumar	III ECE-B
5.	20711A04I9	Y. Lingaswamy	III ECE-C

STUDENT ASSOCIATION ACTIVITIES

Coding Contest

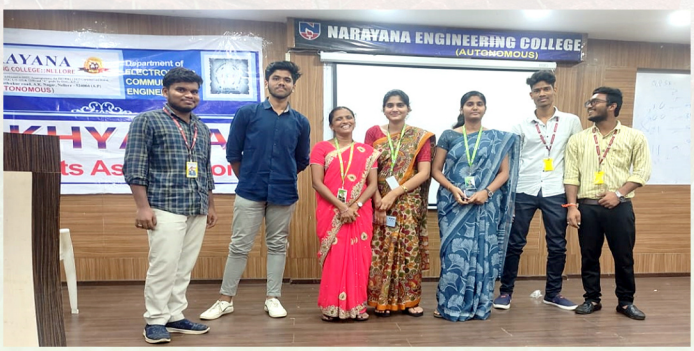
The department of Electronics and Communication Engineering has conducted "Coding Contest" under Students Association Activities on 23/11/2022. Students of II and III Year B.Tech students exhibited their talents and came forward to participate in this event. In this competition world all the companies are looking for graduates who have fantastic grip over CODING and have additional skills. Skills needed to succeed in Coding Contest. Dr. K. Murali, HoD ECE welcomed the gathering. Mr. V. Sudheer, Convener informed the students about the importance of participating in events.

There were two rounds in the coding contest. The first round was programming round in which the participants were asked to write the programming in basic C language. Out of 150 participants, 5 teams having 20 students were selected for the second round. The second round was trouble shooting round in which the selected teams were asked to identify the errors in the given programme. From the second round, three top scoring teams were selected as winning teams.

All the students of B.Tech-ECE actively participated in the coding contest and all the ISF student committee members were actively involved in organizing the event very efficiently. The students have effectively enhanced the relevant knowledge through the coding contest. After the completion of event, Dr. K. Murali, HoD/ECE appreciated the students for their active participation in the event. Totally 150 students participated the event.

WINNERS OF CODING CONTEST

S. No.	Name of the Student	Roll No.	Prize
1.	K. V. Bhumisree K. Mahesh babu	21711A04E5 21711A04H2	FIRST
2.	A. Raj Akhil Sk. PArshad Sd. Sameer Ali	21711A0402 21711A0450 21711A04C7	SECOND
3.	K. Michael A. Ganesh G. Pavan Kalyan S.Guna Prakash	21711A0424 21711A0469 21711A04A9 21711A04B9	THIRD



Essay Writing Competition

In eve of Engineers Day, the department of ECE has organized "Essay Writing Competition" on behalf of "AKHYANA" (students association) on 15.09.2022. The competition was written type where the students showed up their knowledge in the way they see this enthusiastic world and how engineers can contribute it enormously comprising the topic "TECHNOLOGY ENHANCES CREATIVITY". The Engineering community across India celebrates Engineers Day on 15th of September every year as a tribute to the greatest Indian Engineer Bharat Ratna Sir Mokshagundam Visvesvaraya. On this occasion considering the greatness and vast perspective of an engineer, the Student's Council conducted an Essay writing competition to showcase various developmental ideas considering technology.

Engineers Day is celebrated on 15th of September every year to honor the contributions of India's scientific community including scientists, researchers and engineers. The significance of the date lies in the series of technological advancements the country achieved on the day decades earlier.

Students from different departments were participated in this competition. Forms were received from students of almost all departments. Overall, 96 students from the Institute submitted their essay's. Considering these responses, the student association selected 10 best essays out of 96 by rating them over 6 various parameters- Creativity, Structure, Grammar, Adherence to Topic, Length & Wow-Factor.

Further the event was judged by Dr. K. Murali, Head of the Department, ECE. He selected 2 essays as winners of participants namely:

Winners list of Essay Competition

S. No	Roll No	Name of the Student	Class	Prize
1.	20711A0434	Hari Manasa	III ECE-A	I
2.	20711A04D9	Pavani	III ECE-C	II

Poster Presentation

ECE department has Conducted "POSTER PRESENTATION" on behalf of"AKHYANA" on 19/10/2022. II & III B.Tech students of ELECTRONICS AND COMMUNICATION ENGINEERING participated in this paper presentation event. Total no. of PPT's: 18 (in advanced topics).

A poster presentation is a way to communicate your idea or your understanding of a topic in a concise and visually engaging format. A poster presentation usually includes two elements: a poster. a brief verbal explanation of the poster content or topic. A poster presentation provides a visual representation of your study through text, charts, graphs, and other visual aids. A poster presentation allows viewers to read your study material at their own leisure and to interact with you—perhaps asking questions about your methods or your findings.

Outlining your poster first is a great way to get started. Your poster should generally contain the following content:

• A title and list of authors; the title should be catchy and serve to provide a sense of your Research idea , and serves to intrigue people into reading your poster.

• Presenters also often include an institutional logo on their poster, often near the title and authors' names.

• An introduction section, which provides a brief background of your research and, for instance, definitions of key terms

• A materials and methods section, which briefly describes your procedures, methods, and/or materials used.

Certificates & Prizes distributed to winners & runners.

S. No	Roll No	Name of the Student	Class	Prize
1.	21711A04E5	K. Venkata Bhumishree	III ECE-C	I
2.	21711A04H5	Sk. Gowher	III ECE-C	II
2.	21711A04H9	Sk. Sania	III ECE-C	III

Value Added Course on Embedded Robotics

The Department of Electronics and Communication Engineering conducted a Value Added Course on Embedded Robotics from 14/11/2022 to 19/11/2022. The resource Organization was Technotran Electronic Solutions, Nellore. The III B.Tech students from the ECE department have attended this Value Added Course.

The resource person shared his insights, real life scenarios, practical use cases and their solutions on the Embedded Systems. The course started by providing real Arduino Board experience at the registration desk itself – when students' mobile flashed up with the workshop welcome screen on their arrival at the registration desk.

On the first day the Session started with keynote lecture on Embedded Systems and it connected real world. It also provided the insights of applications of embedded systems include home appliances, office automation, security, telecommunication, instrumentation, entertainment, aerospace, banking and finance, automobiles personal and in different embedded systems projects.

The next session began with explanation about Arduino is an open-source electronics prototyping platform (Embedded System) based on flexible, easy-to-use hardware and software. Arduino can sense the environment by receiving input from a variety of sensors and can affect its surroundings by controlling lights, motors, and other actuators. The microcontroller on the board is programmed using the Arduino programming language and the Arduino development environment.

In the later sessions, They discussed about the creation of robots using Arduino: control of motors motion and their behaviors. They have introduced the common motors and how to control them with Arduino. The resource person provided basic knowledge of electronics and Arduino that will allow participants to develop their own robotic and kinetic projects afterwards. The basics of programming for Arduino were introduced as well.

Later on the course they explained about Actuators and L293D Motor Driving IC. Students practically experienced in writing Arduino code for Moving Robot and Switch Controlled Robot.

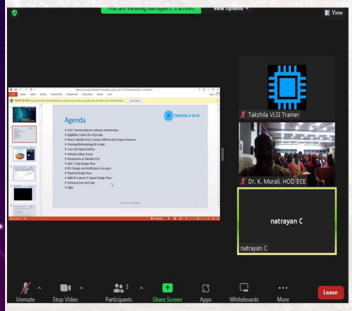
Later on the course was planned to provide hands on experience with Embedded Robotics.

Virtual Seminar on Career Opportunities in semiconductor Sector

Department of Electronics and Communication engineering had conducted a virtual seminar on "Career Opportunities in semi-conductor Sector" under Industry Institute Interaction Cell (IIIC) for IV B.Tech students on 09-12-2022. The Resource Person for the event is Mr. Mahesh, Physical Design Engineer, Intel Technologies India Pvt. Ltd., Bangalore.

The session was inaugurated in the presence of Head of the Department, around 02:35 P.M on 09-12-2022. Dr. K. MURALI, Head of the ECE Department initiated the session with motivating words and encouraged the students to be interactive during the session.

The semiconductor industry is the aggregate of companies engaged in the design and fabrication of semiconductors and semiconductor devices, such as transistors and integrated circuits. Very large-scale integration or VLSI is a process in which millions of MOS transistors are combined and integrated on a single semiconductor microchip. With the global semiconductor revenue crossing USD 440 Billion in 2020, there is an increasing need to design and produce highly efficient and specialized chips that can power new age technologies such as AI/ML, IoT, AR/VR, Cloud etc., which are increasingly becoming mainstream instead of remaining niche technologies.



INDUSTRIAL VISITS

Industrial Visit to Doordarshan Kendra

Department of ECE organized an "Industrial Visit to Doordarshan Kendra, Tirupati" on 11-11-2022 for II ECE - A students. Total of 58 students along with 2 staffs attended the visit. We started at 06:00 A.M. from the college and reached Doordarshan Kendra premises at 10:000 A.M. C. Padmaja, AE, Drawing & Disbursing Officer welcomed us at the venue. Doordarshan (abbreviated as DD; Hindi: Dṛdarśan, lit. 'distant vision, television') is an Indian public service broadcaster (Prasar Bharati) founded by the Government of India, owned by the Ministry of Information and Broadcasting and one of Prasar Bharati's two divisions.

One of India's largest broadcasting organizations in studio and transmitter infrastructure, it was established on 15 September 1959. Doordarshan, which also broadcasts on digital terrestrial transmitters, provides television, radio, online and mobile service throughout metropolitan and regional India and overseas.

Social Objectives of Doordarshan

- Act as a catalyst for change.
- To promote national integration.
- To stimulate a scientific temper in the minds of the people.
- To disseminate the message of family planning as a means of population control and family welfare.

There are so many rooms in the Doordarshan Prasara Bharati Studio engaged with various significant technical works

1. Studio
2. Production control room
3. Make up room
4. Power supply room
5. O.B/ENG

The visit came to an end at 1:00 P.M and we left the premises and reached back to college at 3:00 PM. Students felt that the visit was an informative and interesting.

Industrial Visit to Efftronics

Department of ECE organized an "Industrial Visit to efftronics, Mangalagiri" on 17-09-2022 for IV ECE - A students. Total of 47 students along with 2 staffs attended the visit. Efftronics is a technology leader in Data Acquisition Systems, Data Dissemination Systems, Multilingual Graphics and Engineering solutions.

The Efftronics Systems members are received us at the entrance and gave a brief introduction about the process of manufacturing of LED Display boards, Scrolling Displays, DATA Logger in Railways and their working in detail.

Visited Sections in the Company:

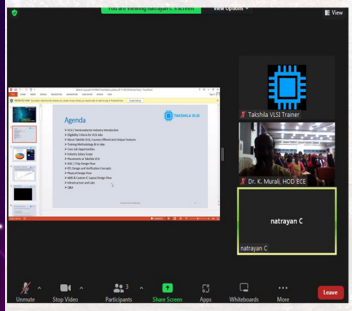
1. Prototype Testing of DATA LOGGER FOR INDIAN RAILWAY.

Virtual Seminar on Career Opportunities in semiconductor Sector

Department of Electronics and Communication engineering had conducted a virtual seminar on "Career Opportunities in semi-conductor Sector" under Industry Institute Interaction Cell (IIIC) for IV B.Tech students on 09-12-2022. The Resource Person for the event is Mr. Mahesh, Physical Design Engineer, Intel Technologies India Pvt. Ltd., Bangalore.

The session was inaugurated in the presence of Head of the Department, around 02:35 P.M on 09-12-2022. Dr. K. MURALI, Head of the ECE Department initiated the session with motivating words and encouraged the students to be interactive during the session.

The semiconductor industry is the aggregate of companies engaged in the design and fabrication of semiconductors and semiconductor devices, such as transistors and integrated circuits. Very large-scale integration or VLSI is a process in which millions of MOS transistors are combined and integrated on a single semiconductor microchip. With the global semiconductor revenue crossing USD 440 Billion in 2020, there is an increasing need to design and produce highly efficient and specialized chips that can power new age technologies such as AI/ML, IoT, AR/VR, Cloud etc., which are increasingly becoming mainstream instead of remaining niche technologies.



INDUSTRIAL VISITS

Industrial Visit to Doordarshan Kendra

Department of ECE organized an "Industrial Visit to Doordarshan Kendra, Tirupati" on 11-11-2022 for II ECE - A students. Total of 58 students along with 2 staffs attended the visit. We started at 06:00 A.M. from the college and reached Doordarshan Kendra premises at 10:00 A.M. C. Padmaja, AE, Drawing & Disbursing Officer welcomed us at the venue. Doordarshan (abbreviated as DD; Hindi: Dṛdarśan, lit. 'distant vision, television') is an Indian public service broadcaster (Prasar Bharati) founded by the Government of India, owned by the Ministry of Information and Broadcasting and one of Prasar Bharati's two divisions.

One of India's largest broadcasting organizations in studio and transmitter infrastructure, it was established on 15 September 1959. Doordarshan, which also broadcasts on digital terrestrial transmitters, provides television, radio, online and mobile service throughout metropolitan and regional India and overseas.

Social Objectives of Doordarshan

- Act as a catalyst for change.
- To promote national integration.
- To stimulate a scientific temper in the minds of the people.
- To disseminate the message of family planning as a means of population control and family welfare.

There are so many rooms in the Doordarshan Prasara Bharati Studio engaged with various significant technical works

1. Studio
2. Production control room
3. Make up room
4. Power supply room
5. O.B/ENG

The visit came to an end at 1:00 P.M and we left the premises and reached back to college at 3:00 PM. Students felt that the visit was an informative and interesting.

Industrial Visit to Efftronics

Department of ECE organized an "Industrial Visit to efftronics, Mangalagiri" on 17-09-2022 for IV ECE - A students. Total of 47 students along with 2 staffs attended the visit. Efftronics is a technology leader in Data Acquisition Systems, Data Dissemination Systems, Multilingual Graphics and Engineering solutions.

The Efftronics Systems members are received us at the entrance and gave a brief introduction about the process of manufacturing of LED Display boards, Scrolling Displays, DATA Logger in Railways and their working in detail.

Visited Sections in the Company:

1. Prototype Testing of DATA LOGGER FOR INDIAN RAILWAY.

Separate pipes are present to deliver cryogenic fuels, which are supplied at 180 degrees Celsius.

Finally, there are exhaust deflection ducts which deflect the exhaust gases through underground tunnels to a place which is a few tens of metres away. In case the flame returns to the rocket, balance will be lost and the rocket may topple. The tunnels are filled with water to reduce pressure and temperature. Also, cryoo genic fuel tanks are available in separate towers. Each floor in the launch pad is 4m high. This launch pad is called 'umbilical' due to the presence of the pipes which feed fuel to the rocket.

Launching pad is surrounded by four large towers which are helpful to capture the launch images and also to ground the potential during thunderstorms to protect the launching pad.

First Launch Pad:

Later we visited first launch pad, unlike the 'umbilical' type, this is a pedestal type. The whole tower moves away from the rocket just before the blast off. As there is a PSLV launch in the next month and that process was taking place at the time, entry was denied and we were allowed to see this from a distance. At the end we visited Space Museum.

Industrial Visit to National Atmospheric Research Laboratory (NARL)

Department of ECE organized an Industrial Visit to "National Att mospheric Research Laboratory (NARL), Gadanki" on 02-099 2022 for III ECE - A students. Total of 39 students along with 2 staffs attended the visit. NARL is an autonomous research laboo ratory fully funded by the department of space, government of India and involved in carrying out fundamental and applied ree search in atmospheric and space science

NARL at Gadanki near Tirupati is an autonomous society supp ported by Department of Space. NARL regularly operates state-of-the-art MST radar, Rayleigh / Mie Lidar, Boundary Layer Lidar, Sodium Lidar, Lower Atmospheric Wind Profiler, Sodar, Disdrometer.

The technical information provided by the NARL team is so inforr mative and upgraded the students with Radar Technology, Optii cal Rain Gauge, Dual frequency GPS receiver, Automatic Weather Station apart from regular launching of the GPS ball loon sonde etc.

NARL mainly concentrate on the atmospheric changes in the varii ous layers of atmosphere like troposphere, stratosphere, mesoo sphere and ionosphere. They have nearly 20 types of RADARS to observe these changes. The main motto of this laboratory is weather prediction. They predict the future values of weather based on the initial values of weather like humidity, pressure, temperature of that day.

The total RAM of the super computer is 2.3TB which was amazz ing. Every day they are storing atleast 500 GB of data regardd ing weather prediction values. This is the reason why NARL has data storage center. In data storage center they have weather predicted reports from last four years to till date. Out of which primary and secondary storage is there, newly predicted weather values are stored in primary storage mad

up of semiconductor and old values are stored in secondary storage made up of magnetic tapes.

MST RADAR is behind the main seminar hall of NARL where large number of dipole antennas and yagi-uda antennas are placed. Nearly thousands of antennas are placed over there out of which every 16 antennas are grouped into one block. This MST radar ,in particular gives us the information regarding mesosphere, stratosphere and troposphere.

The following are the Highlights of the visit

1. Students got witnessed the bird eye view of NARL campus, MST Radar, HF Radar, Rain Radar, X-Band Radar, Radar Electronics laboratory

2. Students visited High performance computer lab, LIDAR (laser Radar) lab ,L-band Radar lab, Sodar lab

Imapct Analysis:

3. The Students gained practical exposure on digital signal processing, antennas and Radars to enhance their knowledge in respective course and get excellent results in their curriculum.

4. The Students Gained better practical exposure on Radar Systems.

Industrial Visit to Doordarshan Kendra

Department of ECE organized an "Industrial Visit to Doordarshan Kendra, Tirupati" on 02-07-2022 for II ECE - A students. Total of 51 students along with 2 staffs attended the visit.

We started at 06:00 A.M. from the college and reached Doordarshan Kendra premises at 10:00 A.M. C. Padmaja, AE, Drawing & Disbursing Officer welcomed us at the venue.

Doordarshan Director in Tirupati Ho, Tirupati is known to satisfactorily cater to the demands of its customer base. The business came into existence in 2008 and has, since then, been a known name in its field. It stands located at Tirupati HO-517501.The business strives to make for a positive experience through its offerings.

Customer centricity is at the core of Doordarshan Director in Tirupati Ho, Tirupati and it is this belief that has led the business to build long-term relationships. Ensuring a positive customer experience, making available goods and/or services that are of top-notch quality is given prime importance.

India's leading B2B market place, Jd Mart ensures engaging in business activities is a seamless process for small and medium enterprises as well as large businesses. In a wake to enable these businesses to reach their audience, this portal lets them showcase their offerings in terms of the products and/or services through a digital catalogue. This business has a wide range of product offerings and the product/catalogue list includes Local Channels, Satellite TV Channels, Television Broadcasting, TV Channel, TV Net Broadcast Software etc. It is located at AIR Bypass Road, AIR Staff quarters, New Balaji Colony, Tirupati, Andhra Pradesh – 517501.

Doordarshan (abbreviated as DD; Hindi: D?rdarśan, lit. 'distant vision, television') is an Indian public service broadcaster founded by the Government of India, owned by the Ministry of Information and Broadcasting and one of Prasar Bharati's two divisions. One of India's largest broadcasting organisations in

in studio and transmitter infrastructure, it was established on 15 September 1959. Doordarshan, which also broadcasts on digital terrestrial transmitters, provides television, radio, online and mobile service throughout metropolitan and regional India and overseas.

The channel began modestly as an experimental broadcaster in Delhi on 15 September 1959, with a small transmitter and a makeshift studio. Regular daily transmission started in 1965 as part of All India Radio, with a five-minute news bulletin read by Pratima Puri. Salma Sultan joined Doordarshan in 1967, and became a news anchor. Krishi Darshan debuted on Doordarshan on 26 January 1967, and is Indian television's longest running program.

Television service was extended to Bombay (now Mumbai) and Amritsar in 1972. Until 1975 only seven Indian cities had television service, and Doordarshan was the country's sole television provider. Television service was separated from radio on 1 April 1976.[4] The All India Radio and Doordarshan were placed under the management of separate directors-general in New Delhi. In 1982, Doordarshan became a national broadcaster.

Doordarshan operates 46 studios and 21 television channels: two all-India channels (DD National and DD News), 17 regional satellite channels, 11 state networks, an international channel (DD India), a sports channel (DD Sports), DD Bharati, DD Retro, DD Urdu and an Explaining about Video Mixing agricultural channel, DD Kisan. DD National (formerly DD-1), regional and local programs are carried on a time-sharing basis for terrestrial broadcasting only. DD News, launched on 3 November 2003 replacing DD Metro (formerly known as the DD-2 entertainment channel), provides 24-hour news. These channels are relayed by all terrestrial transmitters in India. The regional-language satellite channels have two components: a regional service for a particular state (relayed by all terrestrial transmitters in the state), and additional programs in the regional language available through cable operators and DTH operators. DD Sports broadcasts sporting events of national and international importance. It is the only sports channel which telecasts rural sports such as kho-kho and kabbadi.

On 9 March 2019, Prasar Bharati brought 11 more State DD Channels on the Satellite footprint of India through DD Free Dish. This includes five channels for Northeastern states. This will go a long way in strengthening regional cultures and fulfilling people's aspirations. These are – DD Bangla, DD Chhattisgarh, DD Goa, DD Haryana, DD Himachal Pradesh, DD Jharkhand, DD Manipur, DD Meghalaya, DD Mizoram, DD Nagaland, DD Tripura and DD Uttarakhand DD Bangla launched on 9 August 1975, the network's programming consists of soap operas, infotainment series, news and current affairs, social programs and films in Bengali language.

PLACEMENTS SUMMARY

S. No.	Name of the Company	No. of Students Selected
1.	Capgemini	02
2.	HCL	39
3.	Hexaware	01
4.	Infosys	04
5.	KPIT	06
6.	MindTree	03
7.	TCS	05
8.	TerraLogic	01
9.	Turing Minds	06
10.	Wipro	12