



FLASH

Electronics & Telecommunication Engineering
Departmental Newsletter

Volume 04, Issue 01, July- Dec. 2019

Editors: Prof. Flavia Leitao Student Coordinator: Krystal Fernandes

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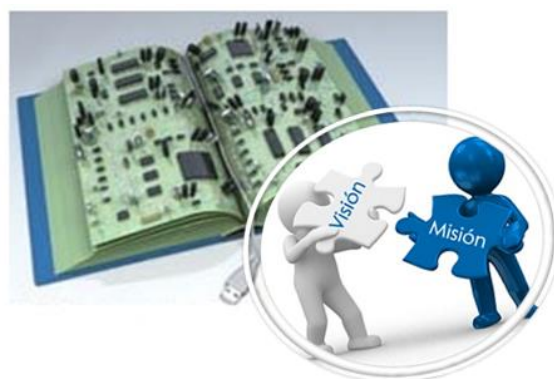
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VISION

To evolve into a Holistic Learning Hub that moulds technologically proficient engineers in the field of Electronics and Telecommunication; contributing to the global industry and society with Integrity, Ethics and Professionalism as envisaged by Don Bosco



MISSION

- To impart education abreast with the fundamentals and advances in technology and transform students into globally accepted professionals
- To foster networking with all stakeholders for promoting technical innovation, research and entrepreneurship
- To encourage various skill enhancing activities and extra-curricular activities to instill high levels of work ethics and responsibility for a better society

DEPARTMENTAL DETAILS

The Department has well qualified and experienced faculty in the areas of Electronics & Communication, VLSI, Embedded, Signal Processing, Automation and Control Engineering. The Department offers Bachelors of Electronics & Telecommunication Engineering programme, with total number of 60 seats in the 1st year and 12 seats for lateral entry into the second year.

The department has been organizing various programs to enhance the Industry -Institute interaction through field visit and workshops. Every year students of Third year and Final Year are exposed to Industry through internship programme of 1 month duration for industry experience.



Department has 12 fully functional Laboratories as listed below, along with the different Software.

- Embedded Lab
- e-Yantra Robotics Lab

➤ LABORATORIES

- Electronics Engineering
- Power Electronics and Control Systems
- Devices and Circuits
- Communication Engineering
- Microprocessor
- Electrical Engineering
- Electrical Technology
- Digital Systems and Electronic Instrumentation
- Signal Processing Lab
- Advanced Communication Lab

SOFTWARES

MATLAB
Xilinx 14 Version
OSCAD
MAGIC
LabVIEW
OCTAVE
POISARPro

KITS

8051 kits
ARM kits
PIC kits
PLC kits
LAN Trainer kits
OFC Kits
PSoC ARM Cortex Kits

MoUs Signed between DBCE (ETC Dept.) and Industries

There is always a talk about the gap between academia and industry. To bridge the gap, Don Bosco College of Engineering signed 23 MoUs on 15th October 2019 at the Taleigao Community hall under the auspices of the inaugural of the Centre for Excellence for Employability Enhancement (CEEE) in the presence of Hon. Chief Minister – Dr Pramod Sawant.

Out of the 23 MoUs Signed, 4 were with the Industries in the Electronic Domain, which are as follows: Enviro Guru (OPC) Pvt. Ltd., InfiCorridor Solutions Private Limited, SUN360 and Mrinq Technologies LLP.



The Objectives and scope of the MoU was to:

- To identify domains with mutual interest, and to further collaborate for capacity-building, research and development.
- To provide mentoring to selected students by the industry-counterpart in the form of internship and guidance for academic projects.
- To organise lecture series for students from industry experts.
- To aid learning process with hands-on in the form of guided mini projects.
- To enable interaction of college teaching staff with industry professionals for research and development.



e-Yantra Robotics Lab Set-up in DBCE

The e-Yantra Lab setup Inaugural and Valedictory function of Task Based Training was scheduled on the 30th of Aug 2019 at 3:00pm, which was to take place online with IITB.

The ceremony started with an opening address by the e-Yantra Team. The function at DBCE commenced with lighting a lamp and symbolic ribbon cutting ceremony by the Director, the Principal and the Head of ETC Department.



This was followed by the opening of the e-Yantra signage which symbolically declares The Lab inaugurated. Dr. Varsha Turkar then handed over the robotic kit to Team Leader Prof. Flavia Leitao.

The e-Yantra Faculty Team, comprising of Prof. Flavia Leitao, Prof. Yeshudas Muttu, Prof. Mathilda Colaco and Prof. Deron Rodrigues were felicitated for successfully completing the task based training. The team was awarded **Grade A** in this training.

The floor was transferred back to IITB e-Yantra team, where they welcomed the Don Bosco College of Engineering to the e-Yantra family by using a “Diya Application”. Thereafter the student’s e-Yantra team was installed.



STUDENT'S CORNER

DBEATS Installation

The 8th Annual Installation of DBEATS (Don Bosco Electronics and Telecommunication Society) was held on 31st August 2019 at 10:00am in the College Auditorium.

The Chief Guest for the function was Dr. Nithin Kumar Y. B, Head of Electronics and Communication Engineering, NIT Goa. Besides the chief guest, the occasion was graced by the presence of Dr. Neena Panandikar, Principal- Don Bosco College of Engineering, Fatorda, Dr. Varsha Turkar, Head of ETC Department, Prof. D. S. Vidhya and Prof. Deron Rodrigues- DBEATS Faculty Coordinators and Mr. Nixon Coutinho – DBEATS Chairperson as the dignitaries on the dais.

The ceremony commenced with a welcome prayer recited by Ms. Sibga Shaikh followed by the lighting of the traditional lamp by the dignitaries. A short video of D-BEATS activities held during the year 2018-2019 was played. The new DBEATS council members were then introduced by Prof. Deron Rodrigues and were welcomed by Dr. Varsha Turkar and Prof. D. S. Vidhya with flower and badges.



This was followed by the oath taking ceremony by the newly elected members. The Chief Guest, in his address emphasized on thinking beyond one's own stream of education. He encouraged students to work with other disciplines in sharing ideas to build up projects.



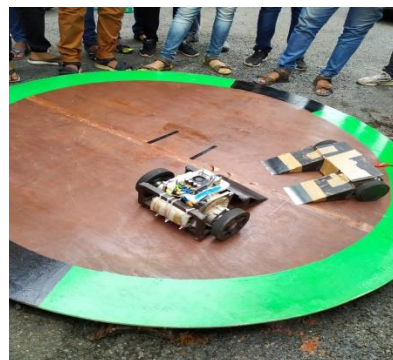
TECHNICAL FEST- TECHNOVA 2019

The Department of Electronics and Telecommunication Engineering in association with DBEATS organized a two-day state level inter-collegiate technical festival, TECHNOVA 2019 on the 17th & 18th of October 2019. The Chief Guest for the Inaugural function was Dr. Jonathan Joshi, C.E.O. Eduvance. The tech-fest aimed to bring together students from various colleges across the state of Goa and provide them a platform to showcase their talents and innovative skills with a competitive spirit.



The Coordinators were Prof. Michelle Araujo e Viegas, Prof. Melba D'Souza, DBEATS coordinators, Prof. Deron Rodrigues, Prof. D.S. Vidhya and Technova student coordinator Mr. Nixon Coutinho.

The fest executed a total of 16 events, each organized at its best of quality. The various Technical Events held were Line Follower, Robo Sumo, Robo Soccer, Circuit builders, IoT Masterchef, Code Warriors, Chart It Out, Tech Buzz and Technical Cross Words. Whereas the Skill Development Events comprised of Brain Jammers, Frame It, Speak up Stand Out, Sell It Out, Minute to Win It, Short Film and the Gorgons Gambit.



A Workshop was organised on “PCB design and Fabrication”. A seminar on “First aid using Electronic Technology”, was also conducted.

The valedictory function was held on 18th October 2019. The Chief Guest for the function was Mr. Ryan Pinto, CEO of Innovantix. This year TECHNOVA 2019 received an overwhelming response in all its events and attracted a huge crowd. The overall winners of TECHNOVA 2019 was Goa College of Engineering, Farmagudi.

Workshops/Seminars/In-house Trainings

CERTIFIED COURSE ON “ARDUINO & IoT”

As a part of the Internship training, the ETC department of DBCE in collaboration with Eduvance conducted a 6 day certified course on “Arduino & IoT”, for the T.E students of ETC from the 8th to the 13th of July 2019. A total of 41 students attended the workshop that was certified from Microchip through Eduvance.

The Resource Persons for the workshop were Mr. Dilip Balasubramaniam, Training Manager of Eduvance and Mr. Anuj Vaani, Systems Engineer of Eduvance.

The training included hands on sessions with the Arduino Uno for interfacing the LEDs, use of delays, control the LEDs using the switch, control the brightness of the LED using Pulse Width Modulation, interfacing the LCD, Moisture sensor, Temperature sensor and programming applications using serial communications, etc.

Students were also introduced to IoT concept using cloud “thingspeak”. Students were taught to create their channels on thinkspeak and produce data.



Another cloud platform Node-red by IBM was also introduced and basic functioning was explained to the students who were then taught to create their account and implement various basic projects.

The coordinators for the Workshop were Dr. Varsha Turkar and Prof. Flavia Leitao.



Orientation Program for SE ETC students

The orientation program for SE ETC students was conducted on 1st July 2019, with the intention of welcoming the students to the ETC Department and introducing them to the various technical and non-technical activities carried out by the department.

The orientation commenced with Dr. Varsha Turkar, HOD of ETC dept. briefing the students about the various activities carried out like paper publications, industry collaborations, projects and other key points in the interest of the students. Prof. D.S. Vidhya gave a brief session on accreditation and NPTEL courses. Prof. Michelle Araujo e Viegas –Class Teacher of SE ETC introduced the students to the various subjects in their curriculum. This was followed by a brief session on DBEATS and student association by Prof. Deron Rodrigues wherein he spoke about the various technical and non-technical activities conducted under the DBEATS banner.

Prof. Yeshudas Muttu introduced the students to IEEE student branch and the various events carried out by them. Prof. Flavia Leitao spoke to the students about e-Yantra, PCB and Eduvance laboratories setup in our college. The students were then given a session on Parikrama-Student Satellite Club by Prof. Mohini Naik and Prof. Kimberly Morais spoke about fieldtrip visits.



WORKSHOP ON “Lyx”

IEEE Student branch of DBCE organized a Hands on workshop on “Professional Documentation using Lyx” for the final year engineering students on 10th August 2019 under the guidance of IEEE Branch Counsellor Prof. Yeshudas Muttu. The resource person for the workshop was Prof. Anisha Cotta.

The workshop began with a brief introduction on Lyx software. The importance of Lyx software and its various applications in professional documentation was explained. Further on writing documents such as technical papers and project reports using Lyx was described. Inserting equations, figures, Creating tables and Bibliography was illustrated. Right from installation of Lyx software till creation of final Lyx document was well planned & executed.



WORKSHOP ON “CIRCUIT DESIGNING”

The ETC dept. in association with the DBEATS organized a one day workshop on “Circuit Designing” for the students of SE ETC on 24th August, 2019. The sessions were conducted for the students by faculty members, Prof. Deron Rodrigues and Prof. Melba D’Souza.

The objective of this workshop was to introduce Circuit Designing which is an integral part of any Electronic Gadget or Robotics and brief students about how to design any circuit and the logic behind it. Different Circuits using LDR, Relay, 555timer, Regulators etc. were designed and tested during the Hands on session.



WORKSHOP ON “ANTENNAS”

The Antenna Research Group in association with student satellite club (Parikrama) group organized a one day workshop for the students of TE ETC on 10th August 2019. The topics covered in the sessions includes basics of Antenna principles, parameters, design of micro strip patch antenna, literature review on the types of antenna used for different applications, antennas used for wireless applications, Roadmap to 5G, Antenna design for 5G. The Coordinator for the workshop was Prof. Mohini N. Naik.

Mini projects were allocated to the students for the ongoing semester namely design of Horn antenna, helical antenna, Yagi antenna, crossed yagi antenna, 5G antenna etc.

Project Manager Musab Shaikh and Rahul Kotru member of Parikrama gave demonstration of crossed yagi antenna to the students and explained its working, construction in detail. Crossed yagi antenna can be used to track NOAA ISS satellites in the future.

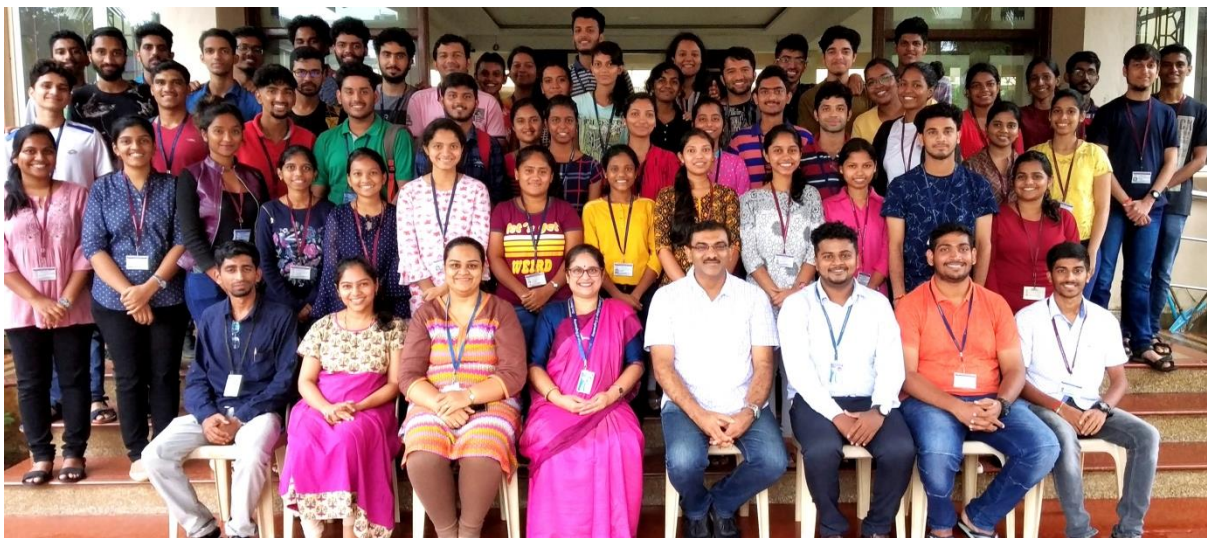


WORKSHOP ON “Machine Learning & Deep Learning”

IEEE student’s branch, DBCE organized a three days Skill Development Hands-on workshop on “Machine learning and Deep learning” in association with IEEE Bombay section for the students TE and BE ETC and Comp. Dept students & faculty members on 23, 24 and 25 August 2019 coordinated by IEEE Branch Counselor, Prof. Yeshudas Muttu. The resource person for the workshop was Prof. Santosh Chapaneri from St. Francis Institute of Technology, Mumbai, recognized & registered to conduct IEEE Skill Development workshops under IEEE Bombay Section. The main objective of this workshop was to provide an overview of Python programming language & provide a hands-on experience on Machine learning and Deep learning.



The workshop began with a wide overview of Python programming language which included basic arithmetic calculations, importing libraries in python. Further on a brief review of classification and regression in Machine learning was taken. The topic of logical regression was further carried by coding it on googlecolab notebook. IRIS dataset was used to extend binary classifier to solve multiclass problems. The last day started with an introduction to Deep Learning, which is a subfield of Machine Learning. In the afternoon session, an efficient neural network algorithm was used to work on the MNIST dataset.



WORKSHOP ON “Introduction to Microcontrollers using ESP8266 NodeMCU”

The Electronics and Telecommunication Engineering Department along with DBEATS Council organized a workshop on Introduction to Microcontrollers using ESP8266 NodeMCU for the students of FE ETC on 27th and 28th September, 2019. The workshop was conducted by Mr. Rohit Sardesai and Mr. Siddhesh Nayak, who are both Alumni students of Don Bosco College of Engineering.



This workshop aimed to demystify the Arduino microcontroller through hands-on work in the lab writing simple codes and testing them. It brought the students over the beginner's threshold to a basic understanding of the use, terminology, and potential of the Arduino.

SEMINAR ON “First Aid using Electronic Technology”

Don Bosco College of Engineering, Fatorda-Goa in Association with Manipal Hospital, Goa has organized a seminar on “First aid using electronic technology” under IEEE Student Branch, DBCE for the technical Fest TECHNOVA 2019, on 17th October 2019. Around 70 students & 10 Faculty members attended the seminar. Dr. Jeedhu Radhakrishnan, Department of Accidents & emergency, Kasturba Medical College & Hospital, Mangalore was the resource person for the day.

Dr. Jeedhu began his session with basic use of first aid, electronic technology in medical field, Use of defibrillators, dealing with breathing problems, helping a choking adult, Hypoglycemia and basic technique to deal with stroke by CPR method in emergency. Students were actually given a demo so as to how to deal with real time situations in case of injuries & environmental emergencies. The team's effort was appreciated by presenting Mementos to Dr. Jeedhu Radhakrishnan & Mr. Sagar Prabhudesai by Dr. Varsha Turkar, HOD-ETC, IEEE Adviser and Prof. Yeshudas Muttu, IEEE Branch Counselor respectively.



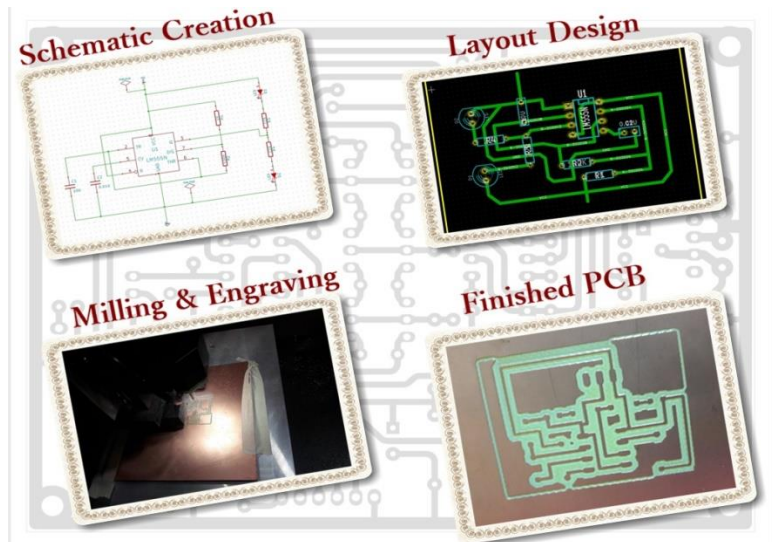
WORKSHOP on “PCB Design and Fabrication”

To fulfil the Industry goals and requirements the department of Electronics and Telecommunication (ETC) Engineering of DBCE in association with Fiire (Forum for Innovation Incubation Research and Entrepreneurship) and IETE conducted a one day workshop on “**PCB Design and Fabrication**” on the 17th Oct, 2019, as a part of the tech feast “Technova 2019”.

The workshop started with an introductory and interactive talk on “PCB Design”. The resource person for the workshop was Mr. Toshal Madkaikar, Alumni of Don Bosco College of Engineering.

The circuit implemented on the PCB was an “Astable Multivibrator”

Firstly the students were given brief explanation on the different stages involved in PCB designing. They were then given a hands-on training on Eagle Software, where the instructor took them step by step through Schematic creation, ERC, Netlist generation, Layout design, and DRC.



This was followed by Gerber and G-Code generation using Nvis Software which is required by the Nvis PCB Prototype Machine. The students were taught to generate Gerber and G-Codes for Milling, Engraving and Drilling, which were then imported to the PCB Prototype Machine. The students were shown how to use the Nvis PCB Prototype Machine for the PCB creation. The coordinators for the workshop were Prof. Flavia Leitao and Prof. Melba D’Souza.



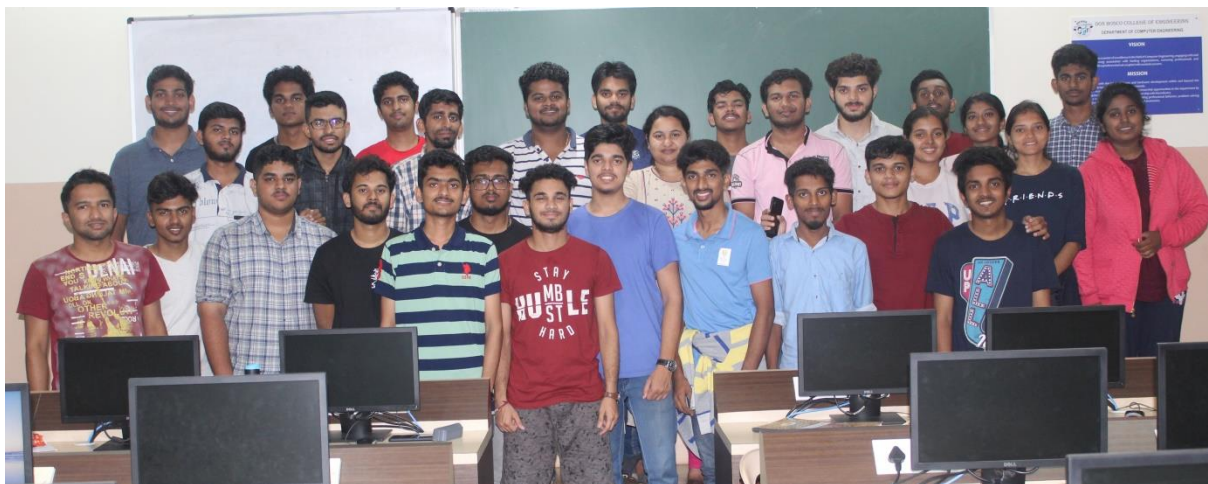
Hackathon “IEEE Xtreme 13.0”

IEEE Students branch of DBCE hosted worldwide 24 hours coding competition, IEEE Xtreme 13.0 for students of Don Bosco College of Engineering, Goa from 19th October 2019(5:30 am) to 20th October 2019 (5:30 am). The event was proctored & well organized under the leadership of IEEE branch counselor, Prof. Yeshudas Muttu. IEEE student branch received great help from Prof. Mohini Naik, Lab Assistant Mr. Ignatius Dias & FiiRE.

IEEE Xtreme 13.0 is a 24-hour online coding competition, within which a worldwide community of college and university students enjoy an engaging set of unique programming challenges. The event received 5015 teams' registration from the entire globe, with each team comprising of maximum three members. Don Bosco College of Engineering had a total of 10 teams participated for the IEEE Xtreme 13.0.



The objective of the event was to provide IEEE Student Members with a new and interesting activity, give them a challenge to embrace teamwork & increase the number of IEEE Student activities with a focus on the computer, programming and information technology fields. IEEE DBCE Students had an enriching experience to cross their thresholds throughout the event.



The problem statements used to appear every hour which was very challenging that made students apply, develop leadership skills & inculcate team spirit. The 24-hour online coding competition ended on 20th October 2019 (5:30 am). The event was encouraged by the Director, Fr. Kinley D'Cruz, Principal Dr. Neena Panandikar & HOD-ETC Dr. Varsha Turkar.

EXPERT TALKS

Expert talk on “Industrial automation – Industry 4.0 and beyond”

The first session of the ‘Expert Talk’ series, organized by the ETC Dept., DBCE, Fatorda, witnessed an energetic and insightful talk by Mr. Chaitanya Voolapalli, Manager, Maintenance and Control, Commscope, Verna. The session was titled as: “Industrial automation – Industry 4.0 and beyond”.

The final year students attended the lecture on 1st August, 2019. Mr. Chaitanya discussed the various shades of industrial automation, with the help of animations and video clips and how we have moved from Industry 1.0, way back in 1786 to industry 4.0. Fourth industrial revolution, also referred to as Industry 4.0 is the era of artificial intelligence, genome editing, biometrics, renewable energy, 3D printing, autonomous vehicles and the Internet of Things.



This was organized by DBEATS coordinators, Prof. Deron Rodrigues and Prof. D.S. Vidhya.

Expert talk on “Use of Augmented Reality for Engineering Education”

The IETE Student Branch of Don Bosco College of Engineering, Fatorda-Goa organized an expert talk on the topic, ‘Use of Augmented Reality for Engineering Education’ under the IETE Goa Chapter. The talk was held on 16th October 2019. The talk was delivered by Dr. Jonathan Joshi, CEO of Eduvance. Eduvance is a premier training centre based in Mumbai which trains engineering students and faculty in various domains.



Dr. Jonathan Joshi first explained what is AR and the difference between AR and virtual reality VR. He spoke about the different modules associated in building an AR environment. Eduvance has also launched an app to teach students using Augmented Reality (AR)

The Expert talk was arranged by Dr. Varsha Turkar and IETE coordinator Dr. Shreyas Simu.

FIELD VISITS

“SIEMENS”

On 27th August 2019, the SE ETC students of DBCE, Fatorda visited Siemens Factory at Verna.

Here they learnt about control and relay module which helps in monitoring voltage and protecting the circuit and used in manufacturing of power grid followed by testing area, where the relays to be used in power grids are tested by binary inputs and outputs which can be controlled manually as well as from laptops.



“Infinity 3D”

Post Lunch the SE ETC students visited Infinity 3-D and CIBA (Centre for Incubation and Business Acceleration) where we learnt about 3 Dimensional imaging and its applications such as in architectural prototypes, statues prototypes can be made before proceeding to actual constructions.

Various types of 3-D printers are used for different types of printing. Different types of plastics are used for different applications.

CIBA believes in “not in getting a job but in creating a job”. The Faculty members who accompanied the students were Prof. Michelle Araujo, Prof. Flavia Leitao and Prof. Shreyashri Desurkar.



“National institute of Oceanography (NIO)”

To tune with the academics, the ETC Dept. organized field trip visit to CSIR- National institute of Oceanography (NIO) for the students of TE ETC on 27th August 2019.

The students were shown the Marine Aquarium of simulated coral reef system, NIO technology of Autonomous Vertical Profile that profiles the coastal water, Autonomous Underwater Vehicle (MAYA) for detection of hypoxia in fresh water, reservoirs and dams.



“Bosch Packaging Technology Division”

Post Lunch the TE ETC students were taken to “Bosch Packaging Technology Division”, where the students were introduced to various sectors some of which were Logistic department, Invert section and Inspection.

The students were shown different machines i.e. Vertical Form Fill and Seal machine (VFFS) and Horizontal Form Fill and Seal machine (HFFS), Intermediate machine, Continuous machine, Jaw draw and Belt draw machine. The students were accompanied by Prof. Mohini Naik, Prof. Yeshudas Muttu and Prof. Priyanka Padiyar.



“Oil and natural Gas corporation - ONGC”

On 27th August 2019, the ETC Dept. of DBCE, organised a field trip for the students of BE ETC to “Oil and Natural Gas corporation (ONGC)”, Betul, Goa. The students were accompanied by Prof .D.S Vidya and Prof. Mathilda Colaco.



The ONGC plant situated at Betul provides complete solution, fire fighting techniques and safety measures required during the process of extraction of oil and natural gas. This is of great importance as oil is highly flammable and has a tendency to catch fire with destruction of life and property. So for this reason, various facilities for safety training are present at ONGC.



The students were introduced about various fire extinguishers available like the water type, Chemical powder type and foam type along with their Standard Operating procedures. It was a great learning session with practical training and exposure. Later, a small explosion and a fireball created with 300 gm of LPG in a controlled cylinder was demonstrated under controlled parameters and extinguished by water monitors.

The students were highly elated and enlightened with the overall experience taking back home great knowledge and lovely experience

Student's Achievements & Felicitation

- Lata Pawar, Sapana Kambli and Joel Nicolas from TE ETC secured Second place, for their project “Solar Composter” at Aarush 2019- technical fest at PCCE under mini project category for the composter using solar energy



- Mr. Willy Rodrigues, Ms. Rosann A. Godinho, Mr. Sidhant Samant, Ms. Shradha Shrikrishna Sawant, Ms. Jyoti Kumari, Ms. Sails Ramchandra Naik, Mr. Aston Vaz and Mr. Aaron Gilbert Fernandes, successfully completed NPTEL course in “Introduction to Programming in C”, under the Mentorship of Prof. Shreyashri Desurkar, from July to Dec. 2019.
- Ms. Priya Kamat successfully completed NPTEL course in “Introduction to Internet of Things”, from July to Dec. 2019

TRAINING & PLACEMENT

The ETC Engineering Department maintains a vibrant industry-academia relationship and the suggestions of the experts are taken as tools for its continuous improvement. The third year and final year students undergo a 2-week Internship Program under the guidance of experience professionals. This is to bridge the gap between education and Industry.

Several graduated students of the college are now occupying highly responsible positions in various reputed and prestigious organizations including Sankalp Semiconductors Pvt Ltd, Citrix, Visteon Technical & Services Centre Pvt. Ltd and Birla Furukawa Fiber Optics Pvt Ltd.

FACULTY INITIATIVES

FACULTY DEVELOPMENT PROGRAMME (FDP) on “eSim”

Don Bosco College of Engineering under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching organized a one – day Faculty Development Program on “eSim” on 21 Sept. 2019. Around 120 Remote Centres participated in this workshop all over India, Don Bosco College of Engineering being one of them. The workshop coordinator was Prof. Kimberly Morais and remote center coordinator for the workshop was Prof. Amrita Naik.



The content of videos included getting started with eSim Linux installation, getting started with eSim Windows installation, schematic Creation and Simulation, device Model creation and Simulation, Mapping Components with Footprints, setting Parameters for PCB designing, laying Tracks on PCB, PCB Layout for Astable Multivibrator.



This workshop was entirely based on self-learning so that the participants familiarized themselves to eSim by getting a first-hand experience.

CERTIFICATIONS/ AWARDS

- Dr. Varsha Turkar got travel grant of Rs. 1,16,000 from IEEE Geoscience and Remote Sensing Society to attend IEEE International Geoscience and Remote Sensing Symposium IGARSS-2019, Yokohama, Japan in July 2019.
- Papers Presented for this Conference is “Geographic Information System And Remote Sensing Education In India – Issues & Solutions”, IEEE International Geoscience and Remote Sensing Symposium (IGARSS)2019.



- Prof. Mohini Naik was selected among the few top Exemplary mentors of change all over India and only one from GOA to receive the honour from NITI AYOJ. Prof. Mohini Naik, was felicitated by CEO of NITI AYOJ, Shri Amitabh Kant & Director Ramanathan Ramanan on 27th June at T-Hub, Hyderabad.



- Prof. Mohini Naik was invited as a guest by Doordarshan GOA (DD Panaji) for their program “ASTURI” On 4th September 2019
- Prof. Mohini Naik was recognized from print media/ newspapers for being Exemplary mentor of change 2019 under ATAL Tinkering LAB, Govt of INDIA. 20 July 2019
- Prof. Mohini Naik is selected as “Regional Mentor of change”, for Goa state by NITI Ayoj government of India.
- Prof. Mohini Naik is selected as Elsevier Advisory Panel member in OCT 2019.
- Prof Deron Rodrigues was invited as the guest of honor at “Eureka! 2019” Science Exhibition cum competition, at Loyola High School, Margao.
- Prof. Anisha Cotta was invited as a Judge for the event ”Hard wired”, on 26th Sept. 2019, for TECHYON 2019, at PCCE, Verna.
- Prof. Flavia Leitao was invited as a Judge for the event ”Electronic Art”, on 27th Sept. 2019, for TECHYON 2019, at PCCE, Verna.
- Prof. Yeshudas Muttu is invited as a resource person in National Conference organized by SIETIIE, on 28th & 29th Of Dec 2019.
- Dr. Varsha Turkar was invited as a chief guest for the 24th World Conference on Applied Science, Engineering and Technology, on 29th - 30th Dec. 2019, at Nanutel Margao, Goa.

PAPER/ JOURNAL PUBLICATIONS

- Dr. Varsha Turkar presented a paper on “Geographic Information System and Remote Sensing Education in India- Issues & Solutions” in the 2019 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Yokohama, Japan during July 28-August 2, 2019.
- Dr. Varsha Turkar presented a paper on “Speckle Noise Reduction of PolSAR data using Non-Parametric Technique” in the National Symposium on Innovations in geospatial technology for sustainable development with special emphasis on NER & Annual Conventions on Indian Society of Geomatics-Shillong Chapter & Indian Society of Remote Sensing- Shillong Chapter and hosted jointly by North-Eastern Space Applications centre(NESAC), Department of Space, and North Eastern Hill University(NEHU) during November 20-22nd, 2019.
- Dr. Varsha Turkar presented a paper on “A Novel Approach of Removal of Salt and Pepper Noise using Morphological Operations” in the National Symposium on Innovations in geospatial technology for sustainable development with special emphasis on NER & Annual Conventions on Indian Society of Geomatics-Shillong Chapter & Indian Society of Remote Sensing- Shillong Chapter and hosted jointly by North-Eastern Space Applications centre(NESAC), Department of Space, and North Eastern Hill University(NEHU) during November 20-22nd, 2019.
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- Prof. D.S. Vidya published a paper, “An optimized method towards formal verification of mixed signals using differential fed neural network over FFNN” International Journal of Electrical & Computer Engineering (2088-8708). Oct 2019, Vol. 9 Issue 5, Part 1, p3423-3431. 9p. Scopus indexed
- Prof. Flavia Leitao and Prof. D.S Vidhya published a paper entitled, “ Full Fledged Automated Fruit Farm”, at 4th International Conference on Communication and Electronics Systems (ICCES 2019) from July 17-19, 2019, Scopus indexed, IEEE.
- Prof. Flavia Leitao and Prof. Mohini Naik published a paper entitled, “ Energy Monitoring of Curing Pumps Using PLC and SCADA”, at 4th International Conference on

Communication and Electronics Systems (ICCES 2019) from July 17-19, 2019, Scopus indexed, IEEE.

- Prof. Mohini Naik, “High Gain 16 Ports MIMO Antenna at 60 GHz for Millimeter Wave Applications” has been sent and accepted at the IEEE Indian Conference on Antenna and Propagation(INCAP2019) which is sponsored by IEEE Antenna and Propagation Society, ISRO, IETE, IEEE AP/MTT Joint chapter Gujarat section. The conference will be held in Ahmadabad Gujarat from 19th to 22nd Dec 2019

WORKSHOPS/SEMINARS/EXPERT TALKS CONDUCTED

- Dr. Varsha Turkar and Prof. Flavia Leitao organized a 6 day certified course on “Arduino & IoT”, for the T.E ETC student, from the 8th to the 13th of July 2019.
- Dr. Varsha Turkar, Prof. Michelle Araujo e Viegas, Prof. D.S. Vidhya, Prof. Deron Rodrigues, Prof. Yeshudas Muttu, Prof. Flavia Leitao, Prof. Mohini Naik and Prof. Kimberly Morais, conducted an orientation program for SE ETC students, on 1st July 2019.
- Prof. Anisha Cotta conducted a hand’s on workshop on “Professional Documentation using Lyx” for the final year engineering students on 10th August 2019, organised by IEEE Branch Counsellor Prof. Yeshudas Muttu.
- Prof. Deron Rodrigues and Prof. Melba D’Souza conducted a one day workshop on “Circuit Designing” for the students of SE ETC on 24th August, 2019.
- Prof. Mohini N. Naik conducted a one day workshop on “Antennas” for the students of TE ETC on 10th August 2019.
- Prof. Yeshudas Muttu organized a three days Skill Development Hands-on workshop on “Machine learning and Deep learning”, for the students TE and BE ETC and Comp. Dept students & faculty members on 23th, 24th and 25th August 2019.
- Prof. Yeshudas Muttu organized a seminar on “First aid using electronic technology”, for the technical Fest TECHNOVA 2019, on 17th October 2019.
- Prof. Flavia Leitao and Prof. Melba D’Souza, conducted a one day workshop on “PCB Design and Fabrication” on the 17th Oct, 2019, as a part of the tech feast “Technova 2019”.
- IEEE Students branch of DBCE under the guidance if IEEE Branch Counsellor Prof. Yeshudas Muttu hosted worldwide 24 hours coding competition, IEEE Xtreme 13.0 for students of Don Bosco College of Engineering, Goa from 19th October 2019(5:30 am) to 20th October 2019 (5:30 am).

WORKSHOPS/SEMINARS/EXPERT TALKS ATTENDED

- Dr. Varsha Turkar attended a Pre-Symposium Tutorial on “Artificial Intelligence(AI) and Machine Learning(ML) for Remote Sensing Data Analysis”, on 18th-19th Nov. 2019, Jointly organized by Indian Society of Geomatics-Shillong Chapter & Indian Society of Remote Sensing- Shillong Chapter

- Prof. Melba D'souza attended a one week ISTE Workshop on “Machine learning and Deep learning using python programming”, from 1st to 5th July 2019, at Padre Conceicao, Verna.
- Prof. Michelle Araujo, Prof. Kimberly Morais, Prof. D. S Vidhya, Prof. Melba D'Souza, Prof. Deron Rodrigues, Prof. Flavia Leitao, Prof. Mohini N Naik, Prof. Priyanka Padiyar and Dr. Shreyas Simu attended a one day FDP on “eSIM”, on 21st of September 2019, at DBCE, fatorda.
- Prof. Anisha Cotta and Prof. Mathilda Colaco attended a four day Workshop on “Innovation Creativity and Startups”, on 13th, 14th, 20th & 21st of September 2019, at BITS Pilani, Vasco.
- Prof. Michelle Araujo, Prof. Trima P. Fernandes e Fizardo, Prof. D.S Vidhya, Prof. Anisha Cotta, Prof. Flavia Leitao and Prof. Mohini N Naik attended a one week ISTE Workshop on “Virtual Reality, Augmented Reality & 3D Modeling”, from 4th to 8th of November 2019, at DBCE fatorda.
- Prof. Yeshudas Muttu and Prof. Deron Rodrigues attended a one week ISTE Workshop on “Advanced Antenna Pattern Synthesis and Beam forming using Computational Intelligence”, from 12th to 17th of November 2019, NIT, Warangal.
- Prof. Selvyn Fernandes attended a one week ISTE Workshop on “Augmented Reality – Principles and Practice”, from 11th to 15th of November 2019, at AITD, Assagoa.
- Prof. Mohini Naik participated in DST & Texas Instruments India Innovation Challenge Design contest 2019 powered by AICTE & anchored by NSRCEL@IIMB

COMMUNITY OUTREACH

➤ **Talk on Career Guidance**

Village Panchayat Nagargao, Sattari organized talk on career guidance for the students of government high school, Ambedem, Nagargao-Goa on 17th August 2019. In regards to this, Sarpanch of the Nagargao Laxmi Harwalkar and other members invited Prof. Mohini N. Naik, Asst. Professor of ETC Engineering, DBCE, to guide students to choose their career. Prof. Mohini Naik gave a brief introduction on what career to pursue after X and XII standard. Students were given brief overview on how to evolve themselves as a researcher.



UPCOMING EVENTS

- Seminar on “Virtual labs”, for faculty members on 10th Jan. 2020
- One day workshop on “e-YANTRA Robotics”, for TE ETC students on 16th Jan 2020
- One day workshop on “Roadmap to 5G Antenna”, for SE ETC students on 25th Jan 2020
- One day workshop on “NS2 simulator and Matlab/ Scilab in Communications, Controls and Signal Processing”, for TE ETC students on 25th Jan 2020
- One day workshop on “PCB DESIGN & FABRICATION”, for TE ETC students on 8th Feb 2020
- IEEE SKEP planned on 8th Feb 2020
- One day workshop on “MATLAB Applications Workshop”, for SE ETC students on 8th Feb 2020
- Two day workshop on “SQL and Frontend Development”, for TE and BE ETC students on 28th and 29th Feb 2020
- Four days Educational Tour planned for the IEEE Student members, from 28th Feb to 2nd March 2020
- Two day workshop on “Analog IC Design”, for TE & BE ETC students on 13th & 14th March 2020
- One day workshop on “eSim”, for SE ETC students on 14th March 2020
- One day workshop on “Ground station development”, for student satellite club on 14th March 2020
- One day workshop on “Electromagnetics & Applications”, for SE ETC students on 28th March 2020
- “BSS Paper Presentation” for TE ETC students on 28th March 2020
- One day workshop on “Applications of Matlab toolboxes”, for SE ETC students on 25th April 2020