



FLASH

Electronics & Telecommunication Engineering
Departmental Newsletter

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Editors: Prof. Flavia Leitao Student Coordinator: Ms. Neha Joshi

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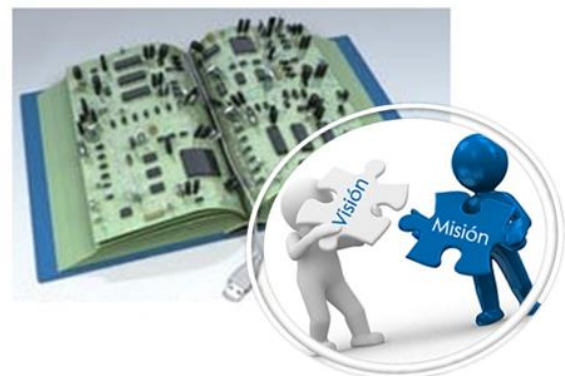
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VISION

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 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 well qualified and experienced faculty in the areas of Electronics & Communication, VLSI, Embedded, Signal Processing, Automation and Control Engineering.

The department has been organizing various programs to enhance the Industry -Institute interaction through field visit and workshops. The students are also provided an opportunity to choose specialization electives to focus on their identified areas of interest.



Department has 11 fully functional Laboratories as listed below, along with the different Software.

- Signal Processing Laboratory
- EDA tools Laboratory
- e-Yantra Robotics Lab

➤ LABORATORIES

- Basic Electronics Engineering Laboratory
- Microwave Engineering Laboratory
- Analog Electronics Laboratory
- Digital Electronics and Instrumentation Laboratory
- Communication Engineering Laboratory
- Embedded system laboratory supported by Cypress
- Project laboratory
- Control and automation Laboratory

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

R&D Knowledge sharing Initiative

Knowledge Sharing Session - 17th February 2021

The ETC Department organized its monthly Knowledge Sharing Session, under the R&D cell on 17th February 2021 from 3:30pm to 5:00pm in Seminar Hall 1. The Knowledge Sharing Session initiative involves activities whose main motive is to update Faculty members with the latest trends in Technology and Research and to learn something beyond academics.

The session was taken up by Mr. Roland Gomes on “Mobile Phone Photography and Editing”. Mr. Roland Gomes started the session by introducing different types of cameras which are mainly classified based on the sensor size and viewfinder mechanism. He explained how sensor size varies in the different types of cameras. He then explained the advantages of using mobile phone for photography which includes Portability, ease in shooting and uploading on social media, simplicity and affordability.

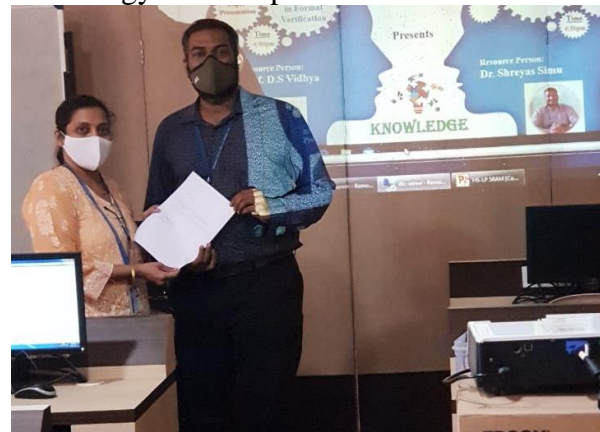


Knowledge Sharing Session - 25th March 2021

The next Knowledge Sharing Session was conducted on 25th March 2021 in E9 Lab. The first session was taken up by Prof. D.S Vidhya and the second by Dr. Shreyas Simu.

Prof. D.S Vidhya presented a technical talk titled “Recent trends in Formal Verification”. Verification through traditional simulation applies a large number of input vectors to the design and then compares the resulting output vectors with actual vectors for functional correctness. As the designs become more complex and require massive input vectors for testing the design.

Dr. Shreyas Simu presented a technical talk on “High Speed SRAMs and Recent Trends”. He started with explaining the difference between SRAM and DRAM and explained in detail the SRAM 6T bitcell structure and its working, the read operation and write operation, along with CMOS, BiCMOS and SOI technology, FDSOI and PDSOI technology and comparison between them.

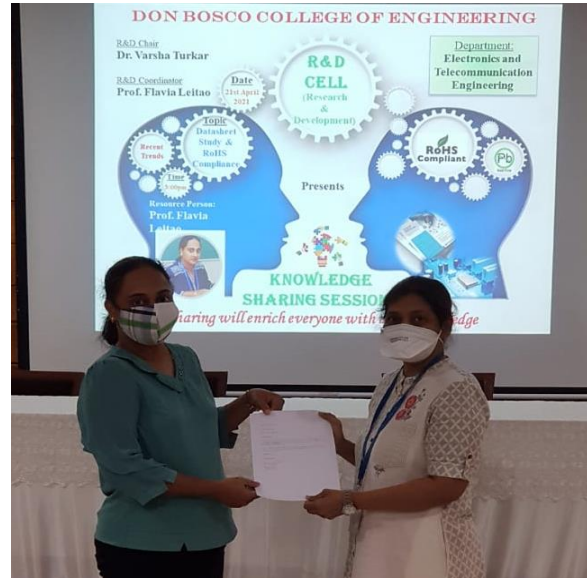


Knowledge Sharing Session - 21st April 2021

The following Knowledge Sharing Session was conducted on 21st April 2021 in Seminar Hall 1 by Prof. Flavia Leitao on “Datasheet Study and RoHS Compliance”.

Prof. Flavia Leitao spoke on Datasheet study of Through Hole (TH) and Surface Mount (SM) Resistors, where she mentioned about the different types of resistors and their different packages in detail, the Part Numbering. She highlighted the Pick and Place machine with a visual perspective of the entire process. She then explained the Wave Soldering and Reflow Soldering methods for the TH and SM parts.

The second part of the session was on RoHS Compliance, where she discussed why Lead was banned and how usage of Tin in place of Lead was advantageous as well as risky in the Space and Military sector.



Knowledge Sharing Session - 18th June 2021

Prof. Trima Fernandes e Fizardo and Prof. Michelle Araujo e Viegas conducted the next Knowledge Sharing session on 18th June 2021 in the online mode.

Prof. Trima presented a technical talk on “State of Art of Network on Chip”. She explained how NoC interconnect fabric is used to reduce wire routing congestion on chip, easier timing closure, add/replace IPs to the SoC design. A summary of few research papers and the various contributions in the Network on Chip Areas was also highlighted.

Prof. Michelle presented a technical talk on “Cognitive Radio Networks”. She spoke about how CR is a new promising communication paradigm for fully utilizing scarce spectrum resources. The four stages of this technology namely spectrum sensing, spectrum management, spectrum sharing, and spectrum mobility, were also discussed.



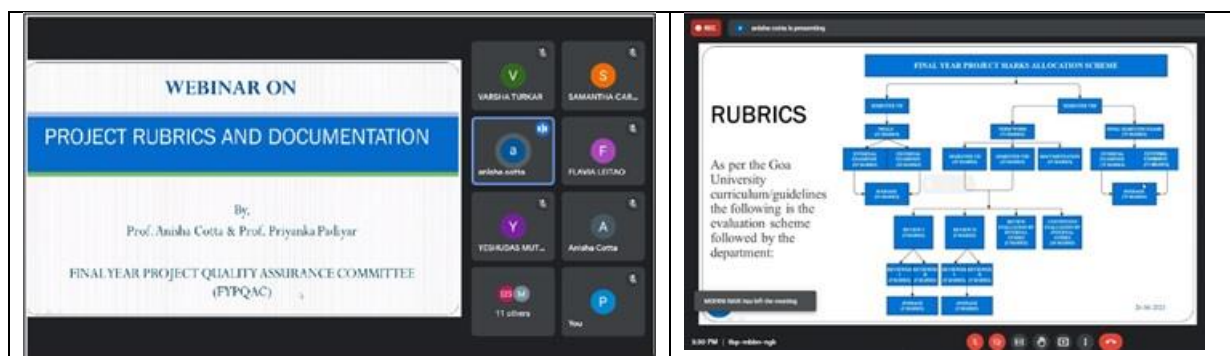
The event was encouraged by R&D Chair Dr. Varsha Turkar and coordinated by Prof. Flavia Leitao.

FDPs Conducted

Webinar on “Project Rubrics and Documentation”

The Final Year Project Quality Assurance Committee (FYPQAC), organised a webinar on “Project Rubrics and Documentation” on June 26, 2021. The resource people for the webinar were Prof. Anisha Cotta and Prof. Priyanka Padiyar. The webinar was attended by faculties from Department of Electronics and Telecommunication Engineering via online platform.

The objectives of this webinar were to introduce the faculties to the rubrics and the documentation to be followed for the final year projects. It commenced with a detailed explanation on the general flow of the project work from the inception of idea to the completion and submission of the project thesis by Prof. Anisha Cotta. She said, “The rubrics that are formulated by FYPQAC are based on the various phases of the project flowchart, due to which it is important that we adhere to it”. It was followed by a briefing on the project marks allocation scheme by Prof. Priyanka Padiyar. The faculties were introduced to the various rubrics to be followed for evaluating and awarding marks to the project groups for every review.



Thereafter, the various documents related to project work were discussed and presented by Prof Anisha Cotta. She stressed on the need to maintain proper documentation.

“IIRS- ISRO COURSES” CONDUCTED

1. IIRS Outreach program on “Overview of Web GIS technology” during June 21- June 25 2021
2. IIRS Outreach program on “ Earth observation for carbon cycle studies” during June 21- June 25 2021
3. IIRS Outreach program on “Overview of Geoprocessing using Python” during January 18, 2021 to January 29, 2021.
4. IIRS Outreach program on “space technology and its applications” on January 11, 2021

Prof. Mohini Naik is the co-ordinator for these IIRS-ISRO courses

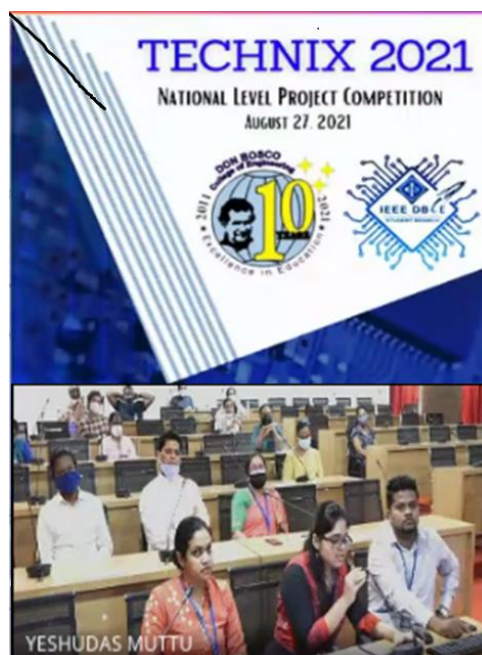
National Level Project Competition –TECHNIX 2021

Don Bosco College of Engineering completes 10 years of excellence in technical education. As a part of this celebration, Technix 2021 was organized by the Final Year Project Quality Assurance Committee, Department of Electronics & Telecommunication Engineering in association with IEEE Student Branch. Technix 2021 commenced in the month of July with the submissions of abstract proposals which went on till July 27th 2021. A total of 130 participants registered for the competition.

A total of 12 abstracts were shortlisted in the software category and 19 abstracts were shortlisted in the hardware category for the final round. The valedictory function of Technix 2021 was held on August 27, 2021. The judges for Technix 2021 were Dr. R.N. Patel, Associate Professor, NIT Raipur and Chair, IEEE Bombay Section Technical and Professional Activities Committee (IEEE BS TPAC) Dr. Saurabh Mehta - Chief Academic Officer at Vidyalankar Institute of Technology, Mumbai and Secretary of IEEE BS, Mr. Hannan Satopay - Chief Executive Officer, Alhansat Technologies and Secretary, IEEE BS TPAC.

The event was compered by Prof. Priyanka Padiyar. The Coordinator of Technix, Prof. Anisha Cotta presented the report of Technix 2021 and acknowledged the support, motivation and guidance received to make Technix 2021 a success.

The Judges then shared their experience in playing such a key role for the competition and declared the winners. The event was concluded with the Vote of thanks by the Coordinator and IEEE DBCE Student Branch Counselor, Prof. Yeshudas Muttu. The event was coordinated by Prof. Anisha Cotta, Prof. Yeshudas Muttu and Prof. Priyanka Padiyar.



STUDENT'S CORNER

Workshops/Seminars/In-house Trainings/ Project Exhibitions

HAM radio licensing examination

Student Satellite Club-Parikrama organized a HAM Radio examination on 28th February 2021 from 10:30 am to 3:30 pm at Don Bosco college of Engineering.

The ham radio licensing examination is known as the Amateur Station Operator's Certificate Examination (ASOC examination). It is conducted by the Wireless Planning and Coordination (WPC) wing of the Ministry of Communications, New Delhi at the Wireless Monitoring Stations located throughout the country.

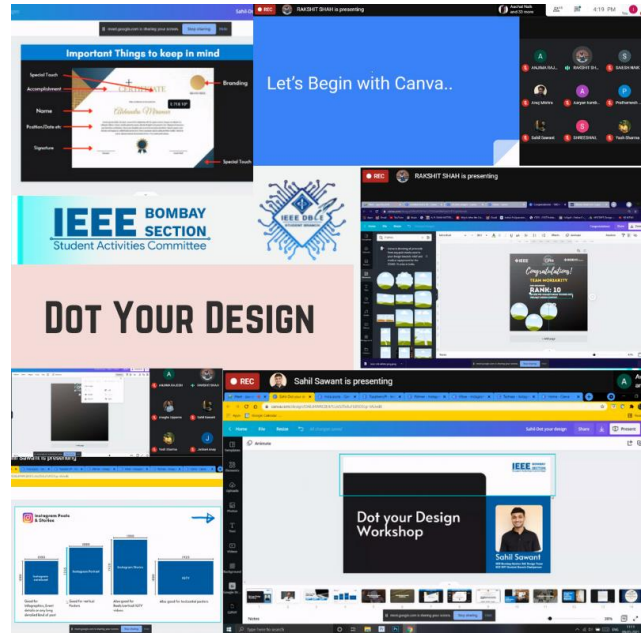


There were total of 40 student's registrations from Goa and Maharashtra. Student satellite members also appeared for the examination for both the grades i.e. restricted and general license. The examination was conducted by Shri Nalnish Srivastava, Wireless Monitoring station officer from Bhopal and his team from WMS Goa. The entire event was coordinated by Prof. Mohini Naik, PI of satellite club, ETC Department and Prof. Sweta Morajkar, CO-PI of satellite club, COMP Department.



Graphic designing Workshop titled “Dot Your Design”

The IEEE Bombay Section Students Activities Committee (SAC) collaborated with IEEE Student Branch of DBCE, Goa to organize a Graphic designing Workshop titled “Dot Your Design” on 8th & 9th May 2021. The guest speakers for the workshop were Mr. Rakshit Shah (Design Lead, IEEE Bombay Section SAC) and Mr. Sahil Sawant (Design Team Member, IEEE Bombay Section SAC). The entire workshop was mainly focused around the software namely Canva. Many examples of different designs and guidelines in designing different things like posters, PowerPoint presentations, letters, resume, etc. using Canva Pro, were given. Few freeware posters designing tools were also discussed



Dr. Sarika Chouhan, IEEE Bombay Section SAC Chairperson, appreciated the efforts put forth by IEEE BS SAC team and IEEE DBCE Student Branch team. Prof. Yeshudas Muttu, IEEE DBCE Branch Counselor mentioned about the collaborative work by IEEE BS SAC & IEEE DBCE SB and as an outcome of this event declared a poster design competition on the theme. The event was truly full of knowledge and received an active participation from 12 different colleges. Mr. Renvick Fernandes, IEEE BS SAC Volunteer & IEEE DBCE SB member delivered the vote of thanks.

e-Poster Design Competition

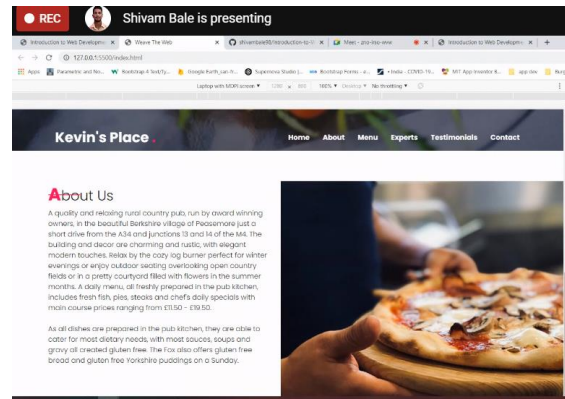
IEEE Bombay Section Student Activities Committee (SAC) in collaboration with IEEE Student Branch of DBCE, Goa organised a theme based e-Poster Design Competition on “CoVid Vaccine Awareness in the Nearest Centre”. Many posters were designed & submitted by the participants using the platform, Canva by 15 May 2021. The Posters were judged by Mr. Rakshit Shah- IEEE Bombay Section SAC Design Lead & Mr. Sahil Sawant, IEEE Bombay Section SAC Design Team Member.

All the participants were given an e-certificate. IEEE DBCE Student Branch congratulates all the winners & they will be awarded prizes worth Rs.3500 from the IEEE Bombay Section.



“Workshop on “Weave the Web”

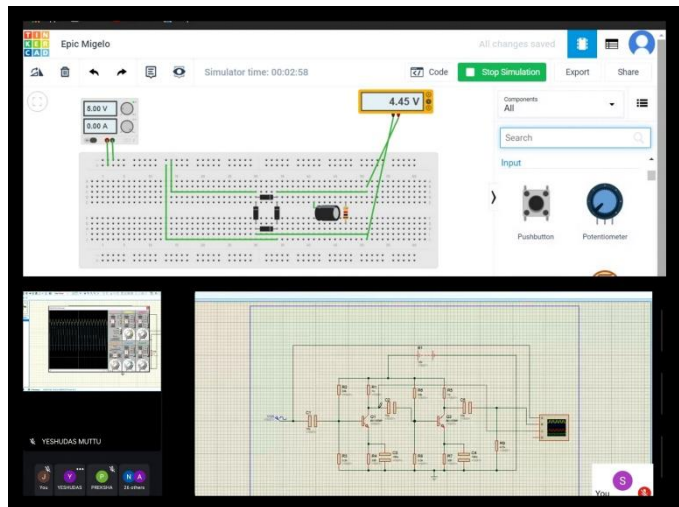
The IEEE DBCE Student Branch Women in Engineering Affinity Group organized a Web Development Workshop “Weave the Web” on 1st May, 2nd May and 15th May 2021 with aim to enhance the student’ understanding on the basic yet essential skill of Web Development in an effective way. The Facilitator for the workshop was our Alumni, Mr. Shivam Bale, Tentwenty Digital Agency Front End Engineer (Intern).



The speaker started with the basics of HTML 5, CSS and JavaScript. He also explained how all the three languages interact for designing a webpage. In the second session the participants were asked code along with the facilitator. Furthermore, the use of JavaScript and CDN was explained. The last session emphasized on the responsive web development with help of Bootstrap. Prof. Yeshudas Muttu and Dr. Varsha Turkar appreciated the efforts put in by Mr. Shivam Bale in conducting this Project based Workshop.

Hand's on Sessions on “Circuit Design & Simulation”

IEEE Student Branch of DBCE, Goa organized a Workshop on Circuit Design & Simulation for second year students of ETC Department. To bridge the gap between industry & academia, Prof. Yeshudas Muttu conducted hand's on workshop using the trending software in companies like Proteus & TinkerCad Circuits. The main objective of this course was to design & simulate the circuits and understand its working in detail.



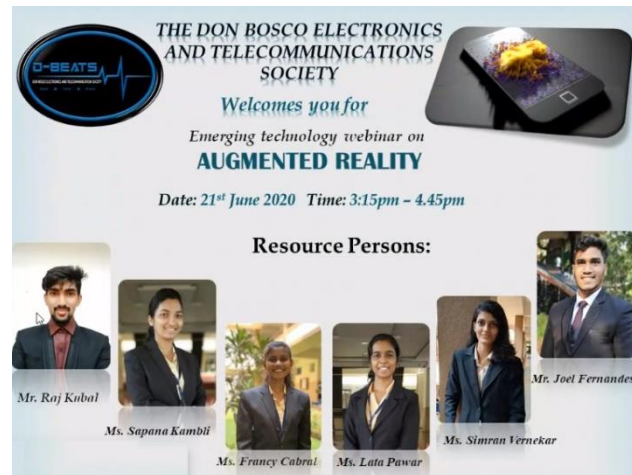
Prof. Yeshudas Muttu explained Proteus software & its use in industry. This was followed by simulation of simple circuits like rectifiers, filters, amplifiers, oscillators, Multivibrators and RC circuits. To get well trained with the software, after each and every session, small exercises were given to the students. This hand's on workshop was conducted on 22nd & 27th October, 3rd, 10th & 24th November, 15th December 2020 from 2:00 p.m. – 3:00 p.m. and 7th January 2021 from 10:00 a.m. to 1:00 p.m. Right from installation of Proteus software till simulation of various circuits was well planned & executed. Through this event, students were able to submit their mid-year document for Electronic Devices & Circuits Lab during the pandemic.

Webinar on “Augmented Reality”

The Students Council DBEATS Society organized an Emerging Technology webinar on “Augmented Reality” on 21 June 2021 from 3.15pm to 4.45pm. The objectives of this webinar were to expose the participants to the recent technologies in AR and to help students to take up projects in this domain. The webinar was held virtually via Google meet and was attended by around 80 students of second and third year of ETC Department.

The webinar commenced with Mr. Rajiv Baracho, Executive Member of DBEATS introducing the speakers for the webinar. They were, Mr. Raj Kubal, Ms. Simran Vernekar, Ms. Francy Cabral, Ms. Sapana Kambli, Ms. Lata Pawar and Mr. Joel Fernandes, final year students of the ETC department.

The session began with the introduction to immersive technologies of Virtual, Augmented and Mixed Reality and the differences between them.



Providing the facts and stats, the unprecedented growth in these technologies was presented. Thereafter, Unity, an end-to-end creation platform for AR, which has custom resources to bring immersive vision to life, was introduced. From the sea of various SDKs available, the most popular AR framework, Vuforia was familiarized and discussed.

In order that the students get first-hand exposure of Augmented Reality, an application developed was provided for the participants to use and explore. Insights were also provided on how the application was developed. Various applications of AR were discussed, followed by demonstration of the projects “Augmented Reality in Online Shopping” and “Innovative Medium of Learning using Augmented Reality”.

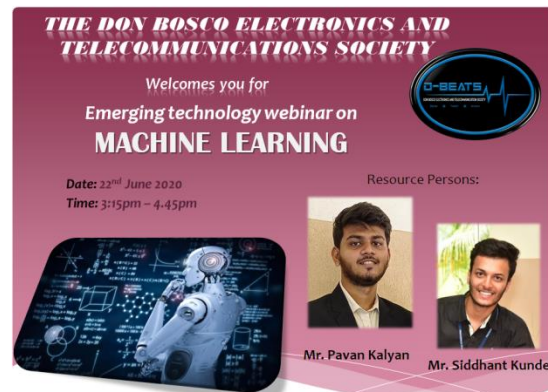


The webinar concluded with the vote of thanks delivered by Ms. Rosann Godinho, Secretary of DBEATS Council and student coordinator for the event. The DBEATS Council was guided by faculty coordinators, Prof. Deron Rodrigues and Prof. Michelle Araujo e Viegas.

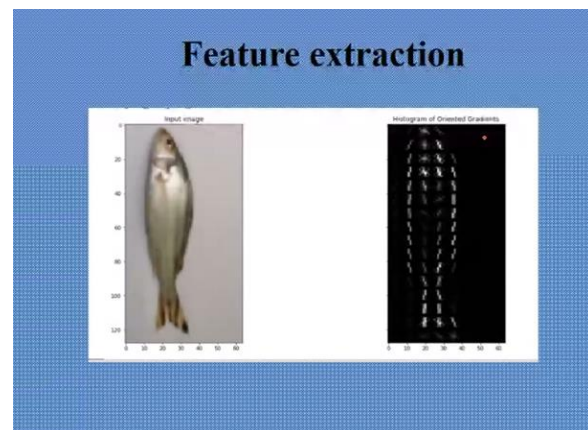
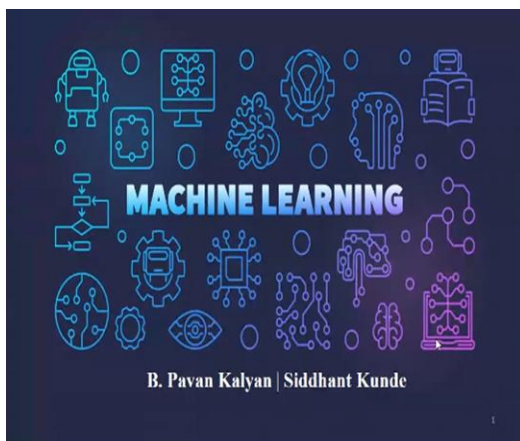
Webinar on “Machine Learning”

The Don Bosco Electronics and Telecommunication Society organised an emerging technology webinar on “Machine Learning” on June 22, 2021, between 3:15pm to 4:45pm. The objectives of this webinar were to expose the participants to the recent technologies in ML, to introduce the software tools used and the application of these technologies and to help students to take up projects in these domains. The webinar was attended by students from Second year and third year ETC students via online platform.

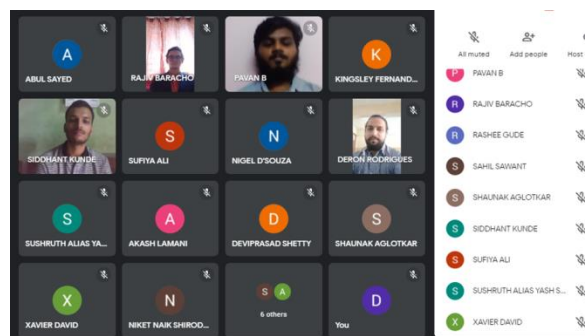
The event began with a welcome by Mr. Rajiv Baracho, executive member of DBEATS student’s council, followed by the introduction to the resource persons, Mr. Pavan Kalyan and Mr. Siddhant Kunde from BE-ETC. The session commenced with a brief introduction to machine learning, followed by the types of Machine Learning techniques: Supervised, unsupervised and reinforcement learning.



The steps involved in ML algorithm were then presented. The speakers stressed on how machine learning can be used to solve various problems. Some leading technologies and applications which make use of ML were also covered. At the end they demonstrated their final year project ‘Fish Quality Assessment System’ which was done using ML.



The webinar concluded with a vote of thanks delivered by Mr. Xavier David, executive member of DBEATS student’s council and the coordinator for the event. The DBEATS Council was directed by faculty coordinators, Mr. Deron Rodrigues, and Mrs. Michelle Araujo e Viegas.

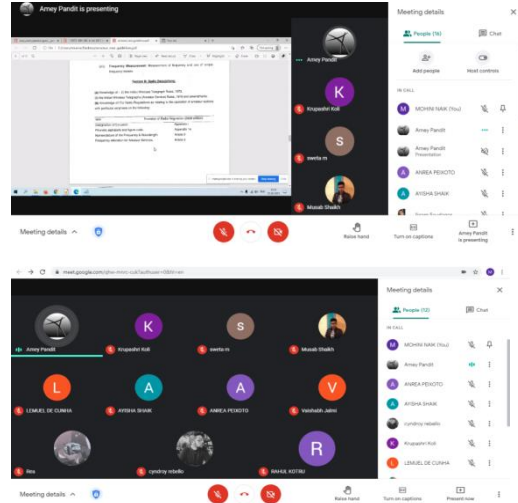


EXPERT TALKS

Talk on Insights of Amateur Radio and preparation for HAM radio examination

Student Satellite Club-Parikrama organized a guest lecture on Amateur Radio and HAM radio examination on 25th February 2021. Mr. Amey Pandit was the speaker for the program. He is an embedded system design engineer by profession and HAM with call sign VU2YQ.

Mr. Amey Pandit started the session by introducing the Amateur Radio and benefits of becoming HAM radio operator. He also discussed the paper pattern and syllabus for the HAM exam. This lecture benefited to all the members of club and also to those who will be answering the exam. The entire event was coordinated by Prof. Mohini Naik, PI of satellite club, ETC Department.



Talks on Study Abroad Program: a workshop series

The IEEE DBCE Student Branch Women in Engineering Affinity Group in association with iSchoolConnect Pvt. Ltd. organized Study Abroad Program: a workshop series technically sponsored by IEEE WIE Bombay Section from 29th June - 3 July 2021.

STAND A CHANCE TO WIN A GIVEAWAY EVERYDAY

FREE REGISTRATION

<http://bit.ly/isic-ieee-bombay>

CONTACT:
Ms. NEHA JOSHI
7350648787
Ms. ANJIMA RAJESH
9067156974

Day 1 - Jobs vs Higher Education: What's right for you.
Day 2 - All about Test Preparations.
Day 3 - Choosing the Right University.
Day 4 - Video Interview Tips.
Day 5 - All about Studying Abroad.

Date: 29 June - 03 July 2021
Time: 5pm - 6 pm
Platform: Zoom

Topic: Job Vs Higher Education

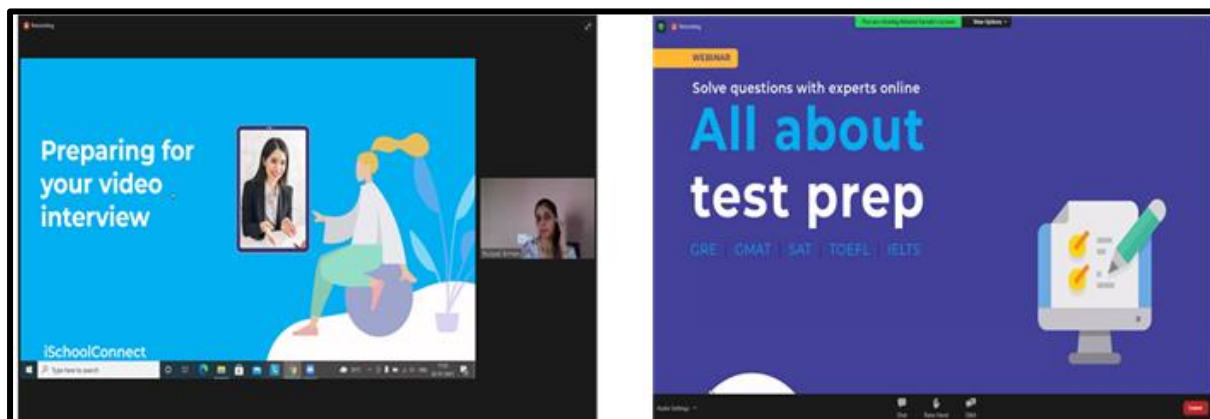
Date: 29th June 2021

The speaker for the day, Ms. Rashmi Kango – Study Abroad Mentor was introduced to the audience by IEEE WIE Student Member Ms. Sidhilaxmi Shenoy. The Session began with a poll asking the participants their plans after graduation. Ms. Rashmi mentioned some of the important aspects of a profile setup, which included academics, soft skills, persona, experience, social media, extra-curricular activities and social cause. She also elaborated on how Covid-19 has impacted current economic situations in various employment areas. She

concluded by suggesting the participants to base their decision while choosing their final destination on the following factors: quality of study, career option, visa, scholarships etc.

Topic: All about Test Preparations

Date: 30th June 2021

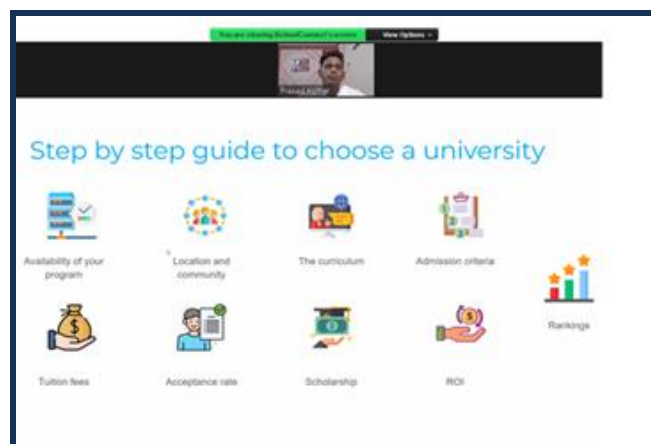


The IEEE Student Member, Mr. Mandar Borkar welcomed the speaker for the day Ms. Ashwini Sarode. The speaker discussed about the test preparations required to study abroad, such as GRE, GMAT, TOEFL and IELTS. She briefly discussed the scores required, score distribution and acceptance rate. She also stated and explained the structure and score distribution for SAT examination.

Topic: Choosing the right university

Date: 1st July 2021

IEEE WIE Student member Ms. Harshada Gawas introduced the speaker for the day, Mr. Prasad Kumar – Study Abroad Expert. The speaker gave a step by step guide to choose an apt university one wants to study in. He also stated that choosing the right university includes a lot of steps, one of which is finding the right program itself. He gave a lot of guidance with regards to availability of a program, tuition fee, scholarships, acceptance rate and rankings.



Topic: Do's and don'ts of study abroad interview

Date: 2nd July 2021

Ms. Roopali Birman – Study Abroad Expert was introduced to the audience by IEEE WIE Student member Ms. Preksha Karpe. The Speaker provided insights on interview preparation, how one should present themselves during a video interview, the documents required for an

interview and tips to ace the VISA interview. Furthermore, she mentioned the necessary documents and also explained how the process works at the VISA interviewing stage.

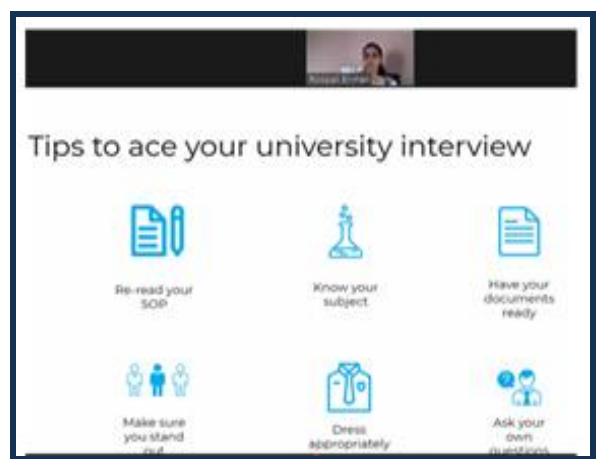
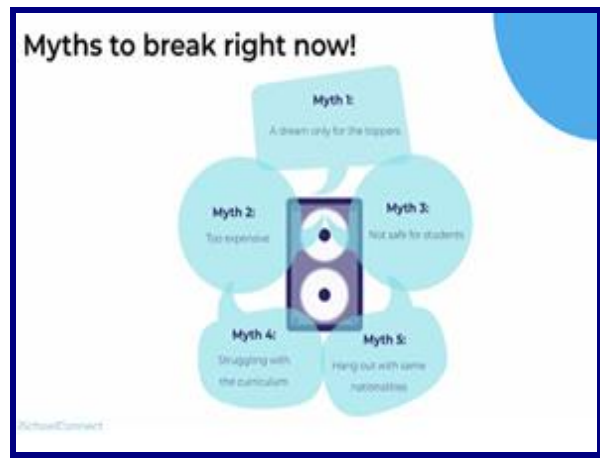
Topic: All about studying abroad

Date: 3rd July 2021



Mr. Ashish Fernando – Founder & CEO of iSchoolConnect was welcomed by IEEE Student member, Mr. Hrishikesh Prabhu. Mr. Ashish started off by briefing the participants on how many students chose to study abroad in 2020 and how to choose the right country for you. He then offered a detailed road-map to study abroad and how to start working on your profile so one can be ready to send out their applications.

After every session, Mr. Aditya Mirani – Marketing Executive at iSchoolConnect briefed the participants about the AI based Video Interview Analyzer available on their website. The attendees were actively engaged in this program by asking queries which were answered by the speaker at the end of every session. The event was coordinated by Prof. Yeshudas Muttu and IEEE DBCE Student members Ms. Neha Joshi & Ms. Anjima Rajesh.



3rd Installation of IEEE DBCE Student Branch

The IEEE Student Branch of Don Bosco College of Engineering organized its 3rd Installation on Saturday, 20th March 2021. The Chief Guest for the function was Dr. B. Satyanarayana, Chair of IEEE Bombay section; connected virtually through google meet. Rev. Fr. Kinley D'Cruz, Director, Dr. Neena Panandikar, Principal, Dr. Varsha Turkar, HOD of ETC Department, and Prof. Yeshudas Muttu, IEEE Student Branch Counselor; were the other dignitaries present for the function. The comperes for the event were IEEE Student members, Mr. Renvick Fernandes and Ms. Anjima Rajesh.

The Chief Guest, in his address touched upon the IEEE benefits and mentioned to establish professional student chapters that would be helpful for the students as well the faculties in their research. He appreciated the efforts put in by Dr. Varsha Turkar & Prof. Yeshudas Muttu for the work they do for the student branch as well as the section. He concluded his speech by mentioning about the big IEEE events coming up in Goa & requested the IEEE DBCE Student branch members to actively volunteer for the same.



This was followed by a premier of the IEEE DBCE student Branch activities video for the year 2020. Later, Prof. Yeshudas Muttu addressed the audience stating the importance of the IEEE SB administration & IEEE DBCE executive members 2021 were introduced to the audience. They were handed over with a badge & a flower by the Director, Fr. Kinley D'Cruz & Principal Dr. Neena Panandikar. This was followed by the oath taking ceremony.

Thereafter, Mr. Gautam Desai, former IEEE vice chair spoke about his IEEE experience & motivated others to take out maximum benefit from the student branch. Soon after, there was a small refreshment break followed by a few fun-based networking activities. This was followed by Prize distribution ceremony. To conclude with, Prof. Yeshudas Muttu appreciated the efforts put by the students to organize this event and ensured to have many IEEE events with the support of the management.



ONLINE ADIEU- BE ETC BATCH 2021 FAREWELL

On 17th August 2021, the ETC Dept. of Don Bosco College of Engineering bid farewell to its final year students of batch 2017 – 2021. It was an online event coordinated by Prof. Kimberly Morais on google meet.

The function began at 10:00 am with a prayer by Miss. Rosann Godinho. Director, Fr. Kinley D’Cruz, conveyed his message through an online video. Principal, Dr. Neena Panandikar, HOD – Dr. Varsha Turkar, class teacher - Prof. Kimberly Morais conveyed their messages during the live session. Annual release of “Ankur” project idea book of the department was coordinated by Prof. Anisha Cota and Prof. Priyanka Padiyar.



Dr. Kala Nayak, Prof. Natasha D’souza, Prof. Michelle Viegas, Prof. Trima Fizarido, Dr. D. S. Vidhya and Prof. Mohini Naik shared their experiences of teaching the batch. For the informal function two events were organised. One was classfare awards 2021 which was collectively hosted by Prof. Yeshudas Muttu, Prof. Mathilda Colaco, Prof. Selvyn Fernandes, Prof. Samantha Cardoso, Prof. Deron Rodrigues, Prof. Melba D’souza.

The second event was “Aapke Alfaaz” which was hosted by Prof. Flavia Leitao and Prof. Sheryas Simu. The students and faculty thoroughly enjoyed both the events. Mr. Pavan Kalyan was declared the best outgoing student of the department. The event ended with a recorded song “Yaroon” sung by a TE student.



STUDENT'S ACHIEVEMENTS & FELICITATION

- **Project “Sanitizing Robot”**, received funds of Rs. 95,639, from Department of Science & Technology (DST) Goa
- They also got Rs.20000 from Goa state innovation council
- The team Participated and selected among the top 24 project groups in the National Level Project Competition Innovation in Manufacturing Process (IMP 2021) competition organized by INAE and IIT Hyderabad
- They also secured First prize in the TECHNIX National Level Project competition 2021 organized by DBCE Final Year Project Quality Assurance (FYPQA) Committee in association with the IEEE DBCE Student Branch, in the hardware category.



- **Project Library Management Robotic system** won the “Best Project Award” for the “5th National Level IEEE Project Competition”. on June 26, 2021.
- They also won the First Place at “PRATIRA 2021”, the National Level Inter-college Project competition” organized by Department of ETC, Sambharam Institute of Technology”, supported by IEEE Bangalore Section on 26 July 2021.
- They received funds of Rs. 87,138/- from Forum for Incubation Innovation Research & Entrepreneurship (FiiRE) under Let's Solve Your Problem (LSYP) initiative.



- Project **Innovative Medium of Learning using Augmented Reality**, won the second place in the TECHNIX National Level Project competition 2021 organized by DBCE - FYPQA Committee in association with the IEEE DBCE Student Branch, in the Software category.
- Won the first place for IIC Business Plan / Prototype Competition



- Project **Water Pollution Monitoring and Decision Support System**, won the third place in the TECHNIX National Level Project competition 2021 organized by DBCE - FYPQA Committee in association with the IEEE DBCE Student Branch, in the Software category.



- Project **Fish Quality Analysis System** got prototyping grants of Rs.20000/- from The Goa state Innovation council



- Project **Ambulatory Blood Pressure Monitor** got prototyping grants of Rs.20000/- from The Goa state Innovation council
- Won second place for IIC Business Plan /Prototype Competition



- Project Aquatic waste collecting system was awarded the Finalist award for the “Innovative project competition IV edition 2020” jointly organized by Goa Chambers of Commerce & Industry (GCCCI) & Goa State Innovation Council (GSIC) for the academic year 2019-20



- Mr. Vaishabh Jalmi from BE ETC and Ms. Anrea Peixoto from SE ETC cleared the Amateur Station Exam 2021
- Jemimah Gonsalves, SE ETC has brought laurels to the college by winning the Third Prize in the State of Goa, in the “Heartfulness Essay Event 2020 in category 2 (college UG/ PG)



TRAINING AND PLACEMENTS

Internship

Every year students of the third year are exposed to industry through internship program of 1 month duration for industry experience. The Third Year students go for internship of 15 days at the end of the 5th semester and the next 15 days at the end of the 6th semester.

Students choose a company where they would like to do internship based on domain areas and approach the company, if the company agrees to take them as interns then a letter is issued from college confirming internship dates and other details. Students wanting to attend a 2 week course or workshop are also allowed to do so.

The third year ETC students underwent industrial Internships from the 22nd March to the 6th April 2021. 56 students successfully completed their internship in companies like Goa Electricity department, Ponda; Micro interconnection; MRF, Goa; Goa Electricity department, Margao; Agnelo electronics; Syntegon technology India Pvt Ltd; Commscope and Asier Solutions.

Five students underwent internship at Asier solutions which is housed in the incubation centre FiiRE of Don Bosco college of Engineering, Fatorda, Goa. Asier Solutions is a pioneer in the field of technical education and has been providing students education in the field of robotic, Arduino programming, coding, AI, web designing and basic electronics. They specialize in building new kits to give students knowledge of STEM education.

Students were given a list of tasks to complete every day. Students were introduced to project building initiative by researching about different components and simulations software. Students worked in the field of robotics and were exposed to problem solving, undertaking different research work and were encouraged to build mini projects using their own ideas. Students also completed various online MOOC courses as a part of the internship program.

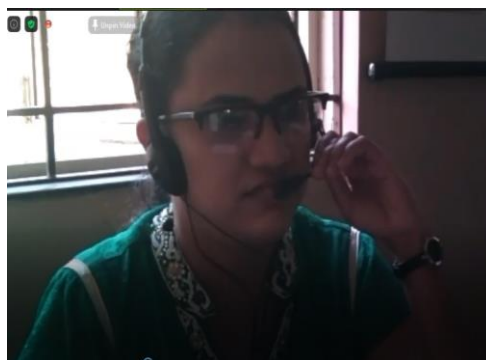
Placements

- Suyog Borker and Mr. Velton D'Silva placed in Tangentia
- Mr. Saurabh Prabhu and Mr. Raj Kubal placed in Persistent Systems
- Ms. Miti Naik Gaunekar, Ms. Francy Cabral, Ms. Simran Vernekar, Mr. Kingsley Fernandes and Mr. Musab Shaikh placed in Capgemini
- Mr. Abhishek Dhumvad placed in Accenture
- Ms. Drasti Naik placed in IBM
- Mr. Yash Rege placed in Creative Capsule
- Mr. Siddhant Kunde and Mr. B. Pavan Kalyan placed in Enigmasoft Technologies Pvt. Ltd.
- Ms. Sapana Kambli placed in Syntegon
- Mr. Gajanan Sangodkar placed in Lift Controls Pvt. Ltd.
- Mr. Sunil Patil placed in Klenzaid's Contamination Control Private Limited
- Mr. Paresh Redkar and Mr. Vishwajeet Desai placed in Canon
- Mr. Joel Nicolas Fernandes and Mr. Satyaswarup Banerjee placed in Kilowatt

FACULTY INITIATIVES

CERTIFICATIONS/ AWARDS/ ACHIEVEMENTS

- Dr. D.S. Vidhya completed her research in “Efficient Realization and Verification of Mixed Signal Logic with Differentially fed neural network” and completed PhD from Assam Don Bosco University.
- Patent published for the topic “Design an Efficient and optimized formal verification model for mixed signal using Differentially fed neural network over Feed forward network”(Application number 202121006719, 2021)
- Prof. Kimberly Morais was invited as a Speaker for a workshop on Electronic Circuit Simulation using eSim that was organized by the FOSSEE eSim team at IITB on February 13 February 2021, on how to use eSim software for practical sessions
- Organised a talk on Mentorship session for Innovators/Student Entrepreneurs under Institute Innovation Council
- Prof. Mohini Naik was invited as a Panelists for the Program on Role of mentors in ATL Marathon organized by AIM NITI AYOOG, New Delhi, on on 12 February 2021
- Invited as a Panelists for the Program on Opportunities for Women Entrepreneurs in Education organized by Atal Innovation Mission (AIM), NITI Aayog AIM, on 12 February 2021
- Cleared the Amateur Station EXAM 2021
- Resourced person for National Skills Qualification Framework (NSQF) and First edition of the Webinar series about Opportunities for Women Entrepreneurs in Education.



- Prof. Deron Rodrigues qualified GATE 2021, by securing a score of 453, all India Ranking 2819 and percentile 96.5%
- Delivered a session on ‘Evolution of Communication Technology’ for 9th and 10th Std students of Perpetual Succour Convent High School Navelim on 18th March, 2021.



- Prof. Priyanka Padiyar has registered for PhD in NIT Goa



- Dr. Varsha Turkar, Chairperson of IEEE WIE Bombay Section Affinity Group. Organised 14 events for Bombay section
- WIE Chair, INGARSS 2021
- Chair, Travel and Tourism , Tensymp 2022
- Member of Board of Studies, Goa University, April 2021

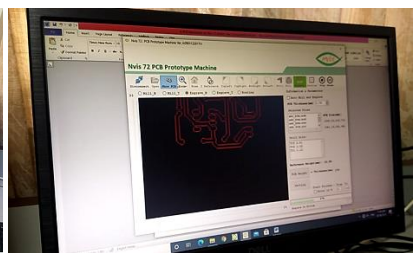


CONSULTANCY

Company: **FunMinds Learning Tech**

Period: August 2021

Work done: Prof. Flavia Leitao made the prototype PCB for the company, did the design in Eagle, generated the Gerbers and G-codes and fabricated the PCB on the Nvis 72 machine, along with the assistance of Mr. Ignatius Dias. The client was well impressed and asked for the design files for further production of the board.



PAPER/ JOURNAL PUBLICATIONS

Journal

- Prasad Kulkarni, B. G. Hogade, Vidula Kulkarni, **Varsha Turkar**, “ASIC Design of Radix-2,8-Point FFT Processor”, Journal of Scientific & Industrial Research Vol. 80, February 2021, pp. 137-142 (Scopus and SCI indexed)

International Conference

- **Varsha Turkar**, Sangita Chaudhary, Sonaali Borkar, “Impact of Online Teaching Learning Process on Engineering Students of India due to COVID-19 Lockdown” , ICAITR 2021, Organised by Vidhyalankar Institute of Technology, Wadala, Mumbai, India, June 1, 2021
- Rahul Kothru, Musab Shaikh, **Varsha Turkar**, **Shreyas Simu**, Satyaswarup Banerjee, Gulab Singh, “Semantic Segmentation of Polsar Images for Various Land Cover Features” IEEE Geoscience and Remote Sensing Symposium IGARSS 2021, 11-16 July 2021
- Juhi Checker, Shaunak De, **Varsha Turkar**, Gulab Singh, “Performance Impact of Jp2 Compression on Semantic Segmentation of Polsar Images” IEEE Geoscience and Remote Sensing Symposium IGARSS 2021, 11-16 July 2021

WORKSHOPS/SEMINARS/EXPERT TALKS CONDUCTED

- Prof. Yeshudas Muttu conducted hands on workshop using the trending software in companies like Proteus & TinkerCad Circuits, on 22nd & 27th October, 3rd, 10th & 24th November, 15th December 2020 from 2:00 p.m. – 3:00 p.m. and 7th January 2021 from 10:00 a.m. to 1:00 p.m.
- Prof. Mohini Naik under the Student Satellite Club-Parikrama organized a guest lecture on Amateur Radio and HAM radio examination on 25th February 2021.
- Dr. D.S Vidhya conducted a knowledge sharing session on “Recent trends in Formal Verification” under the R & D cell on 25th March 2021.
- Dr. Shreyas Simu conducted a knowledge sharing session on “High Speed SRAMs and Recent Trends” under the R & D cell on 25th March 2021.
- Prof. Flavia conducted a knowledge sharing session on “Datasheet Study and RoHS Compliance” under the R & D cell on 25th March 2021.
- Prof. Flavia Leitao, Prof. Yeshudas Muttu and Prof. Deron Rodrigues organized a Two Day Workshop on Firebird V Robot for the students of TE ETC, on March 26th and 27th 2021, under the DBCE e-Yantra Robotics club
- Prof. Yeshudas Muttu with IEEE Student Branch of DBCE organized a Graphic designing Workshop titled “Dot Your Design” on 8th & 9th May 2021.
- Prof. Yeshudas Muttu with IEEE Student Branch of DBCE organized a e-Poster Design Competition on “CoVid Vaccine Awareness in the Nearest Centre”, on 15 May 2021
- Prof. Yeshudas Muttu and Dr. Varsha Turkar, under the IEEE DBCE Student Branch Women in Engineering Affinity Group organized a Web Development Workshop “Weave the Web” on 1st May, 2nd May and 15th May 2021
- Prof. Michelle Araujo conducted a knowledge sharing session on “Cognitive Radio Networks” under the R & D cell on 18th June 2021.
- Prof. Trima Fernandes conducted a knowledge sharing session on “State of Art of Network on Chip” under the R & D cell on 18th June 2021.
- Prof. Deron Rodrigues and Prof. Michelle Araujo organized emerging technology webinar on ‘Augmented Reality’, under DBEATS on 21st June 2021.

- Prof. Deron Rodrigues and Prof. Michelle Araujo organized emerging technology webinar on ‘Machine Learning’, under DBEATS on 22nd June 2021.
- Prof. Anisha Cotta and Prof. Priyanka Padiyar conducted a webinar on “Project Rubrics and Documentation” for faculty of ETC Department on 26th June 2021
- Prof. Michelle Araujo organized a talk on “How to plan for Start-up, Legal and Ethical Steps” under Institute Innovation Council 3.0
- Prof. yeshudas Muttu under the IEEE DBCE Student Branch Women in Engineering Affinity Group in association with iSchoolConnect Pvt. Ltd. organized Study Abroad Program: a workshop series technically sponsored by IEEE WIE Bombay Section from 29th June - 3 July 2021.
- Prof. Anisha Cotta, Prof. Yeshudas Muttu, Prof. Priyanka Padiyar along with Dr. Varsha Turkar organized a National Level Project Competition TECHNIX 2021, on August 27, 2021.
- Prof. Kimberly Morais organized a online farewell for the final year students of batch 2017 – 2021, on 17th August 2021
- Prof. Flavia Leitao and Dr. Varsha Turkar organized knowledge sharing sessions on “Mobile Phone Photography and Editing”, “Recent trends in Formal Verification”, “High Speed SRAMs and Recent Trends”, “Datasheet Study and RoHS Compliance”, “State of Art of Network on Chip” and “Cognitive Radio Networks”, under the R&D cell.

WORKSHOPS/SEMINARS/EXPERT TALKS ATTENDED

- Prof. Anisha Cotta attended AICTE sponsored Two weeks Faculty Development Program on “Machine Learning & its Applications”, from 5th Jan to 15th Jan 2021 by ETC Dept. Kholapur Institute of Technology’s College of Engineering, Kholapur
- Prof. Deron Rodrigues attended 3-Day workshop on Electronic Circuit Simulation using e-Sim from 11 to 13 Feb, 2021, organized by Teaching Learning Centre (ICT) at IIT Bombay (e-SIM).
- Prof. Anisha Cotta attended One Week Online ISTE approved Faculty Development Programme on "Internet of Things (IoT)" sponsored by AICTE and ISTE, from 7th to 12th April 2021 by A.G.Patil Institute Of Technology, Solapur
- Prof. Deron Rodrigues attended 1-day virtual workshop titled "Excel at MS Excel for Effective Organization of Quantitative Metrics data of NAAC" conducted on 15th May 2021 by Vidyalkar Institute of Technology (VIT), Mumbai
- Prof. Trima Fernandes attended an Orientation Session on the NDLI and NDLI Club for NDLI Club Authorities on 5th June 2021
- Prof. Deron Rodrigues and Prof. Mohini Naik attended One Week Online ISTE approved Short Term Training Program on “Recent Trends, Research and Challenges in IoT Applications” from 28 June, 2021 to 03 July 2021.
- Prof. Deron Rodrigues attended Participated in Principals and IQAC Coordinators meet organized by MasterSoft
- All ETC Faculty members attended the knowledge sharing sessions on “Mobile Phone Photography and Editing”, “Recent trends in Formal Verification”, “High Speed SRAMs and Recent Trends”, “Datasheet Study and RoHS Compliance”, “State of Art of Network on Chip” and “Cognitive Radio Networks”.

COMMUNITY OUTREACH

Outreach Programme at Government High School, Kalay

As a part of National Skills Qualification Framework (NSQF) under Ministry of Skill Development and Entrepreneurship, IEEE DBCE Student Branch in association with IEEE Bombay Section SIGHT (Special Interest Group on Humanitarian Technology) organized an Outreach Programme at Government High School, Kalay, Sanguem- Goa under Goa Samagra Shiksha Abhiyan. The main objectives of this event were to make students aware about electronics & telecommunication field and to assess the availability of the resources in the laboratories. The invited resource persons were Prof. Yeshudas Muttu & Prof. Mohini Naik Gadekar. The event started off with a session on “Electromagnetic Wave & Spectrum” by Prof. Mohini Naik Gadekar. The next session titled “Electrical, Electronics & its applications” was delivered by Prof. Yeshudas Muttu. The students were very interactive and showed keen interest in the field of electronics & Telecommunication. The event concluded with Vote of Thanks by Ms. Karishma Naik.



UPCOMING EVENTS

- IEEE National Level Coding Competition on 4th Sept. 2021
- DBEATS- Workshop on Augmented Reality on 17th Sept. 2021
- Antenna Research Group- Design and development of microstrip antenna on 17th Sept. 2021
- “Capture Goa’s Rich Culture” (Video making competition), “Goa in a Snap Shot” (Digital Collage Making Competition)”, on 1st Oct 2021, for celebrating Goa’s 60 Years of Liberation
- IEEE Day Celebration on 9th Oct. 2021
- E-Yantra Workshop on Robotics on 22nd and 23rd Oct. 2021
- Industry Academia Interface on 12th Nov. 2021
- DBEATS - Workshop on Circuit Designing on 13th Nov. 2021
- DBEATS - Project Idea Competition on 27th Nov. 2021
- E-remembrance (Alumni Cultural Evening) on 11th Dec. 2021