FLASH

Electronics & Telecommunication Engineering Departmental Newsletter

Volume 01, Issue 01, July- December 2016

Inside this issue

VISION

Committed to creating an environment which will produce world class engineers by providing students with broad and professional educational programs of the highest quality
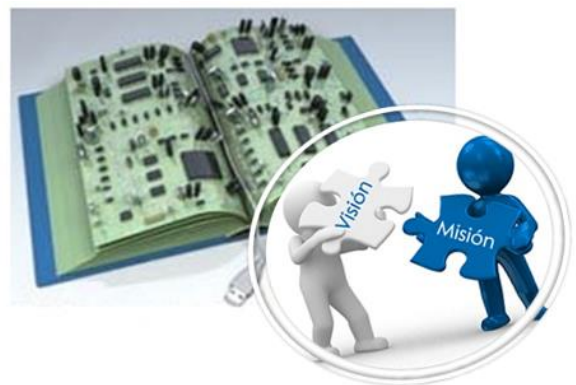
MISSION

To emerge as one of the best comprehensive knowledge centers committed to transform young students into globally employable professionals and provide high quality education in electronics engineering and telecommunications and technology. The Department aims to encourage problem-driven academic initiatives that produce talent to provide the sound foundation for future engineering systems. The Department deems it essential to train and educate human resources for deep technical excellence instill high levels of discipline along with inculcating responsibility for better technology, society and human life.

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 10 fully functional Laboratories as listed below, along with the different Softwares.

> **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

> **SOFTWARE**
- MATLAB
- Xilinx 14 version
- OSCAD
- MAGIC
- LabVIEW

STUDENT'S CORNER

DON BOSCO ELECTRONICS AND TELECOMMUNICATION SOCIETY (DBEATS) 2016-2017

The 5th Annual Installation Ceremony of DBEATS (Don Bosco Electronics and Telecommunication Society) was held on 18th August 2016 at 10:00am in the College Auditorium. The Chief Guest for the function was Mr. Norbert Brian D'Souza, Consultant at Tata Consultancy Services. The ceremony commenced with a welcome prayer recited by Meldon Fernandes, followed by the lighting of the traditional lamp by the dignitaries and a prayer song by the ETC students. A short video of D-BEATS activities held during the year 2015-2016 was played.

The new DBEATS council members were then introduced by Prof. Melba D'Souza (DBEATS Coordinator), which was followed by the oath taking ceremony.

TECHNICAL DEBATE COMPETITION

Ms. Diksha Dessai, General Secretary of DBEATS proposed plans of DBEATS for 2016-21017.Rev. Mr. Mahendra Gadiyar, a third year ETC Students introduced the Chief Guest Mr. Norbert Brian D'Souza 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.

The Technical debate competition was held post lunch. Twelve Teams participated of which 6 teams qualified for the final round. Finally, three places were awarded.

EXPERT TALKS

"Electronics in Industry Verticals" by Mr. Norbert Brian D'Souza

The DBEATS Installation ceremony was followed by a Technical talk on "Electronics in Industry Vertical", delivered by the Chief Guest himself, Mr. Norbert Brian D'Souza. In his talk, he spoke about Automotive Electronics, Avionics, Industrial Automation, Hi-Tech, Telecom, Medical Electronics and Internet of Things. The students got an insight of different projects that can be taken up.

"Wireless Communication: Roadmap to 5G" by Mr. Shailesh Khandolkar

On the occasion of **ENGINEER'S DAY,** 15th September 2016, a guest lecture was organized by the ETC Department in association with DBEATS for the students of the third and fourth year .The resource person for the technical talk was Prof. Shailesh Khandolkar, Associate Professor at Padre Conceicao College of Engineering , Verna.

The talk was based on the topic of WIRELESS COMMUNICATION: Roadmap to 5G...Key Technologies' Overview. The lecture aimed at offering the students a broad idea on the development and possibilities of 5G technology in the coming years.

The speaker further went on to explain the idea of having different generations of networks with the likes of 2G, 3G , 4G and in conclusion, how 5G network could be brought into existence. The lecture was ended with an overview about the difficulties that would be encountered in mapping the way for the launch of 5G in India and the possible solutions for the same.

WORKSHOPS/SEMINARS/IN-HOUSE TRAININGS

ONE WEEK WORKSHOP ON MENTAL ABILITY & QUANTITATIVE APTITUDE

The workshop was aimed at improving the aptitude skills of the students so as to improve their performance at various entrance exams as well for campus interviews. The workshop was conducted by the Dept. faculty for a period of 5 days, from 9.00 am to 5.00 pm.

Day 1(11-07-2016) of the workshop was based on the topics of Blood Relations and Directions. The lecture was conducted by Prof. Flavia Leitao.

Day 2(12-07-2016) of the workshop was based on Coding & Decoding and Percentages. The lecture was conducted by Prof. Deron Rodrigues.

Day 3(13-07-2016) of the workshop was based on Verbal Reasoning, conducted by Prof. Trima Fernandes e Fizardo.

Day 4(14-07-2016) of the workshop was based on the topics of Logical Reasoning and Diagrams. The lecture was conducted by Prof. Melba D'Souza

Day 5(15-07-2016) was a lecture with regards to Quantitative aptitude. The lecture was conducted by Prof. Mathilda Colaco

On each of the 5 days a lecture followed by a mock test was conducted. A total of 63 students attended the lecture series.

WORKSHOP ON HTML-5

The Electronics and Telecommunication Engineering Department in association with DBEATS organized a workshop for the students of Third Year Electronics and Telecommunication Engineering, titled, "HTML 5"on 23rd of July, 6th of Aug 2016.The Resource People were Prof. Norman Dias and Prof. Chinu George from Computer Department, DBCE, Goa.The Coordinator for the workshop was Prof.Vidhya.D.S. from Electronics and Telecommunication Department .The topics which were covered during the course: Website Development using HTML5 and CSS3, that can be implemented in future-rich web browsers on iPhones, Android Phones and WebOS Phones thereby allowing mobile web developers to build websites that surpass desktop equivalents. Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) are the foundation of web development. HTML5 and CSS3 together form a powerful duo that can create websites of any size, shape, or function.

ONE WEEK WORKSHOP ON CCNA BASICS
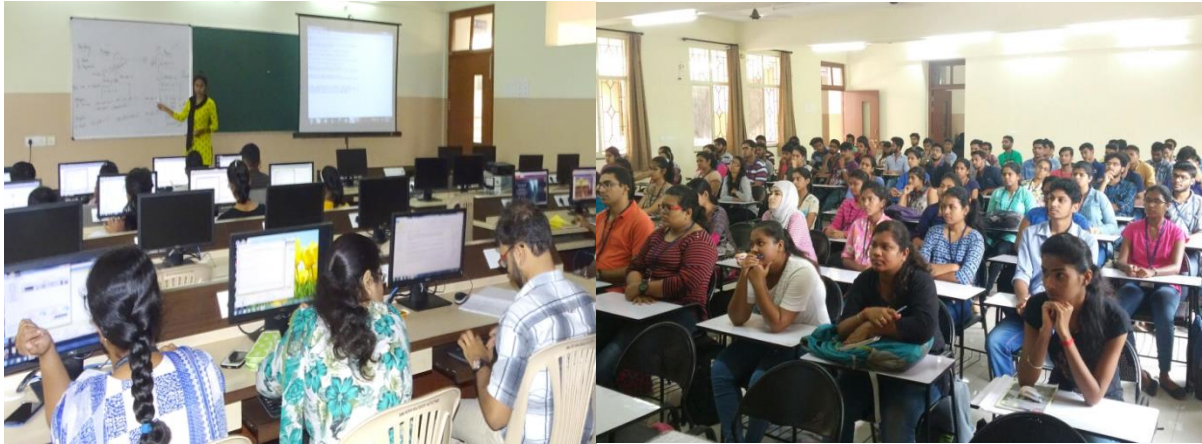
The students of the third year from the electronics and telecommunication engineering attended a workshop from the 4th of July to the 9th of July 2016 as a part of their internship program. A total of 61 students attended the workshop. The workshop was based on the topic of CCNA(Cisco Certified Network Associate) and its applications. The workshop was conducted by Miss. Synora Rodrigues and Mr. Sarvesh Naik Dalal, from IP – GATES, Margoa.

IP-GATES is an organization that provides most comprehensive and cost effective training in various IT products and technologies. Through intense Certification Training they provide individuals and organizations with cutting edge boot camp training and certifications for various IT vendors like CISCO, MICROSOFT, COMPTIA.

The workshop aimed at training our students in the basics of networking. The workshop was conducted over a period of 5 days at the college campus, which involved theory lectures as well as practical sessions.

The lectures delivered by the faculty from IP- GATES involved teaching the students about the various networking devices, internet protocol addressing and configuring networking devices. The workshop also gave the students an opportunity to have experience with actual programming of networking devices using certain soft wares.

Day one (4-7-2016) involved briefing on the course material of the workshop and educating the students about CCNA and the various job prospects involved with this course. The lectures also involved explaining the students the various networking devices and ip addressing techniques. Live demonstrations were also conducted by the faculty using simulation software.

Day two (5-7-2016) lectures involved a more detailed lecture on ip addressing and a technique called sub netting. The students learnt the mathematical aspect of addressing networking devices along with practical sessions.

Day three (6-7-2016), four (8-7-2016) and five (9-7-2016) were primarily practical sessions , wherein the students performed practicals using simulation software to learn the techniques of configuring Switches and Routers. The students also learned about various techniques related to configuring networks such as VLAN, VTP, and Routing.

FIELD VISITS

➤ Final Year ETC Engineering students visited the "Centre for Incubation and Business Acceleration - CIBA" and "Infinyt3D", Verna as a part of their curriculum on the 12th August 2016.

➤ Second Year ETC Engineering students visited the "Centre for Incubation and Business Acceleration - CIBA" and "Infinyt3D", Verna as a part of their curriculum on the 6th October 2016.

ACHIEVEMENTS & FELICITATION

- Mr. Gandhar Sathe, Mr. Avril Vaz, Ms. Samiksha Mandurkar, Ms.Pradnya Kamat & Ms. Fatimath Ezmath M got the first place for their final year project "Leakage and Blockage detection for water pipeline", for Kshitij 2016, which was held in DBCE from the 28th to the 30th of July 2016.
- Mr. Shubham Naik, Ms. Anish Naik, Ms. Deeksha Naik, Ms. Shruti Naik, Mr. Rolan Pereira got the second place for their final year project "Automatic Dry Waste Sorter Machine", for Kshitij 2016, which was held in DBCE from the 28th to the 30th of July 2016.
- Mr. Myron Rodrigues, Mr. Abdul Rakib Sarmadi, Mr. Sunny Sinari, Mr. Shramik Salgaonkar, Mr. Veliston Rocha, Mr. Sagar Nikam got the third place for their final year project "Human Action Controlled Robot", for Kshitij 2016, which was held in DBCE from the 28th to the 30th of July 2016.
- Ms. Ashiya Gangadharan, Ms.Saumya Naik, Ms. Aditi Acharya, Ms. Rowena Fernandes, Ms. Anusha Sirsikar, and Ms. Sherish Mulla got the first place for the mini project "Magical Candle", for Kshitij 2016, which was held in DBCE from the 28th to the 30th of July 2016.
- Ms.Uchita Prabhu Dessai, Ms. Kaymeron Tovar Dias, Ms. Muriel De Souza, Ms. Genevy Angie Sequiera, Ms. Melanta Corrreia & Mr. Rahul Padwalkar got the second place for the mini project "Mobile Bug Circuit", for Kshitij 2016, which was held in DBCE from the 28th to the 30th of July 2016.
- Mr. Luis Gomes, Mr. Siddesh Nayak, Mr. Chandrakant Pal and Mr. Shreyas Aigal got the third place for the mini project "Autonomous Robot", for Kshitij 2016, which was held in DBCE from the 28th to the 30th of July 2016.

- Mr. Myron Rodrigues and Mr. Abdul Rakib Sarmadi represented Don Bosco Incubation centre, Goa in association with DRDO-FICCI ATAC, for the Asian Ministerial Conference on Disaster Risk Reduction 2016, held in Delhi from the 2nd to 5th November 2016, where they presented their project "Human Action Controlled Robot".

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.

A number of past students of the college are now occupying highly responsible positions in various reputed and prestigious organizations including Amazon, Ion exchange, IFB, D-link, GWave, Commscope, HFCL, Dccper/Numadic, Birla Furukawa, Smartlink, Selandia Ship Management and Prime Enterprise. A total no of 32 students were place from the June 2016 batch.

FACULTY INITIATIVES

TEQIP II ISTE ON "INDUSTRIAL AUTOMATION & VIRTUAL INSTRUMENTATION"

A one week TEQIP II ISTE STTP on "**Industrial Automation & Virtual Instrumentation**" was organized by the ETC Dept. of Don Bosco College of Engineering in association with the EI Dept. of Basaveshwar Engineering College, Bagalkot (Karnataka) from November 7th to 11th 2016.

The guests present for the inaugural ceremony were, Mr. Jose Noronha, Chairman of GPSC who was the Chief Guest, Director of Don Bosco College of Engg., Fr. Kinley D'Cruz, Principal of DBCE, Dr. Neena Panandikar, HOD of ETC Dept. Prof. Michelle Viegas, HOD of E&IE Dept. Prof. C.L.Chayalakshmi & Prof. Krishnamurthy Bhat.

Prof. Chayalakshmi gave the sessions on LabVIEW. Prof. Krishnamurthy Bhat demonstrated real time examples with a conveyer belt and proximity sensor using PLC, and also briefed the participants on SCADA and DCS. Prof. Manjula Suthagundar took up PLC progmming with the help of examples using the CX programmer.

A field trip to Zuari Agro Chemicals Limited (ZACL), was organized, where Mr. Sushant Shetye, Asst Manager, Instrumentation Dept. explained the various field devices used in the plant and also simulated the DCS of a section of the plant. Mr. Nilkanth Pai Panandiker, Joint General Manager, ZACL was the chief guest for the valedictory function. A total of 52 participants attended the workshop from different institutes.

PAPER/ JOURNAL PUBLICATIONS

- Prof. Michelle Araujo published a paper titled "Safety Automation System " in International Journal of Science Technology and Engineering, Vol. 2, Issue 9, pp: (1-8), Month: March 2016.
- Prof. Michelle Araujo published a paper titled "Accident Sensor with Google Map Locator" in International Journal for Innovative Research in Science and Technology Volume 2 Issue 10 pp122-127 March 2016.
- Prof. Michelle Araujo published a paper titled "Farmer Alert System" in International Journal of Engineering Research and Reviews, Vol. 4, Issue 2, pp: (1-8), Month: April - June 2016.
- Prof. Trima P. Fernandes e Fizardo published paper titled "Auto smart obstacle detection" in International Journal of Science Technology and Engineering, Volume 2: Issue 9, March 2016.
- Prof. Samantha Cardoso published paper titled "Capacitive Sensor interfaced with Arduino" in International Journal of Science Technology and Engineering, Volume 2: Issue 9, March 2016. (ISSN:2349-784X).
- Prof. Samantha Cardoso published a paper titled "Understanding SIFT Algorithm and its uses" in International Journal of Engineering Research and Reviews, VOL 2, Issue 10 April 2016.
- Prof. Vidhya D.S published a paper "Surveying of Underwater Robot for Marine exploration" in International Journal of Science Technology & Engineering in volume 2,, March 2016. ISSN : 2349-784X.
- Prof. Vidhya D.S published a paper "Obstacle Detection using Ultrasonic Sensors"in International Journal for Innovative Research in science $technology volume 2,Issue II, April 2016. ISSN : 2349-6010.
- Prof. Vidhya D.S published a paper "Adaptive cruise Control" in International Journal for Innovative Research in science $technology volume 3,Issue INumber, June 2016. ISSN : 2349-6010.
- Prof. Anisha Cotta published a paper titled "Human Arm Movement data Acquisition and Processing" in International Journal of Science Technology and Engineering, Vol. 2, Issue 9Month: March 2016; ISSN : 2349-784X.
- Prof. Anisha Cotta published a paper titled "Smart Restaurant Menu Ordering System" in International Journal for Innovative Research in Science and Technology Volume 2 Issue 10 pp122-127 March 2016; ISSN: 2349-284X.
- Prof. Anisha Cotta published paper titled "Automatic Weighing Control System for Quality Assurance" in International Journal for Innovative Research in Science and Technology, Volume 2: Issue 10, March 2016.((ISSN:2349-6010).
- Prof. Anisha Cotta published a paper titled "Wireless Communication using HC-05 Bluetooth Module Interfaced with Arduino" in International Journal of Science, Engineering and Technology Vol. 5, Issue 4, ISSN : 227-7798.
- Prof. Melba D'Souza published paper titled "Multi-featured shopping Trolleys with Billing System" in International Journal for Innovative Research in Science and Technology, Volume 2: Issue 10, March 2016.(ISSN-2349-6010).
- Prof. Flavia Leitao presented and published a paper titled "INTELLECTUAL PROPERTY (IP) PROTECTION USING WATERMARKING AND FINGERPRINTING TECHNIQUES" in the 2nd International Conference on Applied and Theoretical Computing and Communication Technology (iCAATcct-2016), technically sponsored by IEEE Bangalore Section held at SJB Institute of Technology, Bangaluru, Karnataka, during 21-23 July 2016.

WORKSHOPS/SEMINARS/EXPERT TALKS CONDUCTED

- Prof. Flavia Leitao conducted a one day workshop on "Analytical Reasoning" for the students of TE-ETC on the 11th of July 2016.
- Prof. Deron Rodrigues conducted a one day workshop on "Coding and decoding" for the students of TE-ETC on the 12th of July 2016.
- Prof. Trima Fizardo conducted a one day workshop on "Verbal Reasoning" for the students of TE-ETC on the 13th of July 2016.
- Prof. Melba Dsouza conducted a one day workshop on "Logical Diagrams" for the students of TE-ETC on the 14th of July 2016.
- Prof. Mathilda Colaco conducted a one day workshop on "Quantitative Aptitude" for the students of TE-ETC on the 15th of July 2016.
- Prof. D.S Vidhya conducted two days workshop on "HTML-5" for the students of TE-ETC on the 23rd of July and 6th of August 2016.

WORKSHOPS/SEMINARS/EXPERT TALKS ATTENDED

- Prof. Kimberly Morais, Prof. Anisha Cotta, Prof. Samantha Cardoso, Prof. D.S. Vidhya, Prof. Melba Dsouza, Prof Darren Rodrigues attended a one week TEQIP-II ISTE Short Term Training program on "Engineering Management Strategies for Sustainable Development" organized by department of Civil Engineering, Don Bosco College of Engineering from 9th to 13th May 2016.
- Prof. D.S Vidhya attended four weeks workshop on "Use of ICT in Education for Online and Blended Learning", conducted by IIT Bombay, from 2nd May to 10th July 2016.
- Prof. Vishnu Rathod attended a Workshop on "Cloud Computing", conducted by BVBCET-Hubli, on the 11th and 12th of May 2016.
- Prof. Vishnu Rathod attended a Workshop on "Internet of Things (IoT)", conducted by BVBCET-Hubli, on the 13th and 14th of May 2016.
- Prof. Kimberly Moraes, Prof. Melba Dsouza, Prof. Deron Rodrigues, Prof. Flavia Leitao, Prof. Mathilda Colaco and Prof. Vishnu Rathod attended a Faculty development programm on "ANDROID APP DEVELOPMENT", conducted by the Computer dept of DBCE on the 29th and 30th of June 2016.
- Prof. Michelle Viegas and Prof. Samantha Cardoso attended a three day "National Teachers Congress" at MIT-Pune, from the 23rd to 25th Sept 2016.

E-Cell

Prof. Mathilda Colaco attended a three day programm, "THE ENTREPRENEURSHIP SUMMIT 2016", conducted by NIT Goa on the 9th to the 10th of September 2016.

Community outreach

Prof.Trima P. Fernandes e Fizardo delivered a session titled "Scope and future prospects in Electronics and Telecommunication Engineering" at the Seminar "Career in Engineering" held for students of 10th, 11th and 12th Standard on the 21st May 2016 at Don Bosco College of Engineering-Fatorda

UPCOMING EVENTS

- ➢ "Industrial Internship" scheduled for TE ETC students from the 2nd to the 14th Jan 2017.
- ➢ In House training on "OSCAD" and "Image Processing" scheduled for BE ETC students from the 9th to the 14th Jan 2017.
- ➢ "PCB Design" workshop scheduled for SE ETC students on the 14th of Jan 2017.
- ➢ Workshop on "Industrial Automation" scheduled for SE & TE ETC on the 27th and 28th of Jan 2017.
- ➢ Field visits scheduled for the SE, TE and BE ETC students in various industries.
- ➢ Workshop on "LABVIEW" for TE ETC scheduled on the 11th March 2017.
- ➢ "B.S.S" Paper Presentation scheduled for TE & BE ETC on the 25th March 2017.
- ➢ Project Exhibition "TECHNIX 2017" scheduled for the ETC students on the 22nd April 2017.