



Connections

Quarterly Newsletter for Institute's Friends, Patrons, Mentors and Students May - July 2022 Vol 11 - Issue 4

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NEWS IN GENERAL

NBA ACCREDITATION

Don Bosco College of Engineering (DBCE), Fatorda is proud to announce that 3 Under Graduate (UG) Programs in Tier II; Electronics and Telecommunication Engineering (ETC), Mechanical Engineering and Civil Engineering have been accredited by the National Board of Accreditation (NBA) for the Academic Years 2022-23 to 2024-25, up to June 30, 2025 thus getting the courses recognized for quality education worldwide.

Accreditation signifies that the program outcomes of DBCE have met stringent quality standards. It is an indicator to aspiring students of the institute's level of commitment to excellence. An NBA accredited program uses Outcome Based Education (OBE) to measure students on 3 criteria – knowledge, skills and attitude. The facilities available at DBCE ensure holistic development of the students while also preparing them to be professionally equipped to solve real world problems. One of the biggest benefits of this NBA accreditation is that more companies will find it advantageous to take part in the institute's placement programs. This global recognition will also benefit the students in achieving their goals towards higher education.

As of this date, DBCE stands as the Only Institute with NBA Accredited ETC and Civil Engineering programs in the state of Goa. Students can definitely be assured of the fact that DBCE is the centre of excellence for professional education.

The NBA accreditation process was monitored by Principal, Dr. Neena S. Panandikar and guided by Director, Rev. Fr. Kinley D'Cruz. The Institute NBA Coordinators, Dr. Varsha Turkar, Mr. Ajit Salunke along with the staff of DBCE need a special mention for the meticulous preparation, planning and execution.

Principal, Dr. Neena Panandikar expressed that it is her dream come true and is indeed a proud moment as the Institute completes ten years. She gives the credit to the management, NBA coordinators, IQAC team members, staff, students, alumni, parents and all the stakeholders for the hard work put in that has led to this success.

Career Guidance and Higher Studies

The Counseling Cell arranged a talk on guidance on answering interviews, Group Discussions and aptitude tests offered by, T.I.M.E. GOA. The Third year Engineering Students from Computer, Mechanical, and Civil attended the session. The talk was organized on Tuesday, May 17, 2022 and on Thursday May 19, 2022 during their respective Value Education classes on the campus. The Resource person was Mr. Malcolm Dias, Director of T.I.M.E. The students posed interesting questions regarding courses, schemes and job opportunities. The talk ended with a student from the computer and a mechanical class each giving feedback and thanking the resource person for his time and valuable information imparted.

Procyon 2022



Procyon 2022, began with the hosts Ms. Krupashri Koli and Mr. Vadiraj Inamdar welcoming the gathering and the Chief Guest – Shri Subhash PhalDessai – Minister for Social Welfare-Goa, Guest of Honour- Mr. Mark Revlon along with the dignitaries lighting the lamp. The other dignitaries included, Special Invitee- Headmaster- Miracles High School- Mr. Filastro Cardoso, Director- Rev. Fr. Kinley D'cruz , Principal-Dr. Neena Panandikar, Administrator – Rev. Fr. Leo Pereira, CEO – FiiRE- D.S. Prashant, Cultural Secretary-Mr. Gul Ahmed and General Secretary- Mr. Reev D'souza. Each of the dignitaries were given a floral welcome.

Dr. Neena Panandikar in her address welcomed the Chief Guest , Guest of Honour and Special Invitee. She said, “Education is not confined to imparting knowledge, it is also holistic development. Procyon 2022 will showcase a rainbow of talents.” She wished the participants and organisers success for the entire event.

Rev. Fr. Kinley D'cruz mentioned the motive behind naming the cultural event 'PROCYON'. He said that Procyon happens to be the 8th brightest star in the night sky and is also the leading star. To the students he said, "you should be leaders and trailblazers and we find you are an exceptional lot, be it in studies, music, sports,..., you always stand out and stand apart. We celebrate the talents of you Dear Students and Procyon is the stage given to you. Procyon is an event of the student, for the student and by the student." He encouraged the students to have fun, cheer their fellow students and to celebrate their achievements, accomplishments and themselves.

Mr. Vadiraj Inamdar introduced the Chief Guest- Shri Subhash PhalDessai, who further in his address boosted the students to overcome all fear and barriers and take part on stage. He said, "You have to shoulder challenges, opportunities lie within the challenges, you have to pick up the challenges." He applauded the management and staff for the holistic development of the college. To the participants of Procyon 2022, he affirmed, "you will give up all your fear, you will enjoy and provide enjoyment and you will realise the strength, capacity and creativity within you."

Mr. Filastro Cardoso congratulated the students for promoting their inherent talents and wished the Institution its best to reach greater heights.

Shri Subhash PhalDessai along with all dignitaries together released colourful balloons to mark the opening of Procyon 2022.

Mr. Reev D'souza presented the overview of Procyon 2022.

As a token of love for all her guidance as Cultural In-charge during the years, Ms. Mayalin Noronha was presented with a memento.

The Chief guest, Guest of Honour and Special Invitee were all presented with mementos as a token of gratitude and appreciation for having graced the inaugural of Procyon 2022. Ms. Mayalin Noronha proposed the vote of thanks. To begin with the events of Procyon 2022, the audience were mesmerized by the voice of Mr. Mark Revlon who sang a beautiful konkanni song, composed by Reginald Fernandes.



Eleventh Annual Day and Prize Distribution Ceremony was held at Ravindra Bhavan on May 29, 2022. The Annual day is a platform to appreciate and acknowledge the young budding engineers for their academic achievements and to display their talents in the field of Music, Dance and Theatre.

The Annual Day began with a prayer dance followed by the Principal, Dr. Neena Panandikar welcoming the gathering; this was then followed by the Principal and Registrar- Dr. Kala Nayak escorting the dignitaries on stage to light the lamp.

In her address Principal, Dr. Neena Panandikar highlighted the incredible progress the college has made in a span of ten years along with the Training & Placement report. The Heads of Department presented the annual report of their respective departments, Registrar, Dr. Kala Nayak announced to the gathering the performance of the meritorious students and were felicitated. The NSS report was presented by the respective officer.

The W.X Mascarenhas scholarship awards were presented to eight meritorious students by the Director Rev Fr. Kinley D'cruz.

The sports Director- Dr Avertano Baretto awarded the students certificates for various sports competitions. The college magazine *Beacon* and the Newsletter *Connections* were released at the hands of the dignitaries.

Speaking on the occasion, the Chief Guest, IAS officer Ms. Jyoti Kumari said she can feel the enthusiastic infectious energy that the campus holds. She summed her message in three points, she urged the students to continue to learn even when one is out of the education process, in life she reminded that every individual learns from other people's success and failure. Speaking about collaboration into the world, she said it is a game of collaboration between

institute and society so one must be able to continue on those lines. She said, "Whatever one does in life, each one possesses the energy to achieve anything, which means every person can give his/her best, choose their battles wisely, translate it all into positive energy and that will affect ones own family and society."

The Guest of Honour, Dr Vitthal P. Shet Tilve said, "this institution has a lot of energy and potential" and he quoted Steve Jobs on connecting the dots. He efficaciously conveyed a message that one needs to concentrate on the goal and not the obstacle. He said, "It is not money, access to technology or position but it is the cause that will lead to good innovation and one must never settle for less." He concluded that inspiration will come from the words from people who have excelled.

Rector- Rev. Fr. Ralin D'souza said , "stars are born out of nothing and for us humans we don't need to be born with silver spoons to achieve great things in life".He added that if one can bring light to others then a person can be a star, lets give light and be stars.

Provincial - Fr. Felix Fernandes spoke about the book of Viktor Frankl 'Man's search for meaning', he highlighted the brutality of war and how there have been instances in the past where educated individuals, physicists etc. have been involved in brutal activities that have been involved and have caused harm, pain and destruction. Hence his message to the current generation was mainly about responsibility and being individuals who are knowledgeable and wise, utilizing our knowledge for welfare of society.

Director – Rev. Fr. Kinley D'Cruz spoke on the importance of education with co-curricular activities as an overall development of the student which is essential, he applauded the event held by the students council and appreciated the coordination done by the students.

Fr. Kinley motivated the students by citing two quotes one by Mario Andretti '*Desire is the key to motivation, but its determination and commitment to an unrelenting pursuit of your goal - a commitment to excellence - that will enable you to attain the success you seek*' and the other, by Bob Proctor '*your purpose explains what you are doing with your life your vision explains how you are living your purpose, your goals*

enable you to realize your vision'.

The students, Joshua Fernandes, Aryan Kotru, Nicole Fernandes, Bernie Dias compered the function. The formal inaugural session was followed by a cultural programme presented by the students and staff members. The function ended on a glorious note with students of TE Mechanical winning the PROCYON Trophy and BE Mechanical winning the Runners-up trophy. Ms. Elaine Dias proposed the vote of thanks.

DEPARTMENT OF CIVIL ENGINEERING

Field visit to under construction Zuari Bridge

The Second year and Third year Civil Engineering students visited the under construction Zuari bridge site as a part of their field trip on May 11, 2022.

Mr Dyaneshwar Deshmukh -Senior Manager (Planning and Billing), Mr. Dilip Rote, liaison Manger and Mr. Ranjeet K P, safety officer of Dilip Buildcon were also present during the visit. Mr. Atul Joshi Vice President of Dilip Buildcon helped the college authorities with the required permissions.

Session on SketchUp and AutoCAD certification training

The Department of Civil Engineering organised a session on SketchUp and AutoCAD certification training course on 19th May 2022. The speaker was Aarti Kamat, Managing Partner, EDUTEK SOLUTIONS, Patta - Panaji. Mrs. Arti Kamat briefed about the different applications of SketchUp and how it can benefit after graduating and its applications. She also explained how beneficial it would be to learn SketchUp and how it is internationally credited.

Field Trip to R.M.C Plant Vasco & Selaulim Dam, Sanguem

A field trip was organised for the Second Year Civil Students to R.M.C Plant Vasco, ongoing construction site for a fire station in Vasco and Selaulim dam at Sanguem on May 23, 2022. Er. Sunil made the students aware that in the R.M.C plant Vasco, work was carried out in Central Laboratory where ready-mix of M25 to M50 grade etc. are prepared as per the requirements of the client. At the site, the students got to see the mechanism and working of a concrete mixing plant,



the batching unit, dycrete, portatcrete, light concrete block (thermocool slag and air entraining chemical or foam) were shown.

During the latter half of the day, the students visited a fire station where the pile foundation construction was on and saw that the height of building is 12m and friction piles of diameter 750mm are used. They also witnessed that the soil at 4m depth was sandy soil and clayey soil was at depth 17m.

In the evening, the students visited Selaulim Dam situated in Sanguem in South Goa. The components of the dam were explained which was constructed in 1976 and was functional in 2000.

Introduction to Autodesk REVIT

An online introductory course on Autodesk Revit was organized for the BE Civil Students by the Department of Civil Engineering in association with MEP Technical Academy, Bengaluru on June 1, 2022. Mr. Abdul Majeed, Mechanical Engineer with Masters in HVAC was the speaker for the course.

The Instructor began the session where he explained to the students various tools available in the software. He demonstrated how column, slabs, beams, walls, floors, roofs, ceilings, major finishes, and even furniture built can be placed inside a project.

Seventy students attended the session and the event was coordinated by Asst. Prof. Prachi Dessai.

Field Visit To Pune

As part of the curriculum, the Final year students visited 3 sites in Pune, Maharashtra :

1. Orange County
2. Kolte Patil
3. College of Military Engineering

It was a 5-days expedition that started on June 7, 2022 and ended on June 11, 2022.



The students were accompanied by Prof. Satyesh Kakodkar, Prof. Nadya Baracho and Mr. Shantanu Desai.

“Concrete in practice”

The Civil Engineering Department organized a talk for the second-year civil engineering student on the topic “Concrete in practice” by Mr. Siddhesh Kamat Mhamai DGM, Construction and Projects Alcon construction on June 25, 2022. Mr. Siddhesh spoke on how concrete can be prepared, he also spoke on how the right proportioning can make good concrete. The talk was coordinated by Prof. Starina Dias.

Farewell

Department of Civil Engineering hosted a farewell ceremony for batch 2022 on 7th July 2022 attended by Director Rev Fr. Kinley D'Cruz, Principal Dr. Neena Panandikar, Registrar Dr. Kala Nayak, HCED Dr. Shwetha Prasanna, Staff from Science and Humanities Department, Civil Department and students from TE Civil. It was wonderful to see lots of performances from TE and BE Civil students. TE Civil students organized games for the graduating batch and at the end played a video for seniors to walk them down the memory lane. Mr. Gul Ahmed Shaikh was the host for the event. Some students from BE Civil shared their experience too. Farewell coordinators Prof. Kaushik V. Pai Fondekar and Prof. Prachi Dessai



received forms from BE Civil for the award and the Head of Civil Engineering Department announced the Best Outgoing Student for the year 2022 to Mr. Nikhil Chinchwade amongst the nominees. As a token of love, the graduating batch was given mementos by TE Civil students followed by refreshment. Hearty congratulations to batch 2022 and may you rise and always shine.

DEPARTMENT OF MECHANICAL ENGINEERING

Inaugural Ceremony of Advanced Welding Centre supported by Putzmeister Concrete Machines Private Ltd.

The Advanced Welding Centre of the Mechanical Department was inaugurated on May 5, 2022 by the Chief Guest Dr. Xiangyang Jiang, Director, Putzmeister Concrete Machines Private Limited. Mr. Rakesh Ranjan, Global Head, Batching Plant, Putzmeister Concrete Machines Private Limited was the Guest of Honor. Rev. Fr. Kinley D'Cruz, Director, DBCE, Dr. Neena Panandikar, Principal, Prof. Ajit Salunke, HOD- Mechanical Department and Dr. Suraj Marathe, Asst. Professor & Workshop Superintendent were also present on the dais. The centre is supported by Putzmeister Concrete Machines Private Ltd. and has facilities for TIG and MIG welding. The function was attended by the company officials, officials from FiiRE and Goa state Innovation council, Heads of other departments & sections, media personnel, faculty, staff members and students.

Dr. Jiang said that it was wonderful to know that DBCE has achieved so much in the last 10 years. He further added “3D Printing, IOT, AI are very important technology for the world and there is



bright future for mechanical engineers and opportunity to become valuable contributors to the society”. Mr. Ranjan appreciated the Mechanical department and DBCE for the various beyond the curriculum activities and industry interaction. He advised students, saying “Focus on learning, know what to achieve, work on it, strive and keep learning”. Fr. Kinley addressing the delegates said “I welcome you to the Don Bosco family, thanks for handholding with us and I wish that this collaboration will continue and become more stronger in the future”. He gave a brief presentation of the Salesian Society and the Don Bosco educational institutes. Dr. Panandikar congratulated the students of current final year batch who have been selected through campus placements in reputed companies like Cipla, Buoyancy etc. She said “Our mechanical student's projects exhibited at SCIFFI 22 received wide acclaim from media and other stakeholders”. Prof. Salunke gave a brief overview of the facilities and role of the welding centre in bridging the skill gap among students. He said “The centre can be used for skill training programs for the Industry”. Dr. Suraj Marathe proposed the vote of thanks. The program was coordinated by Prof. Gaurish Samant and Prof. harshad Pingulkar. Prof. Swapnil Ramani compered the event.

Technical session on Industrial Standards & how to be Industrial ready (Audit Course in Maintenance Engineering)

The Department of Mechanical Engineering conducted a Technical session on Industrial Standards and how to be industry ready on May 18, 2022. The session is held as a part of Audit Course in Maintenance Engineering for Third year students of Mechanical Department. The session was delivered by Alumnus of Mechanical Department, Mr. Tejas Pandit, Quality Executive, Putzmeister Concrete Machines India Pvt. Ltd.

Mr. Tejas Pandit briefed on the industry expectations, roles and responsibilities attached with the requirements of industrial businesses. Mr. Pandit said “In industry, time is money”, and stressed on the importance of being efficient at work.

Mr. Tejas then elaborated on what industry expects and how students can be industry ready. Mr. Pandit also explained the importance of technical & non-

technical skills, and gave tips to improve on the same. He also explained to the students how to read production drawings and different standards that are referred to in the industry.

The session was attended by the students and staff of Mechanical Department. The Audit Course session was organized by the coordinators, Prof. Swapnil Ramani (Asst. Prof – Mechanical) and Prof, Raymond Joseph (Asst. Prof – Mechanical)

Workshop on Fire Safety



The FSAI student chapter organised a workshop on Fire Safety on 20 May 2022 in association with FSAI Goa Chapter. The chief guest for the function was Shri. Nitin Raikar (Director, Directorate of Fire and Emergency Services, Goa). Also present were other dignitaries- Dr. Jennifer Lewis (President, FSAI Goa Chapter), Fr. Kinley D'Cruz (Director DBCE), Dr. Neena Panandikar (Principal, DBCE), Mr. Vinod Rodrigues (Secretary, FSAI Goa Chapter), Mr. Shawn D'sa (Jt. Secretary, FSAI Goa Chapter), Dr. Kala Nayak (Registrar, DBCE), Prof. Ajit Salunke (HOD Mechanical and faculty advisor, FSAI). To kickstart the function, which was the first to be held in the offline mode since the beginning of the pandemic, Prof. Ajit Salunke welcomed the dignitaries. He mentioned that fire safety, first aid and industrial safety are regularly practiced by the mechanical department and this is highly appreciated by the industry. Dr. Neena Panandikar spoke about the role of the FSAI in providing fire and safety education and creating awareness for the students. This was followed by the addressal of Rev. Fr. Kinley D'Cruz who mentioned the importance of fire safety. Dr. Jennifer Lewis was next to share her thoughts as she spoke about how technology must be used to mitigate the risk of fire. This was followed by addressal on fire safety by the chief guest, Shri. Nitin

Raikar, who spoke about the Classes of Fires, factors which the spread of fires depends upon, and methods of fire control. Mr. Omkar Mangesh Naik, President of FSAI, Student Chapter proposed the Vote of Thanks after which, an expert talk on Fire Safety was given to students and faculty in attendance. Here, an officer from the directorate of fire and emergency services, Goa gave detailed information about fire extinguishers, the types and methods of usage. This was followed by the Fire Safety Demonstration outside the college building where students and faculty members were provided with hands on experience, using the different types of fire extinguishers.

BE Mechanical Field Visit to Okapi Composites, Bethora

An industrial visit to Okapi Composites was organized by Mechanical Engineering Department on May 30, 2022 for the students opting for FRC (Fiber Reinforced Composite) as their elective subject in Final Year. A total of 20 students were accompanied by Prof. Harshad Pingulkar and Mr. Dattaguru Sawardekar for the visit. Mr. Shwetang Nadkarni, CEO – Okapi Composites and an alumni of Civil Engg. Dept. of DBCE guided and explained to the students its various manufacturing facilities and its products. The visit was aimed at gaining industrial exposure and to let the students have an overview on the activities related to various processes, materials, material handling and safety in manufacturing of fiber reinforced composite carried out by Okapi Composites, Bethora, Goa. Students were given an exposure on the manufacture of glass fiber reinforced polymer composite structures for various applications. Preparation of moulds specific to the composite product and its manufacturing using Hand layup technique was explained and demonstrated. Reinforcements of woven and chopped strand mat



glass fiber types were used in different stacking sequences to get the desired strength and stiffness to the composite structure. The company currently manufactures a variety of products such as composite doors, industrial gratings, toilet blocks, security cabins, benches etc. catering to industries as well as direct consumer markets. The students were also informed about the impact and applications of fiber reinforced composite in aerospace, automobile & construction industry. The field visit were organised under the guidance of Prof Ajit Salunke HOD Mechanical Engineering.

product under various ambient temperatures as well as part reliability.

Automated manufacturing lines and MES system was implemented to automatically integrate all production information from industrial plant, improving process efficiency by collecting real-time data, this helped the students in gaining various insights about the popularly discussed term 'Industry 4.0'.

ISHRAE DBCE Students Chapter Industrial Visit to IFB AC Unit, Verna-Goa

Residential and business space-cooling demands are constantly rising around the world, as what was previously seen as a luxury has become a necessity. Air-conditioning manufacturers have played a big part in making units more affordable by increasing their efficiency and improving components and technology. For newly graduating students, keeping up with the latest innovations is critical. In order to bridge this gap Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) chapter of our college organised a field visit to the IFB Air Conditioner manufacturing unit at Verna, Goa on June 18, 2022.

Forty eight student Members of ISHRAE DBCE Student Chapter, from the mechanical engineering department, accompanied by Prof Tanay Rege and Prof Sharad Shanbag visited the state of the art facility at Verna. Line manager Mr. Jagannath and Mr. Keshav Bhat briefed the students about the various operations that took place in the plant. NC punch press machines were used to transform the sheet metal into their respective shapes. The Students learnt how different components of the Air conditioner, such as the compressor, evaporator, condenser fins, and expansion valves, are manufactured and assembled to work as a single unit. For improved customer satisfaction, different tests were carried out under peak load conditions on the air conditioning unit, 80% of the inventory was locally sourced while the rest being imported. The plant has a capacity of producing 1500 units per shift, all manufactured units were invertible and used R-32 as the refrigerant. Students were exposed to the testing facilities and the procedures and practices for

1 Day Hands-on Workshop on '3D Printing & Applications'



A 1-day hands-on workshop on '3D Printing & Applications' was organized by Department of Mechanical Engineering in association with Goa State Innovation Council on July 1, 2022. The workshop was conducted mainly for the teachers of secondary and higher secondary schools across Goa and attended by 21 teachers from all over Goa.

The workshop began with a welcome address to all the participating teachers by Rev. Fr. Kinley D'Cruz – Director – DBCE. Dr. Neena Panandikar – Principal – DBCE, addressing the teachers said, “emerging & interdisciplinary areas - 3D Printing, Robotics, Artificial Intelligence etc. are trending and the teachers and young students have an introduction to these”. Mr. Ajit Salunke, Head of Department of Mechanical Engineering and Mr. Sudip Faldesai, – Project Officer, GSInC also welcomed the participants and looked forward towards having an engaging session with them.

The forenoon session of the workshop covered an introduction to 3D Printing, various processes and applications in healthcare and was delivered by Prof. Ajit Salunke. The participants were also given an insight into the roles and responsibilities of GSInC for prototyping by Mr. Sudip Faldesai. Later a hands-on experience on slicing software and demonstration on

FDM machine was also given by Prof. Gaurish Samant and Mr. Siddhant Panjekar respectively.

The sessions were well received by the participating teachers and they contributed positive feedback & suggested to conduct more focussed workshops on 3D Printing, CAD and the possibility of incorporating certain fundamentals of 3D printing in their curriculum. The workshop was coordinated by Prof. Manjunath Narwate and Prof. Harshad Pingulkar.

BE Mechanical Farewell 2022

The Department of Mechanical engineering hosted a Farewell Ceremony for final year outgoing students on July 5, 2022. Farewell; a celebration for the students who would soon be stepping out of the Institute to start their career and a new innings in their life, an occasion for staff and junior students to wish them good luck for their next big adventure!

The ceremony commenced with an address by Dr. Suraj Marathe, who enlightened the students with his inspirational words “Always strive to be the best in whatever you do. Be humble and let your actions speak for you. May you be blessed with success and glory!” Principal - Dr. Neena Panandikar, who has always generously imparted her wisdom to her pupils and guided them towards the right path, expressed herself to the students. She quoted “Each of you has the potential to become the leaders of your working spheres. I wish you a bright future and a prosperous life. May you all be successful!”. Director - Rev. Fr. Kinley D'Cruz congratulated the students on what he felt was truly coming-of-age for the young engineers as he recollected their journey of 4 years in the Institute and quoted “Education does not stop you from making mistakes but it inspires you to take lessons from your mistakes”. The Administrator - Rev. Fr. Leo joined in to congratulate the students and wish them a successful career ahead.

The juniors sang a beautiful song highlighting the years of camaraderie shared by the students. The event saw dance performances and stage and musical acts performed by the third and second year students for their seniors, as well as some impromptu musical acts, dances and poetry by the students of the passing out batch. Students got an opportunity to 'Walk the Ramp' to stake claim at the 'Best Outfit' awards, among other games organised. Mr. Tanay Rege, Assistant Professor and Coordinator

of the event, announced the award for the best outgoing student of the Department of Mechanical Engineering. The nominations were Mr. Binay Sharma, Mr. Keenan Cardozo, Mr. Bradley Rodrigues and Mr. Sanath Bharne. While each nominee were and are great individuals in their own right, a poll conducted by the department amongst its faculties with points across categories such as academic performance, disciplinary record, sport and cultural activities and organisational initiatives etc. yielded joint win for Mr. Bradley Rodrigues and Mr. Binay Sharma. Mr Kish Rego, an Alumnus from the batch of 2019, an Entrepreneur, was, awarded the Most Distinguished Alumni Award for Year 2022. The Department of Mechanical Engineering congratulates the winners and wishes them all the best for their future endeavours.



The ceremony concluded with the cutting of cake by the outgoing students and the faculty. Laughs and exclamations at the performances filled the room with a light hearted ambience setting the mood for what would be warm and upbeat evening. The glorious example set by the passing out batch as student leaders would continue to live on in the hearts of their juniors. Overall the event was a success.

Mechanical Engineering Girl Students scale great heights to accomplish career goals

Throwback to the letter written by Sudha Murthy to JRD Tata for securing equal opportunities for lady engineers, from thereupon the society and the industry has moved a long way. She was the first Woman Engineer to work in TELCO. In reply to her postcard, the visionary JRD Tata not only changed only “male employees” policy but also ordered to conduct interviews for female applicants. With the current industry scenario and technological shift towards Industry 4.0, Mechanical Engineering has



opened enormous doors for women to pursue their career. A right combination

of Mechanical fundamentals and IT skillset is the prerequisite by the industry.

Our College has created its own space to nurture the dreams of such aspirants. Completing its 10 years, DBCE is proud to share the success stories of their first mechanical engineers (girls) graduated in 2021.

The first girls' batch of mechanical engineers of DBCE have carved a niche for themselves in their career. The sheer dedication and passion to do something different in their careers initiated way back in 2017. The fiery decision to choose mechanical engineering despite opportunities in the field of Computers and IT allied reaped benefits for them. The four years journey in Engineering was challenging for them yet they completed it with excellent academic performance and co-curricular activities too.

Benecia Colaco, Student Placement Coordinator (Mechanical) bagged two job offers from Tata Consultancy Services (TCS) and CEAT Tyres through campus placements. Her passion for mechanical drove her to select core job instead of the booming IT field. She joined CEAT Tyres as GET in supply chain function in Mumbai. She was felicitated by the Hon. Chief Minister of Goa - Dr. Pramod Sawant at the World Youth Skills Day held at DTE Goa in 2021. Priya Ghogale secured a job in the Research & Development department of Cabe Springs & Fasteners, Verna. Presently she is updating her skillsets in newer technologies such as Data Science. She is into content writing and pursues her hobby during her free time. Prithvi Amonkar efficiently upgraded her skillsets and recently joined as an 'Associate Software Engineer' at Dassault Systemes in Pune. Dassault Systèmes is a French software corporation which develops software for 3D product design, simulation, manufacturing, and other 3D related products. Malaika Korgaonkar showed inclination in higher studies in MS and will join in the Autumn semester.

Department of Mechanical Engineering along with Training & Placement Office is in constant efforts to

make students industry ready with changing job profiles for Mechanical Engineering. Batch 2021 got offers from around 30 companies with a total of 26 core job offers. Twelve students opted to pursue their further studies in various national and international institutes of repute. The management, teaching and support staff of Don Bosco College of Engineering take pride in wishing a successful career to all the students from Batch 2021.

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

IEEE DBCE SB Organized Educational Tour to Hyderabad

The IEEE student's branch organized an educational tour to Hyderabad exclusively for IEEE Student members on from 17th – 23rd May 2022 under the guidance of IEEE Branch Counselor, Prof. Yeshudas Muttu. 74 IEEE student members along with 3 Faculty members, Prof. Yeshudas Muttu, Prof. Deron Rodrigues & Prof. Steefni Ema Cruz visited Hyderabad - National Remote Sensing Centre (NRSC), ISRO; Regional Telecom Training Centre (RTTC), Bharat Sanchar Nigam Limited (BSNL); 19th May 2021

The IEEE DBCE students visited the NRSC, ISRO in Hyderabad at 10.00 am. Mr. Ganesh and Mr. Shankar Prasad, Scientist Engineers from NRSC welcomed the students with warm greetings and led them through the day. At the entrance, were trophies and certificates that portrayed the success of the centre and also prototypes of some of the satellites launched. The students were then taken to the auditorium where they were shown videos depicting the history, evolution and success of NRSC, ISRO. The

launch of different satellites was also highlighted. An interesting talk was delivered by Mr. Shankar Prasad,



speaking about the establishment of NRSC and the launch of Chandrayan-I, Chandrayan-II and Mars Orbiter Mission. This was followed by the details of Remote Sensing domain. The students were then taken to see around the exhibits which had images captured by satellites, prototypes of satellites and much more. Towards the end the students posed questions which were answered by Mr. Prasad, therefore clearing the student's doubts. Ms. Anjima Rajesh – Vice-chair, IEEE DBCE SB delivered the vote of thanks – acknowledging them for their valuable time and the knowledge shared.

Next, the IEEE team visited the RTTC – BSNL. Mr. Ramesh Chari welcomed and educated them on Mobile Communication by explaining the different types of wired and wireless media. He gave the students more in-depth information about optic fibers, including the pros and cons. He also spoke on how the generations progressed from 1G to 4G, and the upcoming 5G. After having a very interactive session, Mr. Chari cleared a few doubts the students had and then proceeded to inform the students about project opportunities BSNL provides under IOTR.

The students were then taken to the networking lab, where the next speaker, Mr. Prashant, guided them on the topic of Networking in Broadband Connections. He started the session by explaining a bit of the basic of the internet through the broadband connection and the technology behind it. Mr. Prashant explained the differences between DSL technology and VDSL technology. He further proceeded to explain thoroughly the block diagram of the broadband network architecture.

Mr. Bonu Prakash took over the next session by explaining the Switching and Transmission lines. He explained the basic infrastructure of the landline and the transmission of audio signals. Mr. Prakash further taught the basic process behind the transmission such as quantizing, sampling etc. He guided the students about Circuit switching exchange and packet-switching exchange. He demonstrated the assembly of the landline and explained various parts of it. The session was concluded with Q & A and Mr. Kaiser Souza – chair, IEEE DBCE SB proposed the vote of thanks.

20th May 2022

IEEE DBCE Students visited L & T Metro Rail. Students

were taken to the training hall and Mr. Prashant Kumar; Media relations corporate communication department outline the brief agenda for the day. Mrs. Anindita Sinha, Head – Corporate Communications welcomed all and spoke about communication, corporate communication, media relation, branding, etc. L & T Metro Rail has 57 stations and 3 intersections. Videos on “Overview of Hyderabad, Metro” and “Evolution of Transport in Hyderabad” were shown. Later on, Mr. Rakesh Ningala covered the technical aspects of Metro Rail including introduction to Indian Metro, Rail based Transport System, different phases of metro railway, Structure of Metro, Operation Control Centre, Automatic Fare collection system, HYD Metro rail stakeholder, Overview of Keolis and the session came to an end with a video about Keolis. He also mentioned about the future of metro rail that is transforming into electric. Everyone was later taken to the Depot where inspection, maintenance and functionality of metro take place. In the workshop section, duties including replacement, storage were explained. Then we visited the stable line and the functioning of it, the safety, and speed limit was explained. The Operation Control Centre, the main element behind the functioning of metro rail was shown which had various control officers like depot controller, traffic controller, chief controller, planning. Students visited the Train model Room and Train simulator. In the train model room, it was mentioned that the metro rail of Hyderabad works on CBTC Technology. Train simulator is the place where the trainees of Metro rail get trained on the working of Metro. There were various sections like desk simulator that had various controls of the metro: automatic mode, all doors closed, horn, stop door open and close controls. The brakes are electro-pneumatic standby brake OCC where troubleshooting is also done by giving train faults so that the trainee knows how to handle such



situations, Observer station. The visit came to an end with a Metro journey in Hyderabad. A few IEEE members & faculty members shared their experience & valuable feedback with the Metro Rail team.

21st May 2022

The Ramoji Film Industry gave the members an opportunity to expand their network as well as stay connected with the peers and learn a lot with respect to the technology used in today's modern film making industry. The visit started off with the students being taken around the industry to see the various setups used. Followed by a quick question answer round before lunch. After the lunch there was a small activity conducted before the students got to go into a few enjoyable rides. It was a very wonderful event, where the students got to learn and have a great time.

NATIONAL LEVEL PROJECT COMPETITION -TECHNIX 2022

The Final Year Project Quality Assurance Committee, Department of Electronics & Telecommunication Engineering (ETC) in association with Don Bosco Electronics and Telecommunication Society (DBEATS) organized Technix 2022 from May 30 to July 7, 2022. Technix is a project competition that has been organized by the ETC Department since 2016 with the primary aim to encourage budding engineers to exhibit their novel ideas and innovative projects. The esteemed jury for Technix 2022 were Mr. Myron Rodrigues; Robotics Engineer at Street Drone Ltd, Oxford – U.K. and Mr. Sujay Shirodkar- Co-founder of Carbon-E.

The event commenced in the month of May with the submissions of abstract proposals which went on till June 7, 2022. More than 45 groups from all over India registered for the event. Some of the colleges who participated were Walchand Institute of Technology-, Solapur, RNS Institute of Technology- Bengaluru, Sharad Institute of Technology College of Engineering- Maharashtra , Goa College of Engineering, Agnel Institute of Technology and Design, Government Polytechnic- Curchorem, Shree Rayeshwar Institute of Engineering and Information Technology, Padre Conceicao College of Engineering and Don Bosco College of Engineering. The project competition had 2 categories: the Hardware

category and software category.

The competition saw entries from varied domains like Robotics, Embedded Systems, Signal Processing, Machine Learning, Artificial Intelligence, Biomedical Engineering, Communication Engineering etc. The results of the shortlisted abstracts were declared on June 11, 2022. Some of the criteria for judging the videos included innovation, design and methodology, construction and testing and overall presentation.

The valedictory function of Technix 2022 was held on July 7, 2022. The dignitaries present were Director-DBCE - Rev Fr.Kinley D'cruz; Principal-DBCE- Dr. Neena Panandikar;

Registrar- Dr. Kala Nayak, Head of Department of ETC and Convener of Technix - Dr. Varsha Turkar. The event was compered by the student coordinators Jefin John and Karen Mendes. The event commenced with the welcome address by Rev. Fr. Kinley D'Cruz. In his address he motivated the students to innovate and congratulated all the winners and participants. Later, Dr. Neena Panandikar addressed the gathering and appreciated the efforts put in by the students, coordinators and judges. She said “Winning is secondary. Let not your ideas die off”.

The Coordinator of Technix, Prof. Anisha Cotta presented the report of Technix 2022 and acknowledged the support, motivation and guidance received to make Technix 2022 a success. The judges were introduced by Prof. Michelle Araujo and Prof. Deron Rodrigues. Mr. Myron Rodrigues in his address said “It is good practice to participate in competitions as it helps us know the limitations of our own projects”. Mr. Sujay Shirodkar advised students to pay more attention to the project presentation as it

helps attract attention.



Later, the top 5 projects from hardware and software category were presented.

The First Place

Winners in Software Category were Ms. Bhargava V Desai, Ms. Anusha S, Ms. Deeksha P Rao and Mr. Yadunand G Kamath for the project “Physical Layer Encryption for Wireless communication systems” from RNS Institute of Technology, Bengaluru Karnataka. In the Hardware Category the first place was bagged by Mr. Siddharudh Amale, Mr. Suyash Degaonkar, Mr. Vinayak Annaldas, Ms. Niharika Davewala and Ms. Dhanashri Kandale for the project “Smart Learning Device” from Walchand Institute of Technology, Solapur.

Second place winners in Software category were Ms. Saili Naik, Ms. Jaitali Kunkalkar and Ms. Priya Kamat for their project “Augmented Reality in Engineering Graphics” from our College. In the Hardware Category Ms. Vaishnavi Pareek, Ms. Soniya Kumble, Mr. Mrunal Patil, Ms. Apeksha Huddar and Ms. Tanjeela Kudchikar from Sharad Institute of Technology College of Engineering, Yadav Ichalkaranji won second place for their project “Self Sustained e-Toilet System Using IoT With Sewage Water Treatment Plant”.

The Third place winners in Software Category Mr. Saiesh Naik, Ms. Neha Joshi and Ms. Rosanne Godinho for their project “EduInfoGoa : Goa Education Institutions Information App” from our College. Mr. Rushabh Karpe, Mr. Chaitany Gosawi, Mr. Sujay Jalmi, Mr. Atharv Gosavi and Mr. Krishnakumar Gaonkar from our College won third place in the Hardware Category for their project “Design And Testing Of Squat Analyser For Powerlifting Sport”.

The event was concluded with the Vote of thanks by the Technix Coordinator Prof. Melba D' Souza. The event was coordinated by Prof. Anisha Cotta and Prof. Melba D' Souza.

DEPARTMENT OF COMPUTER ENGINEERING

Prototyping and 3D Printing Seminar Report (Beyond the syllabus)

The Department of Computer Engineering in collaboration with the C-CODES (Council of Computer Department Engg. Students), DBCE Alumni Committee and the Goa State Innovation



Council, organised a seminar on Prototyping and 3D printing technology on June 2nd, 2022 for the S.E and T.E computer students. The speaker was Mr. Rajdutt Kenkre (DBCE Alumni – 2018 batch), from the Rapid prototyping lab at DBCE, Fatorda. The seminar began with a presentation that described the Goa State Innovation Council's objective and numerous initiatives. Mr. Rajdutt explained the procedure to avail the funding for the projects and other services that are offered by the council. The workings of the 3D printing process, the many types of raw materials needed, and other requirements were all described in detail. Various applications of 3D printing were also discussed. The session came to a close with a brief practical demonstration of how to use a 3D printer and the Cura software by providing the design and other commands. Mr. Rajdutt said “3D printing potential in unlimited.”

The students were given a tour of the prototype lab, where they saw numerous machines including: 3D printers, laser cutters, drones, power tools etc. A basic description of how these gadgets work was provided. Students learnt about the most up-to-date 3D printing technologies. The session ended with an interactive question and answer session. Some of the questions that were asked were “What's the cost of a 3D printer? “, “Is resin printing same as 3D printing”. The faculty coordinator was Asst. Prof. Merwyn D'Souza.

Workshop on Building Chatbot using React Nativ
C-Codes Student Association along with the Computer Department organized a workshop on Building Chatbot using React Native . The workshop was conducted on June 24, 2022, for second & third year computer engineering students. The resource person for the workshop was Carson Rodrigues, TE-Comp student. The coordinator for the workshop was Prof. Merwyn D'Souza.

The workshop started with the introduction to React Native. React Native is an open-source UI software framework created by Meta Platforms, Inc. It is used to develop applications for Android, Android TV, iOS, macOS, tvOS, Web, Windows and UWP by enabling developers to use the React framework along with native platform capabilities. The process of Chatbot building started by setting up the environment for React Native in CMD, following to that installing the required packages in VSCode. Post installation, the code was compiled & the android version app was demonstrated on the mobile. The code was linked to Google's fire base along with dialogue flow essentials to process the query fired in the app. The session concluded with sharing of the repositories & the required contents for building on the project.

Inaugural Function of DBCE Goa ACM Student Chapter

The Department of Computer Engineering has registered for ACM Students Chapter named DBCE Goa ACM Student Chapter. A total of 23 student members and 4 Professional members have registered. The inaugural ceremony was held on July 6, 2022. The Chief Guest for the inaugural ceremony was Ms. Maria Choudhary, Principal - MTS, Oracle India and ACM Chair Goa Professional Chapter in attendance with keynote speaker, Mr.Suhas Mallya, Executive Director, EMCO Goa Private Limited. ACM Professional members Dr.Vivek Kamat, Prof.Vandana Naik, DHE and Prof.Louella Colaco were also present at the inaugural function. The function commenced with digital lighting of lamp followed by the Principal, Dr. Neena Panandikar welcoming the gathering. Dr. Neena Panandikar highlighted the incredible progress the college has made in a span of ten years and shared the details of latest achievements in Computer Engineering Department. Director- Rev.Fr. Kinley D'Cruz appreciated the coordination by the ACM student members and Faculty members. Introduction to Chapter members was done and Oath was taken by all the student members. Dr. Gaurang Patkar, Head of Department of Computer Engineering introduced the Chief Guest. Speaking on the occasion, the Chief Guest, Ms. Maria Choudhary shared the importance of ACM Membership and the details of events under ACM across India. She also motivated students to

participate in different contests under ACM. Dr.Vivek, Prof. Vandana and Prof. Louella also gave highlights of the activities under ACM.

The Inaugural function was followed by a keynote address by Mr. Suhas Mallya on the topic:” Business of Technology: Importance of Solution Orientation”. Mr Suhas spoke on value proposition and commercial proposition. He also stressed on solution oriented activities and innovations, making strong business case and leveraging rich ecosystem. The inaugural function concluded with a vote of thanks.

SCIENCE AND HUMANITIES

SEEDS Field Trip to ONGC

The SEEDS (Stairway towards Empowering Engineering Dreams to Success) Council of the Department of Science and Humanities organized a field trip to Oil and Natural Gas Corporation Limited (ONGC) on May 30, 2022. The aim of the trip was to spread awareness on fire safety and preparedness to be first responders in a fire incident. This trip was organized for the First Year Engineering students across all branches of the Institute.

The morning was divided into two sections, i.e, Class of fires and demonstrations. Mr. Alok Kumar, Manager, Fire Services explained the basics of the fire accidents and fire safety. In the interactive session, he introduced the students to the four classes of fires, namely Class A – Solid materials, Class B – flammable liquids, Class C – combustible gases and Class D – active metals. He then said that fire extinguishers are designed not for fire fighters but for first responders, i.e, lay people involved in the fire incident. He showed how to identify the fire extinguishers based on the labels/stickers on them. Each extinguisher is marked with the class of fire that it can be used for.

Following this, a number of demonstrations were done. Students actively participated in the same, with apt safety gear. Students were first demonstrated to identify the fire and then to extinguish it with a method called PASS. It stands for Pull the pin, Aim the nozzle, Squeeze the lever and Sweep from side to side, except for the foam extinguisher which does not require one to sweep. A Butane gas explosion was also exhibited. The different water extinguishers



were displayed. The students were then taken to the IMW Solar plant.

It was a knowledge filled, interactive field trip. The students definitely learned a lot from this experience.

Departmental Café Session

The Department of Science and Humanities had its fourth Departmental Café Session for the Academic Year 2021-22 on the June 25, 2022. The resource persons for the evening were Mrs. Gladys Da Silva, Assistant Professor (Chemistry) and Mrs. Samprita Ghadi, Laboratory Assistant. A hands-on session on the topic 'Hard Water Estimation' was conducted.

Mrs. Gladys began the session with an understanding of what constitutes hard water. She said, “salts of calcium and magnesium cause hardness in water. If only bicarbonates are present then it is temporary hardness. Even in tap water, there is some composition of mineral present. A permissible level of hardness in water is 200 parts per minute (ppm) which can extend up to 2000ppm.”

An estimation of the hardness in water was tested in the Chemistry laboratory by carrying out simple titration experiment using Ethylenediamine tetraacetic acid (EDTA) and water sample with Eriochrome Black T indicator. Participants were paired together and Mrs. Samprita walked the participants through the step-by-step process of the experiments. Each pair conducted the experiment



and was excited upon getting the results of the same. “It took us back to our school days,” said one of the participants, Mrs. Vaishali Parakhi. This interesting, exciting and interactive session was attended by 09 participants of the Department of Science and Humanities.

Two-Day Workshop on Latex

The Department of Science & Humanities organized a workshop on “LaTeX for Beginners” on 30 April & 25 June 2022. The aim was to provide hands-on practice to the first-year students on the aspects of doing documentation work on the open-source, scientific tool. Mr. Yeshudas Muttu - Assistant Professor, was the resource person for this workshop.

Dr. Kala Nayak, Head of Department of Science & Humanities welcomed the students and briefed them about the importance of LaTeX. The coordinator of the workshop Mrs. Vaishali Parakhi introduced Mr. Yeshudas.

Students experienced hands-on practice learning sessions through which they got a better understanding of the LaTeX tool and its applications. The content delivery was as per the needs of every student along with interaction. As part of the practical session, Mr. Yeshudas explained how one can write mathematical equations easily in LaTeX. He explained in detail about the Basics of Equations, Math mode, Mathematical Symbols, Sample codes, Brackets and braces. He also explained how the sections, tables, bibliography, etc are created in LaTeX and how Beamer can be used for preparing the power point presentation. Every student edited an IEEE research paper on LaTeX and gained insight on how to insert images, sub-images, equations, tables, and cross references in a research paper.

Towards the end of the session, students were given an assignment on LaTeX which they had to upload on the provided Google drive link. Sixty students took advantage of this workshop.

SEEDS Programme

The SEEDS (Stairway towards Empowering Engineering Dreams to Success) Programme commenced on July 8, 2022 with the welcome address by Clarita De Souza, which was followed by a variety of events such as Treasure Hunt, Germination of Ideas, Wise Babble, Imaginative Snapshot, Let's

Write, Crack It, Movie Cloud and The Journalist. The completion of these events on July 8, 2022 finally culminated in the Valedictory Function on July 9, 2022.

The Valedictory Function commenced with the address by the Principal, Dr. Neena Panandikar. The Principal in her address thanked the SEEDS Council for organizing a variety of programmes. She exhorted them “to address the emerging areas in engineering.” Dr. Neena Panandikar said, “I strongly feel that you have a lot of opportunities to nurture your innovative ideas.” She congratulated the SEEDS Council for their efforts. The Principal's address was soon followed by the Director's address. The Director, Fr. Kinley D'Cruz, welcomed the Chief Guest for the Valedictory Function. In his address the Director referred to “ three types of people: people who watch things happen, people who make things happen and people who don't know what is happening.” He said, “It is our earnest desire to transform you into people who make things happen.” “In four years we give you a sense of belonging, a sense of identity, so that you can say that you belong to Don Bosco.” “In the first year we give you an opportunity to know each other, to see the strengths of others. SEEDS is one such initiative for the first year students. It is a platform to enhance your engineering dreams.” Quoting Steve Jobs, he said, “Your time is limited, so don't spend it living other people's life... Have the courage to follow your intuition.” After the Director's address, Mr. Shaunak Navrekar, Chairperson of SEEDS Council, presented the annual report 2021-22. Thereafter, the programme continued with the address by the Chief Guest, Dr. Ramesh Kumar, retired scientist. The Chief Guest said, “In Goa you have enough opportunities for engineers. ” He said, “ You can usefully be employed in Goa.” Dr. Ramesh Kumar enumerated a variety of areas where engineers are required, for example: to develop sensors, to survey the water bodies, in agriculture...” He said, “You need to develop your skills and explore more.” “All streams

have a lot of scope and you should be enthusiastic.” Dr. Ramesh Kumar congratulated the SEEDS Council for organizing a lot of activities throughout the year. The address was followed by the Prize Distribution Function. The Mechanical 2 class were declared the winners for the academic year 2021-22, while the ETC class were the runners up. Thereafter, feedback was given by the students and teachers. Finally, the programme came to a close with the Vote of thanks proposed by the Secretary, Sachi Bokade.

TRAINING AND PLACEMENT

CAREER IN ENGINEERING 2022



The Training and Placement Cell organized a talk on the topic 'Career in Engineering'. This event was organised for students of class 10th, 11th, 12th as well as diploma and their parents. The objective of the talk was to help aspiring students in choosing the right branch of engineering and also make them aware of the admission process at the Directorate of technical Education (DTE) for engineering colleges. The talk was conducted on June 18. Ms. Christina Barretto, the moderator of the event gave a brief introduction to the event. Principal -Dr. Neena Panandikar welcomed all the guests to the event and said, “We have an expert from MCC Ms. Alfiya Baig to guide you and also Heads of various departments to guide you. Make the best use of our expert panel and solve your doubts”. Director-Rev. Fr. Kinley D'Cruz informed the gathering about the Salesian Society of Don Bosco and its founder. Ms. Alfiya Baig gave an overview of various popular engineering disciplines and provided information about how to choose a domain of engineering. She said, “Always have a Plan B. If you do not get your desired field you should choose the



other option.” Videos of engineering departments of Don Bosco College of Engineering were shown to the participants to give them an overview and glimpse of life at various disciplines in an engineering college. Prof. Swapnil Ramani gave a detailed explanation of the admission process that is conducted by DTE in Goa. He suggested “Prepare well for board exams to satisfy the minimum criteria and all required documents should be ready before the admission rounds start”. There was a question-answer session which was moderated by Ms. Christina Barretto.

INSTITUTE INNOVATION COUNCIL

Exhibition/Demo Day of Prototype developed & linkage with Innovation Ambassadors for mentorship support

As part of the drive and under the theme of Entrepreneurship an IIC-“Exhibition/Demo Day of Prototype developed & linkage with Innovation Ambassadors for mentorship support” was held in offline mode to give a platform to the participants to showcase their idea/start up to get desired support or external visibility with the support of the Institute Innovation Ambassadors. The exhibition was held on the June 25, 2022 in the college campus. The Innovation Ambassadors – Dr. Suraj Marathe, Assistant Professor Mechanical Engineering Department & President IIC-DBCE and Prof Satyesh Kakodkar, Assistant Professor Civil Engineering Department, Don Bosco College of Engineering, were invited as special guests for the exhibition to provide the required mentorship support to the participating teams. Amongst the audience were various faculty members and the students of Second year Mechanical Engineering . This exhibition helped



the Innovation Ambassadors evaluate the progress and demo of prototypes developed of the innovative ideas that were presented by the teams during the IIC- Idea Pitching Competition held in quarter 2 for the academic 2021-22.

Many students and faculty members visited the exhibition and the participating teams presented fabulous prototypes and demonstrations of their innovative ideas with most of them exhibiting enormous potential for start-ups. Before the exhibition, they received guidance and training on setting up goals by Innovation Ambassadors. The Ambassadors had mentored the teams to build up innovative ideas and take it to the prototype stage. Students of the final year engineering, demonstrated good professional-presentation skills, with great innovative solutions to problems, that left the audience really impressed.

Some of the noteworthy teams were Team 'Squat Analyser' - Design and fabrication of squat analyser for powerlifting sports, Team 'Try to science' - Oxygen Generation Through Pressure Swing Adsorption Method, Team 'Fly Beyond' - Development of Drone for Precision Spraying and Team Exo-Walk- Design and fabrication of Exoskeleton for assistance in walking.

Business of Technology: Importance of solution Orientation

The Institution Innovation Council in Association with Don Bosco College of Engineering (DBCE) ACM-Goa students chapter jointly organized a session on “Business of Technology: Importance of solution Orientation” The session was held on July 6, 2022.

The speaker of the day was Mr. Suha Mallya, Executive Director, Emco Goa Pvt. Ltd. He started with Business Case which provides justification for undertaking a project, programme or portfolio. He also mentioned that it evaluates the benefit, cost and risk of alternative options and provides a rationale for the preferred solution. He explained how business technology helps increase the efficiency of systems, products and services. He also stressed on value proposition and commercial proposition.

There were total 25 students and 4 ACM professional members namely Dr. V.V Kamat, Professor-IIT (Goa); Prof. Luyala Culaco, Padre Conceicao College of Engineering- Goa; Ms.Vandana Naik (Department of

Higher Education-Goa); Ms. Maria Choudhary, Principal MTS, Product Dev - Oracle Cloud Infrastructure. The webinar was very informative and appreciated by the audience.

Webinar on 'How to plan for Start-up and Legal Ethical Steps'

A session on 'How to plan for Start-up and Legal Ethical Steps' was organised by Institution Innovation Council of Don Bosco College of Engineering (IIC-DBCE) on July 13, 2022, on Google meet platform. The resource person for the session was Mr. Michael Viegas- Chartered Accountant and Cost Accountant.

Mr. Michael Viegas began the session by defining what is a Start-up, the main aim of having start-ups.

He spoke about the planning, legal and ethical steps involved in setting up a start-up. In the planning phase he explained the need of checking if the idea is novel, if it has relevance to today's time and the impact it is going to have on society. He also stressed that patience is the key to success and we should not assume failure as the end of anything.

He further explained the steps involved to fructify the idea. He also stressed on the need to protect the idea in the form of patents, trademarks, copyright, geographical indications and industrial designs and aesthetics and also spoke on the benefits the owner gets by protecting their idea. Later on he explained the legalities involved in a start-up and the various ethical steps involved. He concluded his session by speaking about the duties as start-ups, the benefits that a start-up gets and emphasised that hardwork is the key to a start-up success.

Session on 'BUSINESS MODEL CANVAS'

A session on Business Model Canvas' was organised by Institution Innovation Council of Don Bosco College of Engineering (IIC-DBCE) on June 28, 2022, on Google meet platform The resource person for the session was Mr. Anand Lotlikar- Founder- Deviant Strokes Brand Consultancy. Mr. Anand Lotlikar began the session by defining a Business Model Canvas and shared a thought on how to look at a product in a different way. He spoke extensively on "planning" by giving various examples.

He stressed on "What a business model is?" He also explained in detail the '9 Building Blocks of Business

Model Canvas'. He spoke extensively on the different customer segments and stressed on how to cater to different customer segments. He supported the same with the help of numerous examples like Titan, CCD etc. He further added that "different brands define itself in different ways" Mr. Lotlikar said "Designer business model is much more important than the product". He also spoke extensively on value propositions. With a participation of around 40 students, the session was concluded by a vote of thanks delivered by Ms. Melissa Solomon, student coordinator of the event.

RESEARCH AND DEVELOPMENT

R & D Activity (Department of Science & Humanities) Talk on Shape Memory alloys & Heat Domes

The R & D Cell (Department of Science & Humanities) had the above session on July 4, 2022. The resource persons were Mr. Harison Cota - Assistant Professor in Physics and Mr. Milindraj Paigankar - Lab Assistant in Physics In his session, Mr. Harison Cota spoke about the Shape Memory alloys.

Mr. Cota demonstrated how the Nitinol alloy works by making use of dental braces. Shape memory alloys with this fascinating property are used as functional materials in temperature sensors, actuators, and clamping fixtures in medical and industrial applications.

Mr. Milindraj Paigankar demonstrated through a video how the Heat Domes occur. Mr. Milindraj started the session with an explanation about the heat waves and how heat waves lead to more use of Thermal energy and further depletion of the environment due to Greenhouse effect. His main focus was on the occurrence of Heat Domes.

DHRISHNI - WOMEN'S CELL

India Women Network Student's Chapter

DHRISHNI – Women's cell organized an awareness session for the students of Engineering on "India Women Network Student's Chapter" on June 9, 2022. The main objective of the event was to create awareness about Indian Women Network Student's Chapter and the various opportunities for the students.



Ms. Melba D'Souza, Faculty coordinator of the Event welcomed and introduced the Chairperson of CII – IWN, Ms. Sheetal Pai Kane and Ms. Sonia Kuncalienker, Sales Consultant and Writer.

The first session was delivered by Ms. Sonia Kuncalienker who spoke about the student chapter and the various benefits of joining and being a part of the IWN student's chapter.

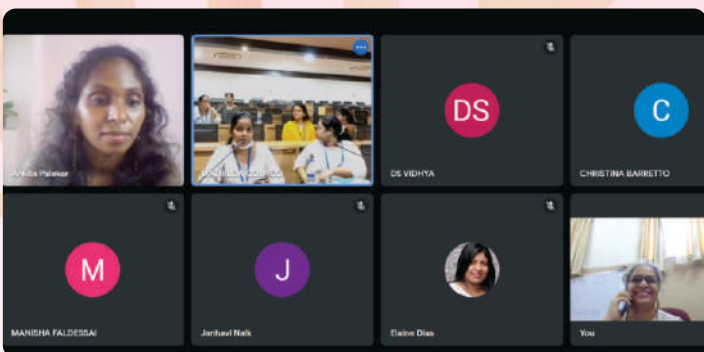
The next session was delivered by Ms. Sheetal Pai Kane. In her session she spoke about Indian Women Network (IWN) and the various initiatives and programmes conducted by IWN. She also applauded the creativeness of the DHRISHNI logo and congratulated and conveyed her good wishes to the DRISHNI team.

The students found the sessions very interesting and informative.

Health, Diet and Nutrition

DHRISHNI – Women's cell organized a session on “Health, diet and nutrition” on July 7, 2022 for the faculty members of Don Bosco College of Engineering. The main objective of the event was to create awareness about healthy eating and be familiarised with health problems associated with poor eating habits and improper food choices.

The session commenced with a brief understanding on what exactly being healthy is. In her session she spoke about necessary changes which we need to



make in day to day life.

She also spoke about the benefits of including seasonal and regional food in the diet. The session was very interesting and informative.

FiiRE

(Forum for Innovation Incubation Research and Entrepreneurship)

Partnership with - Social Entrepreneurship Competition in Tourism.

The Social Entrepreneurship in Tourism Competition is the first worldwide competition focusing on social innovation and entrepreneurship in tourism.

This international competition has partnered with FiiRE, helping FiiRE on a global stage.

Congratulations to hav.life the startup rewarding healthier life, on the recent funding raised.

4) Congratulations to Santosh Kumar J of Trishulavel Eshan (Li-Circle) Pvt. Ltd. on receiving the SISFS funding through FiiRE Goa.

The vision of Li-Circle® Pvt. Ltd. is to strengthen the global advanced battery storage raw material supply chain by sustainable and eco-friendly urban mining, enhancing the circular economy.

It works on a robust collection mechanism of end-of-life lithium-ion batteries Pan India, Designing inhouse mechanical processing of the scrap batteries, eventually extract the metals which can be used in the Li-ion cell manufacturing process.

- Li-Circle is a startup that has been funded by FiiRE Goa under the StartupIndia Seed fund scheme.

Congratulations to Sudhanshu Shekhar and Mrityunjay Kumar of Aumnatic Systems Pvt. Ltd. on receiving the SISFS funding through FiiRE Goa.

Aumnatic intends to design and manufacture electronics for toys in India and make India more self reliant for electronic Toys.

Aumnatic Systems Pvt. Ltd. is a startup that has been funded by FiiRE Goa under the Startup India Seed fund scheme.

Congratulations to Ashish Godghate and Vijay Kumar of A2WedTech Pvt. Ltd. (Awayddings) on receiving the SISFS funding through FiiRE Goa.

A2WedTech Pvt. Ltd. Is a platform where customers can come and check out their favourite destination venues, set their budget & plan their destination wedding online

A2WedTech Pvt. Ltd. is a startup that has been funded by FiiRE Goa under the Startup India Seed fund scheme.

FiiRE-Goa is pleased to announce that they have entered into a Partnership with 'Mumbai-based B2B Consulting Agency', HiG Sports.

HiG Sports is a Mumbai-based B2B Consulting Agency, established to foster innovations in the Sports, Fitness, Leisure and Recreation Industries.

8) FiiRE Goa in collaboration with Anil Potluri of Green Waves Recyclers and Manovikas school Goa conducted a workshop and trained students on 'How to make Seedbombs'

FiiRE Goa is always committed towards restoring, preserving and enabling those who care and are concerned towards the environment.

9) FiiRE Goa in partnership with Venture Catalysts | India's First Integrated Incubator, with support partner Goa State Innovation Council and ecosystem partner BITS Goa Innovation, Incubation & Entrepreneurship society, organized KHOJ'22, held at Don Bosco College Campus, Fatorda Goa.

The keynote address was delivered by Shri. Jose Manuel de Noronha, Chairman - Goa Public Service Commission & Goa State Innovation Council at KHOJ'22. Followed by the Pitch round where 8 startups pitched

The Judges for the Pitch round were-

- Shri. Milind Anvekar- President- Goa Technology Association.
- Ms. Monica Gupta, Venture Partner, Venture Catalysts.
- Shri. Ebin E. - GM, BITS BIONEST.

The startups that pitched

- 1) Kanan Tandi - CogniCue

- 2) Ashish Asgekar- Svayu
- 3) Shalaka D Shet Teli- H2- Health Habits
- 4) Priyanka Tayi- KULA Studio
- 5) Akhilesh Bhise- Innovent
- 6) Akshay Kumar - Fitness Konnect
- 7) Ratnam Upadhya- StockLine
- 8) Narendra Navali- HorizonFX(P) Ltd.

d) Followed by, Smt. Monica Gupta, Venture Partner, who spoke about the Venture Catalyst and our partnership at #KHOJ'22.

e) Followed by the Panel discussion, which included the following people.

10) FiiRE Goa was visited by Dr. Milind R Bhirud , General Manager-NABARD - National Bank for Agriculture and Rural Development.

The delegation visited the Incubation centre to get a sense of the startup ecosystem setup at FiiRE Goa.

11) FiiRE Goa was visited by Mr. Ramesh Verma - Secretary, Science and Technology and Dr. Levinson Martins - MD, Goa Waste Management Corporation, Govt of Goa.

The delegation visited the Incubation centre to get a sense of the startup ecosystem setup and also interacted with startups at FiiRE Goa.

12) FiiRE Goa announces its partnership with Knowledge Chamber of Commerce and Industry of India and has signed a memorandum of understanding (MOU) to solidify this partnership.

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