Institution's Innovation Council (IIC) 3.0

Annual Report 2020-21

Don Bosco College of Engineering



A: About IIC Institute:

Institution Innovation Council of Don Bosco College of Engineering

VISION:

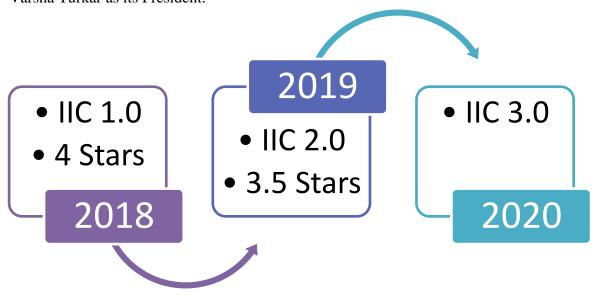
To promote innovation, incubation, and entrepreneurial environment, by offering Students, Faculty, and Society opportunities to renovate their business ideas to prototype to product

MISSION:

- To create a vibrant local ecosystem to incubate and support innovative ideas
- To create entrepreneurship opportunities for Students, Faculty, and Society
- To nurture the start-ups by providing them necessary support
- To provide support to commercialize innovative and sustainable ideas
- To prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework

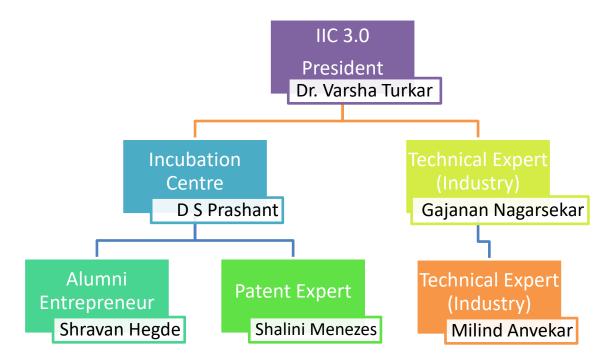
Journey of IIC at the Institute:

IIC 1.0 started in the year 2018 under the Presidentship of Dr. Varsha Turkar. In 2019, Dr. Neena Panandikar became the President of IIC 2.0. At present, in 2020, IIC 3.0 is headed by Dr. Varsha Turkar as its President.



Diversified representation in IIC at Institute from Industry, Departments and Units:

IIC 3.0 has representatives from varied sections such as Incubation Centre, Industry, Advocate and Alumni Entrepreneur besides Faculty and Students of Don Bosco College of Engineering.



B. Brief mention of key functionaries at the IIC Institute:

President

- Constitute the IIC council and appoint its members in consultation with the Principal
- o Responsible for ensuring effective Quarterly Council Meeting
- o Leads the IIC Council
- o Responsible for organizing activities as per the IIC calendar
- o Calls the meetings as and when required
- Assign tasks to IIC committee members
- o Help IIC coordinators to find resource persons for various events
- Keep a track of uploading reports on IIC portal
- o Main point of contact with MHRD Innovation Cell
- Communicate with MHRD Innovation Cell and responsible to ensure decent performance of IIC
- Coordinate with MHRD innovation cell
- o Responsible for all the IIC activities in the institute
- Responsible to self-driven activities
- o Ensure the effective implementation of IIC activities with the help of Convenor
- o Responsible for submitting the monthly progress/activity reports on the IIC portal
- o Guides Convenor to submit the reports on IIC portal

• Vice President

o Handles all the responsibilities in the absence of IIC President

Convener

- Work in close coordination with IIC president
- o Provide help wherever required for smooth conduction of activities
- Ensure the participation in the meeting
- Prepare the meeting agenda prior to meeting with the inputs from all valuable council members and President
- o Send notice to all the members to inform about meeting
- o Invite external IIC committee members to attend the meeting
- o Present quarterly activities in quarterly council meeting
- o Upload the reports on the IIC portal
- Ensure that the internal examination dates would not interfere with the IIC activities and coordinate with all departments to ensure the same
- Collect the inputs from all the members of the council and institute's management at regular interval, especially external members for better planning of IIC activities and effective delivery of results

Coordinators

- o Work in close coordination with President and Convener
- Work as per the responsibilities assigned in council meeting
- o Complete the task assigned to them by the IIC President
- o Submit the report to the convenor before the deadline

C. Tabular representation of Resource strength of the IIC institution:

Total No. of	Total	Total No. of	Pre-	Incubation	IP Facilitation Unit,
IIC Members	No. of	faculty Mentors	Incubation	Units, If	If any
	IAs	From Portal	Units, If any	any	
34	05	-	-	01	In Process
					Dr. Gaurang Patkar
					the coordinator; is
					part of the IIC team

D. Facilities, Infrastructure of Pre-Incubation & Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus:

https://www.fiire.org.in/

E. Achievements:

Sr. No	Title	Total
1	Number and different types of I&E and IPR activities conducted	25
2	No. of Students and Faculty ideas generated	15
3	No. of Students and Faculty Innovation/ Prototypes developed	46
4	No. of IPs generated, Published and Granted	13
5	No. of Student and Faculty Start-ups / Ventures established	5
6	Amount spent on promotion and awareness generation on innovation Entrepreneurship in the campus	0
7	Amount grant or fund supported to student and Faculty lead Innovations, Start-ups and IPR	12,18,269
8	No. of Technology Transfer and Commercialisation happened	0

F. Highlight few best IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum:

- 1. Dr. Gaurang S Patkar, Associate Professor and Head of Computer Engineering Department secured Gold Medal at the 6th International Invention Innovation Competition in Canada, iCAN 2021, with his unique invention related to Predicting wine quality using AI. This competition organised by Toronto International Society of Innovation & Advanced Skills (TISIAS) and supported by Innovation Initiative Co-operative Inc., International Federation of Inventors' Associations (IFIA), World Invention Intellectual Property Associations (WIIPA).
- 2. Dr. Vivek V. Jog Assistant Professor in Computer Engineering Department received a grant of Rs. 20000/- from Goa State Innovation Council as a seed funding amount for development of Proof of concept of project titled "GATE automation using nonconventional energy". He also completed basic course of Innovation Ambassador, MoE –IIC.
- 3. Prof. Satyesh Kakodkar, Assistant Professor in Civil Engineering successfully completed Innovation Ambassador Training conducted by MoE's Innovation Cell & AICTE, New Delhi. Recently Prof. Kakodkar has undergone Innovation Ambassador training (Advanced Level) conducted by MoE's Innovation Cell & AICTE during the period from 30th June 30th July 2021 in online mode.

- 4. Dr. Varsha Turkar, IIC President, Professor and Head, Dept. of Electronics and Telecommunication Engineering, along with her team received Rs. 20,000/- from Goa State Innovation Council as a seed funding amount for development of Proof of Concept of project titled "Fish Quality Analysis System".
- 5. Prof. Michelle Araujo e Viegas, IIC Convenor, Assistant Professor in the Department of Electronics and Telecommunication Engineering, along with her team received Rs. 20,000/-from Goa State Innovation Council as a seed funding amount for development of Proof of Concept of project titled "Sanitizing Robot". She along with her team also received a grant-in-aid of 95,639/- from Department of Science and Technology (DST)-Goa for the project titles "Sanitizing Robot". This project also won the first place in hardware category for National Level Project competition 'Technix 2021'.

G. Highlight selected best Innovations & images with mention of inventor/innovation name:

1) Idea/PoC competition

1st Place:

Team Name: 'Solutionism at its finest'

Idea Title: Quarantined Chefs

Description: A platform to help home-bound chefs to connect with potential customers

Members:

1	Leo Barros (L)
2	Isaiah D'Costa
3	Vaughan D'Souza
4	Duane Rodrigues
5	Joshua Coutinho

1st Place:

Team Name: 'Team Hexacore' Idea Title: Work Social

Description: To facilitate the working of government by involving people's

participation using technology

Members:

1	Vibhav Desai (L)
2	Navin Marojkar
3	Shvesh Naik
4	Abhinav kuppasad

3rd Place:

Team Name: 'SATRN Squad'

Idea Title: Upholding civil liberties by ensuring accessibility.

Description: Simplification & Accessibility of the Indian constitution on a scale never seen before, in the form of an app or website that explicitly states the rights of the people and the limitations of the state machinery.

Members:

1	Aryan Kotru (L)
2	Shubham Tendulkar
3	Rutvik Vaze
4	Tabib Ashraf
5	Nitya Pai

2) Business Plan/Prototype Competition

1st Place:

Team Name: 'Aikyam'

Idea Title: Innovative Medium of Learning using Augmented Reality

Description: A platform to help students to learn better making use of Augmented

Reality

Members:

1	Sapana Subhash Kambli		
2	Lata Ashok Pawar		
3	Joel Nicolas Fernandes		

2nd Place:

Team Name: 'IRIS'

Idea Title: Ambulatory Blood Pressure Monitor

Description: System that would assist healthcare professionals to study a patient better

by continuously monitoring various vital parameters on the go.

Members:

1	Valini D'Silva
2	Gautam Desai,
3	Krystal Fernandes,
4	Velton D'silva

3rd Place:

Team Name: 'Legal Eagles'

Idea Title: Your Legal Consultancy

Description: Sourcing advisors (legal consultancy) through an app in terms of finding

legal help when required

Members:

1	Sahili Dessai
2	Chrinsy Menezes
3	Reggie D'Silva
4	Hayson Da Costa
5	Marsha De Souza

3) Smart India Hackathon 2020

One team was shortlisted for SIH 2020 in hardware category.

Team Name: 'Electrovert'

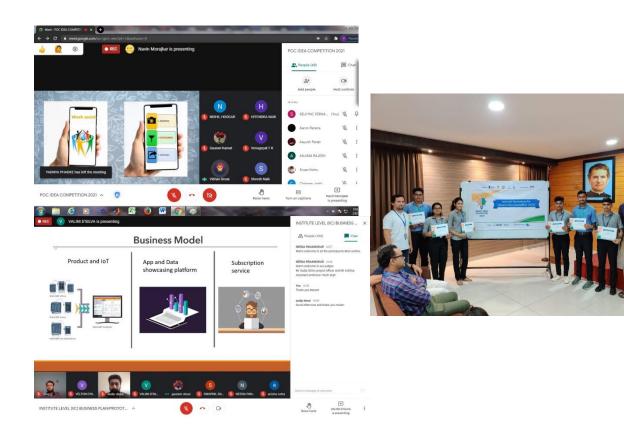
Idea Title: Unique Energy Harvesting Technique

Description: The idea proposed is to harvest energy generated from the pressure

between the tyre of the vehicle and the road while the vehicle is moving

Members:

1	Sayed Abul Fazal
2	Reeva Caldeira
3	Aazam Khan
4	Anjima Rajesh
5	Mohmmed Irfan



H. Highlight selected start-ups established by students/faculties with mention of founder/cofounder name:

Sr. No	Name of Startup/ Ventures	Type of Startup	Name of Faculty/ Student
1	CARBON - E, Goa	Services provided	Mr. Sujay Shirodkar
		in Mechatronics,	Mr. Abdul Rakib
		Robotics	Mr. Myron Rodrigues
		solutions, Product	
		Design &	
		Automation	

2	Jatvam Abhiyantrix Pvt.	Waste Handling &	Mr. Shivdas Gaad
	Ltd	Management	Mr. Rajat Halarnekar
3	Techno – Wheelz Pvt Ltd	Motor Vehicle	Mr. Deepak Kolur
		Manufacturing	

I. List if any break through Innovations / Technology Developed at the Institute:

- 1. Cognicue Analytics Pvt Ltd They convert Non Verbal signals into meaningful data, by capturing the kinesics like facial expressions, facial movements, emotions and other bodily movements. This helps businesses identify the real emotions of the consumer in real time situations and identify the right mode of engagement. They are working towards an ecosystem where no person would be partial towards another due to his/her own past experience and avoid personal bias.
- 2. Letcetra Agritech Pvt Ltd (Agcetra) "Agcetra" which means Agriculture & etc, is an enabler platform for Urban Farming and Agritech services and training. A platform that is built with a vision of bringing all stakeholders of the agriculture industry working together with a vision to build a smart and technology driven farming community and in turn boost the food production industry. The e-commerce capabilities of the platform will ensure that these stakeholders can do business together. Growers can hire consultants, enrol to training programs or procure innovative products. The service providers or sellers get a medium to take their innovations to growers.
- 3. Asier Solutions OPC Pvt Ltd "ASIER", which means "the beginning" in Spanish, is a STEM (Science, Technology, Engineering, and Maths) based Ed-TECH company which aims to foster innovations through technology imparts practical knowledge through their commercialized educational DIY- Kits "ROBOKITS" combined with various workshops and training programs.
- 4. Barve Technologies LLP has developed a first of its kind Life Saving Temperature Regulating Machine. The heating variant helps increase the body temperature of humans and animals when it falls below the normal body temperature and the cooling variant helps decrease the body temperature when it increases beyond the normal body temperature. The machine reduces the treatment time to 1 hour, compared to the traditional method which takes 4-5 hours. A patent for both the variants is applied.

J. Participation of IIC-institute in various programs of Central and Stage Govt. Highlighting especially for the schemes or programs:

- ARIIA The institute has participated in ARIIA 2021. The review and evaluation is still in process.
- NISP Adoption status The National Innovation and Start-up Policy (NISP) coordinator
 of Don Bosco College of Engineering, Goa is Dr. Gaurang S Patkar. Dr.Patkar has
 successfully completed first training and now is in process of forming IPR Cell and
 NISP policy for the college. This policy intends to guide HEIs for promoting students'
 driven innovations & start-ups and to engage the students and faculty in innovation and
 start up activities in campus.
- Smart India Hackathon Smart India Hackathon 2020 is a nationwide initiative to provide students a platform to solve some of the pressing problems we face in our daily

lives, and thus inculcate a culture of product innovation and a mindset of problem solving. In SIH 2020, the students would have the opportunity to work on challenges faced within various Ministries, Departments, Industries, PSUs and NGOs to create world class solutions for some of the top organizations including industries in the world, thus helping the Private sector hire the best minds from across the nation.

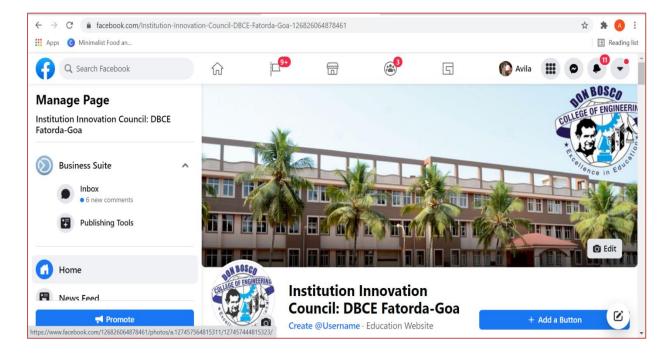
In order to shortlist the teams for the shortlist the teams for the Hardware and Software edition of SIH 2020 a internal hackathon was conducted in the college campus on 27th January 2020. A total of 22 teams comprising of 6 members each participated in the hackathon. The teams comprised of students from Mechanical, Computers, Electronics & Telecommunication and Civil Engineering. They presented their innovative ideas in front of a two member jury panel comprising of Mr. Aaron Miranda Colaco, Software Consultant, working with Blockchain and Mr. VenuGopal, Corporate relation Manager at FIIRE.

In the Hardware edition teams APOGEE and Electrovert emerged as the finalists. In the Software Edition teams INS, Haystack, Bazinga, Innovative Geeks and Mind Benders were declared the finalists. Teams Focus, Rekrete and Squadron 7, Technocrats were placed in the waitlist category in the Hardware Edition and software edition respectively. Team Electovert qualified for the Grand Finale of the SIH in hardware category and Innovative geeks qualified for the Grand Finale in the software edition.

K. Detail of Social Media & Connections of IIC institute:

IIC is on Facebook and the Total Page Followers are 336:

https://www.facebook.com/Institution-Innovation-Council-DBCE-Fatorda-Goa-126826064878461



L. Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation Cell:

IIC DBCE is working towards empowering students towards entrepreneurship by providing them exposure to entrepreneurs, business cases, tools and techniques, to help them start thinking about entrepreneurship at an early stage of their professional life. This can be a huge influence in helping them startup.



-Venugopal T R, Incubation Manager, FiiRE

The Institute Innovation Council of Don Bosco College of Engineering has helped to create awareness, educate, nurture and inculcate a culture of innovation, and enable our understudies to generate new ideas and become more innovative, dynamic and get close to the real world of expertise. I must say that IIC activities will develop better Cognitive Ability for Technology Students.



-Dr. Gaurang Patkar, H.O.D. Computer Engineering

The initiative through the IIC activities and the Innovation cell activities is helping build a strong entrepreneurial and startup culture within the student community of the college. The exposure to the various facets including problem solving initiatives which could be commercialised, understanding the need to build IP based solutions, importance of working in teams, asking for help and support and looking at problems as opportunities is helping build the ground for sustainable startup initiatives in the near future. The willingness to take risk and fail, an

important ingredient in innovation is also getting engrained amongst the student community. Great initiative which will help the nation in the long run.



-D. S Prashant, CEO, FiiRE

IIC at Don Bosco is doing a great job of fostering a culture of innovation among the students and young entrepreneurs. The support they receive from IIC allows them to dream big and pursue their passion of solving key problems using technology and innovation.



-Rohin Parkar, CEO, Co-Founder, Spintly

The main objective of Institution Innovation councils at institutes is to drive innovation and start-up ecosystem at campus by connecting with industry peers. To achieve this objective, the role of faculty being a member of IIC is very important. They play the role of a mentor or guide for young minds in their search of innovation and entrepreneurship.

We at Don Bosco College of Engineering, through its IIC, have been organising various webinars to educate the students about Innovation and start-up ecosystem. The faculty members have undergone series of lectures via online mode conducted by MoE's Innovation cell to drive the mission forward.



-Satyesh Kakodkar, Assistant Professor -Civil, Don Bosco College of Engineering, Innovation Ambassador

IIC at DBCE has been a great Avenue for students to leverage their technical skills and strategize their business ideas from ideation to MVP.

In the recent past there has been a decent involvement from students who have been encouraged and mentored by the faculty and associations like FIRE.

I wish the entire IIC team all the energy and good luck for their future plans for such encouraging work.



-Gajanan Nagarsekar, Healthcare Technology

M. Images:

Here are a few poster images of the various events held by the IIC 3.0 at Don Bosco College of Engineering.









IIC Calendar Activities Conducted: 34

MIC Driven Activities Conducted: 6

Self-Driven Activities Conducted: 4

Total Activities Conducted: 44

N. Contact:

Dr. Neena Panadikar The Principal, Don Bosco College of Engineering Fatorda- Margao Goa-403602

Compiled By: Michelle Araujo e Viegas Asst. Prof and IIC 3.0 Convener

Dr. Gaurang Patkar Associate Prof. and IIC 3.0 Vice President Dr. Varsha Turkar Prof. and IIC 3.0 President