

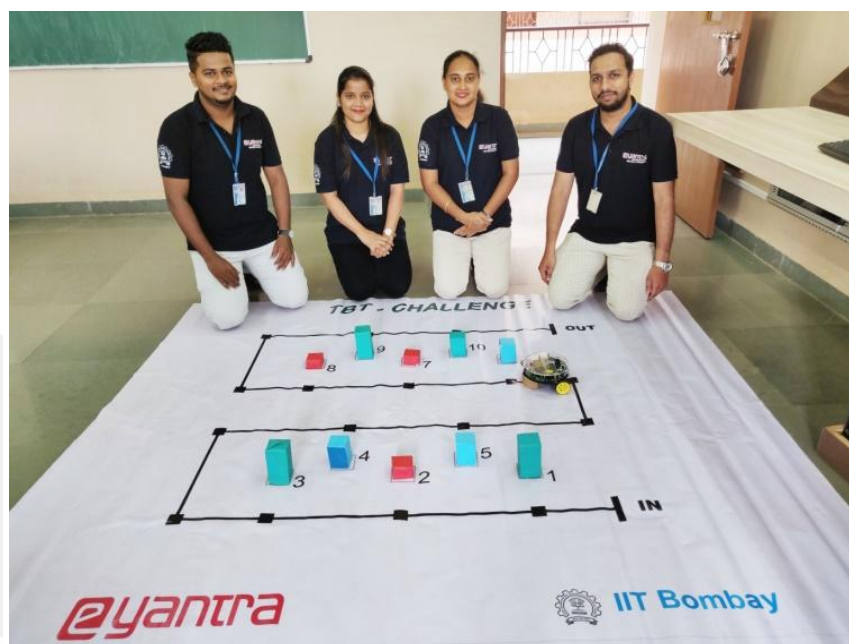


A Project hosted by [IIT Bombay](#), to spread education in the domain of **Embedded Systems** and **Robotics**, in colleges all across India.

Sponsored by MHRD under the National Mission on Education through ICT program.

e-Yantra DBCE Core Team

- ▶ Dr. Varsha Turkar- (HOD-ETC Dept.)
- ▶ Prof. Flavia Leitao (Team Leader)
- ▶ Prof. Yeshudas Muttu (Team Member)
- ▶ Prof. Mathilda Colaco (Team Member)
- ▶ Prof. Deron Rodrigues (Team Member)



[Click here](#) to see the e-Yantra IITB team

Task Based Training

The team attended a Two-day hands-on Workshop on Introduction to Robotics and embedded systems, after which they participated in **Task Based Training**, which is a series of interesting tasks based on Firebird V platform blend theory and practical experimentation, a competition that included participation from 70 plus colleges.

Out of the 70 plus teams that participated, only 17 teams could complete the Task Based Training within the target date and the team from Don Bosco College Of Engineering Goa (comprising of these 4 faculty members) topped the list with a **Class 'A' Award** securing **98.89%**.



DBCE e-yantra Robotics Lab set-up

With the success of this Task Based training, the ETC department of Don Bosco college of Engineering, Goa, inaugurated its e-Yantra Robotics lab on 30th of Aug 2019. It was an Inaugural cum Valedictory ceremony held on an online platform with IIT, Bombay. The team was felicitated and was awarded 3 Robots for successfully completing the task based training.

The e-Yantra students Robotics club was also installed on the 30th of Aug 2019, with the aim to train students on Robotics and Embedded Systems.



For more details, [click here](#)

Initiatives by DBCE e-yantra Robotics club

1. Workshop on “Firebird Robot”

A three day Workshop on “Firebird Robot” for the students of third year and final year ETC, was organized on the 25th, 26th & 28th of June 2019 to spread education in Embedded systems and Robotics.

The Resource Persons for the workshop were Prof. Flavia Leitao, Prof. Yeshudas Muttu, Prof. Mathilda Colaco and Prof. Deron Rodrigues.

The different topics covered were interfacing the Firebird Robot with the Buzzer, Boot Switch, Bar-Graph LED, LCD, Motors, IR sensors, Sharp sensors, White Line sensors and their related applications.

For more details, [click here](#)



2. e-Yantra Task Based Training (2019)

The e-Yantra student's team of DBCE was formed with the aim to train students on Robotics and Embedded Systems.

The e-yantra Faculty team comprising of Prof. Flavia Leitao, Prof. Yeshudas Muttu, Prof. Mathilda Colaco and Prof. Deron Rodrigues, along with our HOD Dr. Varsha Turkar came up with an innovative Teaching- Learning strategy, which was Task Based Learning meaning Learning by Doing

There were in all 7 teams formed, comprising of 4 students each from TE and SE ETC. They were given study material which the students were expected to go through and perform the related tasks. The students learnt to Interface the Firebird Robot with the LED, LCD, Buzzer, Boot Switch, Motors and carry out tasks like performing a particular motion, controlling the speeds, displaying particular data, line followers and so on.



For more details, [click here](#)

Initiatives/Benefits offered by e-yantra IITB

1. eYRC (e-Yantra Robotics Competition)

The e-Yantra Robotics Competition is an annual competition held at IIT, Bombay which is a Project-Based Learning (PBL) approach, where students not only learn and explore technologies but also develop skills to analyze a problem.



For more details, [click here](#)

2. eYSIP (e-Yantra Summer Internship Program)

The aim of the eYSIP is to provide winners of the e-Yantra Robotics Competition a platform with facilities and guidance to work on projects, a chance to experience a research environment and an opportunity to mold themselves into confident individuals.



For more details, [click here](#)

3. eYIC (e-Yantra Innovation Challenge or formerly known as e-Yantra Ideas Competition)

The e-Yantra Ideas Competition solicits innovative projects from teams of eLSI colleges to ensure sustained use of the robotics labs set up through the e-Yantra Lab Setup Initiative (eLSI), to encourage Interesting ideas from students in eLSI colleges across the country and to provide a platform for teams to showcase their projects.



For more details, [click here](#)

4. eYS (e-Yantra Symposium)

e-Yantra Symposium brings together colleges which have established e-Yantra labs for discussions and seminars on how to turn these labs into Innovation Hubs. It also Provide a platform for showcasing student's research projects that were executed in the e-Yantra labs at these colleges.



For more details, [click here](#)

5. eFSI (e-Yantra Farm Setup Initiative)

e-Yantra Farm Setup Initiative is a project to know how to set up an automated agricultural Farm. This includes the creation of beds for growing plants and making the little gadgets, tools, and then networking them for maintaining and monitoring the growth of plants.



For more details, [click here](#)

6. eYRDC (e-Yantra Resource Development Center)

e-Yantra Resource Development Center (eYRDC) is a platform where teachers from different eLSI colleges can share their knowledge and also create content that can be shared across all eLSI colleges, to help them use their e-Yantra labs in an effective manner.



For more details, [click here](#)