

Government Polytechnic Mumbai
Instrumentation Engineering Department

e-Yantra Lab

Embedded Systems and Robotics Lab
In collaboration with IIT Bombay

An e-Yantra Lab Setup Initiative (eLSI) is a program launched by Department of Computer Science and Engineering (CSE) of IIT Bombay to spread Embedded Systems and Robotics education in colleges across India. This program enables Engineering and Polytechnic colleges to train their teachers and students through workshops and online training programs, and set up their own Robotics labs to spread a culture of “Project Based Learning” among students.

In this context, Instrumentation engineering department of Government Polytechnic has set up an e-Yantra laboratory (Embedded Systems and Robotics Lab) collaboration with IIT Bombay and funded by Directorate of Technical Education (DTE), Mumbai, Maharashtra.

This lab was inaugurated by Hon. Dr. N. N. Mhala Sir (Principal, Govt. Polytechnic Mumbai on 18th Oct 2023. He motivated all students and teachers to conduct as well as participate in various project-based learning activities and robotics competitions.



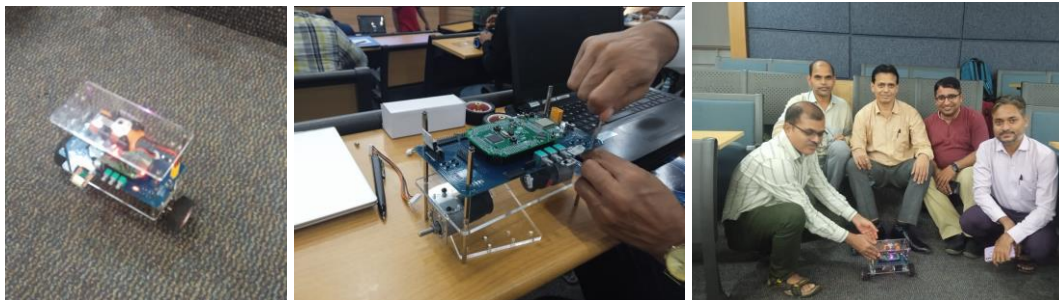
eYantra Lab Inauguration by Hon. Dr. N. N. Mhala Sir (Principal, GP Mumbai)



Hon. Dr. N. N. Mhala Sir (Principal, GP Mumbai) Guiding Students and Teachers on the Occasion of eYantra Lab Inauguration

Activities carried out under e-Yantra Lab

- Three days Workshop at IIT Bombay on “Robotics and Embedded System through Self Balancing Robot Design” during 3rd-5th August 2023 was attended by e-Yantra faculty team of Dr. B. B. Sul, Dr. P. N. Padghan, Mr. S. G. Thube, Mr. F. S. Bagwan. Faculty gained theoretical, programming knowledge, and hands-on experience of robotics and embedded system through self-balancing robot design.



e-Yantra Faculty Team Attending 3-Day Workshop on Self Balancing Robot at IIT, Bombay

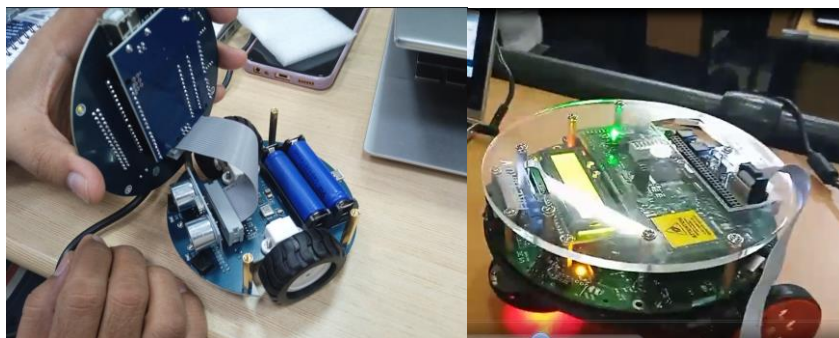
- Two days Workshop at IIT Bombay on “Embedded Systems and Real-time Automation” during 14th-15th September 2023 was attended by three faculty Dr. B. B. Sul, Mr. S. G. Thube, Mr. F. S. Bagwan.

- An online selection test of interested students for e-Yantra activity was conducted by e-Yantra team of IIT Bombay on 25th August 2023 and shortlisted 12 students for further MOOC training.

List of Shortlisted Students for MOOC Training

Sr. No.	Student Name	E-mail ID	Department
1	Ansari Mohd Rehan	rehanansari0912@gmail.com	Information technology
2	Bhavesh Zanke	bhaveshzanke7@gmail.com	Instrumentation Engineering
3	Eshwaran Madhiyalagan Parayen	parayeneshwaran@gmail.com	Electrical Engineering
4	Hrishi Surendra Pandey	hrishipandey27@gmail.com	Electrical Engineering
5	Iffat	kiffat411@gmail.com	Information technology
6	Jayeshkumar Subhashchand Jain	jayeshkumarjain4@gmail.com	Computer Engineering
7	Mayur Prakash Palve	palvemayur1234@gmail.com	Information Technology
8	Mubin Shaikh	shaikhmubin200524@gmail.com	Electronics engineering
9	Rajkumar Anil Jha	fw21me003jharajkumar@gmail.com	Mechanical Engineering
10	Shekhar Manohar Kalvikatte	raghavendrapatil1234@gmail.com	Electrical engineering
11	Shivraj Santosh Kolwankar	shivraj24012005@gmail.com	Information Technology
12	Sonawane Vedant Nitin	vns7588262833@gmail.com	Computer Engineering

- Selected students of GP Mumbai from various branches such as Instrumentation, Mechanical, Electronics, Electrical, Computer, and IT have undergone On-line (MOOC) training on e-Yantra web portal and gaining knowledge about embedded systems and real-time automation.
- GP Mumbai received e-Yantra lab equipment from IIT Bombay on 13.09.2023.
- e-Yantra lab was inaugurated by Hon. Dr. N. N. Mhala Sir (Principal, Govt. Polytechnic Mumbai) on 18th Oct 2023.
- Two-day Training Workshop at IIT Bombay on topic “Alphabot” was attended by e-Yantra team of GP Mumbai during 22nd-23rd Jan 2024.



Workshop on Alphabot at IIT, Bombay

- Total 15 students participated in e-Yantra Robotics competition organized by IIT Bombay
- Total 16 students participated in e-Yantra Innovation Challenge Competition. Four teams are formed and mentored by trained four faculty namely, Dr. B. B. Sul (HOD-IS) Team Leader and other team members Mr. S. R. Kasture (LIS-EC), Mr. S. G. Thube (LIS-IS), and Mr. F. S. Bagwan (LIS-IS).



e-Yantra GPM

Outward No. GPM/IS/eYantra/2023/1

Date: 11-10-2023

Mentorship Order for e-YIC Competition-2023-24

e-Yantra Innovation Challenge (eYIC) is a unique annual competition being organized by CSE dept. of IIT Bombay, Mumbai. It trains student teams in crucial skills through MOOCs before getting them to solve real-world problems and build startups. It also helps students articulate a problem and build their dream start-up. This year's themes are Inclusive cities, Disaster Management and Agriculture. In order to provide technical guidance and support to students, the following teaching faculty are appointed as mentors for following groups of students enrolled for e-Yantra Innovation Challenge (eYIC) competition 2023-24.

Sr. No.	Name of the Mentor	Group No.	Name of the Enrolled Groups/Students
01	Dr. B. B. Sul HOD-IS	01	1) Mr Pranit Patil (IS) 2) Mr. Bharat More (IS) 3) Mr. Pranit Sadafule (IS) 4) Mr. Praful Trimbake (IS)
02	Mr. S. R. Kasture I/c HOD-AI	02	1) Sonali Krishnakant Parte (EC) 2) Qureshi Ilaiz Mahrnood (EC)) 3) Fayyaz Nisar Shaikh (EC) 4) Sujal Yadav Gaykar (IT)
03	Mr. S. G. Thube LIS	03	1) Bhavesh Chandrabhan Zanke (IS) 2) Mayur Prakash Palve (IT) 3) Hrishu Surendra Pandey (EE) 4) Rajkumar Anil Jha (ME)
04	Mr. F. S. Bagwan LIS	04	1) Jayeshkumar Subhashchand Jain (CO) 2) Vedant Nitin Sonswane (CO) 3) Shivraj Santosh Kalwankar (IT) 4) Shivraj Umakant Khandare (EC)

Dr. B. B. Sul
Team Leader- e-Yantra,
Govt. Polytechnic Mumbai-51

1. Copy forwarded to Principal, GP Mumbai
2. Copy circulated among
 - a. HOD CO dept.
 - b. HOD, EC dept.
 - c. HOD, IT dept.
 - d. HOD, EE dept.
 - e. HOD, ME dept.

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S. R. Kasture
11/10/23

- e-Yantra lab resources are being utilized by second/third year students of different disciplines in their final year project works and participating in various technical competitions.
- SYIS students of Instrumentation engg. department participated in DIPEX 2024 Project competition at Terana College of Engg. , Neral, Navi Mumbai



SYIS Students Participation in DIPEX 2024 at Terana COE, Neral, Navi Mumbai

Dr. B. B. Sul
HOD-Instrumentation,
Govt. Polytechnic, Mumbai