



TSSM's

PADMABHOOSHAN VASANTDADA PATIL INSTITUTE  
OF TECHNOLOGY, BAVADHAN, PUNE-21.



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## Institutional Distinctiveness 2018-2019

### ROBOTICS CLUB

The robotics club of PVPIT is a student run club on campus with an active participation of more than 200 students. The institute sensitizes the thrust area in Mechatronics which is fast developing technology. Robotics Club was started by students group in 2013 and is coordinated by senior faculty of domain expertise from mechanical, computer, E TC departments. Within short period of time the robotics club is popular among the students. It took active participation in competitions like Robowar, Roborace, Robocon, etc organized by various institutes of national eminence. Also, students have participated and won prizes in various skill development clubs like Ebike, go-kart, Baja, Supra, etc.

#### Objectives:

1. To facilitate students to understand, design and learn robotics.
2. To update students about recent technological changes in industry.
3. To enhance employ ability and entrepreneurship.
4. To provide interested students with opportunities to express their skills, knowledge and creativity through conceptualizing, designing and programming robots.

#### Facilities:

1. Hydraulic, pneumatic components
2. Computers, PCB Printing, Soldering, Sensors.
3. Bench vice, grinder, drill, Files, cutters, tool box.
4. Central machine shop with CNC/Drill/ milling and Lathe
5. Geared motors, drivers, controllers, wheels, etc

#### Funds provided by:

- TSSM Management
- Mechanical Engineering Students Association (MESA)
- Civil Engineering Students Association (CESA)
- Computer Engineering Students Association (CESA)
- Electronics Engineering Students Association (EESA)

#### Outcomes Achievements:

- Event Name: Olympus 2018 (State Level Competition) Event Theme: 7Kg Robowar Organizer: SVERI'S College of Engineering, Pandharpur Schedule: 16 Sept. 2018 Venue: SVERI'S College of Engineering, Pandharpur Total Participation: 10 Rank: 1st and 2nd

- Event Name: Mind spark 2018(National Level Competition) Event Theme: Aero modeling Glider Making(skill development club) Organizer: College of Engineering, Pune Schedule: 30 Sept.2018 Venue: College of Engineering, Pune Total Participation: 40 PVPIT Rank: 1st
- Event Name: Robo-VRC 2018 (National Level Competition) Event Theme: Task Based Robot Challenge of completing the theme of “Operation Shakti of Pokhran Nuclear Test” Organizer : Veermata Jijabai Technological Institute, Mumbai Schedule : 27- 29 Dec 2018 Venue: Veermata Jijabai Technological Institute, Mumbai Total Participation: 40 PVPIT Rank: 2nd
- Event Name: Geek Pawn 2018 (International Level Competition) Event Theme: Spy Robot Challenge 2018 Organizer : Keen Computing Technology,Shanghai Schedule : 24-25 Oct 2018 Venue: Himalayas Center Daguang Theatre, Shanghai Total Participation: 10 PVPIT Rank: 4th
- Event Name: TECHNICIA 2K19 (National Level Competition) Event Theme: ROBOWAR 30 KG Organizer : AMITY UNI.,MUMBAI Schedule : 28-29 JAN,2019 Venue: AMITY UNI.,CAMPUS ,MUMBAI Total Participation: 25 PVPIT Rank: 1st Thus the robotics club is the institute’s distinct activity of institute which satisfies the aspirations of students by leading India in robowar competition.

### **Current Development:**

- This year some students participated in robotics competitions held at VJTI Mumbai and NIT Warangal.
- In future various robots will be made in this robotics club activity to participate won the international competitions by making skilled engineers. This activity is helpful for student’s placement their carrier growth by makingFacilities:
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## **Institutional Distinctiveness 2019-2020**

### **ROBOTICS CLUB**

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#### **Outcomes Achievements:**

- Event Name: Technozion N'19 Novus (National Level Competition) Event Theme: 60 Kg Robowar Organizer : National Institute of Technology,Warangal Schedule : 03 Nov 2019 Venue: National Institute of Technology,Warangal Total Participation: 15 PVPIT Rank: 1<sup>st</sup>
- Event Name: Mind spark 2019(National Level Competition) Event Theme: Dog fight Organizer: College of Engineering, Pune Schedule: 29 Sept.2019 Venue: College of Engineering, Pune Total Participation: 4 PVPIT Rank: 3<sup>rd</sup>

- Event Name: Technovanza VJTI (National Level Competition) Event Theme: Robowar Organizer : VJTI, Mumbai Schedule : 27 Dec 2019 Venue: VJTI, Mumbai Total Participation: 15 PVPIT Rank: 1<sup>st</sup>
- Event Name: Technicia-2020 (National Level Competition) Event Theme: ROBOWAR Organizer : AMITY UNI.,MUMBAI Schedule : 24 JAN,2020 Venue: AMITY UNI.,CAMPUS ,MUMBAI Total Participation: 5 PVPIT Rank: 1st
- Event Name: Techfest-2021 (National Level Competition) Event Theme: Robowar Organizer : IIT, Mumbai Schedule : 04 Jan 2021 Venue: IIT, Mumbai Total Participation: 10 PVPIT Rank: Semifinalist.
- In future various robots will be made in this robotics club to help students , participate and win the international competitions. This activity is helpful for student's placement and their carrier growth

### **Student Patent Publications at National and International Level**

At National level, total 471 patents have been granted and published in "Indian Patent Advanced Search System"

At International level, total 21 patents have been granted and published in "AU(Australia)Patent Search System"

### **Project Based Learning**

The College emphasis on Project-based learning (PBL), which is a student centered pedagogy that involves a dynamic classroom approach in which students acquire a deeper knowledge through active exploration of real-world challenges and problems.

### **Dowsing**

Dowsing workshop is organized every year by the Department of Civil Engineering. This year a total of 110 students participated. Various Experts were invited to guide students to search for underground supplies of water, metal, etc., by the use of a divining rod.