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# **Innovative Teaching – Learning Activity**

## **Project Based Learnings**

Class: FE, SE, TE, BE

# **Objective:**

- 1. To develop collaborative learning and teamwork
- 2. To enhance students' presentation and communication.
- 3. To develop students' technical report writing abilities.
- 4. To promote innovation and creativity.
- 5. To work towards bridging the gap between academia and industry by involving industry professionals and alumni as judges and mentors.

#### **Outcomes:**

- 1. Improves teamwork and colaboration.
- 2. Improves presentation skills.
- 3. Improves technical report writing skills.
- 4. Participation in PBL exhibition and e-Ganesha competition improves communication skills and confedence among students.

#### **Details of the activity:**

- All students, from first year (FE) to final year (BE), are engaged in project-based learning. FE and SE students undertake course-based projects, while TE students focus on mini-projects, and BE students work on more complex major-projects as a part of their curriculum.
- At the end of each semester, a PBL exhibition is organized within the department, where student groups present their project models. Industry professionals, often alumni of the department, serve as judges.
- Prizes are awarded to the top three winning teams based on their project presentations.
  The department also hosts an annual E-Ganesha competition, where students showcase
  their creativity by designing and decorating ideas using innovative electronic
  components.
- Alumni of the department serve as judges for this competition, and winners are awarded exciting prizes to encourage their innovative spirit.

### **Photo for Activity:**

Photographs of project-based learning exhibition cum competition







# **Impact of the activity:**

- 1. Working in a group strengthened improved teamwork and collaboration among students.
- 2. PBL experience enhanced students' performance in campus and internship interviews.
- 3. Students published research papers based on their projects.
- 4. Students actively participated in project exhibitions and diverse competitions, including Smart Hackathon, Dipex, and Karmaveer EXPO, where they achieved award-winning results.
- 5. Students participated in and won debate competitions.
- 6. Students published patent based on their projects.

### **Student achievements**

- 1. Won 1<sup>st</sup> Place at TechFiesta International Hackathon at PICT Pune. The team members have interdisciplinary backgrounds.
- Ayush Pund
- Yash Giri
- Yash Barve
- Vidhi Metkar



2. Ritesh Sakhare Won the first prize in the ABB Live Project Competition



3. Team Matrix is an interdisciplinary team that competes in robotics competitions. Team secured  $7^{th}$  place in the ISRO Robotics Challenge and  $2^{nd}$  place at National Robotex



