

Marathwada Mitramandal's

COLLEGE OF ENGINEERING

S.No.18, Plot No.5/3, Karvenagar, Pune-411 052

Accredited with 'A' Grade by NAAC

Accredited by NBA (Electrical and Mechanical Engg. Department)

Recipient of 'Best College Award 2019' of SPPU

Recognized under section 2(f) and 12B of UGC Act 1956

Criterion 7 7.2. Best Practices

Best Practice - I

1. Title of the Practice – 'Professional skills exposure to students'

2. Objectives

To enhance the professional skills of students, to improve their employability and organize training programs, to motivate students for higher education and entrepreneurship so as to empower them with current industry needs and job requirements. This further enhances the knowledge which enables learners to think in terms of problem solving, making inferences, and drawing conclusions.

3. The Context

A various functional committees and student chapters are formed at the institute level, in which the functional head and a faculty representative from each department are actively working to achieve the objectives. Students organize/participate in several national/international events

4. The Practice

The efforts and initiatives undertaken are as follows:

- The institute organizes project competitions, industrial visits, workshops, expert lectures, and skill development courses.
- Students enthusiastically participate/publish their ideas in National/International conferences and journals.
- Active memberships of professional bodies like ACM, IEEE, CSI, ISTE, SAEINDIA, ISHRAE, ASHRAE, IEI, QCFI, IAENG, ISRD etc. and participate in the national/international level events organized by these professional bodies.
- The teams of various student activities are formed by conducting aptitude/technical tests and interviews which participate in the national/international events like BAJA SAE International, BAJA SAEINDIA, SUPRA SAEINDIA, Formula Bharat, SAEINDIA NIS EffiCycle, Robocon, AeroDesign and Hackathon.
- The institute has formed various student associations such as ITSA, MESA, ACES, BETA, EESA and GDSC which includes a faculty and student members which plan and organize technical and non technical (Social and Cultural) activities.

5. Evidence of success

- **BAJA SAEINDIA competition** "Team Abhedya" received first prize in Engineering Design worth Rs. 60,000/- in 2018, AIR 12th 2019, AIR 4th with 2nd Prize of Rs.40000/- in Suspension and Traction event in 2020, AIR 18th and 1st prize in Go Green Event worth Rs. 20000/-, in 2022.
- **SAEINDIA NIS EffiCycle competition** Team 'ACHILLES' secured AIR 6th and prizes worth Rs. 60,000/- in 2019, AIR 4th in 2020, AIR 1st and Best CAE award in 2021.
- 'Team Rudra' of Robocon got 100 out of 100 points in the first round of Robocon Competition 2020.
- **Formula Student competition** 'Team Abhedya Racers' secured AIR 24th in 2018, AIR 14th with a runner up award in ACCELERATION worth Rs. 20,000/- in 2019 and AIR 08th in Formula Bharat 2022.
- Four students of IT Department have received best research paper award in ICETEMS-2021 conference.
- Mr. Vedant Joshi (Comp) selected as a 'Ambassador for IEEE Xtreme 15.0' at IEEE Pune section.
- ISTE student Chapter received "Best Student Chapter in Maharashtra and Goa Section award" in 2018-19.
- Students of Mechanical Department have Published Patent on "Design and Development of Liquid Food dispenser Assembly".
- Madhura Barshikar, (E&TC) ranked among the top 7% at the International Astronomy and Astrophysics Competition conducted on 27/07/2020.

6. Problems Encountered and Resources required

- To maintain a balance between academic activities and technical event activities.
- The space available for on road testing of ATV and formula vehicles is very limited.

Best Practice - II

1. Title of the Practice: 'Industry Institute Interaction'

2. Objectives

- To establish and maintain relationships with the corporate world through MoUs, Center of Excellence, sponsored projects, industrial visits, internships and in-plant training programs.
- To provide a good platform for placement and sponsorship for projects & various technical events, etc.

3. The Context

The institution has taken the initiative to interact with various industries through the 'Industry Institute Interaction Committee' that maintains professional relations with industries. It opens up a fresh avenue for enthusiastic young minds and faculty members to develop skills across diverse areas, including managerial skills, social responsibilities and Industry liaison.

4. The Practice

The efforts and initiatives undertaken are as follows:

- The Institute has established the 'Foundation for Make It Happen Center for Invention, Innovation and Incubation (FMCIII)'. The FMCIII is established in collaboration with Tata Technologies Ltd. and Science & Technology Park which enables domain exploration through working principles, application and hands-on experience to make students deployable. It facilitates training, manufacturing, R&D activities, incubation center and many more.
- Interactive sessions by Industry experts are arranged through 'Department Advisory Board' meetings, skill development programs, faculty development programs, personality development programs, career counseling, technical competitions, project sponsorships, industry training programs, industrial visits, add on courses.
- The Institute has International linkages by availing membership of professional bodies and MoUs with various Industries.

5. Evidence of Success

- Mechanical department conducted FDP on "Zero Based Costing in Mechanical Engineering" from 21/02/2022 to 23/02/2022, Eight days workshop on "Applied Psychrometry & Heat Load Calculation" by Mr. Ranade.
- IT department conducted a demonstration session on Cloud Platform on 18/03/2021, One Week Workshop on 'C-Programming' on 14/10/2020 to 21/10/2020
- Department of E&TC organized regional finals of "e-Yantra Ideas Competition" (eYIC) & Industry Conclave in association with IIT Bombay on 28th & 29th February 2020.
- Department of Electrical Engineering has conducted an International webinar on 'Entrepreneurship Development' on 28/08/2020.

- Department of Computer Engineering has organized four day workshop on "Python and Data Science" in association with ATS, from 28/08/2019 to 31/08/2019.
- Orientation seminar regarding "Study Go Work Japan" was organized for all interested students on 09/09/2021 and 18/06/2021 in association with Hirameki Solutions.
- Mr. Kartik Shriniketan, a TE Computer Engineering student and team, has developed and deployed a project titled "Electricity: Bill Generator & Unit Calculator" in association with Animational.com.
- Ms. Sharanya Nair (COMP) placed in "DIVA CORPORATION" Tokyo, Japan.
- Department of Computer Engineering organized one week Short Term Training program (STTP) on "Data Analytics using Machine Learning for High Performance Computing" from 03/06/2019 to 07/06/2019.
- Following Table shows the total number of sponsored projects, MoU and Guest/Expert lectures and Industrial visits conducted in the last five years.

Sponsored BE Projects	MoUs Signed	Guest/Expert Lectures Conducted	Industrial Visits
272	68	357	102

6. Problems Encountered -

- Due to low packages in core industries students get diverted to the software field.
- Sponsored projects for final year students, industrial visits, and internships were challenging during corona pandemic period.
- It is a challenge to obtain paid internships in good industries.



