

INSTITUTIONAL BEST PRACTICES

Best Practice – I

1. Title of the Practice – Professional Skills exposure to students

2. Objectives

Objectives of this best practice are 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.

3. The Context

Industry needs are frequently changing, and technologies are rapidly updating. Students must be aware of these changes and update their skill sets. Though the students are good in academics, few of them are lacking in presentation and technical skills. They are needed to be groomed in technical as well as presentation aspects so that they can fulfil soft skill requirements in Industry. Hence, a Technical Event functional committee is formed at the Institution level, in which the functional head and a faculty representative from each Department are actively working to achieve the objectives.

4. The Practice

Enhancing out of box thinking of students is a noteworthy point of this practice. Efforts taken for the same are mentioned as follows:

- Organizing University sponsored workshops on emerging technologies for faculty members and students
- Students enthusiastically participate/ publish their ideas in National/International Conferences and Journals.
- Expert/Guest lectures are frequently conducted for students by Industry Professionals to impart knowledge of the latest trends in Industries.

- Technical events are organized to improve the professional and technical skills of students to enhance their employability.
- Faculty members and students are active members of professional bodies like ACM, IEEE, CSI, ISTE, SAEINDIA, ISHRAE, ASHRAE, IEL, QCFI, IAENG, ISRD, etc.
- Various student associations such as ITSA, MESA, ACES, BETA and EESA are formed. Technical and non - technical events are organized under the dynamic leadership of student coordinators of each student association.
- Every Department conducts add-on courses/certification courses for students to enhance their technical skills.
- Industrial visits are organized to understand the professional work culture of Industries.

5. Evidence of success

- Team Rudra of Robocon got 100 out of 100 points in the first round of Robocon Competition 2020 organised by IIT Delhi.
- Team Achilles of Efficycle got the Sponsorship of Rs. 1,15,000/- using crowdfunding through Kitto App from all over the world.
- Mr. Shubham Khairnar of BE, Mr. Jay Pillai, Mr. Krushna Pisal, Mr. Aditya Waghire of TE Electrical participated in “Online Mode of Virtual SAEINDIA Efficycle 2020 “ organized by Lovely Professional university on 27/09/2020 and achieved (1) Conventional all India Rank 4, (2)Advance All India Rank 5 among 27 participants.
- Ms. Swasti Bali student of IT Department has bagged ‘Star Intern’ award on Digital Marketing by Credit Systems India.
- Three students from MMCOE received scholarships of Rs 20,000/- each at the scholarship Distribution Ceremony of ACR Project consultants and Rotary Club (North) conducted for all students of Pune on 6/6/2020.
- Students of Mechanical Department Siddarth Pawar, Digvijay Sawant, Akshay Power, Saurabh Sawant have Published Patent on “Design and Development of Liquid Food dispenser Assembly” (Application number: 202021020276, A Date of Publication- 17/07/2020).
- Madhura Barshikar, B.E E&TC student, ranked among the top 7% at the International Astronomy and Astrophysics Competition conducted on 27/07/2020.

- Students chapters IE(I) and ISHRAE have organized an expert session on the topic “Modeling of Two-Phase Frictional Pressure Gradient in Refrigeration and Air Conditioning Systems” ,by International Speaker: Dr. M. M. Awad, Associate Professor, Mansoura University, Egypt on 11/02/2021.
- ACES student chapter of Department of Computer Engineering has arranged a webinar Series on ‘Project Management’ during 19/08/2020 to 20/08/2020.
- The Department of IT has organized a ‘Web Development Workshop’, under ACM from 20/10/2020 to 22/10/2020 for SE TE and BE students.
- Webinar on ‘Career Avenues in Clinical data Analytics’ was organized by CSI on 09/11/2020.
- ISTE Students’ Chapter in collaboration with ISTE Students’ Chapter Maulana Azad National Institute of Technology (MANIT) Bhopal conducted National level quiz competition “Chimera-X’s” banner on 8/02/2021.
- ISACA Students’ Chapter has organised a Virtual event ‘ISACA Knowledge Session’ on ‘Roadmap for Careers in Information Security and Cyber Security’ on 13/03/2021.
- ISTE Students’ Chapter in collaboration with various Industries, organized a national level Hackathon coding competition ‘Hacksprint V2’ during 24/09/2020 to 26 /09/2020.
- Shreyas Chate, Shubham Kamble, Devyani Jadhav, Krutartha Rasal, students of IT Department have received best research paper award in ICETEMS-2021 conference.
- Mr. Vedant Joshi student of Department of Computer Engineering selected as a ‘Ambassador for IEEE Xtreme 15.0’ at IEEE Pune section on 03/05/2021.

6. Problems Encountered and Resources required

- It is difficult to find the right person from the Industry who can authoritatively deliver sessions on the latest technologies. It is challenging to maintain a balance between academic activities and technical event activities.
- Some students are from vernacular backgrounds and have poor English communication skills, which need to be improved.
- Conduction of hands-on/ on campus training was difficult due to the Corona pandemic situation.

Best Practice – II

1. Title of the Practice: ‘Industry Institute Interaction’

2. Objectives

The main objective is to establish and maintain relationships with the corporate world through MoUs, Center of Excellence, sponsored projects, industrial visits and in-plant training programs for students and faculty members.

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. Industrial visits are arranged for students and faculty members to gain practical exposure and keep abreast of their knowledge. To achieve academic excellence, students are encouraged to interact with industries and research organizations through FDP, industrial visits, sponsored projects, training programs, internships, consultancy etc. Industry professionals are regularly invited to share their knowledge with the students. 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

To strengthen the Industry Institution Interaction, Institution is a member of reputed Industry professional bodies like MCCIA, CII etc. The Institution has established the Make It Happen Center for Invention, Innovation and Incubation (MCIII). MCIII is established in collaboration with Tata Technologies Ltd. and Science and Technology Park. The main motto behind the MCIII is enabling 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. The industrial liaison program is aimed at developing meaningful relationships with industries to create and strengthen mutually beneficial relationships between Institution and Industry.

- **Faculty Development Program** – To upgrade professional skills, various FDPs are conducted, which includes interactive sessions by Industry experts and Industry workshops/ training.

- **Student Development Program** – For the overall development of students, various programs are conducted like personality development, career counseling, technical competitions, industry training programs, industrial visits, add on courses etc.
- **Curriculum Review** – The Institution has constituted an Academic Advisory Board which comprises experts from various industries. Their suggestions are incorporated into the curriculum through different add-on courses/guest lectures.
- **International Linkages** –The institution is trying to build International linkages by availing membership of professional bodies, MoUs with various Industries and partnership between Industry and academia through consultancy. MoUs are signed with various companies and different activities such as project sponsorships, competitions, seminars, workshops and technical events are conducted.

5. Evidence of Success

- The Department of Computer Engineering has organized three days FDP ‘NBA Accreditation and Outcome Based Education’ from 18/06/2020 to 20/06/2020.
- A three-day online Webinar series on ‘Scope of Nanomaterials in Engineering and Technology’ was organized by the Department of Engineering Science from 9/07/2020 to 11/07/2020.
- The Department of Mechanical Engineering has signed a MoU with the Associated Chambers of Commerce & Industry of India (ASSOCHAM) on 19/08/2020.
- Department of Electrical Engineering has conducted an International webinar on ‘Entrepreneurship Development’ on 28/08/2020.
- Mr. Vijay Vaze, Program Manager, Cybage, Pune, has delivered an expert session on 'Agile Development Approaches: Industrial Perspectives' on 05/09/2020 for TE Computer students.
- Expert Lecture on ‘Image Signal Processing using MATLAB’ by Mr. Milind Khanderao (Application Engineer, Design Tech) was arranged for TE, BE E&TC students on 12/10/2020.
- The Department of IT conducted a One Week Workshop on ‘C-Programming’ on 14/10/2020 to 21/10/2020 for SE Electrical students.
- The Department of E&TC has signed a MoU with BSNL to facilitate BE Projects, Internships, Faculty Training and Placements on 22/10/2020.

- The Department of Mechanical Engineering has arranged a virtual industry visit at IMTMA Technology centre on 03/11/2020.
- Ms. Asma Shaikh and team faculties of Department of Computer Engineering had filed Indian Patent on ‘Wearable device for Alzheimer’ at ‘Government of India Patent’ on 11/12/ 2020.
- Dr. Sandeep Chaware, faculty of Department of Computer Engineering filed a Patent on ‘IoT based class monitoring System’ at ‘Australian Government’ on 9/12/2020.
- Department of E&TC has successfully conducted three Days online Faculty Orientation Workshop under the aegis of BCUD SPPU & BoS (E&TC) on SE (E&TC/Elex.) Revised Syllabus for the course " Signals & Systems" during 18/01/2021 to 20/1/ 2021.
- The Department of Information Technology organized a ‘One day Faculty Orientation Program (FOP)’ on 1/02/2021 for Revised SE IT (2019 Course) for the subject “Software Engineering (Theory)” in association with BOS-IT SPPU.
- The Department of Electrical Engineering conducted a two days workshop on “Outcome-based Education” on 12/02/2021 to 13/02/2021.
- Mr. Mahesh Bodhgire, Managing Director ecoRise Software solutions conducted a demonstration session on Cloud Platform on 18/03/2021 for TE IT students.
- IEEE Student Branch has organized Exuberance Week from 8/03/2021 to 13/03/2021. More than 300 students have participated in this event
- Total 105 students of the Department of Computer Engineering have successfully completed internships from various industries.

6. Problems Encountered –

- Sometimes it is a hurdle to call speakers from prominent companies for expert sessions because of their busy schedules.
- Lack of sponsored projects for final year students.
- Arranging Industrial visits are difficult due to the Corona pandemic.

PRINCIPAL