

## INSTITUTIONAL BEST PRACTICES

### Best Practice – I

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

#### **2. Goal**

Objectives of this best practice are to enhance the professional skills of student 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, 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, CSI, ISTE, SAEINDIA, ISHRAE, ASHRAE, IEI, 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 co-ordinators 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**

- Vinay Phadnis, S.E.(Computer) is an online instructor with over 1500 students worldwide on Machine Learning, Decentralization, and Quantum Computing. He is a co-founder and CTO at a New York based instance Learning company called Immersful and is a speaker at the QuantumValley conference.
- Team Abhedya performed well and secured many prizes in the National level ‘BAJA SAEINDIA 2020’ competition held at NATRIP, Pithampur, Indore, MP. Team Abhedya will participate first time in the International event of BAJA SAE Arizona at USA in April 2020.
- At National level technical event “SAEINDIA SUPRA 2019” which was held from 16<sup>th</sup> to 20<sup>th</sup> July 2019, team ABHEDYA RACERS won a runner up award in ACCELERATION event among 150 teams with the prize money of Rs. 20,000/- and a trophy. Also stood 14<sup>th</sup> among 150 teams.
- Dr. K. R. Patil , Associate Professor in Mechanical Engineering, has been honored with the Prestigious National level ‘Dronacharya Award’ for SUPRA SAEINDIA June 2019 and BAJA SAEINDIA 2020.
- Student of TE computer, Ms. Shrutika Sarode, grabbed Gold Medal in 57<sup>th</sup> National Roller Skating Championship held in Vishakhapatnam, Andhra Pradesh.

- Considering student chapter activities, ISHRAE HQ during ACREX 20 at New Delhi has awarded “Best Student Activities Performance” to ISHRAE Pune Chapter chaired by Dr. Vijay W. Bhatkar , Associate Professor, Mechanical on 26<sup>th</sup> February 2020.
- Team ACHILLES of MMCOE performance in National level, “SAEINDIA Effi-Cycle 2019” competition held at Lovely Professional University, Jalandhar, Punjab during 1<sup>st</sup> October to 5<sup>th</sup> October 2019. The team secured all India 6<sup>th</sup> rank in SAE-NIS EFFI-CYCLE 2019 competition and grabbed many prizes worth Rs. 60,000/-
- ISTE Students’ Chapter in collaboration with various Industries, organized “FAST ASSESSMENT BY COMPANY EXPERTS (FACE)” event during 26<sup>th</sup> to 28<sup>th</sup> September 2019 to provide Industry exposure to students.
- 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<sup>th</sup> February 2020.
- Cyber Security Awareness session was organized by students’ association of IT department ‘ITSA’ on 31/07/2019 in association with Cyber Cell Department, Pune Police.
- A coding competition, “Codemia2K19” was conducted by the Department of Computer Engineering in association with CSI on 21/09/2019.

## **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.

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

#### **2. Goal**

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, DICCI, IGCC etc. The institution is a member of the Education Excellence Forum under CII. Including MMCOE, CII has shortlisted three Institutions in SPPU, which provides numerous interventions, architect solutions, recommendations and training to academia throughout the year. EEF focuses on faculty development programs, student development programs, curriculum reviews, and international linkages. 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

- Department of E&TC organized regional finals of “e-Yantra Ideas Competition” (eYIC) & Industry Conclave in association with IIT Bombay on 28<sup>th</sup> & 29<sup>th</sup> February 2020.
- Orientation seminar regarding “Study Go Work Japan” was organized for all students SE & TE of all branches on 08/01/2020 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. This project is a part of the Smart City Project initiated by the Government of India.
- Department of Electrical Engineering organized a guest lecture on “Solar Thermal Systems” by Mr. Sourabh Kelkar, SeeGreen, Pvt. Ltd, Pune.
- Each Department has MoUs with various well known Industries. Number of MoUs with various departments are Computer:15, Mech:13, IT:05, MBA:03, Electrical: 04, E&TC:04.
- Dr. V. N. Gohokar, Dr. M. R. Tarambale and Mr. P. R. Chobe, faculty members of the Department of Electrical have been selected as a mentor of NITY Ayog, Government of India for development of the skill set Lab.
- One day workshop on Hibernate was organized by CSI chapter on 11/02/2020 in association with Extremity India Technology.
- ATV Fest 2019 was conducted by the Department of Mechanical Engineering on 03/10/2019.

- The industrial visit of Computer and IT Engineering students was organized at Persistent Systems, Hinjewadi on 27/02/2020 by Corporate Relation Division (CRD), MMCOE.
- Eleven students of the Department of Computer Engineering got an internship at Indicus Software, Pune, in IoT and Machine Learning domain.
- Department of Electrical Engineering organized an Industrial visit for the students of SE on 27<sup>th</sup> August 2019 at Hydropower Plant, Pawana
- Department of Computer Engineering organized four days workshop on “Python and Data Science” in association with ATS from 28/08/2019 to 31/08/2019.
- 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.
- Department of Computer Engineering and Computer Society of India (CSI) Student’s Chapter MMCOE has organized a Webinar on Deep Learning and its application under COE on 18th April 2020 (Saturday).

## **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.

**PRINCIPAL**