

Best Practices and Institutional Distinctiveness: AY 2022-23

Best Practice I

Title of the Practice: Imbibing professionalism in students through Industrial exposure

Objectives of the Practice:

- To keep students abreast of changing technology
- To familiarize the students with industry culture and the gaps between curriculum and industrial needs.
- To enrich students with practical insights into developing industries
- To develop and improve business skills in communication, technology, quantitative reasoning, and teamwork.

Context:

Engineering and technology are constantly evolving fields, and it is crucial for engineers to stay updated with the latest trends and technologies. The transition from being a student to a career professional requires practical exposure and industrial experience. The curriculum alone is not sufficient to prepare students for the challenges of the industry. Many students lack professionalism practiced in the industry, and there is a need to bridge the gap between the curriculum and industry requirements. Industrial exposure plays a vital role in the overall development of students.

Practice:

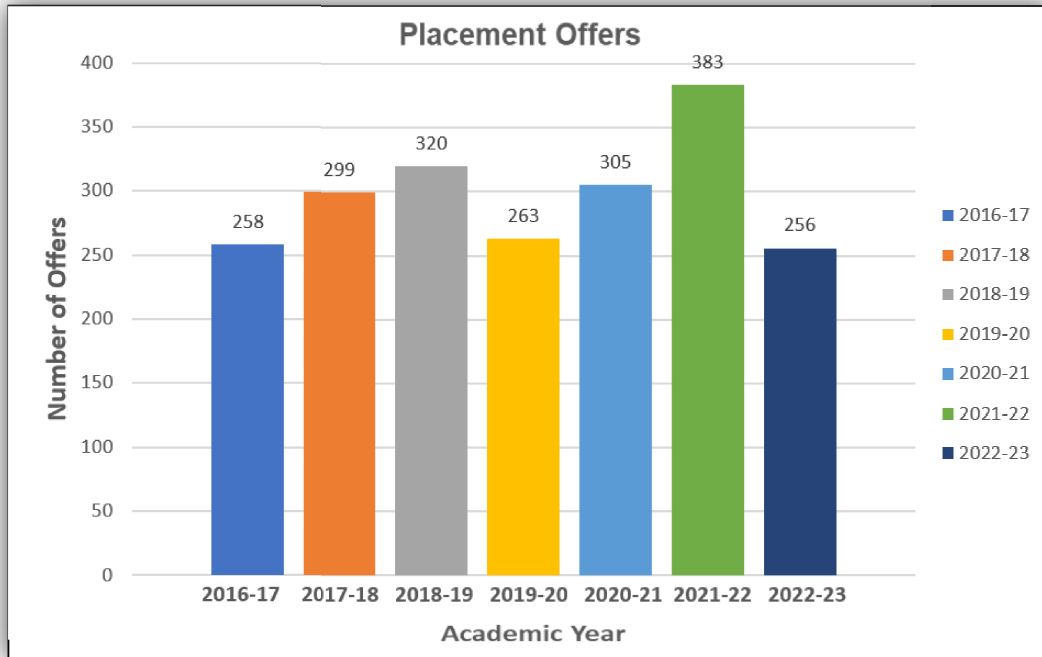
The institute has implemented several initiatives to provide industrial exposure to students:

- Guest lectures, talk sessions, seminars, and workshops by industry experts are organized.
- Alumni share their technical experiences and participate in tech talks.
- Industrial visits are arranged for students to gain practical insights.
- Summer internship programs are organized for students to gain hands-on experience.

Institute acknowledges that employability is a significant challenge for engineering graduates due to the lack of required skill sets. Therefore, efforts are made to enhance both technical and non-technical skills. Amid the pandemic, online platforms were utilized for conducting talks, sessions, and virtual industrial visits. Internship programs are emphasized to provide students with training and make them job-ready. Competitions are organized where students analyze and provide solutions to real-time industry problems.

Evidence of Success:

The success of the practice is evident in the increased placement percentage and improvement in students' skills. The institute has witnessed a considerable number of placements compared to previous years. Students who were initially weak in certain skills have shown significant improvement due to the inputs provided through industrial exposure. The chart depicting the placement percentage ratio for the last five years demonstrates the positive trend, with approximately 250 students already placed and the process ongoing.



Best Practice II

Title of the Practice: Soft Skill Enhancement

Objectives of the Practice:

To develop various soft skills of students' to improve their overall development, this in the long run will support efforts to achieve the Outcome-Based Education (OBE) objectives of knowledge, skill, and attitude.

The Context:

The Institute's curriculum, teaching-learning process, and co-curricular activities play a crucial role in enhancing the technical knowledge of our students. However, in today's competitive world, technical expertise alone is insufficient for achieving success. Students need to develop a range of essential skills, including personality development, effective communication, interpersonal relations, leadership, teamwork, time management, and other soft skills. It is noteworthy that the majority of students admitted to our institute hail from rural and tribal areas of Palghar district. As an institution, VCET recognizes its responsibility to ensure that all our students have equal opportunities and are equipped with the necessary skills to thrive in the professional world.

The Practice:

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1. We start with the induction program, which covers sessions for physical fitness and universal human values.
2. The Literati Club organizes an elocution competition, extempore, where students have to speak on a topic provided on the spot within a stipulated time.
3. The NSS organizes various activities to create awareness about organ donation, blood donation, residential camps, vigilance, road safety, and many others.
4. The Sports Committee promotes participation in individual as well as team sports like chess, table tennis, football, cricket, and running to keep up the sporting spirit of our students.
5. The Students' Council takes care of events from a cultural perspective.
6. The sensitization of gender equality is undertaken by the ICC and IIC by organizing seminars on women's empowerment.

All the above-mentioned events focus on the development of one or more soft skills such as communication, teamwork, adaptability, problem-solving, creativity, work ethic, interpersonal skills, time management, responsibility, leadership, attitude, decision-making, emotional intelligence, self-motivation, and collaboration.

Evidence of Success:

Event	Student Participation
Induction Program	520
Literati Club	73
NSS	60 to 100 students per event
Sports Committee	32
Student Council	800

Problems Encountered:

The attention of students for such non-credit activities is less as the students primarily focus on knowledge and not skills. The committees are taking all possible measures to ensure increased participation henceforth.

Institutional Distinctiveness

Vidyavardhini's College of Engineering and Technology envisions being a premier Institute of technical education, always aiming to become a valuable resource for industry and society. In line with its vision, priority, and thrust, we at VCET believe in strengthening the pillars of the Institute i.e., the students and faculty of the Institute. Numerous efforts have been taken in this direction to groom the overall personality of students and augment the technical skill sets of its faculty members.

Student-centric activities:

Skill enhancement: Various seminars and workshops are regularly arranged by various departments in pursuit of skill enhancement for students. Also, national-level competitions like the VCET National Level Project Competition (VNPS), the VCET Hackathon, and the product show case are conducted every year to provide a platform for students to showcase their technical abilities. The result of these efforts could be seen in the accolades won by the students at the state and national levels in various technical competitions.

Leadership qualities: Various student committees, bodies, and chapters exist at VCET, which are a way of boosting the interpersonal skills of students. Most of these committees are student-driven, faculty-guided committees where importance is given to the overall development of students. The most appropriate way of achieving the right way of learning, i.e., “learning by doing” , is accomplished with the existence of such student bodies. It not only helps in developing their technical skills but also enriches their interpersonal skills like self-confidence, communication, teamwork, leadership, accountability, negotiation skills, assertiveness, collaboration, etc. The various committees and student chapters at VCET are Student Council, Sports Committee, Literati Committee, NSS, Hackathon, IEEE, IETE, SAE, ISA, CSI, ISHRAE, and VMEA.

Research and Industry readiness: To make students industry-ready, efforts are made by the departments. During the final year, students are encouraged to take up either research-oriented projects or projects that would facilitate innovative solutions to some pressing problems. Students are encouraged to participate in various project show cases and demonstrate their ideas. Industry Institute interaction is fostered through various events and activities like product showcases, seminars, talks, and workshops by industry experts, as well as activities conducted by the Industry-Institute Interaction Cell. To provide insight regarding the internal workings of companies and augment theoretical knowledge with practical perspective, industrial visits are organized by the departments. These visits help the students identify their prospective area of work and select relevant organizations for their internships, projects, etc.

Employability: The Institute has a Placement and Training Cell with an efficient team of faculty, including a full-time placement officer, to facilitate career guidance, training, and placements for students and support the functioning of the cell. The cell offers guidance and support on all aspects of career planning, such as aptitude training, technical training, placement

opportunities, and even higher studies, through structured training and placement activities. Career counseling is provided at a granular level so that every student benefits from it. In line with its objective of aiding in placing students in competitively good companies, appropriate initiatives are taken to counsel the students with respect to career guidance and higher education. Some of them are:

- Seminars on higher and foreign studies
- Talks on career guidance
- Talks on motivational lectures by alumni, entrepreneurs, industry guests, and faculty
- Provision of books, magazines, and periodicals on competitive/civil service/GATE/GRE/TOEFL, etc. exams in the library
- Subscription to newspapers related to career opportunities, such as Rojgar Samachar

Social, moral, and ethical values: The National Service Scheme (NSS) Government of India, Ministry of Youth Affairs & Sports, provides an opportunity to the student youth of India to take part in various government-led community service activities and programs. The sole aim of the NSS is to provide young students with hands-on experience in delivering community service. VCET has its own team of NSS. UDAAN was founded in the academic year 2014–2015 at VCET. UDAAN is now part of the NSS committee of VCET. The inception of UDAAN is a result of the responsibility of our institution and students towards the social scenario of society. Some of the activities are blood donation camps, donation camps, awareness programs, etc.

Entrepreneurship: The entrepreneurship cell of the Institute- 'E-Cell', is formed with an objective of fostering entrepreneurship skills amongst the students. It is a student-driven and faculty-guided cell striving to channel the competencies of budding engineers. It is a platform where students can exemplify their innovations, creativity, zeal, passion, and entrepreneurship skills and cherish their dreams. A myriad of activities, like seminars, talks, and prototype building of the ideas, are conducted for the students.

Faculty-centric activities:

Enhanced Teaching Learning: Traditional blackboard learning is the heart of the teaching-learning process. However, with the advancement of technology, it cannot be the only means in the teaching-learning process. The use of modern tools and methodologies is a must to improve the transfer of knowledge from faculty to students. The internet has exposed students to a huge repository of knowledge. Therefore, students need to be advised to use it effectively. Every classroom is equipped with LCD projectors and an internet facility to demonstrate online literature. Apart from that, faculty members have explored different ICT tools, some of which are listed below:

- NPTEL Videos
- Youtube Channel/YouTube Videos
- Course web pages
- Google Forms
- E-books
- Digital library

- Google classroom
- Flipped Classroom

Research and consultancy: Faculty members are motivated to carry out research activities, and funds are provided to attend STTPs, conferences, and workshops on specialized topics of interest. Faculty members are also encouraged to carry out consulting work. To facilitate increased industry interaction, MOUs are signed with industries.

Professional development: Numerous professional development schemes exist, such as research promotion schemes, IPR support, reimbursement of conference fees, support for higher education, and support for faculty training. The Institute is also one of the remote centers for IIT Bombay, through which faculty can attend certification courses.