

The Institution can proudly proclaim that it has more than two best practices; however the following two best practices have been chosen to show case the achievements of the college:

### **Best Practice 1:**

**Title of the Practice:** *Academics and Training& Placement (Career Development)*

#### **Objectives of the Practice**

To improve the quality of education being offered and enhance placement opportunities to the graduating engineers, an academic monitoring committee and placement cell have been constituted with the following objectives:

- To ensure that the teaching learning process is student centric
- To ensure that the curriculum is in tune with the demands of the industry and R&D organizations
- To ensure that the students undertake projects which are technically demanding and socially relevant
- To help boost the students' confidence levels through soft skills training
- To train the students in time- bound answering of aptitude tests
- To prepare the students for different levels of selection process such as group discussions and one-to- one interviews
- To ensure that most of the eligible students are placed

#### **The Context**

It is an established fact that, majority of the students in our country are showing an inclination to pursue Engineering Education and the trend has not tapered off. One of the main reasons behind this trend is the abundant employment opportunities available to the graduating engineers in the IT and other corporate sectors. With large number of Government, Private Colleges and Deemed to be Universities offering engineering education, it is imperative that, for an institution to be recognised as an elite institution by the students and peers, it should offer state of the art education coupled with emphasis on R&D activities and brand building. Any institution which fails to focus on these parameters on a continuous basis will get relegated to the class of average institutions over a period of time, which is very short in the existing fiercely competitive world.

Our Management being aware of this fact, is motivating and incentivising the faculty and the administration to attain this onerous but achievable goal.

#### **The Practice**

The quality of education being offered is refined in the form of annual revision of curriculum through BoS meetings. Due care is taken to include External experts from reputed academic institutions and industries in BoS of all Departments. Alumni and students are made members of internal BoS to obtain their feedback before finalizing the curriculum. Experts from industry are drafted to teach a portion of some selected courses in different departments. Faculty Development Programs and Workshops are organized to enhance the domain knowledge of faculty and staff.

To enhance the quality and quantity of student placement, a dedicated training and placement cell has been established with a full time training and placement officer (TPO). The TPO works in close conjunction with the Departmental Heads and Placement Coordinators to ensure that reputed industries connected to various departments are invited to visit the campus for recruitment. Soft skill training is made an integral component of the academic activity from the first year itself to ensure that all the students are equipped with the necessary skill sets to participate in the campus recruitment activities. Intensive placement training is offered to the eligible students for campus recruitment.

### **Evidence of Success**

The gradual increase in the placement record and the number companies visiting the campus for recruitment purpose is an effective testimony to the efforts put in by the college authorities to attain the objectives stated above.

### **Problems Encountered and Resources Required**

- Motivating faculty and students to adopt innovative methods of teaching-learning processes.
- Motivating faculty to make attempts to obtain research grants from funding agencies.
- Motivating faculty and students to undertake technically demanding and social relevant projects.
- Attracting top companies for campus recruitment
- Limited placement offers by Core Companies
- Internship for students in reputed companies and organizations
- Enhancing the quality of student input

### **Best Practice 2:**

#### ***Title of the Practice: Inculcation of Research Culture among Faculty and Students***

#### **Objectives of the Practice**

To promote the research and Development activities among the faculty and students, A Research Progress Review Committee (RPRC) has been constituted in the college with the following objectives:

- To inculcate research culture among faculty and students
- To identify emerging and thrust areas of research and disseminate the information to staff and students
- To encourage the faculty to identify the thrust areas in technology for the students project work
- To motivate the faculty to publish/present the findings in reputed journals / National / International Conferences
- To encourage faculty to work towards a Ph.D degree under QIP Programme
- To assist the faculty to apply to funding agencies like AICTE, DST and DRDO for promoting their research work.

- To kindle interest in students for active involvement in short duration and long duration projects.
- To promote research work leading to patenting.

### **The Context**

The repute of any educational institution rests on teaching – learning process and R & D activities. In view of this, the college has been implementing measures to give impetus for establishing and augmenting the research activities of the college in tune with the emerging and thrust areas in Engineering & Technology. Inculcating research culture in faculty and students is being given priority almost equal to the teaching-learning process. The competency of the students to face challenges of the society at the end of their four year tenure will be enhanced not just by their grades and ranks but the ability to apply their knowledge, analyse problems, synthesize a solution and evaluate the outcome. These skills can be acquired by working on real time projects during their academic career. In order to direct the students along these lines, the faculty also have to be fully equipped with necessary skills. Just as much as the teaching learning process is a partnership between the teacher and the taught, so also is the research and development process in which the guide and the researcher have equal role to play.

The outcome of research should be relevant to the societal needs and a section of the society at least should be direct beneficiaries. Therefore, taking up research activities connected to the societal needs will imbibe a sense of moral responsibility in the students. The students are therefore advised to take up projects with some relevance to the societal needs.

### **The Practice**

The contextualization of the above is effected by the following practices:

- All Faculty members are encouraged to attend and present papers in national and international conferences
- To facilitate the same, the management extends 100% financial assistance towards TA, DA and registration fee.
- Concession in weekly work load of up to two hours is extended to faculty working on funded projects.
- Seed money is provided by the Management to initiate research activities.
- Eminent researchers are invited to the campus for delivering lectures during National and International seminars/ workshops/ conferences organized by various departments in the college to boost the knowledge level of the faculty and the students.
- Faculty can apply to the management for travel, boarding and lodging allowances to visit reputed research laboratories and funding agencies like AICTE, DST and DRDO either to submit their proposals in person or follow up the submitted proposals.
- As a part of the curriculum prescribed, the final year students have to take up and complete project work to the tune of 12 credits.
- Winners in project contests are rewarded with prize money by the management during Ambedkar Jayanthi Celebration Day(14th April Every Year)
- Memorandum of Understanding have been signed with many industries / agencies

### Evidence of Success

- Fifteen Research centres, (10 UG Departments, 3 Basic sciences and 2 Master Degree Departments) under VTU Belgaum are established.
- 83 faculty members have been conferred with Ph.D and 05 faculty members have completed MSc Engg in the last five years. More than 100 faculty members are actively engaged in pursuing PhD program.
- Funds to the tune of 32 Lakhs have been received by different faculty members from various funding agencies during 2017-18.
- An amount of 50 lakh rupees has been budgeted by the Management to the faculty for carrying out research work

### Problems Encountered and Resources Required

- Motivating students and faculty to involve in R&D activities is always a challenge
- Time constraint is a major stumbling block to carryout R&D activities.
- More generous seed money/advance from the management for preliminary work or while awaiting funds from agencies is always welcome.
- Lack of prompt reply from funding agencies.

If the funding agencies can point out the reason for rejecting the proposal or offer suggestions for improvement, it will go a long way in preparing better project proposals

*\*Provide the details in annexure (annexure need to be numbered as i, ii,iii)*

#### 7.4 Contribution to environmental awareness / protection

The NSS unit of the institution regularly conducts the extension activities to create an awareness among the students about Institutional Social Responsibility. The list of activities conducted during 2017-18 are:

- Dr. AIT campus cleaning (10-03-2018)`
- NSS Camp at VTU, Belagavi (01-04-2017 to 07-04-2017)
- Tree plantation program (08-05-2017)
- Awareness about Eco friendly Ganesha (23-08-2017)
- Awareness about the effects of Junk food (07-09-2017)
- Awareness program for a Eco friendly Diwali (17-10-2017)
- Blood donation camp in association with Rotary club Vijayanagar, Bangalore( 10-11-2017)

Awareness among the tribal people about health, cleanliness and the importance of education during 17<sup>th</sup> and 18<sup>th</sup> November 2017 at Boodipadaga, Chamarajanagara District

7.5 Whether environmental audit was conducted?      Yes  No

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

## **The SWOC Analysis of the Institution**

### **Strengths**

- Management with a vision for imparting quality education and student welfare.
- Government aided, Autonomous and TEQIP Funded Institution.
- Institute has well qualified and highly dedicated Teaching and Non-Teaching Staff.
- Better retention of faculty with 45% of Ph.D holders.
- Sufficient infrastructure and Hostel facility.
- Outcome Based Education focused on employment, entrepreneurship development and research orientation.
- Institute has excellent rapport with outside corporate world for technical and managerial support.
- The Institute has well equipped digital library which has access to e-books, National and International e-journals.
- Special Book Bank for SC/ST Students

### **Weaknesses**

- Students, being from rural area, are striving to meet national and global standards in technical education and facing language barriers.
- Institute has to upgrade their teaching community for more funded projects; quality research and development; and patents and consultancy. Consultancy work to be improved.
- Lack of opportunities for international collaboration.
- Poor Industry supported laboratories.
- Aptitude of the students for higher learning is low.
- Involvement of Staff in research is constrained due to more academic work load.

### **Opportunities**

- Institute is continuously organizing various developmental programs for the benefit of teachers and students through seminars, workshops, conferences, symposiums and other student meets.
- Ever increasing demand for technical education at UG & PG level of Engineering & Technology.
- Many more opportunities for tie-ups with both established and start-up companies in India and abroad for enhancing learning outcomes.
- Situated at the centre of Bangalore city where multinational companies are setting up their design houses.
- Enhancing engineering values among socio-economic background Students through innovative teaching and learning process.
- Promoting the young and motivated faculty members towards research and academic excellence.

- Innovation in teaching-learning process.
- To develop R&D activities by interacting with premier Industries and high performing Institutions.

### **Challenges**

- Matching 100% placement against declining quality of students.
- Bridging the gap between curriculum and industry needs due to fast developing technology.
- Grooming students for inculcating Entrepreneurship in cut-throat competitive markets.
- Working strategically on key requirements of industry to increase revenue through consultancy.
- Institute has competition from other technical Institutions/ universities.
- Competition from other institutions and foreign universities that may setup their operations in India in near future.
- Decreasing availability of committed and quality faculty with passion for teaching.
- Collaboration with foreign universities.
- Students with diverse background.
- Continuous change in technology that challenges the employability of the students.
- Increasing number of engineering colleges.

Input quality of students, their academic performance and providing placement opportunities.