BUILDERS ENGINEERING COLLEGE

Best Practice 1

1. Title of the Practice

Career Oriented Skill Development Training Modules

2. Objectives of the Practice

- To make the curricula more robust, enhance the skill component of the syllabi and to introduce Career Oriented Skill Development to empower students to be job worthy/ create entrepreneurial ventures.

This was implemented –

- To provide career education and develop skills in students, interested in directly entering the workforce.
- To support students in the vocational exploration, identification, pursuit and integration of personal and professional career goals.
- Incorporation of skilling in the curriculum is to provide opportunities for quality long and short-term skill training.
- To develop courses of interest for personal and community development.
- To broaden the skill-base of the students and to empower them for alternative vocations.
- To connect students directly to opportunities for employment, internship /on the job training.
- To develop professionals with global competencies viz. soft skills, information and communication technologies etc.

3. The Context

- The Specific Objective of the Placement Based Training is to Train and Expertise the students to meet the present day requirements in the market for the Survival. This includes the Personality Development; Resume writing, Communication Skills, Aptitude, Personal Interview and Group Discussion.
- The institution's philosophy is to develop a student centric, rigorous, flexible curriculum which is relevant for the individuals, the country's economy, and the society at large.
- It motivated to look beyond traditional pathways of 3 Es viz. Education, Employability and Employment and think of strategies to bridge the gap between skill and knowledge.
- To incorporate vocational & skill component in the regular courses.
- To offer short-term skill-based courses along with traditional degree courses.
- To offer vocational and industry-aligned professional courses.
- To promote interdisciplinary programmes that prepare students for diversified career opportunities.
- These courses focus on real-world application, with many programs including internships or projects in their field of study.
- To offer value added courses based on the recent advancement.
- This Placement based Training helps students to improve the academic standards and to provide all the academic facilities to the students based on today's need of the Software industry/hardware Industry into which the students enter after they complete the course.

4. The Practice

- We Practiced skill based training courses which cater to the requirements of various professional fields.
- They provide opportunities to students for enhancing their career development & exploratory

learning through hands-on practice, classroom sessions, self-study, understanding of the job market, skill development and decision-making.

- Students first year to final year are eligible to take up this training alongside their regular course of study.
- They are characterised by multiple exit options, credit system, unit-based syllabi, outcome-based assessment, and Input and output-based credit criteria for general education and skills respectively.
- At the end of four years, the students are equipped with soft skill training along with conventional degree in Engineering.
- They are designed to be interdisciplinary in nature and promote horizontal mobility.
- A dedicated slot of minimum one hour to maximum 4 hours in a week is reserved in the college timetable for each of the courses.
- Internships, projects, on the job training, practicals, seminars, presentations by the students form an integral part of the syllabi of most of these courses.
- The campus maintains a robust industry-academia interface to bridge the gap between the two and make the content of these courses industry relevant.
- Students are constantly motivated through counselling, to increase their morale.
- Students are also informed and advised on the importance of maintaining good academic scores as these play a major role during recruitment. The cell helps students improve their academic scores through a series of programs and workshops.
- Builders Engineering College looks to develop its students from industrial perspective. For this we have designed training modules to impart technical, logical, analytical, behavioural and managerial skills in every student.
- We also promote students to visit various industries pertaining to their disciplines so that they get the right exposure.
- We are also assessing the students through various online testing methodologies so that the right set of students is channelized towards the right profile.
- The following training programmes are conducted for the students by proper planning prior the academic start.

(i) Soft Skill Training Programme:

This helps students develop effective communication skills and presentation capabilities in academic and professional settings. These interactive activities focus on work environment and real life situations. Individual attention is given and even shy students are encouraged and empowered to develop their public speaking, interactive and interpersonal skills. This includes the enhancement of following skills

- ✓ Presentation Skills
- ✓ Group Discussion
- ✓ Resume Preparation
- ✓ Interview Preparation
- ✓ Just a Minute
- ✓ Leadership Qualities
- ✓ Goal Setting
- ✓ Time Management
- ✓ Team Player, etc.

(ii) Aptitude Skill Trainings:

It includes to increase the following abilities in the students – Reasoning, Data Interpretation, Logical.

(iii) Analytical Technical Skill Trainings:

The students are trained in advanced techniques of the following languages and technologies and make them application oriented.

- ✓ C/C++
- ✓ JAVA
- ✓ PHYTHON

5. Evidence of Success

- The Placement Based Training programme has improved the success rate of the students in the final placement interviews to an appreciable extent.
- These courses have proved to be effective in student's overall progression and in seeking employment or to set up own start-ups.
- The multi-faceted and multi-disciplinary learning experiences have facilitated the scope for better employment which is reflected in the placements.
- Students have developed multiple skills through the field experiences/practical training/ summer internships and are able to apply theoretical knowledge in practical situations.
- Skill development enhances the proficiency of a student in their particular area of interest. Skill enhances to build the professional network, better communication, time management and so on.

6. Problems encountered and Resources required

- Sustaining the interest of the students of professional programmes in these courses is a challenge because they are under pressure to cope with the core courses of the programme.
- Students at times do face problem in getting permission from their parents for internships.
- Getting adequately trained faculty to teach the skill based papers.
- Further, in a tightly scheduled semester pattern of teaching, time management has been found to be one of the biggest challenges in giving special space to industry-academic interface.
- At times fixing time slots in the timetable becomes a challenge in case of PG and UG (II, III& IV year) students opting for the Training course.
- Good Infrastructure, adequate faculty and resources are required to run them.
- Modular curricula along with modern teaching-learning tools and methods like audio-visual preparations, group discussions, Student seminars and internships are required.
- "Work to become, not to acquire".

BEST PRACTICE-2

1. Title of the Practice: Green Campus

2. Objectives of the Practice:

- It is to create awareness among the public about the importance of saving and conserving electrical energy. It is said that "an unit of electrical energy saved is an unit generated".
- Energy conservation refers to the methods of reduction in energy consumption by way of elimination of wastage and promotion of efficiency.
- We know that due to the vast gap between demand and supply, lot of efforts is being done to bridge the gap in terms of generation of more electricity which requires lot of capital investment and apart from it creates lot of environmental concerns.
- Energy conservation is the key element of energy management. We can reduce the energy consumption by adopting various ways of energy conservation which includes efficient use of technologies and avoiding energy wastages.
- The main objective of energy conservation is
    - ✓ To minimize Energy cost /wastage of energy.
    - ✓ To minimize the environmental effects.

3. The Context

- Energy Conservation is a term that refers to consumption of the least amount of energy while avoiding unnecessary use of energy.
- In this context, efforts are made to make the consumers understand the importance of energy conservation, be aware of the efficient usage of energy and adopt measures and policies elicited for energy conservation.
- Energy Conservation reduces the stress on energy services to be provided by the utilities and can result in increased environmental quality, national security, personal financial security and improved economics. It is at the top of the sustainable energy hierarchy. It aims to save energy for future use.

4. The Practice

- To emphasize the above aspects, our campus has the practice of celebrating the National Energy Conservation Day, Renewable Energy Day every year to bring awareness among the students and all concerned, about energy conservation.
- The awareness among the consumers of electric power in the campus is ensured through proper informative sign boards affixed near all the strategic points of electric power supply units.
- As a part of energy conservation methods our BEC campus has been build with 200KWp Solar Plant to reduce the dependency of EB power.
- Minimum 600KWh per day consumption from TNEB has been reduced by installing 200KWp solar plant. Hence nearly 50% of EB bill has been reduced by the use of solar plant.
- As an energy conservation measure we adopted solar based street lights, Motion sensor based street lights and 70-80 % of our campus is equipped with LED lights.
- Our campus has been designed with the Biogas plant capacity of $45m^3$ in boy's hostel which can handle the waste from 750-800 Persons and Food waste.
- Invited lectures, workshops, seminars, group discussions, etc. are held periodically at the campus to acquire the awareness among the consumers of electric power about the energy conservation opportunities and measures to be adopted.

- Everyone is motivated to voluntarily adopt energy conservation measures based on the energy conservation opportunities at their disposal such as, reduced use of AC or heater that consume a larger amount of energy every day, increased usage of LED bulbs or smart lighting options, avoid the use of water heating equipment (resistive loads) that consume higher units of energy, fitting the properly rated power factor improvement devices (reactive power compensators) at the captive generation units set up in the campus, etc.
- It is advised that using less hot water can save a lot of energy. Water conservation also leads to better energy conservation. We have established solar energy panels in the campus to generate solar power.
- Energy Conservation Day and Renewable Energy Day are celebrated every year to raise global awareness to take positive environmental action to protect nature and to promote the use of renewable energy resources.

5. **Evidence of Success**

- Celebration of National Energy Conservation Day was that it emphasizes every person to adopt energy conservation measures while using electric power in their day to day activities. Anyone can save energy by taking small steps at home or office by eliminating unnecessary use of light, fan, AC or any other energy consuming equipment.
- Green Energy Club has been successfully implemented in our campus. Every year we will be conducting minimum two programmes through Green Energy club to bring awareness among the students about green campus and green environment.
- Energy saving education is an indispensable part of quality education for college students. In today's world, the quality education for college students is increasingly valued by the education sector. Besides quality education such as daily scientific culture, ideological morality and mental health, the environmental quality with energy saving and environmental protection consciousness should become the basic quality of college students.
- By adopting the conservation methods students are equipped with the knowledge of using the electric energy effectively with recent technologies.