



KCE - BEST PRACTICE I

Title of the Practice

Systematic approaches to strengthen Industry-Academia Interactions gaining wider exposure and knowledge among student and faculty members.

Goal

Institute takes various initiatives to promote closer interactions with industries and to establish linkages with Industries. Academia-Industry interactions is need of the hour. KCE has set a practice of mandatory visit to industries by both students and faculty members. It provides a platform to know about industry practices and expectations. Students visit industries during vacation period under In-House Training (IHT) scheme and Faculty members visit Industries under Faculty-Visit-To-Factory Scheme. With the objective of developing and refining skills, network with professionals in the field and gain valuable industrial experience, students are encouraged for internships.

The Context

Being rural located institution with diverse group of students varying in potential and committed to provide better career opportunities, various efforts are taken in to support student progression. Around 45-50% of students belong to first generation graduate group. With a commitment to raise the student skills and enhance their career opportunities, regular interactions with industries are initiated. Industry personnel are invited for various technical events. Faculty enrich their knowledge through FVFS and prepare students to meet its expectations. To overcome the listed challenges and to attain the objective, IIC takes initiatives

- **Rural locate** of the institute and access to industries located at cities is strenuous
- Gap between **Curriculum & Industry expectations** and student potential is very wide.
- **Educational system** focuses on marks based evaluation
- **Scope for Industry-Academia interaction** is very less due to **governing policies & rules**
- **Global economy changes** resulting in less demands at Industries.

The Practice

- **Staff interaction with Industries**

- **Faculty-Visit-To-Factory (FVFS):** To expose faculty members with industrial practices and expectations by means of “Training to the Trainer”, FVFS scheme is practiced. Faculty members visit various industries to acquire practical knowledge and upgrade to the recent trends adopted in the industries. Faculty members disseminate the knowledge gained during their visits and by appropriate mapping to course topics or content beyond syllabus component. FVFS schemes paves way for interactions with industrial personnel thereby linkages for academic support is established.

- **Student interaction with Industries**

Internship, In-Plant training (IPT), Industrial Visits (IV) : Industrial visits are important for student undergoing professional degree. IHT, IV and Internship are made mandated to give insight into industrial environment. 51 students have undergone internship during this period.

- With an aim to go beyond academics, industrial visit provides students a practical perspective on the world of work. By these visits internal operations of the industries are exposed to students. Students are able to identify prospective areas of work at industries.
- To inculcate domain specific industrial experience, all pre-final year students are encouraged to undergo training for a period of 3-5 days under IHT scheme. Innovative Project works are initiated by the students through these visits. After the visit, students will share their experience during presentation session.
- Batchwise all round performer from every branch is sponsored for industrial visit abroad. An unique practice of the institution encourages advanced learner to be competent and triggers overall initiatives among the members.

Evidence of Success

- Industry Institute Interaction Cell strives to establish linkages with various industries and networked to support enrichment activities. Student placement record, Industrial interactions are in increasing trend. Various Technical Training Programmes organized inviting industrial experts.

Categorywise Industrial sectors in regular interaction (4 years)

Category	No. of Companies
Production & Manufacturing sectors	35
Service sectors	9
Communication sectors	3
IT sectors	14
Total	61

Faculty-Visit-To-Factory Scheme summary

DEPT.	Year wise No. of Industries visited			
	2019	2018	2017	2016
Civil	09	11	15	11
CSE	13	10	11	10
ECE	18	11	15	14
EEE	11	06	11	11
Mech	20	08	14	13
S & H	18	19	20	21
Total	91	65	86	80

Branchwise In-House Training (IHT) & Field Visit (FV) (2018-19)

Branch	No. Of students	No. of Companies visited	Field Visit
CIVIL	109	32	90
CSE	55	08	90
ECE	51	10	24
EEE	13	04	48
MECH	88	07	68

- Technical Training sessions, Employability enhancement programmes, Project work expo are organized inviting industrial experts. Online tests are conducted for final year students in association with industrial linkages.
- Custom designed skill oriented courses in the name of “**My Credit Course-MCC**” is offered to all final year students, MCC course is aimed at enhancing the employability opportunities of the students. MCC is designed identifying industrial experience and through the interactions gained by faculty during FVFS.

Branch	No. of students	Topic Offered
CIVIL	109	Staad Pro
CSE	55	Data Mining
ECE	44	System Design Using Embedded C Programming
	47	CCTV Installation And Servicing
EEE	48	Solar Panel Installation
MECH	119	Non destructive testing and evaluation

Problems encountered and resources required

- Establishing linkages with Industries to support In-House Training initiatives.

BEST PRACTICE II

Title of the Practice

Systematic approaches towards student and staff skill enrichment & accomplishments supporting overall progression

Goal

- To motivate students and support them in overall grooming thereby become competent to face the world with confidence.
- To encourage staff members opportunities for career progression and professional accomplishments.
- To provide opportunities for various value addition initiatives and support services

The Context

Structured practices adopted at the institute incorporates activities extending students' education beyond their curriculum. With a commitment to provide opportunities for broadening their educational experience, activities are organized throughout at various stages. These activities are designed to cater the demands of the employers and higher education providers. Programmes help in attainment of students skills & knowledge, fostering a sense of confidence.

The Practice

Student potentials are identified at various stages. Yearwise, various opportunities are provided to the students fostering towards overall grooming. Course plan structure incorporating assignments & content beyond syllabus component for all courses, Mini-Project works, Refresher courses with suitable industrial expert involvement imparts industrial exposure to students in a systematic manner. Students were motivated and enriched through various opportunities created internally through value addition initiatives and encouraged to attend external programmes. Academic calendar includes slots for these activities. Action plan for these events are submitted during semester commencement and review is made on the progression. Value Added Courses aim to provide additional learner centric graded skill oriented technical training, with the primary objective of improving the employability skills of engineering students. The primary objectives are,

- To provide an opportunity to students to develop inter-disciplinary skills.
- To bridge the skill gaps and make students industry ready.
- To provide a course in order to equip themselves to enhance their curriculum.

University recommends and offers credit to Value added course for students studying under regulation 2017. Institute has offered custom designed Value added course departmentwise, credited in mark statements. Staff members are encouraged for enrichment towards raising quality.

Evidence of Success

1. Regular time-table incorporates the skill enhancement practices Project work, GATE & Competitive exam coaching, T&P training and MCC. Student Change Club meet is conducted regularly as per day order of the department. **Professional society activities** are conducted as per action plan semesterwise. Student feedback on the activity records effectiveness of the activities.

2. **Placement track record** of our institution is highly appreciable : 75 % of our 2018 batch students have been selected and placement offers were committed to these students. We are happy in creating opportunities for our final year students every year among the best industry players
3. **Best Department award** credits the accomplishments & activities of the department staff and students. Departments submit overall report of the department. Evaluation committee examines and identifies the best performer of the year. Department with highest score is awarded as Best Department during the Annual Day Celebrations. This practice instils a spirit of competition and triggers best accomplishments resulting in overall progression.

**Academic enrichment initiatives organized for students
(Internal Programmes)**

Programme organized	Number of events
Orientation Programme	5
Bridge course	9
Guest Lecture sessions	19
Workshop	19
Seminar	9
Symposium	5
National Conference	6
Spoken Tutorial workshops	18
Alumni Interaction Sessions	18
Professional Society Activities	26
My Credit Course (MCC)	238
Intra Department Paper Presentation	7
Mini-Project Expo	3
Project Expo	5
Alumni Interactions	7
Career guidance programme	2

Programme attended by the students

(External Programmes)

Programme	Number of participants
Workshop	253
Seminar	29
Paper presentation (Symposium)	35
Technical events (Symposium)	35
National Conference – Paper Publication	180
International Conference – Paper publication	107
Journal publication	126
Project contest	91
Awards, Prizes	27

Staff enrichment & accomplishments

Programme	Number of participants
FDP (AU & Universities) participation	14
FDP (Internal)	24
Workshop (External)	25
Workshop (Internal)	29
Seminar (External)	9
Seminar (Internal)	8
STTP / SDP	42
National Conference Paper publication	98
International Conference paper publication	42
Journal publication	66
Awards	7
Ph.D Completion / Enrolment	6
Research proposals	8
Other proposals (Programmes)	15
SWAYAM COURSES	38
NITTR QIP	117

Problems encountered and resources required

Conduct of programmes in align to hectic academic schedule was found difficult.