MCET/IQAC/NAAC/Criterion 7/7.2/7.2.1

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the institution has successfully implemented two best practices such as 1) Industry Institute Interaction (I^3) through Cooperation, Collaboration and Co creation (C3) for Engagement, Efficiency and Effectiveness (3E) 2) Offering Courses for Professional Skills.

Pertaining to the metric 7.2.1, we hereby declare that the sample photographs are proofs of the implementation of best practices in the institution.

Steering Committee Coordinator

PRINCIPAL
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Dr. Mahalingam College of
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Pollachi

BEST PRACTICE 1

1. Title of the Practice

Industry Institute Interaction (I^3) through Cooperation, Collaboration and Co creation (C3) for Engagement, Efficiency and Effectiveness (3E)

2. Objectives of the Practice

The institution envisions to produce globally competitive workforce and entrepreneurs. Industry connect is vital for understanding the needs outside the academic system. Institution strives hard to interact closely with industry using multiple methods at three different levels namely; cooperation, collaboration and co creation, where co creation is the highest. The objectives of the practice are:

- Gain industry insights from experts through various forums and activities.
- Partner with industries to establish centres, run customized initiatives.
- Design, deploy and assess programs jointly with industry that are beneficial to multiple stakeholders.

3. The Context

In India, industry institute interaction has always remained a challenge due to the wide gap between the two. Systematic interventions are required to narrow this gap with different levels of commitment from both depending on the activity. While both are interested in narrowing the gap, clear plans, and their execution with commitment from the institutions creates confidence required for stronger interactions and partnerships. The activities associated in building and maintaining successful industry institute partnerships are highly resource intensive for both in terms of time, money, and people. Business and academic leadership level agreements and sponsorships are essential to promote these activities which lead to long term benefits. Normally the partnerships initiate at the lowest level of cooperation and slowly grow into higher levels.

4. The Practice

Higher education, especially in engineering must cater to the needs of industry to sustain the growth of India. Autonomous higher educational institutions have a greater role to play in this since the academic freedom given by the University Grants Commission is primarily to cater to diverse needs of industry through courses and programs. The institute actively pursues:

- Professional competence development of students and faculty.
- Placements, internships, events involving industry/industry body.
- Learning and development with industry/industry body as partners and government schemes
- Startup ecosystem related, promoting entrepreneurship.
- Alumni interactions, support, and networking.

Institute deploys the C3 (cooperate, collaborate, cocreate) for (industry, institute, interaction) I^3 model at 3E (engagement, efficiency and effectiveness) levels. As part of cooperation the institute engages with industry for invited talks, internships, placement drives, curriculum review in board of studies, regulation formulation in the academic council and similar activities. In collaboration the engagement extends to, efficiency of relationship through consultancy and research projects, implementation of 2 - 2/4 – 8 /16 internship model, establishment of centres, trainings for specific needs, execution of activities as part corporate social responsibility and similar. In co creation both industry and institute jointly develop and deploy programs for the benefit of learners either at the institute or at the industry with high effectiveness. These programs, especially related to skills identified by the sector skills councils in the country are easily benchmarked or aligned to the national skill qualification framework thereby making it contextual at the national level.

The three levels cooperation, collaboration and cocreation are based on the extent of resource commitments involved for both the institute and industry. The levels offer the advantage having large number of relationships and its positioning clearly indicating the commitment that needs to be exercised for the relationship. While an institute prefers either collaboration or cocreation, industry makes the choice regarding the levels. The institute has been successful in implementing this model for industry institute interaction over the years. Location of the institute, quality of school education and expectations for industry pose challenges to the operation of the model. Also most of the activities in the model can be executed by autonomous institutions or universities, while the affiliated institutions will have other constraints. Quick wins are required to convince industry especially when the relationship is naïve.

5. Evidence of Success

During the last five years

- o 544 guest lectures/webinars/invited talks were given by industry experts

- 458 subject matter experts have contributed in statutory bodies
- 6 new centres established over and above the existing
- 35 STEP/ STEP UP/ Conclaves were organized
- 475 training programmes have been done by the centres
- 500+ industries offered internships to students
- 1989 students completed internships
- 96 students completed graduation through collaborative educational programs
- 1808 employees of industries were trained by the institute

6. Problems Encountered and Resources Required

It has always been a challenge to convince industry to engage with institute especially at the higher levels of the model. However, with rigor in execution of activities, relationships with industries usually migrate to higher levels. Learner attitude determines the sustenance of relationships. Often the relationship suffers due to lack of proper attitude of the learner in industry environment. Careful monitoring and coaching by faculty members is essential to alleviate this problem.

The resource requirement for the practice depends on the level. Higher the level, higher the resource in terms of time, money, and people. Also, the commitment of the same from the industry increases at the higher levels. The results indicate that the resources committed are worth it both for the institute and industry.

7. Notes (Optional)

The 2 –2/4 – 8 /16 model of internship is appreciated and well received by core industries. This model emphasizes the principle of same student with the same industry. 2 weeks, 4 weeks of summer terms of 2nd and 3rd year respectively and 8 or 16 weeks of 8th semester are the internship periods. Faculty members will accompany students in the industry unless denied by the industry. Repeated and long duration interaction between the potential employee and employer in this model, makes near perfect matches.

BEST PRACTICE 2

Title of the Practice

Offering Courses for Professional Skills

Objective:

Professional Skills courses, shortly PS courses, are those courses that are offered with the objective of enabling the students of the college imbibe all those skills that are needed to be successful in their professional and personal life. These courses are offered for developing the behavioural competencies of students.

The Context:

The regular courses are technical oriented. Those courses help acquire knowledge and skill on technical subjects. They develop technical expertise that is much needed for becoming a proficient engineer in the career – either as an employee in a company or as an entrepreneur.

Whereas, the PS courses bring in the appropriate mental awakening among the students in understanding, assimilating and demonstrating lifelong all those skills and virtues that bolster their strength and spirit to perform their duties to the highest level excellence, fairness and satisfaction to self and all concerned at all times.

Technical orientation

The Practice:

All PS courses are part of curriculum. They are considered as practical courses, each with one credit. One course per each semester offered up to sixth semester.

The courses offered under professional Skills were Sports for Wellness, Promotion of Students' Wellness, Personal Effectiveness, Ethical and Moral Responsibility, Teamness and Interpersonal Skills and Campus to Corporate. Each PS course has a syllabus that details the course outcomes for

the course, detailed unit-wise content for coverage, method of assessment and evaluation. The syllabus for each professional course has been designed with inputs from the subject matter experts and industry personnel.

As a part of practice, the Basic kayakalpa meditation course with certification will be introduced in Student Induction Programme (SIP) for all first years. During the regular schedule the Listed below are some parameters from the physical, mental, social and psychological domain which will be measured and an individual score card will be generated to individual student:

Physical domain	BMI, flexibility, Energy level(endurance), muscle strength, Grooming
Mental domain	Perceptions, attention/concentration, Memory, gunas* , Mental agility
Psychological and social domain	fear of failure, peer influence, personal relationship, self motivation, Being impulsive

Measurement for students

Sample score card:

Dr. Mahalingam College of Engineering and Technology,
Pollachi – 642003.
(An Autonomous Institution affiliated to Anna University)

Wellness score card

Name of the student : R.INDRIS
Roll number : 18BAU001
Programme : Auto   Section: A
Academic year : 2018-19

S.No	Wellbeing	Sub-dimension	Maximum marks	Mid value	Student Value	Student performance	Student score
1	Physical	BMI	16	21.5	23.55	NORMAL	16
		Flexibility	12	22.63	34	VERY GOOD	10
		Energy	12	2000	1300	NEEDS IMPROVEMENT	3
2	Mental	Attention	15	0	12.27	AVERAGE	9
		Memory	15	16	14	AVERAGE	7.5
3	Social	Interpersonal	10	5	1.67	NEEDS IMPROVEMENT	1.67
		Emotional	5	2.5	3.04	NEEDS IMPROVEMENT	3.04
		Self-concept	5	2.5	3.85	VERYGOOD	3.85
4	Spiritual	Guna	10	-	7	Rajasik	7
		TOTAL					61.06

Since MCET pioneered the Professional skill courses from AY2014-2015, it became easier to implement the Universal Human Values course as a part of curriculum prescribed by AICTE model curriculum. The designed six courses were modified accordingly in 2019 curriculum as four courses viz., Wellness for Students, Universal Human Values, Employability Skills 1:Teamness and Inter-Personal Skills and Employability Skills 2: Campus to corporate. The practices made in each course are listed below:

- **Wellness for Students**

The Wellness for Students program is designed to identify students' strengths, weaknesses, and opportunities in their pursuit of academic, career, and personal goals. It aims to establish a well-articulated roadmap for achieving these goals and teaches effective time management techniques for completing tasks on schedule. The course assists students in allocating time for activities that align with their career aspirations, adding value to their professional development.

One of the key components of the course is helping students conduct a personal SWOT analysis, enabling them to understand their strengths, weaknesses, opportunities, and threats. By doing so, they can formulate a strategic plan and set goals using methodologies such as SMART goals (Specific, Measurable, Achievable, Relevant, and Time-bound), Inclusive goals, Positive stretch, Pain vs. gain analysis, and Gun-point commitment. These methodologies help the students to shape their tangible and non – tangible goals and be proactive and reactive based on the scenarios.

Moreover, the course enables students to distinguish between SMART goals and NON-SMART goals when it comes to advancing their careers. It introduces principles like the Pareto 80-20 principle for prioritization of goals; Time quadrants to effectively prioritize weekly tasks based on priority labels such as urgent, not urgent, important, non-important tasks; the glass jar principle for managing time efficiently and handling procrastination; handling time wasters and mastering the art of saying 'NO' when necessary.

A special initiative has been taken in this course by introducing students to physical wellness, such as warm-up exercises, joint movements, and simple asanas, to help them experience the importance of good physical health. In addition to this, the course exposes students to yoga practices for mental well-being and helps them understand the benefits of good food and good sleep in becoming not only physically fit but also mentally sound.

- **Universal Human Values**

Universal Human Values course exhibits an enlightened awareness of the values that encompass various aspects of human existence, including the self, family, society, nation, and nature. These values are not just abstract concepts but are actively embraced by students through individual and group activities that foster reflection, sharing, creativity, teamwork, and ultimately growth.

At the core of Universal Human Values lies the recognition of the significance of self. Students engage in introspection, encouraging personal reflection, and subsequently sharing their insights with others. This self-awareness cultivates a deeper understanding of one's own values, aspirations, and purpose, leading to personal growth and the development of a strong moral compass.

Moreover, Universal Human Values emphasize the importance of family. Students engage in activities that promote introspection and reflection on the values upheld within their familial units. Students partake in activities that encourage introspection and reflection on the broader social, cultural, and environmental contexts in which they exist. This awareness allows for a greater understanding of the interplay between different value systems, fostering tolerance, empathy, and respect for diverse perspectives and backgrounds.

All students attend this course regularly and get to know about themselves through self-exploration and also about their acquaintances of how to behave in teams with unity through involving in group discussions. It is hoped that they would be able to apply what they have learnt to their own self in different day-to-day settings in real life.

- **Employability Skills I :Teamness and Inter-Personal Skills**

Employability skills are the major metric of any professional to embrace success in his professional life. The course has codified the set of topics and activities that enables them to practise in their college life and this practical educational effort leads them to right path. The ES-1 is the red carpet for them to lead them into arena of topics that enlightens them with the perfect attributes of a professional. It is highly essential to incorporate in the mindset of the students with these skills so that it would enable an open mindedness for the students to move out of their shell and walk in the path of success. Employability Skills –I: Teamness and Interpersonal skills is offered to the V semester students of all the departments to train the students to enhance the communication skills, presentation skills, interpersonal skills and team ethics and develop positive

attitude, good body language along with dressing and grooming. Appropriate metrics are used to measure these skills.

- **Employability Skills II : Campus to corporate**

Soft skills are life skills that are the need of the moment for any professional. Soft skills create completeness for a person's personality. This course stresses the importance of soft skill for an engineer and helps them to acquire it for their completeness. Campus to Corporate course is offered to the VI semester students of all the departments to make them ready for industry ready engineers. In this course, the students were trained in various aspects to work effectively in the industry environment. They are well trained in CV preparation, emotional intelligence, leadership skills and time management. They become more qualified for employability when they do group discussion and take mock interviews.

Evidence of Success:

All students attend "wellness for students" course regularly and maintain a personal journal. The journal logs the behaviours and their patterns emanating from the inputs in this course. The students steadily come to understand that their wellbeing improves as is evidenced in their BMI, behaviour, emotional and psychological aspects. By embracing professional skill courses, individuals contribute to the creation of a harmonious and inclusive world. As outcomes of these courses the students are able to,

- Reflect on values, aspiration, relationships and hence identify strengths and weaknesses.
- Set well articulated goals for academics, career, and personal aspirations.
- Establish the road map to realize the goals.
- Apply time management techniques to complete planned tasks on time.
- Practice techniques to promote physical, mental and social wellbeing
- Value human relationships in family and society and maintain harmonious relationships.
- Respect nature and its existence for survival and sustainability of all life forms and hence practice conservation of nature
- Appreciate ethical behavior as a result of value system in personal and professional situations
- Demonstrate effective communication attributes as part of their skills and facilitate presentation & public speaking skills

- Identify and explore the true self and handle negatives.

- Develop interpersonal skills and to groom as a professional

- Explain the importance of Nonverbal skill set to attain perfection

- Build teamness and its ethics to facilitate corporate working

- Understand the emotions and necessity to handle them.

- Build effective resumes to project the positives to be employable.

- Facilitate collaborative work environment and to engage in healthy agreements for building person's professional facet.

- Demonstrate leadership skills.

Apart from qualitative outcomes, quantitative outcomes are evidenced in the good number of students placed every year.

Academic year	2017-18	2018-19	2019-20	2020-21	2021-22
Number of outgoing students placed	661	515	485	510	571

Resources:

Resources such as Yoga hall, well equipped Gym are available. Professionally designed workbooks are available for the courses. Expert instruction is also available for these courses. The faculty members are trained to facilitate the orientation and handle these courses.

Yoga and Meditation Practice for certification