

Best Practices:

Best Practice 1: Research, Innovations and Entrepreneurship development through CRED

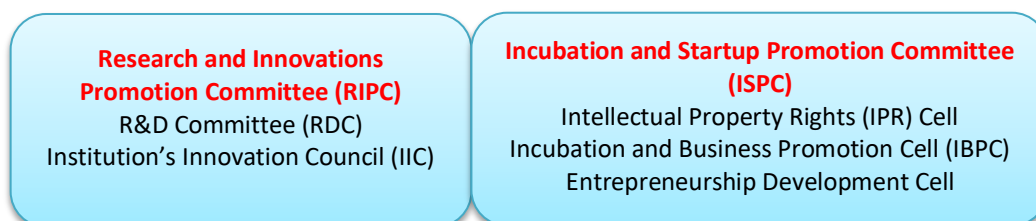
1. Title: RIE through CRED – Research, Innovations and Entrepreneurship development through CRED (Centre for Innovative Research, Incubation and Entrepreneurship Development)

2. Objectives:

- Promotion of research and innovations among students and faculty members
- Creation of an aspirational entrepreneurship culture i.e., opportunity driven entrepreneurship as opposed to necessity driven
- Enhancement of the support ecosystem for entrepreneurs catering to local and national needs
- Rapid and inclusive growth of Small scale industries / Startup enterprises and innovation

3. Context:

The institution established the Research & Development Cell during the year 2015. With its initiation the team was able to promote research culture among the faculty and students, promoted consultancy works, encouraged publication of research papers in reputed journals. Though patent rights and entrepreneurship development was a major focus, much light was not thrown on those two initiatives. Strategically thinking there was a need to boost the research eco-system along with development of innovations, patents and entrepreneurship among the students and faculty members. In such a context the management and IQAC team identified the potential of promoting ownership of concepts and ideas through patents, business promotions and entrepreneurship development. This led to the formulation of “The Centre for Innovative Research, Incubation and Entrepreneurship Development” during October 2018. With a visionary of establishing a sound environment in research, innovation and incubation for the students and faculty members, the CRED spearheaded with multiple activities through Research and Innovations Promotion Committee (RIPC) and Incubation and Startup Promotion Committee (ISPC). The committees under RIPC and ISPC are as under:



4. The Practice: From Innovator to Entrepreneur

A. Research promotion through R&D Committee: The College has created basic and advanced research facilities in the campus with a dedicated research team of faculty members. A dedicated centre lab is established which caters to the research needs of faculty and students of the college and collaborating institutions. Special schemes/awards/policies/incentives to motivate faculty and students towards research and publication in reputed journals are implemented. Faculty members and students are

encouraged to participate in conferences, research conclaves, workshops, etc. for interactions with experts in the field. The vibrant R&D culture fosters innovative spirit to kindle the young minds at the campus under able guidance and mentorship of motivated faculty members at all the departments.

B. Innovations promotion through Institution's Innovation Council: Prince Shri Venkateshwara Padmavathy Engineering College in association with Ministry of Human Resource Development (MHRD), Govt. of India has established 'MHRD's Institution's Innovation Council (IIC) during November 2018 to systematically foster the culture of Innovation. The main objective of IIC at PSVPEC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes. IIC is established to promote innovation in the Institution through multitudinous modes leading to an innovation promotion eco-system in the campus.

C. IPR promotion through IPR Cell: The IPR Cell of the college was constituted in November 2018. The cell was aimed to provide Intellectual Property Rights awareness for teachers and students. It also scrutinizes legal and monetary facets of the documentation of research papers. Many of the intellectual possessions are not sheltered due to the lack of understanding of the importance of IPR. For this reason, IPR cell at PSVPEC was established to contribute knowledge about IPR and aid in filing of patent applications and filing other forms of IPR. IPR cell functions under the Incubation and Startup Promotion Committee (ISPC) of the college. IQAC in association with IPR cell organizes various programmes to propagate the importance of IPR among the students and faculty members of the college.

D. Startup promotion through IBPC: Incubation & Business Promotions Cell (IBPC) nurtures successful indigenous technologies and growth oriented entrepreneurs / enterprises who can contribute to the economic growth of this region and the community. IBPC is reputed for its huge network of successful domain experts, academicians and experienced professionals who can share their technical experience in harnessing the skill of product development. IBPC is also ready to serve both non- technology and technology businesses. This, in turn, may help with faculty and student recruitment, and retention of graduates in the community.

E. Entrepreneurship promotion through ED Cell: The Entrepreneur Development Cell (ED Cell) of PSVPEC has been established in the year 2015-16 to encourage graduating engineers to consider Self-employment as a career option. This cell promotes the Entrepreneurship through expert lectures, workshops, seminars, business plan, idea pitching competitions and outdoor activities. It also provides technical and marketing support from innovation to entrepreneurship. The ED Cell strives to inspire students to create new and innovative business ventures compliant to global market and standards. Entrepreneurship Cell provides mentoring and regular guidance to the students from industry experts and successful entrepreneurs from various areas of business. Entrepreneurship is nurtured from the very beginning of student's academic journey at PSVPEC - through various student driven committees, events, programs held in the campus.

Best Practice – 2

ROI through Extension

Title: ROI through Extension – Responsibilities, Outreach and Impact creation through Extension activities.

2. Objectives:

- To educate students, faculty and local community people on self-development through educational resources.
- To enable the people to manage changes in the social and economic arena.
- To organise and conduct programmes that address people's needs and their priorities.
- To use a group approach to enhance cost-effectiveness, creativity and to encourage democratic processes through students and faculty members.
- To make students and faculty become educators by encouraging them to participate in development of the local community people through learning activities.
- To be flexible and innovative in program approaches and to create an impact among the local community on sustainability and development.

3. Context:

Our college inculcates social value and responsibilities to the faculty members and students by imparting extension activities in the neighborhood for holistic development of the society. Every year the extension activities are planned for various villages in and around the college. All students are engaged in the extension activity which comes under the services and curriculum. Students are also motivated to organise events and programmes for the people by themselves which make them understand the grass root problems in the society. The Students also are allowed to take up surveys in the villages to understand the problems faced by the people, so as to provide solutions through innovative research or through outreach activities. The college consistently promotes participation of students and faculty members in socio-friendly extension activities through various cells and activity centres. The college aims to develop students' Emotional Quotient through their interaction with various challenges and hurdles faced by the people in the nearby community and encourage stakeholders to develop their positive attitude towards life. The National Service Scheme unit, Rotaract Club and The Youth Red Cross Society play a major role in these initiatives. In addition, outreach programs and invited lectures are also given to the community.

4. The Practice: From Education to Service

A. National Service Scheme (NSS): The National Service Scheme (NSS) was launched in 1969, the birth centenary year of the Father of Nation, by the Government of India. It is a voluntary association of young people, especially college students to work for campus-community linkages. The aim is to

develop student's personality through community service. The NSS unit of PSVPEC provides a platform to the students for community work and developing a sense of involvement in the tasks of nation building. NSS volunteers work to ensure that a needy get help to enhance their standard of living. A variety of activities are organized every year to channelize the energy and idealism of the younger generation into creative pursuits. They educate students and society regarding many issues like health, sanitation, pollution, agriculture, etc. Various health camps and cleanliness drives across campus and slum areas nearby are taken out regularly to create awareness and also to motivate people to work towards a clean environment.

B. Rotaract Club: Prince Shri Venkateshwara Padmavathy Engineering College in association with Rotary International has established the Rotaract Club with more than 70 members. A young and vibrant team is in place in the Rotaract club such that they are involved in different extension activities and community services. They organize and participate in different extension activities like AIDS awareness rally, Vigilance Awareness, Anti – Dowry programs, Tree – Plantation, Blood Donation, awareness camps on food and health, health camps in collaboration with hospitals, etc.

C. Youth Red Cross Society: PSVPEC's Youth Red Cross was established to inculcate in the Youth of our college / country, awareness on the care of their own health and that of others the understanding and acceptance of civic responsibilities and acting accordingly with humanitarian concern, to fulfil the same to enable the growth and development. It functions with the one and only aim of serving people in distress without any consideration of caste, religion, language and nationality. Students of the college, irrespective of their classes are eligible for membership in the Youth Red Cross provided; they volunteer themselves for participation in the philanthropic services of the Red Cross Society.

D. Unnat Bharat Abhiyan (UBA): Unnat Bharat Abhiyan is inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India. The Mission of Unnat Bharat Abhiyan is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. It also aims to create a virtuous cycle between society and an inclusive academic system by providing knowledge and practices for emerging professions and to upgrade the capabilities of both the public and the private sectors in responding to the development needs of rural India. Prince Shri Venkateshwara Padmavathy Engineering College is one among the various institutions of the nation to take part in the various activities covered under the UBA. The UBA team of our college under the leadership of Principal Dr. G Indira and the Coordinators Dr. X Mercilin Raajini and Mr. G Sathi has identified the following villages in order to improvise the livelihood of the village: **Gowrivakkam, Mambakkam, Polachery, Ponmar and Vengadamangalam** in the Kancheepuram district of Tamilnadu.

The UBA team of our college conducted many rallies to create awareness regarding the importance of water in the present & future scenario, eliminating the usage of plastics. The team has taken a detailed survey of the households in the villages to understand the livelihood practices of the villages. Various water management activities, cleaning activities, veterinary camps, training programmes on rain water harvesting, etc., have been conducted in the villages. Special camps were also organized by the team for a period of 10 days in Ponmar village.

E. Pradhan Mantri Kaushal Vikas Yojana (PMKVY): Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE) implemented by National Skill Development Corporation. The objective of this Skill Certification Scheme is to enable a large number of Indian youth to take up industry-relevant skill training that will help them in securing a better livelihood. Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL). Our institution has started PMKVY-TI scheme under AICTE from 2018-19. In 2018-19 session 50 students have enrolled and in 2019-20 session 75 students enrolled in different branches. Our institution provides good infrastructure (Lab and other facilities), best training by our experience trainer to the enrolled students. Assessment of both batches has been successfully completed by different sectors and certificates of qualified students have been also distributed.

5. Evidence of Success:

Impact: Through extension and outreach programs, we sensitize the students to develop social values, widespread their responsibilities and knowledge in societal issues and problems by making them to involve with the community people. Through this, we establish a good relationship with NGO, tie-up with Multi National Company and join hands with local community organization and serve the community. Students with profound interest attain the social values and responsibility. Above all, the students get hold of social justice, value, responsibility and sustainability.

Achievements:

The National Service Scheme (NSS) of PSVPEC has been doing remarkable work during the last five years. The unit has been in the forefront of all the activities in the college and has offered many selfless services to the society. The NSS unit has been bestowed with best NSS unit award for the year 2018-19 by the Anna University, Chennai for the community service and enterprising attitude. Apart from the incessant regular activities in the campus, the units organize many community contact programmes in and outside the campus. The NSS plays a large role in making the students socially committed, self-confident and responsible citizens of the nation. It would be pertinent to note that the committed efforts by the enterprising programme officers of the NSS unit and the NSS volunteers took the NSS unit to exceptional achievements during the last five years.

5. Problems encountered and resources required:

- Students initially face a constraint in understanding the community in which they work. This is planned to be addressed by the orientation workshops organised by the outreach centres.
- It is also tough for the students to understand themselves in relation to their community, especially for those students who are from the urban places.
- Identifying the needs and problems of the community is done effectively but involving the community to solve their own problems is a great challenge, since people are not ready to accept the initiatives readily. Continuous interaction and involvement of the students through living with the community only helps the people change and cooperate with the service units.
- More focus is required in developing competence required for group living and sharing of responsibilities among the students.
- Students lack skills in mobilizing community participation.
- The institution should involve students in research and innovations for agriculture development and sustainable initiatives for the farmers as the college is surrounded by agricultural lands.