BEST PRACTICE-2

1. Title of the Practice: Innovation Eco-System



2. The Context:

Transforming engineering education is one of the visions of Sairam Institute of Technology. Sairam Innovation Ecosystem is a comprehensive well-crafted program that encourages indigenous student innovations along with lending support for setting up start-ups and incubations. The program is implemented in stages, with the overall objective of converting the student ideas into start-ups and patentable technologies. The program is implemented in four stages namely Immersion Program (generation of idea) at the I Year, Live-in-Lab (Checking the feasibility and enhancing the ideas) at the II Year , Mini Project (prototype development and its testing) at III Year and Project Development (development of final product, filing of patent as applicable and setting up of Start-ups) at the final year. Each stage is implemented through a well-formulated event Sairam SDG Ideathon at I Year, Sairam SDG Solveathon at II Year, Sairam SDG Innovathon at III Year and Sairam SDG Inspirethon at IV Year in which all the students are encouraged to actively participate. This ecosystem is implemented right from the first year of under-graduation. The prime highlight of this program is to make students solve the issues enlisted in the United Nations's Sustainable Development Goals program.

3. Objectives of the Practice:

Sairam Institute of Technology has designed and developed an innovative competition based learning model named Sairam Innovation Ecosystem. This model was piloted for the autonomous batch students from the academic year 2020-21. The enormous amount of positive feedback from the students created confidence to implement it for the four years of engineering students in Sairam Institute of Technology. "One Student - One Startup" is the main focus of this ecosystem. The slow and steady process crafted to implement this ecosystem will help to achieve this target.

4. The Practice:



Sairam SDG Ideathon is the first stage of the implementation of the Sairam Innovation Ecosystem project. This phase is principally concerned with encouraging the students to generate ideas for existing real world problems. Students are taught to apply critical thinking concepts to arrive at the optimal solution possible. First year students actively participate in Sairam Ideathon. Students are actively encouraged to map their ideas to the goal numbers of Sustainable Development Goals (SDG)

Sairam SDG Ideathon 1.0 was launched on 08-02-2021 during the webinar on Sustainable Development Goals. The event registered a total participation count of 1100.



Sairam SDG Ideathon 2.0 was launched on 20-12-2021 during the Jump-started Program. Number of Students Participated is 1290.



Sairam SDG Solveathon is the second stage of the program is implemented through Sairam SDG Solveathon. At this stage, design thinking concepts are taught to the students through awareness programs such as boot camps and technological training sessions that enable them to add a touch of user-friendliness to the products they envision. Once the idea is realized and feasibility it checked, students are asked to develop a business model for their problem.



Sairam SDG Innovathon is the third stage of this program. Students are promptly motivated to build or design prototypes of the original products or solutions they envisioned. Since prototyping can be a catalyst for deriving creative solutions that can be incorporated during final product design, students are always encouraged to build prototypes. Additionally, prototyping reduces extra costs that would have incurred during final product design. Students will be able to assess their level through Technology Readiness Level and able to pitch their ideas for business.

Sairam SDG Inspirethon is the final stage of the program where students finally transform their ideas to businesses alongside filing for patents as applicable. They can inspire through paper or patent publication and setting up of start-ups. The overall vision of this project comes to reality at this stage.



5. Obstacles faced / Problems encountered:

Science and humanities faculties guiding Ideathon stage only, remaining stages guiding by the department faculties.

Students may encounter challenges in comprehending complex domain such as Artificial Intelligence, Machine Learning, Deep Learning, APP, Web development, Automation, Materials, Robotics, Energy, Renewable energy, Structural, Sustainability, Semi conductor, signal, wireless, Antenna, image process, AR, VR, Block chain, Cloud, Cyber, data science, IOT, Embedded and Biotech.

It covers a wide range of topics, and students may find it challenging to manage their time effectively.

6. Impact of the Practice / Evidence of Success:

- ✓ Improved Skills and Knowledge
- ✓ Innovation Success and Certification
- ✓ Practical Project Outcomes
- ✓ Continued Learning and Professional Growth
- ✓ Patent filed
- ✓ Publication of journal papers
- ✓ Setting up of start-ups

7. Resources Required:

- ✓ Well equipped lab for offline classes.
- ✓ Individual laptop or Desktop for practice at home or hostel

8. Contact Details:

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Accredited Status: A+ Validity Period: up to 2023

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