

SRM Institute of Science and Technology

(Deemed to be University u/s 3 of UGC Act, 1956)

7.3.1: Portray the performance of the Institution in one area distinctive to its priority and thrust

PERFORMANCE OF THE INSTITUTION IN ONE AREA DISTINCTIVE TO ITS PRIORITY AND THRUST

PROMOTION OF INNOVATION, INCUBATION AND ENTREPRENEURSHIP

OBJECTIVES

- To instill in the young minds the concepts of innovation
- To facilitate the students to transform their innovative ideas into products through incubation
- To expose the students to entrepreneurship in the areas of their specialization

UNDERLYING PRINCIPLES

Students are inculcated adequate theoretical and practical knowledge which normally fetches good employment opportunities. However, the same knowledge can transform the students into entrepreneurs who can contribute directly to nation building. This practice will convince the students to take up entrepreneurship by removing the fear and anxiety normally associated with such endeavors. This concept is also envisaged in NEP-2020 under Clause 11 '*Towards a More Holistic and Multidisciplinary Education*'.

NECESSITY

Day by day government jobs are shrinking. Though there is a compensating expansion of the private sector, the pandemic which has turned the world upside down has also impacted on the security of private sector jobs. Therefore, the students who have been imparted a quality education at SRMIST should be adequately prepared to become entrepreneurs straightaway after graduation or after a short stint in industry. Further innovative entrepreneurs focusing on *atmanirbhar bharat* can keep our country afloat amidst global war scenarios and natural calamities.

SETTING UP SRM DIRECTORATE OF ENTREPRENEURSHIP AND INNOVATION (DEI) <https://www.srmdei.com/>

DEI is a dedicated directorate which looks after the entrepreneurial requirements of students. It was set up in 2015 in collaboration with UC Berkley through a MoU, envisaged student/faculty exchange programs to enhance the local ecosystem.

DEI is an interdisciplinary directorate where students and faculty from the varied disciplines get themselves involved in incubation leading to start-ups and entrepreneurship.

The Directorate itself is self-contained having the necessary hardware and software. Further the Directorate also facilitates and coordinates with laboratories across SRMIST depending on students' specific requirements.

The Directorate also offers space and facilities and also interaction with industries.

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OVERCOMING CHALLENGES

The challenges like attracting students who are employment focused to DEI, finding time for them to work beyond class hours, mobilizing faculty from across the disciplines to be part of DEI have been overcome through flexi timetables for both faculty and students, involving students in the decision-making processes and identification and motivation of interested faculty. The issue of funding is also ameliorated by roping in external funding agencies like IEDC and SISFS who supplement SRMIST's funding.

IMPLEMENTATION THROUGH- ICED-ICIF PROGRAM

This program involves the following practices that provide a holistic end-to-end approach to innovation and entrepreneurship and constitute an overall unique distinctive practice for the university.

I- Innovate in-house

- Through Fabrication Lab, which facilitates students to innovate leading to incubations.
- 52 faculty members have been trained as Innovation Ambassadors
- 16 Idea/Innovation Student Clubs
- 9 External Experts/Agencies engaged as Mentors

C- Competitions- Coordinates the activities of various student clubs including participation in technical competitions across the country.

E- Entrepreneurship Courses-

- Offers 27 tailor made minor courses oriented
- Open elective courses
- Students trained at UC Berkeley conduct courses
- Formulated an I & E policy along with implementation plan

D-Design Thinking-DEI trains faculty on Design thinking

I- Infrastructure

- Space and facilities for students to innovate, incubate and generate start-ups
- Pre-Incubation Facility – 9 Nos.

C- Collaboration with:

- DST-NSTEDB, GoI)-Establishment of NewGen IEDC (Innovation and Entrepreneurship Development Centres)
- Department for Promotion of Industry and Internal Trade (DPIIT), Government of India-Implements the Startup India Seedfund Scheme, a program of the Bootstrappers' Research Council (BRC), a section 8

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company, established to oversee all incubation and technology transfer processes.

- Institute Innovation Council (IIC), an initiative of the MoE are overseen by DEI-Appropriate resources provided
- NISP portal for I&E (Innovation and Entrepreneurship) Policy adoption
- National Kapila Portal registered-and participated in Smart India Hackathon -2022
- External partners – 13 (Teesside University, MoE's Innovation cell, The Chennai Angels, Jacob's Institute of Design Innovation, UC Berkeley, etc.)

I- Intellectual Property

- DEI through the Centre for Intellectual Asset Protection (CIAP) coordinates the patent filing, publishing -CIAP works to Protect, Promote and Profit from the IP generated by the institute researchers and students
- DEI managed by a 17 dedicated faculty and others.

F- Funding arrangements

- By Attracting Angel investors and venture capitalists

IMPACT

a. ARIIA ranking

The institution has been ranked within top five in the last three years.

b. Innovations

Total number of innovations recorded in YUKTI National Innovation Repository (2022) - 19

Highlights

- Wireless charging electric skate scooter with PV charging station
- Smart helmet
- Smart Electricity Conservation System for an indoor environment

c. Products developed and distributed during Covid-19

- Low cost ventilator
- Covid-19 face shields
- Multipurpose sanitizer dispenser
- Unmanned vehicle for disinfection
- Robot for medicine delivery for Covid-19 patients
- Location based corona tracker

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d. Ventures and Start-ups

23 ventures and start-ups have been recorded in YUKTI National Innovation Repository (2022).

Highlights

- Abhinava Rizel has secured an investment of USD of 25 million from MM Forging.
- Kreator 3D printer and solutions Pvt. Limited
- WORKIFY
- ZERO MEAT

e. Collaboration with other incubation units, HEIs and Industries

Collaborations with 31 private industries and four government units.

Highlights

- Automotive Research Association of India, Pune (Govt.)
- CSIR (Govt.)
- Indian Navy
- Mitsubishi Electric India Pvt. Limited

f. Patents published, granted and commercialized

- Published : 1211
- Granted : 101
- Commercialized : 4

Highlights of commercialized patents:

- Ear based biometric authentication
- IoT Fog based power distribution system
- Hardened 22 carat gold for jewelry making in collaboration with TANISHQ (TATA)

CONTINUAL IMPROVEMENT

The achievements mentioned above have been measured against KRAs envisaged in strategic plan and follow up action is taken.

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| Category | KRA as per strategic plan/Achievements |
|----------------------------|--|
| Patents granted | 50/101 |
| Patents commercialized | 10/4 |
| No. of start-ups incubated | 15/28 |

| File Description |
|--|
| <p>Link of appropriate Web link in the Institutional website</p> <p>https://www.srmist.edu.in/research/innovation-incubation/</p> <p>https://www.srmdei.com/</p> |
| <p>Link for additional information</p> <p>https://www.srmdei.com/event</p> |
| <p>Any additional information</p> <p>ARIIA Report+Photos</p> <p>SRMIST Link</p> <p>http://naac23.srmist.edu.in/webassets/SSR_IV/General/7.3_ARIIA%20Report%2BOther.pdf</p> <p>NAAC Link</p> <p>https://assessmentonline.naac.gov.in/storage/app/hei/SSR/100682/7.3.1_1693461428_10935.pdf</p> |