### CRITERION 3.2.1

# 3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

## **3.2 Innovation Ecosystem**

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation, etc.

## (1) Ecosystem for Innovations

Dadi Institute of Engineering and Technology has an outstanding and harmonious ecosystem for innovation, where research and inventions tune together and help in transformation of information and knowledge among faculty and students through Institution's Innovation Council, R&D Centre, EDC,

## **Innovation Facilitating Centres**

#### 1. Institution's Innovation Council(IIC):

Dadi Institute of Engineering & Technology is registered as Institution's Innovation Council(IIC) initiated by the Ministry of Education(MoE) in collaboration with AICTE to systematically foster the culture of innovation and start-up ecosystem in the Institute. Primary role is to engage large number of faculty, students and staff in various innovation and entrepreneurship related activities such as ideation, Problem solving, Proof of Concept development, Design Thinking, IPT, project handling and management at Preincubation/Incubation stage, etc., so that Innovation and entrepreneurship ecosystem gets established and stabilized in the Institute.

#### 2. Research and Development Centre

Research and development Unit of DIET is a hub of innovation, research, amalgamation of various ideas woven to create patents and many more in its incubation centre that was established since 2017. R&D Cell nurtures and hones research culture in the institute by encouraging research in emerging trends and stimulating boundary areas of Engineering, Society, Economics, Medical, Technology, Agriculture, Science and Humanities. In order to motivate the faculty members towards research incentives are provided for publishing their research findings in reputed journals with impact factor, grants, patents etc.,

#### 3. Entrepreneurship Development Cell

DIET launched its EDC Cell in 2016 with a motto to bring awareness about entrepreneurship, its importance and need among students and faculty. EDC encourages entrepreneurship as a feasible and a great career choice and also offers pre-incubation provisions to the one, who would take up a career in this field. Moreover, EDC organizes various sponsored Entrepreneurship Awareness Camps, Start-up concepts, Idea contest, Women Entrepreneurship Development Programmes, Workshops, Seminars, conferences, summits and FDPs for its beneficiaries regularly.

#### 4. Product Development Lab

Institute is recognized as Host Institute(HI) for implementation of the Incubation component under MSME Innovative Scheme

#### 5. Idea Lab

DIET with its IDEA Lab has encouraged many students to come up with novice ideas and formulate a foundation to work on those concepts. Providing a space with loads of facilities to explore new ideas amalgamated with the syllabus, is the main purpose of IDEA Lab. Students apply their notions in collaboration with real time applications from Science, Technology, Engineering and Mathematics (STEM). Students get hands-on experience, learn and understand by its practical implementation and create the products based on theories and formulas. Doing so, leads them to interact with each other about a common goal and inspires to team work, drawbacks get allayed, nurtures visualization, develops exploration spirit and makes them a great problem solver.

#### 6. Engineering Clinic

Enthused by Medical Clinics, Engineering field is also now encouraged to escalate EngineeringClinics in the campus. DIET has its own Engineering Clinic to merge student's engineering knowledge with real time contemporary requirements of the modern age. The age of Technology is in need of new trend every single day and students must be challenging enough to run parallel with the most demanding 21<sup>st</sup> century. The Engineering Clinic concepts grooms the students and faculty to understand the current and future provisions and can imbibe theoretical concepts to get evolved into practical outcomes. Students at DIET interact with industrial people, Engineers from industry, learn and understand the applications and mechanism of engineering works and gethands-on experience and prepare themselves for the future. Clinics are a continuous and extensive part of the syllabus and bridges the outside world of engineering field for exploration in their four-years of undergraduate program.

#### 7. ISRO Nodal Centre - Transformative Activities

Dadi Institute of Engineering & Technology is nodal centre for Indian Institute of Remote Sensing Outreach Programme that focuses on strengthening the Academia and User Segments in Space Technology and its applications using Online Learning Platforms. Many students and faculty from different Institutes have participated in this programme and have been certified by ISRO. The resource persons have enlightened the participants of virtual sessions with multidisciplinary topics.

#### 8. NPTEL Local Chapter

DIET is enriched with NPTEL Local Chapter where the students and faculty upgrade themselves by doing courses on recent trends.

#### 9. IPR Facilitating Centre

DIET IPR facilitating Centre motivates students and faculty to submit their ideas for Intellectual Property & Rights. With the funding support from National Research & Development Corporation and other organizations many patents are filed in Indian and other country offices.

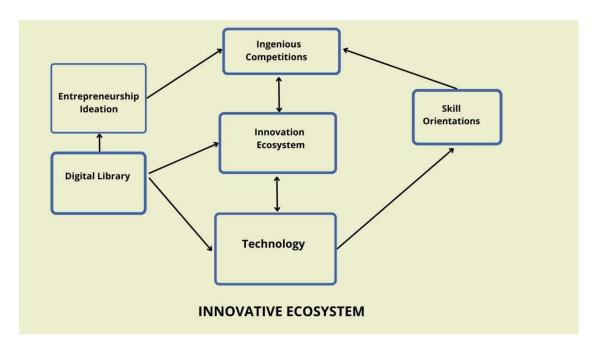


Fig.1 Innovative Ecosystem

## (2) Initiatives for Creation and Transfer of Knowledge

- Encourage and motivate students and faculty to do extensive research in multidisciplinary areas. About 10 batches of students under the guidance of faculty from different disciplines worked together for the development of a software/technology.
- 2. Create a platform for encouraging students and faculty to innovate research ideas and inspire research potentialities and develop a room to see their ideas turn into reality in the form of patents, innovative projects, products and services. About

15% of the students and faculty were involved in developing innovative research ideas and contributed their potential ideas significantly in the national level government contests. Further 19 patents are filed and published by faculty and students.

- Special focus on student and faculty Startups and Entrepreneurship development.
  32 startup ideas are formulated and products are developed. One startup is registered.
- 4. Technology transfer by conducting various events like conferences, seminars, workshops, FDP, idea contests, project competition, product design, logo design for students and faculty fraternity and drive towards the field of research and innovation. Almost 100% of the students participated in these events.
- 5. Encourage and support the students and faculty to write papers, articles, book chapters etc., under reputed journals like web of science, SCI, Scopus indexed journals etc. 60% of the faculty and students are contributing in developing the knowledge and disseminating the knowledge through Paper publications/Conferences/Books & Book Chapters.

#### **Recognitions by Government**

- 4-star rating achieved in Institution Innovation Ranking from Ministry of Education, AICTE
- Placed under the band 151-300 in the NIRF Rankings 2023 for Innovation, previously known as 'Atal Ranking of Institutions on Innovation Achievements' (ARIIA).
- Participation Certificates from various National and International hackathons.