







9 INDUSTRY, INNOVATION AND INFRASTRUCTURE









Higher Education Institutes play a crucial role in fostering innovation, entrepreneurship, and startup culture. They often implement various initiatives to support students, faculty, and alumni in their entrepreneurial endeavors. Creating an Innovation and Entrepreneurial Ecosystem is an integral part of the Vision and Mission of Sharda University. The University has taken various strategic initiatives to nurture innovation and entrepreneurship among the students and faculty and bring the cultural and attitudinal shift from job seeker to job giver. Sharda University is renowned for its emphasis on innovation and entrepreneurship by offering a range of resources to support local start-ups. These initiatives play a pivotal role in nurturing the entrepreneurial ecosystem, not only within the University but also the community at large. The University has augmented its innovation and entrepreneurial initiatives with mission statements:

- Encourage and nurture aspiring entrepreneurs in converting their ideas to potential ventures through business incubation.
- Equip innovators and entrepreneurs with skills required to develop the potential ventures into highly scalable businesses which can create large scale socio-economic impact.
- Facilitate entrepreneurs and early stage startups to scale up their ventures through access to a network of entrepreneurial ecosystem enablers.
- Promote entrepreneurship as a career among the students by integrating credit benefits with the efforts made by the students towards being an entrepreneur.
- Extend the facilities of business incubation to entrepreneurs external to the University.

Innovation Labs and Centres: Sharda University has established various prototyping labs, innovation labs and research centres. These facilities provide innovators and startups an access to a range of state-of-the-art facilities where ideas can be validated through development of proof of concept. The availability of these resources has proven instrumental in accelerating the development and prototyping phases of start-up ventures. Some of these facilities which has

positively impacted the growth of innovation and entrepreneurship in the University are listed below.

- Digital Fabrication Lab
- Mechanical Fabrication Lab
- Idea to Product Development Cell
- Central Instrumentation Facility
- DST-FIST Lab
- Centre for AI
- Centre for Cyber Security and Cryptology
- Hydroponics & Tissue Culture Centre
- iHUB Sharda
- Young Founder's Club
- Yunus Social Business Centre



Business Incubator:

Entrepreneurship plays a vital role in ensuring a strong resource for economic development of the country. In line with the flagship initiatives of the Government of India such as Star-up India, Atal Innovation Mission and Aatmanirbhar Bharat, Sharda University established an incubation facility - Sharda Launchpad Federation (SLP). This facility is registered under section 8 of Companies Act 2013, Govt. of India and serves as a Special Purpose Vehicle (SPV) to promote innovation and incubation within the University and for the external community. The incubator is approved as a Business Incubator by Government of Uttar Pradesh under UP Startup Policy 2020 and Ministry of MSME and also a member of SIDBI Delhi NCR Incubator Network Program. The incubator has partnered with entrepreneurship ecosystem enablers such as MSME Chamber of Commerce,

EzyLegal, Paytm, YES Bank, IIT Roorkee Alumni Association, AWS Activate, Fundenable and various other startup ecosystem stakeholders.

Sharda Launchpad provides a platform for new, small and medium – scale enterprises for the development and management of the enterprise. To understand the enterprise better, Sharda Launchpad offers mentoring by the in-house-faculty and industry experts for budding entrepreneurial students and alumni. To foster the spirit of competition, Sharda students are nominated and guided for various inter and intra-college entrepreneurial contests.

Sharda Launchpad has supported more than 100 innovators through pre-incubation mentoring and 60+ startups have been supported through incubation. Startups are supported through dedicated one-to-one mentoring and group masterclasses.









Mentoring:

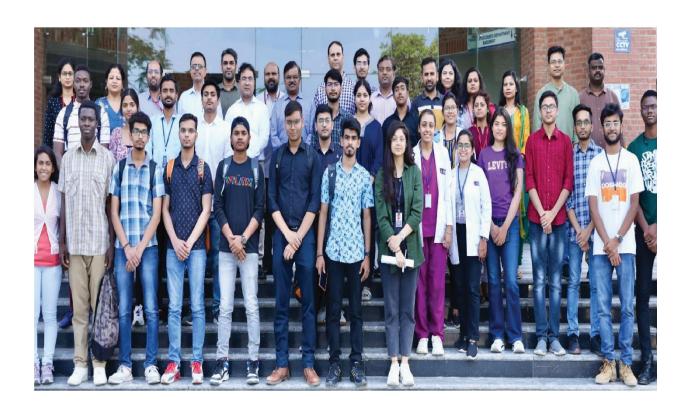
The university, through its incubator, operates a comprehensive mentoring program that connects aspiring entrepreneurs and startup founders with experienced mentors. These mentors, often comprising faculty members, successful alumni, and industry experts, provide invaluable guidance on various aspects of entrepreneurship. Various group masterclasses are conducted on multiple aspects of entrepreneurship. This includes business planning, market research, financial modeling, and networking strategies. The mentorship program has received commendation for its effectiveness in helping start-ups navigate challenges and make informed decisions.



Workshops and Training Programs:

Sharda University hosts regular training programs and workshops designed to address specific challenges faced by start-ups. The training sessions are conducted by accomplished professionals and are structured to be practical and hands-on, equipping entrepreneurs with the skills and knowledge necessary for success. These workshops provide a platform for entrepreneurs to interact, learn from industry experts, and collaborate on innovative solutions. Topics covered include funding opportunities, intellectual property protection, and effective business communication. Attendees consistently praise the workshops for their relevance and applicability to real-world scenarios. More than 40 such programs have been conducted during the year 2022 and more than 1000 students and startups have been benefitted.

Sharda University has introduced a credit course named Introduction to Entrepreneurship (course code IED001) in which undergraduate students study about various aspects of entrepreneurship and identify problem statements from industry and society and develop business model on their probable solutions.





Financial Assistance:

Sharda University offers seed funding or grants to help students and faculty turn their innovative ideas into prototypes. This funding can be used for product development, market research, and other essential activities. To facilitate and motivate student and faculty entrepreneurs, up to 80% cost of company registration is reimbursed through the incubator Sharda Launchpad Federation. The University also offers in-kind support by providing pre-incubation to aspiring student entrepreneurs at no cost. The monthly charges for co-work space are also waived off for the undergraduate student entrepreneurs. Various innovators and entrepreneurs have been mentored and facilitated for the grants under different State and Centre Government scheme such as Seed capital under UP Startup Policy and prototype grant under MSME Idea Hackathon.





Innovations and Startups on Low Carbon Initiatives:

The University and its incubator have supported various innovators and startups working in the domain of low carbon technology and carbon sequestration during the year 2022.

Navstream Innovations LLP:: A startup founded by the undergraduate students of Sharda University and incubated at Sharda Launchpad, the company is developing energy management system. The initial prototype is a battery management system for Electric Vehicles. The startup aims to extend it by developing system which will enhance the efficiency of solar power systems. The startup has received a grant of Rs. 15 lakhs under Ministry of MSME Idea Hackathon through Sharda University as Host Institute.

Verdant Motors Private Ltd: A team of young entrepreneurs incubated at Sharda Launchpad were supported with office space, lab facility and technology mentoring to develop the prototype and MVP of their electric two wheelers. The startup has indigenously designed and developed all the major parts of their vehicle and reached to revenue generation stage.



Pineal Innovations Private Limited: The startup has developed sanitary pads will provide affordable, plastic free sanitary pads targeting the rural population. This invention aims to utilize sugarcane waste to develop low-cost sanitary pads. This invention aims to remove absorbent gels and use natural absorbents like fuller's earth and psyllium husk or tragacanth gum or Arabic gum or acacia gum or any other gums to develop highly quality low-cost sanitary pads. This invention aims to recycle waste material like bagasse to develop natural and biodegradable, low-cost sanitary pads.

Calvem Energy Pvt Ltd: The objective of the project is to develop a rare earth magnet-free traction motor for electric vehicles that is environmentally sustainable, cost-effective, and efficient. It is proposed to develop and evaluate two variants of Reluctance synchronous motor: a conventional reluctance synchronous motor, and a ferrite-assisted reluctance synchronous motor. Further sub variants of these two variants will be developed.







Innovations and stry related initiatives in the domain of low carbon technology:

Sharda University has supported various innovations in the domain of low carbon technology by filing IPs, creating lab facilities for validation and development of proof of concept and exploring opportunities for commercialization of these innovations. The faculty, research scholars are working with various industry in the region and developing solutions leading to sustainable environment friendly growth of economy through industrial innovations.

