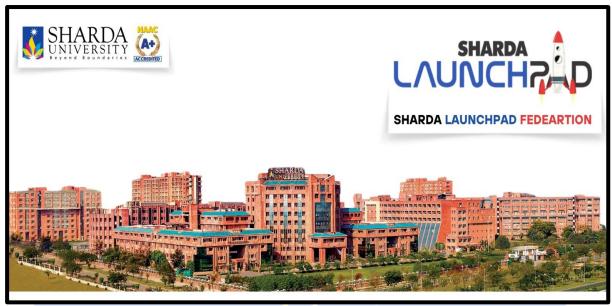




9 INDUSTRY, INNOVATION AND INFRASTRUCTURE





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 Startup 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 recognised by various governmental bodies, such as, Department of Science and Technology, Startup India, 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, PUM, Netherland, AWS Activate, Fundenable and various other startup ecosystem stakeholders at national and international level.

Sharda Launchpad provides a platform for new, small and medium – scale enterprises for the development and management of the enterprise. For enterprise to scale up, Sharda Launchpad offers mentoring by the in-house-faculty and industry experts.

To inspire young innovators, various hackathons and competitions are organized providing platforms for participants to develop skills, solve real-world problems, and gain mentorship from industry experts. By fostering creativity and collaboration, these competitions play a crucial role in nurturing future advancements and contributions to society.

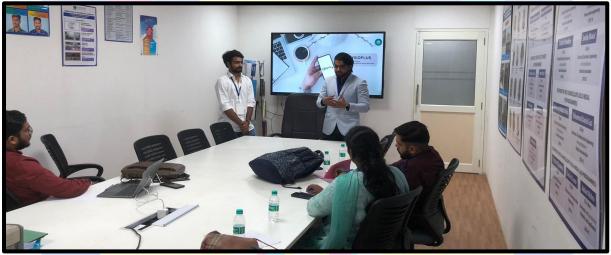
Sharda Launchpad has supported more than 100 innovators through pre-incubation mentoring and 80+ startups have been supported through incubation and other support services.

Mentoring



The university, through its incubator, operates a comprehensive mentoring program that connects aspiring entrepreneurs and startup founders with industry aces. 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, such as, 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, strategizing effective go-to-market strategies and effective business communication. More than 80 such programs have been conducted in past two years 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 the 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 Startup India Seed Funding Scheme, iTBI under DST various incentive schemes under UP Startup Policy and prototype grant under MSME Idea Hackathon.

Innovations and Startups on Low Carbo 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.



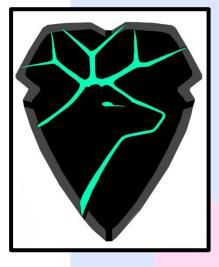
Navstream Innovations LLP: A startup founded by a student of Sharda University and incubated at Sharda Launchpad is developing an energy management system aimed at enhancing battery efficiency across various chemistries, including sodium-ion, lithium-ion, solar power, and wind energy. Additionally, the startup is working on a system to validate carbon credits. This initiative aligns with several UN Sustainable Development Goals (SDGs), including SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 13 (Climate Action). By improving battery efficiency and validating carbon credits, the project supports the transition to renewable energy and promotes sustainable practices. The startup has received a grant of Rs. 12 lakhs under the Startup India Seed Funding

Scheme and Rs. 15 lakhs under the Ministry of MSME Idea Hackathon through Sharda University as the Host Institute, fostering innovation and entrepreneurship.

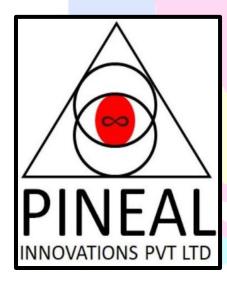


SVRC Techno Innovations Pvt Ltd: An agri-drone startup, SVRC Techno Innovations Private Limited, is developing integrated solutions using AI and cloud platforms to optimize energy use and reduce greenhouse gas emissions, aligning with the UN Sustainable Development Goals (SDGs). This initiative supports SDG 13 (Climate Action) by mitigating climate impacts and SDG 12 (Responsible Consumption and Production) through efficient resource management. AI-powered sensors and automated systems help farmers reduce water usage and enhance crop yields sustainably, contributing to SDG 2 (Zero Hunger). Supported by the Sustainable Development Solution Network, a global initiative for the United Nations, the startup has received INR 30 lakhs under the Startup India Seed Funding Scheme and

benefits from infrastructure support facilities. This project fosters innovation in agriculture, promoting sustainable practices and environmental stewardship.



Verdant Motors Private Ltd: A team of young entrepreneurs incubated at Sharda Launchpad, supported with office space, lab facilities, and technology mentoring, have developed the prototype and MVP of their electric two-wheelers. This initiative aligns with the UN Sustainable Development Goals (SDGs), particularly SDG 9 (Industry, Innovation, and Infrastructure) and SDG 7 (Affordable and Clean Energy). By indigenously designing and developing all major parts of their vehicle, the startup promotes innovation and sustainable industrialization. Additionally, reaching the revenue generation stage demonstrates economic growth and job creation, supporting SDG 8 (Decent Work and Economic Growth). This project not only advances clean and sustainable transportation solutions but also fosters a culture of entrepreneurship and technological innovation.



Pineal Innovations Private Limited: The startup has developed affordable, plastic-free sanitary pads targeting the rural population, aligning with several UN Sustainable Development Goals (SDGs). This innovation utilizes sugarcane waste to produce low-cost sanitary pads, supporting SDG 12 (Responsible Consumption and Production) by promoting recycling and waste reduction. By removing absorbent gels and using natural materials like fuller's earth, psyllium husk, and various gums, the project ensures the pads are biodegradable and environmentally friendly, contributing to SDG 15 (Life on Land). Additionally, providing accessible sanitary products addresses SDG 3 (Good Health and Well-being) by improving menstrual hygiene management in rural areas. This initiative not only fosters sustainable practices but also

empowers women by enhancing their health and well-being through access to quality, eco-friendly sanitary pads.



Calvem Energy Pvt Ltd: The objective of the project is to develop a rare earth magnet-free traction motor for electric vehicles, focusing on environmental sustainability, cost-effectiveness, and efficiency. This aligns with several UN Sustainable Development Goals (SDGs), including SDG 7 (Affordable and

Clean Energy) and SDG 13 (Climate Action). The project proposes to design and evaluate two variants of reluctance synchronous motors: a conventional reluctance synchronous motor and a ferrite-assisted reluctance synchronous motor, with further sub-variants of these two types. By eliminating the need for rare earth magnets, the project aims to reduce dependency on scarce materials, lower production costs, and minimize environmental impact. This innovative approach will contribute to cleaner transportation technologies and promote the adoption of electric vehicles, supporting global efforts to combat climate change and foster sustainable industrial innovation.

Prototyping of Advanced Micro Ear Surgical Instruments



The objective of the project is to develop advanced, cost-effective, and user-friendly Micro Ear Surgical Instruments (MESIs) to improve healthcare accessibility and surgical efficiency, aligning with Sustainable Development Goal (SDG) 3: Good Health and Well-being. Their objectives include prototyping, real-world testing, and technology transfer of MESIs for commercialization and revenue generation. This project features a structured timeline for prototyping, fabrication, testing, and technology transfer over 12 months. Patents for innovative surgical instruments, such as the Rosen's circular knife, monopolar cautery with suction canula, and extendable surgical cutting instruments, have been published. Expected outcomes include the production of safer, more efficient surgical tools that reduce the need for multiple instruments, enhancing surgical flexibility and efficiency. The commercialization of this technology, facilitated by agencies like NRDC, will contribute to the economic growth and technological advancement in the healthcare sector, supporting SDG 9: Industry, Innovation, and Infrastructure. This project has been funded under the government scheme of MSME Idea Hackathon 2.0 to the tune of 14.00 lakhs

Maximizing energy recovery using microalgae in novel microbial carbon capture cells via Carbon dioxide sequestration. The proposal aims to develop and optimize Microbial Carbon Capture Cells (MCCs) to address climate change and sustainability challenges in line with the UN Sustainable Development Goals (SDGs). By integrating microalgae with modified microbial fuel cells, the project seeks to enhance carbon dioxide sequestration and energy recovery during wastewater treatment. This aligns with SDG 6 (Clean Water and Sanitation) and SDG 7 (Affordable and Clean Energy) by treating waste effectively

and generating renewable energy. Additionally, the project's focus on reducing greenhouse gas emissions supports SDG 13 (Climate Action). The project will tackle current limitations, such as high manufacturing costs and internal resistance, to scale up this technology. By optimizing key parameters and designing cost-effective components, the project aims to create a sustainable solution that contributes to environmental conservation and resource efficiency. This project has been funded under the government scheme of MSME Idea Hackathon 2.0 to the tune of 13.50 lakhs.

Automating Ophthalmoscopy: The project aims to automate ophthalmoscopy for detecting and evaluating retinal and glaucoma symptoms, addressing the widespread issue of ocular diseases caused by visual coercion, pollution, and genetic disorders. By automating the classification of disorders such as Normal, Glaucomatous, and Diabetic Retinopathy, the project seeks to overcome current detection limitations, which rely heavily on ophthalmologists. This initiative aligns with several UN Sustainable Development Goals (SDGs), including SDG 3 (Good Health and Well-being), by improving diagnostic accuracy and accessibility, and SDG 9 (Industry, Innovation, and Infrastructure), through the development of advanced medical technologies. The automated system will enhance early detection and treatment, reducing the risk of severe vision loss or blindness, and promoting overall eye health. The project leverages AI and image processing technologies to create a cost-effective, scalable solution, contributing to better healthcare outcomes and innovation in medical diagnostics. This project has been funded under the government scheme of MSME Idea Hackathon 2.0 to the tune of 12 lakhs.

5th Technovation Hackathon at Sharda University

Sharda School of Engineering & Technology organized the 5th Technovation Hackathon in which 2445 participants and 813 teams participated .After two rounds of evaluation, 124 teams including 15 teams from reputed colleges like Galgotias University , IIMT , IGDTU , etc were shortlisted for final evaluation. The selected teams prepared their models at the University Campus. The objective of the hackathon was to discover innovative ideas from young minds for the problems of society. During the event, the students worked on the themes that were Smart Citizen & Governance, Facilities & Amenities Design, Smart Security, Safety & Surveillance, Smart Health, Agriculture & Sanitation and Smart Transport & Pollution Control.

Job Fair



Training and Placement Department in association with Sharda School of Law conducted the first ever Mega Job cum Internship Fair - Law on 5th Nov. 2022 The event was graced by the

presence of Dr. Pradeep Rai, Senior Advocate and Vice President of the Supreme Court Bar Association as Chief Guest. Dr. Pawan Duggal, Senior Advocate, Supreme Court (Expert Cyber Law) attended the event as a Guest of Honor. Attorney Vinay Bhardwaj attended the ceremony as a special guest. This event aimed to give law students a wide range of internship and employment options. More than 20 prestigious law firms, including R & R Associates, Pavan Duggal Associates, Kansal Law Chambers, Khurana & Khurana Advocates, IP Attorneys, Vidhi Patron Law Offices, Fair Law Practitioner, PC & Associates, Mahndiyan Associates, Sharma Bharadwaj & Co., Link Legal, and others, took part and chose students.

Industrial Hackathon-2023: A Step towards Aatama Nirbhar Bharat



Industrial Hackathon: An Initiative towards Trillion Dollar Economy

