

RESEARCH AND DEVELOPMENT POLICY

Version-4.0 UPES Dehradun, Uttarakhand 248007

Approved by the Board of Management at its 66th Meeting held on 15.04.2025

Research and Development at UPES

1.0 PREAMBLE

UPES aspires to establish itself as a "University of Tomorrow" and recognizes the vital role of research and entrepreneurship in higher education. Therefore, the University is committed to promoting a research-oriented culture among its staff, students, and faculty. To achieve this, UPES has outlined the following objectives:

OBJECTIVES

1.1. Creating a Conducive Environment for Research

UPES aims to promote a positive environment for research activity, emphasizing the central role of research in faculty workload.

1.2. Enhancing Research Capacity

The university plans to invest in human capital and physical infrastructure to improve the research capacity of both faculty and students.

1.3. Supporting External Research Funding

UPES aims to secure external research funding to expand its research activities and to position itself to compete for a share of the Indian government's prioritized development of a knowledge-driven economy.

1.4. Encouraging Collaborative Research

UPES recognizes the need for a collaborative approach to research and stresses the importance of interdisciplinary teams to address complex societal challenges and attract funding.

1.5. Encourage Innovation-driven Entrepreneurship

Encouraging innovation-driven entrepreneurship is an important aspect of UPES's mission. The university has various initiatives such as SEED, SHODH and Runway that provide a platform for faculty and students to validate their ideas, develop new technology, design products, incubate with mentoring and provide access to a network of resources to accelerate their success.

1.6. Maximizing Research Outputs

The university will measure the success of its research strategy through the identification and tracking of outputs, making necessary adjustments to align with the institute's strategic requirements. A well-defined organizational structure will oversee research and development activities.

UPES' Initiatives for Promoting Research and Innovation

UPES recognizes the importance of promoting research and innovation among its faculty and students. To achieve this, the university has launched several initiatives that provide financial and institutional support to faculty and students in their research pursuits.

Initiatives

1. SEED Individual Funding

UPES offers SEED Individual funding to its faculty members to test the feasibility of their research ideas without fear of failure. This in-house financial support is available for consumables, mini equipment, field visits, fees for characterization, software purchase, and other operational expenses. The objective of this initiative is to provide flexible working capital to researchers and leverage these limited funds into substantial external funding, industrial support, or creative scholarship projects.

2. SEED Infrastructure Funding

SEED Infra funding is a program offered by UPES to support the development of central research infrastructure that can benefit a large number of users, especially across multiple schools. The program aims to provide funding for infrastructure that can support engineering, manufacturing, and advanced research activities while adding value to student training. SEED Infra also encourages projects that explore the possibility of revenue generation and prioritize equipment for fundamental studies. The program's objectives align with UPES's focus on providing high-quality education and conducting cutting-edge research.

3. SEED Incubation

The SEED Incubation scheme is a program that aims to support faculty members at UPES who have a proof of concept that has the potential to become a marketable product. This initiative is focused on taking the concept to the next level of Technology Readiness Level (TRL) 5 and higher. The scheme provides a grant that can be used for prototyping, testing, and the development of a minimum viable product to move the technology closer to market readiness and ultimately commercialize it.

The ultimate goal of the program is to create a culture of innovation and entrepreneurship at UPES and to support faculty members in their efforts to bring their research and innovation to the market.

4. SHODH support for students

UPES is committed to instilling a culture of innovation-driven entrepreneurship in all its students. SHODH is an initiative that provides a testing ground for students to validate their ideas, develop new technology, or design products that would lead to

technology or product development, research papers, patents, and/or startups. The objective of this initiative is to inculcate a culture of innovation-driven entrepreneurship that can address emerging local and global challenges and provide opportunities related to the development of sustainable products/technology.

5. Patents

UPES has a dedicated IPR cell as per the recommendations of UGC to address the awareness and importance of intellectual property along with preserving and safeguarding such intellectual property through patents and copyrights. Standard operating procedures for intellectual property creation, formulation, and filing to granting have been established. This initiative enables the faculty to work on strengthening the idea both technically and economically.

6. Anusandhan

UPES is committed to building research capacity for faculty and students to drive innovation. Anusandhan equips researchers with the latest developments in their fields through seminars, workshops, invited talks, and brainstorming sessions. These activities provide updates on state-of-the-art research topics and train participants in advanced methods, tools, and techniques to conduct cutting-edge research, fostering a dynamic environment for knowledge exchange and skill development.

7. Learning with Leaders

UPES recognizes that public funding is a strong source for strengthening research potential locally and globally. To enable young and seasoned researchers to embark on public funded research projects within or across disciplines, UPES provides experiential support sessions with pioneers of the respective domain and funding agencies. The objective of this initiative is to enable the faculty to learn from experts and empower them to independently ideate, formulate, and frame a research proposal that can potentially grab funding opportunities.

8. Runway

Runway, an initiative by UPES Council for Innovation and Entrepreneurship (UCIE), is a state-recognized business incubator and nodal agency that provides flexible space, resources, and mentoring to incubate organizations in Uttarakhand. Its objective is to encourage entrepreneurship and help incubate organizations that can create jobs and revenue for the region. As a member of the University Business Incubator (UBI) Global, Runway has a unique opportunity to explore and understand India's incubation ecosystem and foster innovation-driven entrepreneurship.

9. Grant for Travel

Faculty and students are encouraged to participate in and present their research at various international and national forums (conferences/workshops/seminars, etc). UPES provides travel grant for the same.

10. Research Database

Access to subscription-based databases is essential for conducting credible research. To support researchers with reliable resources, UPES has subscribed to multiple research publication databases covering disciplines such as science, engineering, computer science, management, law, humanities, design, media, and health sciences.

11. Centralized Instrumentation Centre

In addition to providing access to word's leading citation databases and subscription to high quality peer reviewed journals. UPES has a central Instrumentation Centre (CIC) which has state-of-the-art experimentation facility. An updated list of equipment at CIC can be found at www.research.upes.ac.in

Training on Equipment: UPES also supports hands-on training on sophisticated instruments. This aims to provide support to establish their research findings and corelate with data through various instruments

12. Academic Integrity awareness (ethics and plagiarism)

UPES is committed to maintain high academic standards in its programs and expects faculty, students and staff to conduct themselves in a manner that is fair, honest and consistent with the principles of academic integrity, during the entire process of teaching, learning and research. Students and faculty are initiated into ways of uploading academic integrity with the help of academic integrity awareness (AIA) drive. The university has also subscribed to Turnitin, DrillBit (provided by Ministry of Education, GoI) and Learning Management System (Project Orange), which has inbuilt mechanism to do a similarity check for all the content submitted by students as term paper, assignments, etc.

13. Support for organizing conferences / workshops etc.

UPES understand the importance of providing a platform where bright minds research scholars, students, industry experts, policy makers, academicians etc. come together to discuss and address the state-of-the-art in diverse fields present the latest development in various fields of science, technology, etc and deliberate to provide solution to various problems that have challenged us. In order to cater to this need UPES provides support (financial and technical) to organize conferences/workshops, etc.

14. Research Rewards

We at UPES understand the importance of work done by active researchers, who contribute to the overall development of UPES in the form of project funding, patent, papers in peer reviewed high impact journals, etc. UPES recognizes and acknowledge such contributions in annual award event established since September 5, 2014.

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