RESEARCH AND INNOVATION CELL DOON UNIVERSITY

Research Policy 2021

[1] Preamble

The Doon University Research Policy (DU-RP) 2021 envisages the promotion of quality research within the University. In order to enhance the quality in higher education, the University considers the research and innovation to be very important aspects. Our country can succeed to address the societal challenges if higher education institutions have an emphasis on research, innovation, and technology development. The foundation of Self-reliant India (Atma-Nirbhar Bharat) may be very strong if there is an integration of Research, Innovation and Technology Development. The establishment of Research and Innovation Cell will enable the University to attain the targets of Atma-Nirbhar Bharat. The implementation of the research policy is likely to catalyze the multidisciplinary/ transdisciplinary and translational research culture in the University.

[2] Scope

This policy will be applicable on all the faculty members, students or other personnels of Doon University, involved in independent or collaborative research involving different departments, institutions or organizations funded either through university or any other source.

[3] Vision

To put in place a robust mechanism for developing and strengthening the research ecosystem within the University

[4] Mission

(4.1) To create a conducive environment for enhanced research productivity.
(4.2) To encourage and enhance the collaboration of the University with the industry, government, community- based organizations, and agencies at the local, national, and international levels.
(4.3) To facilitate the mobilization of resources and funding for improving research infrastructure, brand image and productivity.

[5] Objectives

(5.1) To create an organizational structure having the components/committees with role-based functions
(5.2) To encourage researchers to identify thrust areas of research, and form related cluster groups/ frontline teams/consortia of researchers.
(5.3) To encourage the appropriate bodies of the University for having the provisions for establishing the research infrastructure and research equipments, the recruitment of research personnel(s), and financial management with adequate autonomy to the Principal Investigator(s) and disseminate research outcomes to stakeholders.
(5.4) To encourage and ensure that the researchers and innovators of the University establish a specific mechanism for promoting, identifying potential collaborators from

industry, research organizations, academic institutions & other stakeholders for cooperation and synergistic partnerships.

(5.5) To encourage and ensure that the University has some nodal center or cell to sensitize the researchers and create awareness among them about funding opportunities with various research funding agencies, extend guidance and support to them in preparation & submission of project proposals and resolve the issues which they face after receiving the grants.

(5.6) To ensure that there are standard operating procedures and formats for different tasks related to research work

(5.7) To ensure that there are hassle-free and expedited procedures for smooth file movements of (a) research related projects or task, (b) payment of fellowships to research personnels (c) the selection procedure of research personnels in sanctioned projects, (d) matters related to procurement in line with the university rules.

(5.8) To ensure that the University is providing adequate support and guidance to the researchers for timely completion of projects and sending Project Completion Report and Utilization Certificates/Statement of Expenditure (UC/SE).

(5.9) To ensure that there are mechanisms in the University to resolve the issues of the researchers (including faculty members, post-doctoral fellows and research students.

(5.10) To ensure that the researchers as well as administrative bodies of the University are in working in compliance with the terms and conditions of sponsored research projects.

(5.11) To encourage and ensure that there is a specific mechanism to put efforts for enhancing the University-Industry Inter Linkage, Incubation, Innovation and Entrepreneurship Development and generation of Intellectual Properties (IP).

(5.12) To encourage and ensure that there is a coordination among different cells/centers

(5.13) To encourage and ensure that the University has an Institutional Research Information System for sharing the status of ongoing/ completed research projects/programmes, expertise & resources, and preparing the database (using ICT) of in-house experts to provide industrial consultancy and services.

(5.14) To encourage the departments and schools of the university for engaging & utilizing the services of superannuated active faculty/scientists in research capacity building of talented young minds and promote mobility of researchers across institutions and R&D Labs.

(5.15) To encourage the researchers and relevant committees to enable and use the nodal center for ideation and conceptualization of research topics/themes by organizing workshops and training programs.

(5.16) To encourage and ensure that the researchers within the University are adhered to the integrity and ethical practices in research activities including clearance of bioethical committee.

(5.17) To ensure that the researchers are involved in creating an interactive research environment and providing platforms such as conferences, seminars, workshops, invited lectures from eminent personalities from all fields including science, engineering, management, social sciences, law, literature, art and culture *etc.*

(5.18) To encourage the researchers for their active participation in the national / international conferences, seminars, workshops.

(5.19) To encourage and facilitate the Departments and Schools to organize research internship/training programmes/workshops for scholars, young faculties and professionals.

(5.20) To encourage and ensure that the researchers are securing and protecting the

intellectual property rights.

(5.21) To ensure that the issues such as academic misconduct, disputes between researchers over data or access, and conflict of interest are resolved at the earliest.

(5.22) To develop the mechanisms for incentivizing the researchers on the quality, productivity and innovative nature of their research works.

(5.23) To develop mechanism for maintaining the record of each and every research project of university and publications/awards by faculty and students.

(5.24) Any other activity as advised by Hon'ble Vice Chancellor.

[6] Research Framework and Strategy

[6.1] Research in Doon University will be conducted by application of knowledge for overall improvement of quality of life and development of the nation at large.

[6.2] The Research Policy will be implemented by Research Cell for specific purpose of governance, administrative and financial facilitation and promotion of research activities.

[6.3] The functions of Research Cell will be integrated with all academic bodies of the university (AAC, SRAC, Academic Council, Faculty Committees, Executive Council *etc.*) as required.

[6.4] The Research Cell will make appropriate recommendations to the University authorities on research related issues for final decision and execution. This system will enable collection and compilation of all the data and information related to research in the university. Books.

[6.5] All stakeholders will be sensitized to route all research related documents to administrative authorities through the Research Cell for processing.

[6.6] The researchers will be encouraged to attract the funding from government agencies as well as industry.

[7] Governance

The university will have efficient governance mechanism for ensuring autonomy, transparency, accountability, and adaptability. Such a mechanism will ensure strengthening interlinkages to create a conducive research environment. The University can foster the human elements (faculty, staff, scholars, and students), logistics (research infrastructure and facilities), knowledge resources (research equipment, project utilities, and consumables), fund flow, etc. through a steady, proficient, effective governance (Rules, Norms, and Policies) and financial (Grants and Funds) management. Experienced researchers will constitute the leadership and administrative structure of the research cell for establishing an effective and robust governance. The apex body in the governance may be a council (e.g., Research Governance Council or Research Advisory Council) in which the head or convener will be Hon'ble Vice-Chancellor or his/her nominee. This council will be the decision-making body in context of constituting the committees under the research cell, appointing the director(s)/convener(s), authorizing the Vice-Chancellor for deciding routine matters, accepting the recommendation(s) of the committees on various matters.

[8] Administration

Doon University will create an organizational structure which will include research cell, bodies, authorities, and committees for facilitating the planning, implementation, and

monitoring of research activities, formulating rules, regulations, and policy frameworks for utilization of facilities and resources at the University. The university will develop some specific mechanism or strategy to bring a single-window operational system into existence and function. The activities of research cell will be mentored and monitored by various committees. Such committees will work for devising research models, technology, appraisal, foresight and review functions, mediating sectoral R&D progress, and IPR protection. The research cell will have a close contact with Ministry Innovation Cell so that various innovative plans may be used for facilitating the researchers.

[9] Research Ecosystem/Collaboration

It is well known that a vibrant research ecosystem in the universities aims to provide meaningful thrust for sustainable research and innovation and promote collaboration between government, universities, research institutes and industries. Doon University will work to build a sustainable research ecosystem in which the researchers will be facilitated for quality outcomes and improved productivity. The University will be connected (through its research cell) with the research cells of already well-known/established higher education or research institutions. The research cell of the University will work to facilitate the collaborative research with other national and international institutions in inter-disciplinary, trans-disciplinary, and multidisciplinary research areas. University through its research cell will work to develop strategic partnerships with key industry players, research organizations, institutions, associations, NGOs, and government bodies. The cell will also work to develop collaborations, partnerships, consortia, and combined ventures for joint research activities to facilitate the exchange of researchers. The University will work to strengthen resource sharing within the university and among universities, funding agencies, industries, corporate and government.

[10] Information Management System

The University will work to develop and improve Research Information Management System (RIMS). This system will be helpful in the advancement of both research and innovation. It will be beneficial for the researchers and the stakeholders. This system will be used to collect and manage research-oriented information, databases, publications, research projects, fellowships, collaborations, patents, thrust areas, innovations etc. It would also be used as a platform for accessing resource-centric information pertaining to human capital (expertise), physical capital (state-of-art laboratories and high-end instrumental facilities), and knowledge capital (digital library & information, intellectual property facilitation). In accordance with the requirements (laid down by various regulatory agencies), the researchers can use this system to submit, modify, or update their research compliances such as protocols, formats, approvals, documentary records, equipment lists, etc. This system can also be used to obtain a centralized and integrated database to manage issues related to and radioactive-safety approval clearances for use and disposal of biological, chemical and radioactive hazardous materials, protective equipment measures, surveillance of staff, appropriate trainings/workshops, etc.

[11] Research Promotion & Guidance

The research activities at the University will be aligned with the mandates of various National Missions in order to contribute to achieving the national goal of Self-Reliant India (Atma-Nirbhar Bharat). Research Cell will work to encourage faculties to conceive ideas

through enhanced industry-academia interactions and prepare research proposals for funding from various agencies. In order to motivate the end-users (students, scholars, and faculties) to participate actively in the process of ideation and innovative research in emerging areas, the research cell of the university will organize capacity-building programs (Research Methodology and Research Techniques). In addition, emphasis will also be laid down on conducting specific research theme-based workshops and research internships.

[11.1] Research Thrust and Clustered Areas

The research cell will work to identify the thrust areas for research. It must also work to have the information and knowledge about the availability of key resources, including in-house human resources, faculty research competencies, and support systems. The cell will also underpin the societal needs. The cell will work to form research clusters and/or regional research consortia so that the researchers may connect with each other for joint high value (interdisciplinary and trans-disciplinary) research projects to avail national and international funding opportunities. Such consortia will focus on finding solutions in inter-disciplinary, trans-disciplinary, and multidisciplinary areas. The incubation center of the University will put efforts to transform innovative ideas (administered and monitored by the research cell) into processes and products.

[11.2] Research Incentives and Recognition

Research cell will work to trigger and catalyze the research interest among scholars and faculties by institutionalizing the awards and incentives. Incentivizing the researchers for their quality publications and patents will have an enduring positive impact. Research cell will institutionalize a variety of awards for accomplishments/achievements of researchers in the form of impactful quality research and/ or research-based teaching to stimulate and invigorate the research and innovation activities in the university. Research cell will also develop some specific mechanism and policy for identifying and recognizing high-performing research faculty and develop a unique Research Career ladder for them.

[11.3] Technology Development and Business Centred Facility

The research cell (in collaboration with incubation center and other related cells) will work to establish a facility centered on technology and business development. Such a facility will be a hub for strategic partnerships/ collaborations, industry-institute interface, sponsored or contract research, new knowledge generation, IPR, and patent services, technology transfer, and commercialization of research to facilitate innovation, incubation, entrepreneurship and start-up ventures.

[11.4] Finance

The research cell will work to facilitate resource mobilization from government, industry, and other funding agencies so that a corpus may be created for research activities. The corpus created for research could also support the seed funding for freshly recruited faculty for developing research facilities, publications and patenting. Efforts will also be made to obtain Corporate Social Responsibility (CSR) funds for research activities. The university will make provision for research in the annual budget subject to the availability of funds.

[12] Integrity and Ethics

The research cell will work to sensitize the researchers to understand the importance of

integrity and ethics and comply with ethical codes of research and publishing practices at institutional, national, and global levels. The university will provide access of a standard and internationally reputed software to all researchers for implementing the mechanism to avoid any kind of plagiarism. In addition, the cell will sensitize the research community about dubious research and publishing practices and predatory journals.

[12.1] The researcher will have the right and responsibility to (i) ensure that research is accurately reported to scientific and academic community and (ii) choose the appropriate mode of publication or presentation of data and results.

[12.2] Researchers can take due credit and publish the research outcome or method/process/technology developed, file patent or claim its intellectual property right in any other form, but affiliation with university for carrying out research has to be prominently mentioned/exhibited and acknowledged at appropriate place(s).

[12.3] Under special conditions, the university may restrict a researcher from putting anything related to research in public domain.

[12.4] Any transfer of copyright having a financial implication will have to be executed only upon permission from the university.

[12.5] Both the researcher and university will hold the right in the intellectual property generated from research. However, the decisions of university will be the binding in all cases of transfer of IPR for any productive purpose.

[12.6] If any financial income arises out of a research, the income distribution will be in accordance with the Consultancy Policy of Doon University.

[13] Capacity Building

Research Cell will work to build the capacity of faculty and students to undertake research problems in line with the latest advances and emerging fields. The competence, thus acquired by the researchers, will be reflected in the publications and contributions to technological developments. Such researchers will also pave the way for the university to attract more research grants under norm-based funding, improve its accreditation ranking and enhance its brand image. The research cell will organize regular events such as refresher courses, workshops, trainings/internships, and seminars/conferences for this purpose i.e., capacity building.

[14] Research Monitoring

[14.1] The research cell will work to ensure that the researchers are involved in research development and innovation activities through the creation of infrastructure, generation of resources, promotion of business, and facilitation of policy framework while adhering to ethical practices. The culture of such research and innovation activities which are in line with policy environment in India will be nurtured.

[14.2] The research cell will monitor the research progress, coordinate program, manage and facilitate optimizing resources, timely review of research activities for completion of the projects as per schedule. The research cell will also formulate and recommend the quality benchmarks for research to meet the global/international standards.

[14.3] The research cell will undertake an internal evaluation of the research papers and suggest Scopus Indexed, Web of Science (WoS), or UGC-CARE recognized journals for appropriate publications.

[14.4] The cell will also work to ensure that all the research labs in the institution fulfill

the norms of Good Laboratory Practices (GLP) and Safety (Bio and Chemical) measures, recognized as QIP center and by the National Accreditation Board of Laboratories (NABL).

[14.5] In addition, research cell will also define the research data, that would mean facts, materials or physical items or articles, artefacts, observations, experiences, responses to questionnaires *etc* collected by researcher which are used for making inferences or drawing conclusions and on which an argument, theory or test is based. Data may be numeric, descriptive, visual or virtual. Data may also be raw or processed, experimentalor observational. Data will also include all kinds of laboratory and/or field notebooks, maps, photographs, audio-video recordings or any other thingcollected or generated by researcher. Research material in addition to hardware and equipment would include books, consumables, apparatus, computer, digital media *etc.* Provenance information such as how, when, where the data were collected and the means of collection, the software code and license used to generate, annotate or analyze the data are also included in research material and property. All these will always belong to the university.

[14.6] Research cell will also ensure the security and confidentiality of the research data that incorporates confidential information such as, personally identifiable human participant data, and trade secrets.

[15] Dispute Redressal and Resolution

These are broad policy guidelines and principles, which shall evolve in due course of time. The spirit holds greater importance than words and sentences. All cases of lack of clarity on any issue, or any ambiguity, or subjectivity in interpretation, must be reported to the university, whose decision will be final and binding. The Vice Chancellor may, at any point of time, call for its amendment or revision as deemed appropriate.