
Innovation and Startup Policy

Version 1.0



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INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KALYANI
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1. Introduction

The Government of India's initiative to nurture the spirit of innovation among the Higher Educational Institutions (HEIs) and translate these into products, processes and services for commercial exploitation has manifested in two policy guidelines:

- a) the National Innovation and Startup Policy (NISP) (Ministry of Education, Sep 2019; https://mic.gov.in/assets/doc/startup_policy_2019.pdf), (https://drive.google.com/file/d/1v1WsCMMg7K5D11hcU8p1WdqTcTo_MA-T/view?usp=share_link), (<https://drive.google.com/file/d/1otHEM9hK6sUPcufWdFf5MgktvtoadSdM/view?usp=sharing>) and
- b) Draft guidelines for Intellectual Property Rights (IPR) in academic institutions (Department of Industrial Policy and Promotion, Sep 2019).

The Indian Institute of Information Technology Kalyani (IIIT Kalyani), hereafter referred to as the 'institute', has reviewed these policies, mapped them to ongoing design, innovation and incubation activities and enabling units in the institute, identified gaps and initiated consultations with faculty, staff and a cross-section of students to frame a policy that is specific to the context of the institute. The rest of the document specifies the Innovation and Startup Policy of the institute and related procedures.

2. Abbreviation/Terminologies

MoE	Ministry of Education, Government of India
BoG	Board of Governors, the principal executive body of the institute as per the IIIT Act
Senate	The principal academic body of the institute as per the IIIT Act
Research Advisory Board	Research Advisory Board, a body setup in 2018, as per the IIIT Act to primarily help identify potential areas of research, and organize and promote research in the institute. Item 22.2.(e) of the Act states that the Research Advisory Board "may provide for incubation of technology applications emerging from research and to protect and utilize the intellectual property obtained from research in the institute"
Director	Director - the principal executive officer of the institute as per the IIIT Act
SRIC	Sponsored Research Industrial Consultancy, a unit set up by the institute in 2018 to look after the sponsored research and externally funded projects. https://iiitkalyani.ac.in/php/proj_spons.php
IIC	Institute Innovation Council of IIIT Kalyani. It is guided by the MoE Innovation Cell to systematically foster the culture of innovation among students and faculty in a HEI, establish an ecosystem for scouting ideas and pre-incubation of ideas among students, and prepare the institute for ARIIA ranking (https://mic.gov.in/). IIC is operational since December 2018 (IC201810245).
ARIIA	Atal Ranking of Institutions in Innovation Achievements is an initiative of the MoE to systematically rank all major HEIs in India on indicators related to "Innovation and Entrepreneurship Development" among students and faculty (https://www.ariia.gov.in/). The institute's ARIIA data is available in http://iiitkalyani.ac.in/images/ARI-U-0796.pdf

IPR Cell	Intellectual Property Rights Cell, a unit recently setup to promote awareness of intellectual property rights and facilitate filing of patents and technology commercialization by faculty and students. IPR Cell will be operational as early as possible.
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3. Innovation and Startup Policy

3.1 Objective and Scope

- a. The objective of the Innovation and Startup Policy is to enable the faculty, staff and students of the institute to participate in innovation and entrepreneurship activities, and encourage them to consider entrepreneurship and startup as a career option.
- b. This policy shall apply to all faculty, staff and students who have established legal relationship with the institute. Such a legal relationship may arise pursuant to the provision of law, collective agreement or individual agreement (may refer to employment/retainership contract/ pursuance of studies or any other legal arrangement). The policy also encourages involvement of the institute's alumni, and local industry in the entrepreneurship and startup activities.

3.2 Strategies and Governance

- a. Entrepreneurship promotion and development is one of the key dimensions of the institute's vision and strategy. The institute will use the ARIIA ranking framework to set objectives and track the different performance indicators and guide actions.
- b. The entrepreneurial agenda of the institute will be the responsibility of the Director. Since promoting entrepreneurship requires a different type of mindset as compared to other academic activities, this role may be staffed by a faculty who understands the industry and above all business, with clear goals tied to innovation and incubation ecosystem development and ARIIA ranking.
- c. A sustainable financial strategy may be developed by the institute administration to support investment in the innovation activities
 - i. The institute has created a separate 'Innovation Fund' and plan towards allocating 1% of the total annual budget of the institute for funding and supporting innovation activities of units such as: (1) the IPR Cell (IPR awareness, patenting and licensing); (2) IIC (awareness sessions on innovation and entrepreneurship, hackathons, demo days, field visits, market surveys, etc. as prescribed by the MoE Innovation Cell) and; (3) design/innovation/entrepreneurship-oriented Student Clubs (participation in prestigious national and international innovation contests). The budget requirement for each financial year may be presented by the Director to Finance Committee, BoG, and its utilization may be as per the GFR guidelines. The Innovation Fund is not meant for funding startups or the incubator. It is also not meant for providing seedgrants for faculty research.
 - ii. The financial strategy should also involve raising funds from diverse sources such as Central and State Governments and related bodies, corporates (CSR

funds), and non-governmental organizations to support innovation and entrepreneurship.

- iii. Institute may also raise funding through sponsorships and donations. Institute should actively engage alumni network for promoting innovation and entrepreneurship.
- d. The proposals for establishment of startup by any faculty/staff/student in the Institute shall be submitted to the NISP expert committee. The committee may evaluate the eligibility as per the policy and recommend to the Director for approval. The committee may also recommend to the Director to set up a review committee of external experts, where appropriate. All approvals may be reported to the BoG.
- e. The innovation and entrepreneurship strategy will embrace the entrepreneurial activities across various centers, departments, faculty members, within the institute. The objectives of the units may be aligned with the innovation objectives and performance indicators of the institute.
- f. Importance of innovation and entrepreneurial agenda should be known across the institute and should be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc. The IIC comprising student and faculty representatives will play an important role in the above, along with student clubs.
- g. Development of entrepreneurship culture should not be limited within the boundaries of the institution. Faculty and staff may participate in initiatives to promote startups outside the institute with prior approvals. The amount of time a faculty or staff spends on such initiatives may not exceed 20% (1 day in a 5-day week) and must be in line with the definition of startup and mandate of the institute.
 - i. The institute must strive to be the driving force in developing entrepreneurship culture in its vicinity (regional, social and community level). This shall include giving opportunity for regional startups, provision to extend facilities for outsiders and active involvement of the institute in defining strategic direction for local development.
- h. Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, and engaging the international faculties in teaching and research should also be promoted.

3.3 Startups Enabling Institutional Infrastructure

Creation of pre-incubation and incubation facilities for nurturing innovations and startups in HEIs institutions should be undertaken. Incubation and Innovation need to be organically interlinked.

The goal of the effort should be to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

- a. The institute may create and continuously improve facilities to support pre-incubation and Incubation / acceleration by mobilizing resources from internal and external sources.
- b. All Innovation and Pre-Incubation facilities should be accessible 24x7 (with permission from the Director) to students, staff and faculty of all disciplines and departments across the institution. Incubation facilities may be offered as per the

rules of the Technology Business Incubator (TBI). Institute will collaborate with nearby TBI of other Institutes to facilitate this support to students and faculty members.

- c. Institute may offer mentoring and other relevant services through Pre-incubation/Incubation units in-return for fees(or) zero payment on case-to-case basis. The BoG may be informed of such activities.
- d. Product to market strategy for startups may be supported by the institute on deserving cases with the approval of the Director and the BoG.

3.4 Nurturing Innovations and Startups

- a. The institute will encourage the creation and nurturing of Startups/enterprises by students (Undergraduate, Dual Degree, Post Graduate, Ph.D.), staff (including temporary or project staff), and faculty. They will be encouraged to apply for incubation with the institute's incubator. However, the selection of the startup for incubation will be as per the guidelines of NISP, MoE. They can also apply to other incubators or use their own funds.
 - i. Student inventors in their final year (Undergraduate, Post Graduate) may also be allowed (with confirmation from senate) to opt for developing their startup in place of their summer trainings/internships, mini project/major project; select their project supervisor from other departments in line with the startup requirements. The consent of the supervisor may be provided. The student must also describe how they will separate and clearly distinguish their ongoing research activities as a student from all the work being conducted at the startup in their project thesis. In such cases, IP transfer or waiver will be as per the IPR policy.
 - ii. PhD students in their final stage of research will be encouraged to commercialize their technology developed as part of their research with prior approval of the guide. They may be allowed to spend 20% of time (1 day in a week) to pursue startup related activities without disrupting their teaching assistant and research responsibilities. In such cases, IP transfer or waiver will be as per the IPR policy.
 - iii. The institute will allow licensing of IPR from institute to startup as per the IPR policy. Students and faculty/staff members intending to initiate a startup based on the technology developed or co-developed by them or the technology owned by the institute, may be given a license on the said technology as per the IPR policy.
 - iv. The institute will encourage students to intern with the startups incubated in any recognized incubator while studying. In such cases students may be permitted to select or change project supervisors in line with the area of interest. The consent of the supervisor may be communicated to the Director.
 - v. Student inventors will also be allowed to opt for developing their startup in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a startup may be interdisciplinary or multidisciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the startup.
- b. Student entrepreneurs will not be given any flexibility with respect to attendance

required for meeting academic requirements. They will be permitted to opt for fewer courses in their final year, extend their registration and complete the degree requirements within the limit established by the institute Senate.

- c. The institute will allow its students to take a semester/year break (or even more depending upon the decision of review committee constituted by the institute) to work on their startups and re-join academics to complete the course. They may be given the option to appear for placements at the time of their completion
- d. The institute, depending on availability, will provide accommodation to the entrepreneurs within the campus for some period of time on nominal charges as applicable
- e. The institute may consider starting a part-time/full time Masters and PhD program in innovation and entrepreneurship where one can get degree while incubating and nurturing a startup company after satisfying the necessary academic requirements (within and exit options as per NEP 2020). This will be subject to the approval of the Senate
- f. Interdisciplinary research and publication on startup and entrepreneurship should be promoted by the institute
- g. Institute may facilitate the startup activities/ technology development by allowing students/ faculty/staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:
 - i. Short-term/ six-month/ one-year part-time entrepreneurship training
 - ii. Mentorship support on regular basis
 - iii. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product costing, marketing, brand-development, human resource management as well as law and regulations impacting a business
 - iv. License institute IPR as discussed in the IPR policy
- h. Participation in startup related activities, product development and commercialization will be considered as a legitimate activity of faculty in addition to sponsored research, industrial consultancy or continuous education. Each faculty may choose a mix of these activities in addition to minimum required teaching, guidance and administrative duties. Institute may take the initiative to update performance evaluation policies in consultation with the BoG.
- i. The institute at no stage will have any liability accrue to it because of any activity of any startup.

3.5 Product Ownership Rights for Technologies Developed at the Institute

- a. The ownership of IP will be as per the IPR policy of the institute
- b. The IPR coordinator will be the convener for IPR / technology-licensing / incubation etc. matters and present before an expert committee nominated by the Director for decision on such matters.

3.6 Organizational Capacity, Human Resources and Incentives

- a. Institute may recruit faculty and staff that have a strong innovation and entrepreneurial/ industrial experience, behavior, and attitude. The selection

committee may look for this potential as an added advantage on top of the prevalent rules for recruitment. The institute may use the MoE approval for recruiting industry experienced faculty. This will help in fostering the innovation and entrepreneurship culture

- i. Some of the relevant faculty members with prior exposure and interest may be deputed for training to promote innovation and entrepreneurship
- ii. To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff may be developed with constant upskilling.
- b. Faculty and departments of the institutes have to work in coherence and cross-departmental linkages may be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge
- c. In order to attract and retain right people, the institute in consultation with the BoG may develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities
 - i. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.
 - ii. The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships
 - iii. A performance matrix may be developed and used for evaluation of annual performance.
- d. Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills which are not available internally. Such experts may be paid honorarium as per the institute norms
- e. Faculty and staff are encouraged to do courses on innovation, entrepreneurship management and venture development using their professional development fund

3.7 Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level

- a. To ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market, the institute will rely on the following mechanisms
 - i. Students shall be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs should innovate with focus on the market niche. Students will be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition shall be routinely

organized.

- b. The institute shall provide support to students who show potential, in pre-startup phase. Connecting student entrepreneurs with real life entrepreneurs will help the students in understanding real challenges which may be faced by them while going through the innovation funnel and will increase the probability of success
- c. The institute shall allocate a portion of the Innovation Fund for the IIC activities. IIC will organize various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts will be required to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey. The IIC may comprise innovation champions from within the students/ faculty/ staff for each department/ stream of study.

3.8 Norms for Faculty/Staff Startups

- a. Only those technologies which originate or developed through collaborative research with other institutes/industry from within the institute may be taken up for faculty/staff-led startups
 - i. Role of faculty/staff may vary from being an owner/ direct promoter, mentor, consultant, or as non-executive board member of the startup
 - ii. Faculty/staff startup may consist of faculty/staff members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- b. There would be no restriction on the shares that faculty / staff can take in a startup. However, there may be a limit on the amount of time that a faculty can spend. Faculty/staff may be permitted to use upto 20% of their time (1 day in a 5-day week) on startup initiatives. In case the effort exceeds this limit, they may utilize existing leave / leave without pay/ take sabbatical, without compromising their existing academic and administrative duties and subject to the institute norms and approval of the Director. Sabbatical may be allowed provided the startup work is related to faculty expertise and can advance research in that domain, and eligibility as per institute policy.
- c. In case of selection of a faculty/staff startup by an outside national (CFTI) or international accelerator, a maximum leave (as sabbatical/ existing leave/ unpaid leave / earned leave) of one semester/ year may be permitted as per the institute norms and approval of the Director, and without compromising their existing academic and administrative duties. Sabbatical may be allowed provided the startup work is related to faculty expertise and can advance research in that domain, and eligibility as per institute policy
- d. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company
- e. Faculty must not accept gifts from the startup
- f. Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa
- g. An ethics committee comprising external members may be constituted or help sought from another institution's ethics committee to review any ethical issues, conflict of interest, and human subject related research in startups.

3.9 Pedagogy and Learning Interventions for Entrepreneurship Development

- a. Diversified approach should be adopted to produce desirable learning outcomes, which should include cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery
 - i. Student clubs/ bodies / departments may be encouraged to organize competitions, bootcamps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability
 - ii. Institute may create an annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute
 - iii. For creating awareness among the students, the teaching methods should include case studies on business failure and real-life experience reports by startups
 - iv. Tolerating and encouraging failures: Failures need to be elaborately discussed and debated to imbibe that failure is a part of life, thus helping in reducing the social stigma associated with it. Very importantly, this should be a part of institute's philosophy and culture
- b. Entrepreneurship education should be imparted to students at curricular/ co-curricular/ extracurricular level through elective/ short term or long-term courses on innovation, entrepreneurship and venture development. Validated learning outcomes should be made available to the students
 - i. Integration of expertise of the external stakeholders may be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment
 - ii. In the beginning of every academic session, institute may conduct an induction program about the importance of innovation and entrepreneurship so that freshly inducted students are made aware about the entrepreneurial agenda of the institute and available support systems. Curriculum for the entrepreneurship education should be continuously updated based on entrepreneurship research outcomes. This may also include case studies on failures
 - iii. Industry linkages should be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence
 - iv. Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based
 - v. Customized teaching and training materials should be developed for startups
 - vi. It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader, who would convert an innovation successfully into a product, others may join the leader and work for the startup. It is important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take risk.
- c. Pedagogical changes need to be done to ensure that maximum number of student projects and innovations are based around real life challenges. A committee

involving representatives from NISP expert committee, engineering and science departments and the IPR cell may be created to ensure that learning interventions inculcate entrepreneurial culture, and are constantly reviewed and updated.

3.10 Collaboration, Co-creation, Business Relationships and Knowledge Exchange

- a. Stakeholder engagement should be given prime importance in the entrepreneurial agenda of the institute. Institutes should find potential partners, resource organizations, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs
 - i. To encourage co-creation, bi-directional flow/ exchange of knowledge and people may be ensured between institute, incubators, science parks, etc.
 - ii. Institute may organize networking events for better engagement of collaborators and open up the opportunities for staff, faculty and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
 - iii. Mechanism may be developed by the institute to capitalize on the knowledge gained through these collaborations.
- b. Knowledge exchange through collaboration and partnership should be made a part of institutional policy and institutes must provide support mechanisms and guidance for creating, managing and coordinating these relationships
 - i. Through formal and informal mechanisms such as internships, teaching and research exchange programmes, student clubs, etc., faculty, staff and students of the institutes should be given the opportunities to connect with their external environment.
 - ii. Connect of the institute with the external environment must be leveraged in form of absorbing information and experience from the external ecosystem into the institute's environment.
 - iii. The institute may plan for an innovation knowledge platform using in-house Information & Communication Technology (ICT) capabilities.

3.11 Entrepreneurial Impact Assessment

- a. Impact assessment of institute's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education shall be performed using the ARIIA ranking on an annual basis.
 - i. Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning should be assessed
 - ii. Number of startups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by the institutes should be recorded and used for impact assessment
 - iii. Impact should also be measured for the support system provided by the institute to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial

ecosystem, etc.

- b. Formulation of strategy and impact assessment should go hand in hand. The information on impact of the activities should be actively used while developing and reviewing the entrepreneurial strategy
- c. Impact assessment for measuring the success should be in terms of sustainable social, financial and technological impact in the market. For innovations at pre-commercial stage, development of sustainable enterprise model is critical. COMMERCIAL success along with overall human resource development for nation building, environmental and societal impact are the key measures in long run.