NISP Startup Policy - MSIT (2020)

Guiding Framework for Higher Education Institutions

National INNOVATION and STARTUP Policy 2020 for Students and Faculty of MSIT:
The National Innovation and Startup Policy 2020 for students and faculty of Maharaja Surajmal Institute of Technology (MSIT) will enable the institute to actively engage students, faculties and staff in innovation and entrepreneurship related activities. This framework is inlined with the Ministry of Human Resource Development in bringing uniformity across HEIs in terms of Intellectual Property ownership management, technology licensing and institutional Startup policy, thus enabling creation of a robust innovation and Start up ecosystem across all HEIs.

Preamble
In November 2016, All India Council of Technical Education (AICTE) released a Startup Policy document for AICTE approved institutions, to address the need of inculcation of innovation and entrepreneurial culture in higher education institutions (HEIs). Being inspired from the policy, MSIT designed Innovation and Startup Policy. An eleven membered committee was constituted by MSIT to formulate detailed guidelines for various aspects related to innovation, Startup and entrepreneurship management. This committee deliberated on various facets for nurturing the innovation and Startup culture in MSIT, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, MSIT Innovation and Startup Policy 2020 for students and faculties was prepared.

<u>**VISION**</u>

The 'National Student and Faculty Startup policy 2020' is a guiding framework to envision an educational system oriented towards start ups and entrepreneurship opportunities for student and faculties. The guidelines provide ways to MSIT for developing entrepreneurial agenda, managing Intellectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises established by faculty and students. The policy is designed to achieve the cultural and attitudinal shift and to ensure that 'Innovation and Startup' culture as the primary fulcrum of our higher education system. These guidelines will enable institute to actively support their faculty, staff and students to participate in innovation and entrepreneurship (I&E) related activities, thus encouraging students and faculty to consider start ups and entrepreneurship as a career option. These guidelines will also help emphasize that the entrepreneurship is all about creating a business, which is financially successful.

<u>**MSIT Innovation and Startup Policy 2020 for Students and Faculty**</u>

1. **Strategies and Governance :**

a. Entrepreneurship promotion and development should be one of the major dimensions of the HEIs strategy. To facilitate development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators should be defined for assessment.

b. Implementation of entrepreneurial vision at the institute should be achieved through mission statements rather than stringent control system. The entrepreneurial agenda should be the responsibility of a senior person at the level of dean/ director/ equivalent position to bring in required commitment and must be well understood by the higher authorities. However, one must understand that promoting entrepreneurship requires a different type of mindset as compared to other academic activities. Therefore, this person should be very carefully chosen from someone who understands the industry and above all business.

c. Resource mobilization plan should be worked out at the institute for supporting pre-incubation, incubation infrastructure and facilities. A sustainable financial strategy should be defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.

    i. Investment in the entrepreneurial activities should be a part of the institutional financial strategy. Minimum 1% fund of the total annual budget of the institution should be allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'.

    ii. The strategy should also involve raising funds from diverse sources to reduce dependency on the public funding. Bringing in external funding through government (state and central) such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, etc. and non-government sources should be encouraged.

iii. To support technology incubators, academic institutes may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.

iv. Institute may also raise funding through sponsorships and donations. Institute should actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).

d. For expediting the decision making, hierarchical barriers should be minimized and individual autonomy and ownership of initiatives should be promoted.

2. Startups Enabling Institutional Infrastructure

a. MSIT has created pre-incubation and incubation facilities for nurturing innovations and startups in the institute where Incubation and Innovation are organically interlinked. The goal of the effort is to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

b. This Pre-Incubation/Incubation facility is accessible (with permission) 24x7 to students, staff and faculty of all disciplines and departments across the institution.

c. Pre-incubation facilities of MSIT are within the MSIT campus and under the full control of Surajmal Memorial Education Society.

d. MSIT incubation Cell offer mentoring and other relevant services through Pre-incubation/Incubation units in-return for fees, equity sharing and (or) zero payment basis as per the decision of NISP committee.

3. Nurturing Innovations and Start ups

a. For easy creation and nurturing of Start ups/enterprises applicant may be students (UG, PG, Ph.D.), staff (including temporary or project staff), faculty, alumni and potential start up applicants even from outside the institutions. The preference will be given to those startups which are useful in rural development, helpful in transforming life of the people and which have potential to sustain in the market.

b.
I. In case any startup is not being incubated in the institute due to limited facility/ infrastructure, then it may reach out to nearest incubation facilities in other HEIs in order to facilitate access to their students, staff and faculty.

II. The students and faculty members, intending to initiate a start up based on the technology developed or co-developed by them or the technology owned by the institute, should be allowed to take a license on the said technology on easy term, either in terms of equity in the venture and/ or license fees and/ or royalty to obviate the early stage financial burden.

III. MSIT allows its students / staff to work on their innovative projects and setting up start ups (including Social Start ups) or work as intern / part-time in start ups (incubated in any recognized HEIs/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models.

IV. Student inventors are allowed to opt for start up in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a start up 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 start up.

c. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying are allowed to use institute address to register their company with due permission from the institution.

d. Students entrepreneurs are allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the institute. In case of students, 10% - 20% relaxation of attendance per semester may be considered and the same may be asked from university for necessary permission.

e. The institute have a provision of hostel/guest room accommodation to the entrepreneurs within the campus for some period of time.

f. Faculty and staff are allowed to take off for a two year sabbatical leave (unpaid) for working on startups and come back. Institution should consider allowing use of its resource to faculty/students/staff wishing to establish start up as a fulltime effort. The seniority and other academic benefits during such period may be preserved for such staff or faculty.

g. Institute will 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. Institute will also link the startups to other seed-fund providers/ angel funds/ venture funds or itself may set up seed-fund once the incubation activities mature.
   V. License institute IPR as discussed in section 4 below.

h. The services and facilities are initially free for students as well as faculty for promoting entrepreneurial culture in the institute. After 5 years, institute will take 2% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided and use of the institute's IPR.

    I.   For staff and faculty, institute can take no-more than 20% of shares that staff / faculty takes while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares, listed above.

    II.   No restriction on shares that faculty / staff can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, then they will go on sabbatical leave.

    III.   In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services by paying charges basis to take a final decision based on satisfaction of 15 MIC services offered by the institute/incubator. In that case, during the cooling period, institute cannot force startup to issue equity on the first day of granting incubation support.

i. The institute will also provide services based on mixture of equity, fee-based and/ or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the institute on charge (by paying money) basis. Institute could extend this startup facility to alumni of the institute as well as outsiders.

j. Participation in start up related activities will be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.

k. Product development and commercialization as well as participating and nurturing of startups would now be added to a bucket of faculty-duties and each faculty would choose a mix and match of these activities (in addition to minimum required teaching and guidance) and then respective faculty are evaluated accordingly for their performance and promotion.

l. Institutions might also need to update/change/revise performance evaluation policies for faculty and staff as stated above.

m. Institute should ensure that at no stage any liability accrue to it because of any activity of any startup.

n. The progress of every startup will be monitored by the NISP committee as per the timeline given in the startup document. Progress presentations may be conducted for every startup at the end of every six months.

4. Product Ownership Rights forTechnologies Developed at the Institute

a. When institute facilities / funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by inventors and the institute.

   I.   Inventors and institute could together license the product / IPR to any commercial organization with inventors having the primary say. License fees could be either / or a mix of

            1. Upfront fees or one-time technology transfer fees

            2. Royalty as a percentage of sale-price

            3. Shares in the company licensing the product

   II.   An institute may not be allowed to hold the equity as per the current statute, so SPV may be requested to hold equity on their behalf

   III.   If one or more of the inventors wish to incubate a company and license the product to this company, the royalties would be no more than 4% of sale price, preferably 1 to 2%, unless it is pure software product. If it is shares in the company, shares will again be 1% to 4%. For a pure software product licensing, there may be a revenue sharing to be mutually decided between the institute and the incubated company.

b. On the other hand, if product/ IPR is developed by innovators not using any institute facilities, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product/ IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.

c. If there is a dispute in ownership, a minimum five membered committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the institute's alumni/ industry experts (having experience in technology commercialization) and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. Institute can use alumni/ faculty of other institutes as members, if they cannot find sufficiently experienced alumni / faculty of their own.

d. Institute incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If institute is to pay for patent filing, they can have a committee, which can examine whether the IPR is worth patenting. The committee should consist of faculty who have experience and excelled in technology translation. If inventors are using their own funds or non-institute funds, then they alone should have a say in patenting.

e. All institute's decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / institute will have no say, including heads of department, heads of institutes, deans or registrars.

f. Interdisciplinary research and publication on startup and entrepreneurship will be preferred and promoted by the institution.

Norms for the Faculty Startups

a. For better coordination of the entrepreneurial activities, norms for faculty to have startups should be created by the institutes.

   I.   Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup

   II.   Institutes should work on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.

   III. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.

b. In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, they may take sabbatical leave upto two years. At one time, not more than 10% of the faculty should be allowed to take leave for the startups.

c. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company.

d. In case of selection of a faculty start up by an outside national or international accelerator, a maximum leave (as sabbatical/ existing leave/ unpaid leave/ casual leave/ earned leave) of one semester/ year (or even more depending upon the decision of review committee constituted by the institute) may be permitted to the faculty.

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. Human subject related research in startup should get clearance from ethics committee of the institution.

Pedagogy and Learning Interventions for Entrepreneurship Development

a. Diversified approach will 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 will be created for organizing 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. Institutes should start 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: Our systems are not designed for tolerating and encouraging failure. 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.

V.   Innovation champions should be nominated from within the students/ faculty/ staff for each department/ stream of study.

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 should 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 should conduct an induction program about the importance of I&E 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 should 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. Sensitization of students should be done for their understanding on expected learning outcomes. v. 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. Learning interventions developed by the institutes for inculcating entrepreneurial culture should be constantly reviewed and updated.

9. 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 mediumsized 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 should be ensured between institutes such as incubators, science parks, etc.

 ii. Institute should organize networking events for better engagement of collaborators and should 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 should be developed by the institute to capitalize on the knowledge gained through these collaborations.

 iv. Care must be taken to ensure that events DON'T BECOME an end goal. First focus of the incubator should be to create successful ventures.

b. The institute should develop policy and guidelines for forming and managing the relationships with external stakeholders including private industries.

c. 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, clubs, social gatherings, 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. Single Point of Contact (SPOC) mechanism should be created in the institute for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.

 iv. Mechanisms should be devised by the institutions to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.

 v. Knowledge management should be done by the institute through development of innovation knowledge platform using inhouse Information & Communication Technology (ICT) capabilities

Entrepreneurial Impact Assessment

a. Impact assessment of institute's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education should be performed regularly using well defined evaluation parameters.

 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 start ups 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. COMMERCIALsuccess is the ONLY measure in the long run.