

COLLEGE NATIONAL INNOVATION AND START UP POLICY (NISP) 2021

ABSTRACT

National INNOVATION and STARTUP Policy 2021 for Students and Faculty

A Guiding Framework

MHRD's Innovation Cell and AICTE's initiative of The National Innovation and Startup Policy 2019 for students and faculty of Higher Education Institutions (HEIs) will enable the institutes to actively engage students, faculties and staff in innovation and entrepreneurship related activities. Uniform and successful implementation of the 'NISP 2019' for students and faculty of all the HEIs across the nation is the main objective. The roadmap suggested through this document is 'broad guidelines' for an institution.

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PREAMBLE

The National Innovation and Startup Policy 2021 for students and faculty will enable the institutes to actively engage students, faculties and staff in innovation and entrepreneurship related activities.

India aspires to become 5 trillion-dollar economy by 2024. To reach the mark, it needs to evolve systems and mechanisms to convert the present demographic dividend into high quality technical human resource capable of doing cutting edge research and innovation and deep-tech entrepreneurship.

The 'National Student and Faculty Startup Policy 2019' for HEIs is a guiding framework to envision an educational system oriented towards startups and entrepreneurship opportunities for student and faculties. The guidelines provide ways to Indian HEIs for developing entrepreneurial agenda, managing Intellectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises established by faculty and students.

In India, innovation is still not the epicenter of education. In order to achieve the cultural and attitudinal shift and to ensure that 'Innovation and Startup' culture is the primary fulcrum of our higher education system a policy framework and guidelines are the need of this hour. These guidelines will enable institutions 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 recommendations and guiding principles will also help HEIs in creating their own policy framework, if required.

Moreover, these guidelines will facilitate Ministry of Human Resource Development in bringing uniformity across HEIs in terms of IPR ownership management, technology licensing and institutional startups policy, thus enabling creation of a robust innovation and Startup ecosystem

across all HEIs. These guidelines will also help emphasize that the entrepreneurship is all about creating a business, which is financially successful.

With this vision, 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). The policy primarily focused on guiding the AICTE approved institutions in implementing 'Startup Action Plan' of Government of India. Subsequent to release of the Startup policy by AICTE and further interaction & feedback received from education institutions, a need was felt for a more elaborate and comprehensive policy guiding document, which could be applicable for all the HEIs in India.

A fifteen membered committee was constituted by Ministry of Human Resource Development 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 HEIs, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, National Innovation and Startup Policy 2019 for students and faculties of HEIs were prepared.

As per the guidelines issued by MHRD Innovation Cell and AICTE, the following various cells have formed at institute level to create innovation and startup ecosystem within college campus.

Constitution of Institutions Innovation Council (IIC)

Name of the Member	Member Type	Role of the Member
Prof. DR. S. R. Patil	Principal	President
Prof. Dr. S. L. Kore (Assoc. Prof. E&TC dept.)	Faculty	SPOC
Prof. A. D. Khairkar (Asst. Prof. IT dept.)	Faculty	Convener
Prof. A. D. Khairkar (Asst. Prof. IT dept.)	Faculty	Innovation Cell and ARIIA
Prof. V. P. Mulik (Asst. Prof. E&TC dept.)	Faculty	Start Up Cell and Incubation cell
Prof. M. S. Kasar (Asst. Prof. E&TC dept.)	Faculty	Entrepreneurship Development Cell
Prof. Dr. S. L. Kore (Assoc. Prof. E&TC dept.)	Faculty	IPR , ARIIA and NISP coordinator
Prof. M. A. Rane (Asst. Prof. IT dept.)	Faculty	National and International level Hackathon (SIHS)
Prof. S. A. Dhole (Asst. Prof. E&TC dept.)	Faculty	Project Coordinator and SIHH

Prof. Dr. S. P. Kadam (Asst. Prof. Comp. dept.) Mr. Chaware	Faculty	Social Media Coordinator Website Data Coordinator
Dr. Shaila D. Apte Dr. Neeta Doshi Dr. Pratap Sanap	External Experts	Innovation, Start up, IPR and Entrepreneurship and Hackathon
Barakha Mitthal Sneha Bantu Priyanka Padhe	Alumni	Innovation, Start up, IPR and Entrepreneurship and Hackathon
Samrudhi Jadhav Geetanjali Gutte	Students	Student Club/Body for IIC activities

To organize start-up, Innovation, IPR and Entrepreneurship related activities students club is formed.

IIC Students' Club

Role	Name of the Student	Dept.	Class & DIV	Mobile No.
Coordinator	Samrudhi Jadhav	E&TC	BE	9404956840
Coordinator	Geetanjali Gutte	E&TC	BE	7020733719
Member	Shruti Singh	E&TC	SE I	9440500913
Member	Preeti Vishwakarma	E&TC	TE I	8999191335
Member	Pooja Sharma	E&TC	BE I	9403702209
Member	Ankasha Ranpise	COMP	SE	9823346849
Member	Divya Muske	COMP	TE	7796730147
Member	Amisha Patil	COMP	BE	8007962330
Member	Shailaja Shree	IT	SE	9473355619
Member	Sonakshi Shende Sanskruti Patel	IT	TE	7057593825 7276565265
Member	Yutika Vora Tanvi Kathed	IT	BE	8329074560 7887866363

Vision, mission, short term and long term goals are set to achieve MHRDS NISP 2019 vision.

VISION

To develop innovation and start-up ecosystem at institute

MISSION

To Provide resources and impart skills

SHORT TERM GOALS

Create awareness about IPR, innovations, start-ups and entrepreneurship at institute

Initiate pre incubation centre

LONG TERM GOALS

Establishing incubation centre

Promoting innovation and technology solutions for social and industrial needs

POLICY DRAFT

The institute has formulated the policy in line with the policy of MHRD IIC and AICTE, NISP 2019 for Students and Faculty.

National Innovation and Startup Policy 2019 for Students and Faculty

1. Strategies and Governance

a. To facilitate development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators should be defined for assessment.

b. Financial strategies:

i. 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, MeitY9, 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).

c. 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.

- d. Micro action plan should also be developed by the institute to accomplish the policy objectives.
- e. Institute should develop and implement I & E strategy and policy for the entire institute in order to integrate the entrepreneurial activities across various centers, departments, faculties, within the institutes.

2. Startups Enabling Institutional Infrastructure

- a. Creation of pre-incubation facilities.
- b. This Pre-Incubation facility should be accessible during working hours to students, staff and faculty of all disciplines and departments across the institution.

3. Nurturing Innovations and Start ups

- a. Institute is expected to establish processes and mechanisms for easy creation and nurturing of start-ups/enterprises by students (UG, PG), staff (including temporary or project staff), faculty, alumni.
- b. Reach out to nearest incubation facilities in other HEIs in order to facilitate access to students, staff and faculty.
- c. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the institute to register their company with due permission from the institution.
- d. Students entrepreneurs should be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the institute.
- e. Allow faculty and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the institute) as sabbatical/ unpaid leave/ casual leave/ earned leave 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.
- f. Institute may also link the startups to other seed fund providers'/angel funds/venture funds.
- g. Institutions might also need to update/change/revise performance evaluation policies for faculty and staff.

4. Product Ownership Rights for Technologies Developed at 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. 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 IPR cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. If institute is to pay for patent filing, they can have a committee which can examine whether the IPR is worth patenting.

e. Interdisciplinary research and publication on startup and entrepreneurship should be promoted by the institutions.

5. Organizational Capacity, Human Resources and Incentives

a. 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.

b. Faculty and staff should be encouraged to do courses on innovation, entrepreneurship management and venture development.

6. 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, mechanisms should be devised at institution level.

i. Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development.

ii. Students/ staff should 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.

iii. Students should 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, boot camps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.

iv. To prepare the students for creating the start up through the education, integration of education activities with enterprise-related activities should be done.

b. 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. For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.

i. Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.

d. Institute must develop a ready reckoner of Innovation Tool Kit, which must be kept on the homepage on institute's website to answer the doubts and queries of the innovators and enlisting the facilities available at the institute.

7. Norms for Faculty Startups

a. Only those technologies should be taken for faculty startups which originate from within the same institute.

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. Faculty must not accept gifts from the startup.
 - c. Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa.
 - d. Human subject related research in startup should get clearance from ethics committee of the institution.

8. Pedagogy and Learning Interventions for Entrepreneurship Development

- a. i. Student clubs/ bodies/ departments must 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/ extra-curricular 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. 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.

c. Pedagogical changes need to be done to ensure that maximum number of student projects and innovations are based around real life challenges.

9. Collaboration, Co-creation, Business Relationships and Knowledge Exchange

a. 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. 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.

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.

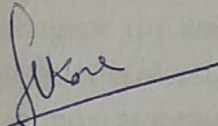
ii. Single Point of Contact (SPOC) mechanism should be created in the institute for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.

10. 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 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.

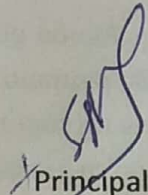
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National INNOVATION and STARTUP Policy 2019 for Students and Faculty, MHRD and AICTE



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