

# **The National Institute of Engineering Mysore – India**

## **Innovation and Startup Policy**

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This policy guidelines on innovation and startup has been farmed with an aim to promote the innovation and entrepreneurship culture within our institution as per the recommendations of MHRD's Innovation Cell ( MIC) to help the nation in meeting its target economy by doing cutting edge research and innovation and deep tech entrepreneurship. Our primary goal would be to link innovation to Enterprises to Financial success. Promoting Innovation and entrepreneurship, this will guide our institute on the mechanism of handholding the students and faculty members supporting their initiatives for successful innovations and startups in the coming years. The guidelines highlight various important points including revenue sharing, IP, equity sharing mechanism, technology licensing, between our institute and its startups

The National Institute of Engineering herein called as (NIE) and The National Institute of Engineering – Institute of Technology (NIE-IT) the Incubation & startup center referred as (ISC) situated at (NIE), has been created to promote innovation and technology based startup ventures helping the nation in fostering the Make in India and AtmanirbharBharat initiatives. These focused initiatives will help the society improving their quality of life and prosperity. The NIEISC will also serve as a competent platform for innovation and startup requirements for the city of Mysore and the country. The Incubation center (ISC) was set up with a potential to create startups focusing on economic growth, strategic value and social relevance. The center supports innovative startups with access to knowledge, funding, infrastructure, mentoring and network. .

The fact that innovation is born out of community interaction and the freedom to learn and explore. Every aspirant will be given an opportunity to explore their passion and build innovative in an inspired environment.

## **1. Strategies and Governance**

- a. The National Institute of Engineering (NIE) is committed to the development of an entrepreneurial ecosystem in the organization, promoting entrepreneurship through pre-incubation, incubation and startup activities for students, faculty members, staff and existing incubates..
- b. The National Institute of Engineering Institutional Innovation Council (NIEISC) will create an ecosystem that will foster, promote innovation and knowledge based entrepreneurship leading to people's aspiration and local needs through financially
- c. Successful ventures. The entrepreneurial agenda will be Chief Innovation Officer supported by the managing committee. He will promote entrepreneurship agenda understating the industry and business with strong background from industry, product development and innovations.

- d. NIE will work out resource mobilization plan for supporting pre-incubation, incubation infrastructure and facilities. NIE as part of institutional financial strategy will allocate minimum 1% of the total annual budget of the Institute for Innovation and Entrepreneur activities.
- e. The Incubation center has been and will be registered as a society / Trust / Section 8 company and will manage as independent entity. Incubation center and its team is empowered to expedite the decision making through individual autonomy and ownership of initiatives as per Society / Trust / Section 8 company The Incubation center will also explore 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..
- f. NIE will also raise funding from sponsorships and donations by actively engaging alumni network for promoting Innovation & Entrepreneurship (I&E).
- g. NIE will focus importance of innovation and entrepreneurial agenda across the institute through periodic conferences, convocations, workshops.
- h. NIE management will define long term goals for the entire institution. Student and faculty startup Policy and action plan will be formulated inline with the current document along with well-defined short-term and long-term goals reaching regional, societal and community level. Plan to integrate the entrepreneurial activities across various centers, departments, faculties thus breaking the silos.
- i. Development of entrepreneurship culture should not be limited within the boundaries of the institution. Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, engaging the international faculties in teaching and research will also be promoted. Successful entrepreneurs from NIE alumni will be invited to share their success stories and startup experience with students, faculty members and incubates.

## **2. Startups Enabling Institutional Infrastructure**

- a. NIE will create and continue pre-incubation and incubation facilities for nurturing innovations and startups. The primary objective would be to organically interlink Incubation with Innovation as without innovation new enterprises are unlikely to succeed. The goal will be linking of INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.
- b. This Pre-Incubation/Incubation facility will be accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution.

- c. NIE will create facilities within the institution for supporting pre-incubation (e.g. IICs
- d. as per the guidelines by MHRD's Innovation Cell, Startup Cell, Student Clubs.) and Incubation by mobilizing resources from internal and external sources.
- e. Pre incubation / Incubation support will be provided to the aspiring students, faculty members and others interested in operating a Startup. NIE will offer mentoring and other relevant services through Pre-incubation/Incubation units. The modalities regarding Equity Sharing in Startups supported through these units will be decided on case to case basis depending upon the nature of services offered.

### **3. Nurturing Innovations and Startups**

- a. The Incubation center will establish processes and mechanisms for easy creation and nurturing of Startups /Enterprises by students of UG, PG, and Ph.D. programs and faculty members. The set processes of the center will ensure to achieve following:
  - i. Incubation support offers access to pre-incubation & Incubation facility to start ups by students,staff and faculty members through an agreement.
  - ii. Will allow licensing of IPR from institute to startup. Ideally students and faculty members intending to initiate a startup based on the technology developed or co-developed by them or the technology owned by the institute, will 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. Will allow setting up a startup (including social startups) and working part-time for the startups while studying / working: NIE will allow their students / staff to work on their innovative projects and setting up startups (including Social Startups) or work as intern / part-time in startups (incubated in any recognized HEI's/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models.
- b. Student inventors may also be allowed to opt for 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.
- c. 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.
  - i. NIE will permit students / faculty members / staff company to register using the institution address with due permission from the center.

- ii. NIE will permit the establishment of startups while pursuing their course.
  - iii. Student entrepreneurs will be given due consideration if their attendance is less than the minimum permissible percentage to appear for an examination. The incubation center will issue recommendation to the authorities for the efforts put by the student during the period of absence for the makeover.
  - iv. NIE will consider the request by the student to take a semester/year break to work on their startups and re-join academics to complete the course.
  - v. NIE will allow faculty and staff to take off for a semester / year as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back.
  - vi. NIE will facilitate the startup activities/ technology development by allowing students/ faculty/staff to use institute infrastructure and facilities with a short term entrepreneurship development program or Mentorship support on regular basis.
- d. The facilities extended by NIE to the incubated companies are;
- i. They can attend the entrepreneurship training with a minimum or no registration fee
  - ii. Incubatee can access technology development, ideation, creativity, design thinking, with a minimum or no charge depending on the consumables and other material usage.
  - iii. Incubation center will provide link to other banks, seed-fund providers/ angel funds/ venture funds. Incubatees will be responsible to secure funds as per the norms and regulations of the funding agencies.
  - iv. Faculty members involvement in startup / incubation / advisory role or mentoring of the startups, should not affect or compromise their regular academic and administrative work / duties.
- e. The alumni of the institute as well as other external teams / individuals can avail this Incubation / startup facility.
- f. Faculty / staff members participation in incubation / startup related activities will be given due weight age while evaluating their annual performance.
- g. Every faculty members may encourage and motivate students to carryout Innovation and Entrepreneur activities.
- h. The incubatee at any stage will not cause any damage to the reputation of NIE and its Incubation center due to any of its activities after executing the contract. The startup activity should never bring the institution to any liability at any stage.

- i. In return of the services and facilities, institute may take 2% to 9.5% equity/ stake in the startup/company, based on brand used, faculty contribution, support provided and use of institute's IPR(a limit of 9.5% is suggested so that institute has no legal liability arising out of startup. Other factors for consideration should be space, infrastructure, mentorship support, seed funds, support for accounts, legal, patents etc.
- j. External incubates will undertake an agreement to become an incubatee and accept to provide a royalty fee of 2% to 5% and a monthly rental for the incubation center to utilize its services.
- k. Student / Staff / Faculty members who are planning to launch a startup company through the incubator on a part time or a combination of equity and royalty as mentioned above will be charged 10 % to 15% of royalty payment.
- l. 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.
- m. No restriction on shares that faculty / staff can take, as long as they do not spend more than20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties.
- n. In case of compulsory equity model, Startup may be given a cooling period of Three months to use incubation services on rental basis to take a final decision based on satisfaction of 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 and charge a fee for the services (at prevailing rates) rendered.
- o. The Incubation center would on case to case basis would considering offering its 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 rental basis.
- p. 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.
- q. Institute should ensure that at no stage any liability accrue to it because of any activity of any startup.

#### **4. Product Ownership Rights for Technologies Developed at Institute**

- a. When NIE 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.
- a. Inventors and institute could together license the product / IPR to any commercial organisation, 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
- b. If one or more of the inventors wish to incubate a company and license the product to this company, the royalties would be 4% of sale price. If it is a pure software product then the royalty would be 9%. If it is shares in the company, shares will again 4%. For a pure software product licensing, there may be a revenue sharing to be mutually decided between the Incubation center and the incubated company.
- a. 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.
- b. 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.
- c. Institute IPR cell or the 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 inventors are using their own funds or non institute funds, then they alone should have a say in patenting.

## **5. Organizational Capacity, Human Resources and Incentives**

- a. NIE to foster the I&E culture, will utilize the services of faculty and staff members having strong innovation and entrepreneurial/industrial experience. They will be deputed for required training to promote I&E.
- b. Efforts will be made to strengthen the cross faculty and cross departmental engagement to gain maximum utilization of internal resources and knowledge.
- c. External subject matter experts and alumni will be engaged for strategic guidance, knowledge sharing thereby enhancing the internal available skills.
- d. NIE will encourage its faculty and staff members to attend courses on innovation, entrepreneurship management and venture development.
- e. NIE will develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
- f. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.

## **6. Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level**

- a. NIE will establish system to maximize exposure of students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market.
- b. NIE will organize periodic programs to develop entrepreneurial mindset of students by initiatives like idea and innovation competitions, hackathons, workshops, boot camps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges
- c. NIE will focus on experiential learning by exposing students in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs and experts and updating the curriculum. Initiatives like, awards and recognition should be routinely organized.
- d. NIE will link startups and companies with other entrepreneurial ecosystem both in India and abroad through their participation in competitions.
- e. The institute has established an Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities.



- f. The Institutions Innovation Council will guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts will be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.

## **7. Norms for Faculty Startups**

- a. Faculty startups select only those technologies which originate within the same institute.
- b. The role of a faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
- c. NIE will safeguard the 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.
- d. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- e. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company. Faculty must not involve research staff or other staff of NIE in activities of the startup or vice versa.
- f. Faculty must not accept gifts from the startup.
- g. Human subject related research in startup should get clearance from ethics committee of NIE. Faculty must abide by the rules of the of HR's policy of the Institute.

## **8. Pedagogy and Learning Interventions for Entrepreneurship Development**

- a. Diversified approach will be adopted to produce desirable learning outcomes, including cross disciplinary learning using mentors, labs, case studies, games, etc.
- b. Student clubs/ bodies will be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies will be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.
- c. In an effort to recognize outstanding ideas, successful enterprises and contribution to promoting innovation and enterprises ecosystem, NIE will start an annual 'INNOVATION & ENTREPRENEURSHIP AWARD'

- d. Teaching methods will include case studies highlighting business failures and real life experience reports by startups. This will create awareness among the students. 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.
- e. Innovation champions will be nominated from within the students/ faculty/ staff for each department of study.
- f. Entrepreneurship education will be imparted to students at curricular/ co-curricular/ extracurricular level through elective/ short term or long-term courses on innovation, entrepreneurship and venture development. The learning outcomes will be made available to the students.
- g. A collaborative culture and engagement with external environment will be achieved by utilizing the external stake holder's expertise while providing entrepreneurship education.
- h. Start of every academic session, NIE will 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.
- i. Industry linkages will be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.
- j. Sensitization of students will be done for their understanding on expected learning outcomes.
- k. Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based.
- l. Customized teaching and training materials will be developed for startups.

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

- a. NIE will promote active engagement of Incubatees with stakeholders and resourceful organizations like, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs.
- b. NIE will engage global stakeholders through bi-directional flow/ exchange of knowledge between institutes / organisations such as incubators, accelerators, science parks, software technology parks etc.

- c. NIE will develop policy and guidelines for forming and managing the relationships with external stakeholders including private industries.
- d. 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.
- e. NIE will create environment to support through formal and informal mechanisms such as internships, teaching and research exchange programs, clubs, social gatherings, etc. to connect with their external environment.
- f. The incubation center will effectively absorb information and knowledge from the external ecosystem into the institute's environment.
- g. Single Point of Contact (SPOC) mechanism will be created in the institute for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.
- h. NIE will collaborate with industries, government, NGO's, and other bodies for exploitation of entrepreneurial opportunities.
- i. NIE institutions Innovation Council (NIEISC) and the Incubation center will do Knowledge management through mutual support and exchange of expertise.

## **10. Entrepreneurial Impact Assessment**

- a. Impact assessment of NIE's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education will be measured regularly using the following evaluation parameters.
- b. Knowledge exchange initiatives, by engagement of all departments and faculty in the entrepreneurial teaching and learning..
- c. 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.
- d. Financial and technological impact in the market for innovations at pre-commercial stage. Essence of COMMERCIAL success is the ONLY measure in long run
- e. Transforming innovative ideas to commercialization with the support and recognition received
- f. Number of effective collaborations with industries / alumni startup & NGO's

## Revision History

- 0.1 Draft document dated 15 Aug 2021
- 0.2 Implemented review comments 1 Oct 2021
- 0.3 Implemented review comments
  
- 1.0 Document Release dated 9 Oct 2021

