

NITTTR BHOPAL –

INNOVATION & START UP POLICY & PROCEDURES 2021 (IISP 2021)

Agenda Item No. 156.4.3 approved by the Board of Governors, NITTTR Bhopal in its meeting held on 16.12.2022

The Ministry of Human Resource Development in 2019 released the National Innovation and Start up Policy 2019 for faculty, staff and students of Higher Education Institutions (HEIs). It facilitates the creation of innovation and startup culture and ecosystem, thereby facilitating Intellectual Property Ownership management, technology licensing, and institutional Startups in the institute.

HEIs were directed by the ministry to form institute's innovation and start up policy. Training programs were arranged by the Ministry of Education Innovation Cell for the same. The matter was taken up in the institute. The draft policy was made and sent to the three-member committee. Suggestions of the committee members were incorporated. It was then presented before the Director, Deans, and Head of the Departments.

National Institute of Technical Teachers Training and Research (NITTTR) (Deemed to be University under distinct category), Bhopal framed its Institute Innovation & Start up Policy and Procedures 2021 (IISP 2021).

This policy will enable the institutes to actively engage faculties, staff, students, alumni, and potential start up applicants outside the institution in innovation and entrepreneurship related activities.

The same was placed and approved by the Academic Council Meeting held on 23.09.2022 at 10.30 am held in the Board Room of the institute vide agenda item No. 27.12. Thereafter the IISP 2021 was again placed before the 156th meeting of Board of Governors held on 16th December 2022 as Agenda Item No. 156.4.3 and the same was approved by the BoG.

For uploading in the institute website.

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Agenda
For
27th Meeting
of the
Academic Council
of
National Institute of Technical
Teachers' Training & Research
Bhopal
to be held

At
Board Room
On

Friday
23rd September, 2022
At 10:30 AM



National Institute of Technical Teachers' Training & Research
Bhopal

Item No. 27.12 To Approve Innovation and Startup Policy of NITTTR Bhopal

The Ministry of Human Resource Development in 2019, released the National Innovation and Startup Policy 2019 for faculty, staff, and students of Higher Education Institutions (HEIs). It facilitates the creation of innovation and Startup culture and ecosystem, thereby facilitating Intellectual Property ownership management, technology licensing, and institutional Startups in the Institute.

HEIs were directed by the ministry to form Institute's Innovation and Startup policy. Training programs were arranged by the Ministry of Education Innovation Cell for the same. The matter was taken up in the Institute. The draft policy was made and sent to a three-member committee. Suggestions of the committee members were incorporated. It was then presented before the Director, deans, and heads of the departments.

This policy will enable the institutes to actively engage faculties, staff, students, alumni, and potential startup applicants outside the institution in innovation and entrepreneurship-related activities.

The Institute's Innovation and Startup policy document is enclosed as **Annexure- 7**.
Academic Council may like to consider this policy.



**National Institute of Technical Teachers'
Training & Research**

(Govt. of India, Ministry of Education)
Shanti Marg, Shamla Hills, Bhopal - 462002 (M.P.)

Minutes of the 156th BoG Meeting

**Held on
16th December 2022**

Member Secretary

NITTTR Bhopal

Chairman

	<p>members from NITTTR, Bhopal may be posted or may be engaged on deputation basis / contract basis. The appointment on contract basis may be made by engaging retired faculty/staff from the DTE of the respective states & the remuneration may be fixed as last pay drawn minus pension. The period of such appointment may be kept as <u>two years</u> only.</p> <p>The proposal is put up to BoG for approval in principle. If approved, the detailed proposal will be worked out.</p>
Item No. 156.4.3	<p>TO CONSIDER AND APPROVE MINUTES OF THE MEETING OF 27th ACADEMIC COUNCIL .</p> <p>27th Meeting of the Academic Council under the Chairmanship of Prof. C.C. Tripathi was held on 23.9.2022 at 10.30 am in the Board Room of the institute. Many important items were discussed in the meeting. Minutes of the meeting are placed before the hon'ble BoG for consideration and approval.(Annexure-2)</p> <p>Salient points of the AC meeting are as under for consideration please-</p> <ol style="list-style-type: none"> To Establishment of Centre for Experiential Learning Cell at NITTTR, Bhopal to enhance teaching-learning activities of the Institute. Research Project Proposals through Internal Funding for 2022-23 To offer Short-Term and Long-Term Internship Programmes To offer PG Diploma and Certificate courses for UG and Diploma students through Siemens Centre of Excellence Revised Fee structure for conducting calendar training programme of NITTTR, Bhopal To offer Modular M.Tech. Programmes with Education Technology by NITTTR, Bhopal To Approve recognition/awards for good work by the faculty To approve the panel for selection of Professors, Associate Professors and Assistant Professors (selection grades), and Assistant Professor for recruitment/promotion under CAS for various departments. To Approve Innovation and Startup Policy of NITTTR Bhopal To organize training programmes under PM Gati Shakti Project To develop a Digital Platform to offer various Courses on Education Pedagogy and emerging area subjects Equivalence of Induction Training Programme Phase – I and Phase – II to Advanced Pedagogy Programme To consider renaming the existing departments.
ITEM NO. 156.4.4	<p>TO INFORM THE PROGRESS REPORT OF ACTIVITIES UNDER PM GATI SHAKTI PROJECT OF THE INSTITUTE.</p> <p>The institute is happy to inform that the NITTTR Bhopal has played a significant role in bringing out change through quality knowledge dissemination and cutting edge research in the logistics and infrastructure</p>



**INSTITUTE INNOVATION & STARTUP POLICY &
PROCEDURES 2021
(IISP 2021)
NITTTR BHOPAL**

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NITTTR BHOPAL Innovation and Startup Policy 2021

Vision

To become an internationally acclaimed centre for promoting innovative technologies and startup initiatives by providing support and assistance to the new-age innovators and entrepreneurial talents among students, faculty, staff, and community.

1. Strategies and Governance

- a. Entrepreneurship promotion and development will be one of the major dimensions of NITTTR Bhopal's strategy. For facilitating the development of an entrepreneurial ecosystem in the organisation, specific objectives and associated performance indicators have been defined.
- b. The mission statement of the institute will be modified in the future for the inclusion of entrepreneurial vision at NITTTR Bhopal. The entrepreneurial schema will be the responsibility of a senior person at the level of professor or equivalent position to bring in the required commitment and will be well understood by the higher authorities. This person will be very carefully chosen from someone who understands the industry and, above all, business.
- c. A resource mobilisation plan will be worked out at the Institute for supporting pre-incubation, incubation infrastructure, and related facilities. A sustainable financial strategy will be in order to reduce the organisational constraints to work on the entrepreneurial agenda.
 - i. Investment in entrepreneurial activities will be included in the financial strategy of the institution. Two percent (which is the minimum) fund of the total annual budget (of the institution) will be allocated for supporting and funding innovation and startups related activities through the creation of a separate 'Innovation fund'.
 - ii. The strategy will also include raising funds from diverse sources to reduce pendency on public funding. Bringing in funding through government (state and central) such as AICTE, DST, DBT, MHRD, TDB, TIFAC, DSIR, BIRAC, CSIR, NSTEDB, NRDC, Startup India, Invest India, MSDE, MSME, MeitY, etc. and non-government sources will be encouraged.
 - iii. To support technology incubators, academic institutes will approach corporate and private sectors for generating funds under CSR per Section 135 of the Company Act 2013.
 - iv. Institute will also raise funding through donations and sponsorships. Institute will actively engross the alumni network for promoting Innovation & Entrepreneurship (I&E).
- d. Decision making hierarchical barriers will be curtailed, and individual autonomy and ownership of initiatives will be promoted for expediting.
- e. The importance of innovation and entrepreneurial agenda will be known across the institute and will be promoted and emphasised at institutional programs such

- as seminars, convocations, conferences, workshops, etc.
- f. Student and faculty startup policy, procedures, and action plan will be formulated at the Institute level, which is in line with the existing document along with well-defined short-term and long-term goals. A micro action plan will also be developed by the institutes to accomplish the policy objectives.
 - g. Institute will develop and implement an I & E strategy and policy for the entire institute in order to assimilate the entrepreneurial activities across various centres, departments, faculties within the institutes, thus breaking the silos.
 - h. Product to market strategy for startups will be developed by the institute on case to case basis.
 - i. The development of entrepreneurship culture will not be limited within the boundaries of the institution.
 - i. NITTTR Bhopal will be the driving force in developing entrepreneurship culture in its vicinity (regional, social, and community level). This will include giving opportunities for regional startups, provision to encompass facilities for outsiders, and active engrossment of the institute in providing strategic direction for local development.
 - ii. Strategic international partnerships will be developed using two-sided and multilateral channels with international innovation groups and other relevant organisations. Also, international exchange programs, internships, engaging the global faculties in teaching and research will also be promoted.

2. Startups Enabling Institutional Infrastructure

The creation of pre-incubation and incubation facilities for nurturing innovations and startups in NITTTR Bhopal will be undertaken. Incubation and Innovation will be organically interlinked. With innovation, new enterprises are likely to succeed. The aim of the efforts would be to link innovation to enterprises to financial success.

- a. NITTTR Bhopal will create facilities within their institution for supporting pre-incubation (e.g. IICs as per the guidelines by MHRD's Innovation Cell, IEDC, New-Gen IEDC, Innovation Cell, Startup Cell, Student Clubs, etc., and Incubation/acceleration by activating resources from external and internal sources.
- b. This Pre-Incubation/Incubation facility will be available 24x7 to students, staff, and faculty of all disciplines and departments across the institution.
- c. Pre-incubation facilities will not be a separate registered entity. Or 'Incubation cum Technology Commercialization Unit' (ITCU) will be a separate entity (SPV) registered under Section-8 of Company Act 2013 or 'Society' listed under Society Registration

Act with an independent governance structure. It will allow more freedom to Incubators in making decisions with less administrative hassles for performing the programs connected to innovation, IPR and Startups.

- d. NITTTR Bhopal will offer mentoring and other relevant services through Pre-incubation/Incubation units in return for fees, sharing of equity, and (or) zero payment basis. The norms regarding Equity Sharing in Startups supported through these units will rest upon the nature of services rendered by these units.

3. Nurturing Innovations and Startups

- a. NITTTR Bhopal will establish processes and mechanisms for creation and nurturing of Startups/enterprises by students of UG, PG, Ph.D., staff (including temporary or project staff), faculty, alumni, and potential startup applicants even from outside the institutions.
- b. While defining their processes, NITTTR Bhopal will ensure to achieve the following:
 - i. Incubation support: Offer to use pre-incubation & Incubation facility for startups by students, staff, and faculty for a mutually acceptable time frame.
In case a NITTTR Bhopal doesn't have a dedicated facility/infrastructure that fits its own, then it may reach out to the other incubation facilities in other HEIs in order to facilitate access to their students, staff, and faculty.
 - ii. Will permit licensing of IPR from institute to start up: Preferably, students and faculty members aiming to initiate startups on the technology established or co-developed by them or the technology possessed by the institute will be allowed to take a license on the said technology on an easy term, either in the condition of equity in the venture and/or license fees and/or royalty to avoid the early-stage financial burden.
 - iii. Will permit setting up a startup (including social and not for profit startups) and working part-time for the startups while studying/working: HEIs will allow their students/staff to effort on their innovative projects and establish startups (including Social Startups) or work as an intern/part-time in startups (incubated in any HEIs/Incubators) while studying/ working. Student Entrepreneurs will earn credits for working on innovative prototypes/Business Models. Institute will need to develop clear guidelines to formalise this mechanism. Student inventors will also be permitted to opt for a startup in place of their mini project/ major project, seminars, summer training. The area in which student wishes to initiate startup will be interdisciplinary or multi-disciplinary. However, the student must define how they will separate and clearly

differentiate the ongoing research activities as a student from work being carried at the startup.

- c. Students who are under incubation and are pursuing some entrepreneurial ventures while studying will be allowed to use their address in the institute/hostel to register their company with due permission from the institution.
- d. Students entrepreneurs will be allowed to take the examination, even if their attendance is less than the minimum required percentage, with due permission from the institute.
- e. NITTTR Bhopal will allow their students to take a break of a semester/year (or even more to work on their startups and re-join academics to complete the course. Student entrepreneurs will earn academic credits for their efforts put in for creation of an enterprise. Institute will establish a review committee for review of a start-up by students, and based on the progress made; it will consider giving appropriate credits for academics.
- f. NITTTR Bhopal will explore the provision of space to the entrepreneurs within the campus for some time.
- g. Permit faculty and staff to take off or a semester/year (or even more) a sabbatical/unpaid leave/casual leave/earned leave or other leave for working on startups and coming back. The institution will consider allowing the use of its resource to faculty/students/staff wishing to establish start-up as a full-time effort. The seniority and other academic benefits in such a period will be preserved for such staff or faculty.
- h. Start a part-time/full-time MS/MBA/ PGDM (Innovation, entrepreneurship and venture development) program where one will be able to get a degree while incubating and fostering a startup company. AICTE has issued guidelines for a similar program.
- i. NITTTR Bhopal will facilitate the startup activities/technology advancement by allowing students/faculty/staff to utilise institute infrastructure and facilities, as per the will of the potential entrepreneur in the following manners:
 - i Short-term/six-month or one-year part-time entrepreneurship training.
 - ii Mentorship support on a continuous basis.
 - iii Facilitate in a variety of areas like technology development, ideation, creativity, design thinking, fundraising, financial management, cash-flow management, business development, new venture planning, product development, social entrepreneurship, marketing, brand development, product- costing, human resource management, law, and regulations.

- iv NITTTR Bhopal will also link the startups to other seed-fund providers/angel funds/venture funds, or itself will set up seed-fund once the incubation activities mature.
- v License institute IPR to others, as discussed in section 4 below.
- j. In return for the services and facilities, NITTTR Bhopal may take 2% to 9.5% equity stake in the startup/company, considering brand used, faculty contribution, the support provided, and use of the institute's IPR (an upper limit of 9.5% is suggested so that NITTTR Bhopal has no legal liability arising out of the startup). The NITTTR Bhopal will normally take a much lower equity share (unless its full-time faculty/staff have substantial shares). Other factors for consideration will be infrastructure, space, mentorship support, seed- funds, support for legal, accounts, patents, etc.
 - No restriction on faculty/staff of NITTTR Bhopal for taking shares, as long as they do not devote more than 20% of office time on the startup and do not compromise with their prevailing academic and administrative work/duties.
 - In the case of the compulsory equity model, the Startup will be given a cooling time of 3 months to utilise incubation services on a rental basis to take a final conclusion based on the satisfaction level of services offered by the institute/incubator. In that case, during the cooling period, NITTTR Bhopal will not force the startup to immediately issue equity on granting incubation support.
- k. The NITTTR Bhopal will also provide services based on the mixture of equity, fee-based, and/or zero payment models. Therefore, a startup may choose to avail only the support, not seed funding, by the institute on a rental basis.
- l. NITTTR Bhopal could extend this start-up facility to alumni of the institute as well as outsiders.
- m. Participation in startup-related activities will be considered as one of the legitimate activities of faculty in addition to teaching, industrial consultancy, R&D projects, and management duties and will be considered while evaluating the annual performance of the faculty. It is expected that every faculty will mentor a few startups.
- n. Product development and commercialisation and participating and nurturing of startups will be added to a bucket of faculty duties, and each faculty will choose a mix of these activities (in addition to the minimum required teaching and guidance), and then respective faculty will be evaluated accordingly for their performance and promotion.

- o. NITTTR Bhopal will also update/change/revise performance evaluation policies for faculty and staff as stated above.
- p. NITTTR Bhopal will ensure that at no stage does any liability accrue to it because of any activity of any startup.

4. Product Ownership Rights for Technologies Developed in the Institute

- a. When NITTTR Bhopal facilities/funds are used substantially or when IPR has developed as a part of curriculum/academic activity, IPR will be jointly owned by inventors and the institute.
 - i. Inventors and NITTTR Bhopal will together license the product/IPR to any commercial organisation, with inventors having a primary say. License fees could be either one of the below or mixed.
 - 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. NITTTR Bhopal will hold the equity as per the current statute, so SPV will be requested to hold equity on NITTTR's behalf.
 - iii. If one or more of the inventors want to incubate a company and license the product to this company, the royalties should not be more than 4% of the sale price, preferably 1 to 2%, except it is pure software product. In case it is shares in the company, shares will again be 1% to 4%. For pure software product licensing, there will be a value-sharing to be mutually decided between the institute and the incubated company.
- b. If product/IPR is developed by innovators without the use of any institute facilities, outside office working hours (for staff and faculty) or not as a part of the curriculum by a student, then product/IPR will be entirely possessed by inventors in proportion to the contributions made by them. In this case, inventors can choose to use the technology in the way they deem fit.
- c. In case of a dispute in ownership, a minimum 5-member committee consisting of two faculty members, two of the institute's alumni/industry experts (possessing exposure in technology commercialisation), and one legal advisor with experience in IPR, will scrutinise the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. Institute will use alumni/faculty of other institutions as members if they cannot find sufficiently experienced alumni faculty of their own.

- d. NITTTR Bhopal's incubation centre will only be a manager and facilitator for providing facilities to faculty, staff, and students. They will not have a say on how the invention is done, how it is patented or how it is to be licensed. If NITTTR Bhopal is to pay for patent filing, they can have a committee that can examine whether the IPR is worth patenting. The committee will consist of faculty who have experience and in technology translation. If inventors are utilising their own funds or non-institute funds, then they alone will have a say in patenting.
- e. All institute's decision-making bodies with respect to incubation/IPR/ technology-licensing will comprise faculty and experts who have experience in technology translation. Other faculty/staff 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 promoted by the NITTTR Bhopal.

5. Organisational Capacity, Human Resources, and Incentives

- a. NITTTR Bhopal will recruit faculty and staff that have entrepreneurial/industrial experience, attitude, and behavior. This will help in maintaining the I & E culture.
 - i. Some of the faculty members with prior exposure and interest will be deputed for training to promote I&E.
 - ii. To achieve better engagement of staff and faculty in entrepreneurial activities, institutional policy on career development of staff will be developed with constant upskilling.
- b. Faculty and departments of the institutes will work with coherence, and cross-departmental linkages will be strengthened through exchanges like shared faculty, cross-faculty teaching, and research in order to harness maximum utilisation of internal resources and knowledge.
- c. Periodically some external subject experts such as guest lecturers or alumni will be engaged for strategic advice and bringing in skills that are not available internally.
- d. Faculty and staff will be encouraged to undertake courses on innovation, entrepreneurship management, and venture development.
- e. In order to motivate, attract and retain the right people, NITTTR Bhopal will develop academic and non-academic rewards and incentives mechanisms for all
- f. For Faculty, Staff, and stakeholders that actively contribute and support entrepreneurship agenda and activities.

- i. The reward system for the staff will include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, training, etc.
- ii. The recognition of the stakeholders will include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships, etc.
- iii. A performance matrix will be established and used for the evaluation of annual performance.

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

- a. Mechanisms will be developed to expose maximum students, faculty, and staff to innovative pre-incubation activities and pathways from ideation to innovation to market their early stage.
 - i. Spreading awareness among faculty and staff and about the value of entrepreneurship and its contribution to career development or employability will be a part of the institutional entrepreneurial agenda.
 - ii. Students/staff will be taught about innovation (technology, processor business innovation) as a mechanism to resolve the problems of society and consumers. Entrepreneurs will innovate keeping a focus on the market niche.
 - iii. Students will be encouraged to develop an entrepreneurial mindset through experiential learning by divulging them to training in cognitive skills like design thinking, critical thinking, etc., by inviting 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 will be routinely organised.
 - iv. Integration of education activities and enterprise-related activities will be done to prepare the students for creating the startup through education.
- b. The institute will link their startups and companies with a broader entrepreneurial ecosystem and by providing support to students who demonstrate potential in the pre-startup phase. Linking student entrepreneurs with real-life entrepreneurs will support the students in understanding real challenges that may be faced by them in the innovation process and will increase the probability of success.
- c. The institute will establish Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate an appropriate budget for its activities. IICs will guide the institution in conducting various activities related to innovation, startup, and entrepreneurship development. Collective and concentrated efforts will be undertaken to identify, scout, support, acknowledge,

and reward proven student ideas and innovations to further facilitate their entrepreneurial journey.

- d. For strengthening the innovations at the institute, access to financing will be opened for the potential entrepreneurs.
 - i. Networking events will be organised to create a platform for budding entrepreneurs to meet investors and pitch their ideas.
 - ii. Provide business incubation facilities: premises at a subsidised cost. Laboratories, research facilities, training, IT services, mentoring, etc., will be accessible to the new startups
 - iii. A culture will be promoted to make innovators understand that money is not FREE and is risk capital. The entrepreneur should utilise these funds and return them. While funding is taking a risk on the entrepreneur, it is an obligation on the part of the entrepreneur to make efforts to prove that the funding agency did right in funding them.
- e. NITTTR Bhopal will develop a ready reckoner of Innovation Tool Kit, which will be kept on the homepage on the institute's website to clarify the doubts and queries of the innovators and enlist the facilities existing at the institute.

7. Norms for Faculty Startups

- a. For better coordination of the innovation and entrepreneurial activities, norms for faculty startups will be created by the institutes.
 - i. Role of faculty may differ from being a mentor, owner/direct promoter, consultant, or on-board member of the startup.
 - ii. Institutes will work on developing a policy on conflict of interests to safeguard that the regular duties of the faculty do not suffer because of his/her involvement in the startup activities.
 - iii. Faculty startup may comprise of faculty members alone or with students or with faculty of other institutes or with alumni or with any other entrepreneurs.
- b. Faculty will clearly separate and distinguish ongoing research at the institute from work conducted at the startup/company.
- c. In case of selection of a start-up founded by a faculty, by a national or international accelerator, leave (as sabbatical/existing leave/unpaid leave/casual leave/earned leave) of one year (or more based on decision of review committee) will be permitted to the faculty.
- d. Faculty will not accept gifts from the startup.

- e. Faculty will not involve research staff or other staff of the institute in activities at the startup and vice-versa.
- f.

8. Pedagogy and Learning Interventions for entrepreneurship Development

- a. A diversified approach will be taken to produce desired learning outcomes, which will include cross-disciplinary learning using mentors, labs, games, case studies, etc., in place of traditional lecture-based delivery.
 - i. Student clubs/ bodies/ departments will be established for organising competitions, boot camps, workshops, awards, etc. These bodies will be integrated into institutional strategy, planning to ensure the enhancement of the student's thinking and responding ability.
 - ii. NITTTR Bhopal will start the annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognise successful entrepreneurs, outstanding ideas, and contributors for encouraging innovation and enterprises ecosystem within the institute.
 - iii. The teaching methods will comprise case studies on business failure/success and real-life experience reports by startups.
 - iv. Tolerating and encouraging failures: Failures will be elaborately debated and discussed to imbibe that failure is a part of life for reducing the social stigma associated with it. It will be a part of the institute's philosophy and culture.
 - v. Innovation champions will be designated from within the students/ faculty/staff for each department/stream of study.
- b. Entrepreneurship education will be taught to students at curricular/ co-curricular/extra-curricular level through mandatory courses/short-term or long-term courses on innovation, startup/entrepreneurship, and venture development.
 - i. Integration of external expertise will be done in entrepreneurship education to evolve a culture of collaboration and engagement with the external environment.
 - ii. At the beginning of every academic session, NITTTR Bhopal will organise induction programs to emphasise the importance of I&E. Freshly inducted students will be made aware of the entrepreneurial agenda of the institute and available support systems. Course-Curriculum for entrepreneurship education will be unceasingly updated based on entrepreneurship research. This will also include case studies on success and failures.

- iii. Industry linkages will be leveraged for research and survey on trends in technology, research, innovation, and market intelligence.
- iv. Student innovators, experts, startups, will be engaged in the dialogue process while developing the strategy so that it becomes need-based.
- v. Customised learning materials will be developed for startups.
- c. Pedagogical changes will be done to ensure that a maximum number of student projects and innovations are based on real-life challenges. Learning interventions developed by the institutes for indoctrinating entrepreneurial culture will be constantly reviewed and updated.

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

- a. Stakeholder engagement will be given importance in the entrepreneurial agenda of the institute. Institutes will identify potential partners, resource organisations, micro, small and medium-sized enterprises (MSMEs), alumni, social enterprises, schools, professional bodies, and entrepreneurs to support entrepreneurship and co-design the programs.
 - i. For encouraging co-creation, bi-directional flow/ exchange of knowledge and people will be ensured between institutes such as incubators, science parks, etc.
 - ii. Institute will organise networking events for better engagement of collaborators and will open up the opportunities for staff, faculty, and students to allow a constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
 - iii. Mechanism will be established by the institute to exploit the knowledge gained through these collaborations.
 - iv. Care will be taken to safeguard that events do not become an end goal. First focus of the incubator will be to create successful ventures.
- b. The institute will make policy and guidelines for founding and managing relationships with external stakeholders, including private industries.
- c. Knowledge exchange through partnership and collaboration will be made a part of institutional policy, and institutes will provide support mechanisms and direction for creating, managing, and coordinating these relationships.
 - i. Through formal and informal mechanisms like internships, teaching and research exchange programs, social gatherings, clubs, etc., faculty, staff, and students of the institutes will be provided with the opportunities to connect with their external environment.

- ii. Connect of the institute with the external environment will be leveraged to inform of absorbing experience and information from the external ecosystem into the institute's environment.
- iii. A Single Point of Contact (SPOC) mechanism will be established in the institute for the faculty, students, collaborators, partners, and other stakeholders to ensure access to information.
- iv. Mechanisms will be devised by the NITTTR Bhopal to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.
- v. Knowledge management will be managed by the institute through the development of an innovation knowledge platform using in-house Information & Communication Technology (ICT) capabilities.

10. Entrepreneurial Impact Assessment

- a. Impact assessment of the institute's innovation and entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education will be performed regularly using well-defined evaluation parameters.
 - i. Monitoring and evaluation of information/knowledge exchange initiatives, engagement of all departments and faculty in the innovation/entrepreneurial teaching and learning will be assessed.
 - ii. A number of startups created, support system provided at the institutional level, and satisfaction of participants, new business relationships created by the institutes will be recorded and used for impact assessment.
 - iii. The impact will also be measured for the support system created by the institute to the student entrepreneurs, faculty, and staff for innovation, pre-incubation, incubation, IPR protection, industry linkages, exposure to the entrepreneurial ecosystem, etc.
- b. Preparation of strategy and impact assessment will go together. The information on the impact of the activities will be used for reviewing the entrepreneurial strategy.
- c. Impact assessment for measuring the achievements will be in terms of sustainable social, financial and technological impact in the market. For innovations at the pre-commercial stage, the development of a sustainable enterprise model is critical. Commercial success of an innovation/entrepreneurial effort is the only measure in the long run.

NITTTR Innovation and Startup Procedures 2021

1. Introduction:

The Ministry of Education in 2019, released the National Innovation and Startup Policy 2019 for students and faculty of Higher Education Institutions (HEIs). The Policy is in line with the focus of the Central Government on entrepreneurial projects. The framework was created to enable the institutes to actively engage students, faculties, and staff (including temporary or project staff), alumni, and potential startup applicants from outside the institution in innovation and entrepreneurship-related activities. The Guidelines on National Innovation & Startup policy 2019 were published to provide the required direction and support in handling, Innovation Startup and Intellectual Property rights-related issues.

The framework is designed to facilitate Ministry of Education in bringing uniformity across HEIs in terms of Intellectual Property ownership management, technology licensing, and institutional Startup policy, thus enabling the creation of robust innovation and Startup ecosystem across all HEIs.

Innovation and Entrepreneurship must emerge as one of the focal points of today's education system with a focus on the creation of economic hubs so that the nation aspires to become a five trillion-dollar economy in the near future. To achieve this milestone, systems and mechanisms must evolve to convert the present demographic dividends into high-quality technical human resources, which could eventually create wealth generation hubs through Startups and entrepreneurship.

In Madhya Pradesh, there are multiple dynamics at play with regard to entrepreneurial activities. The MP government, entrepreneurs, and advocacy groups seek to promote entrepreneurship, which officially and logically forms part of their mandate. However, there are certain inherent factors that inhibit entrepreneurial activity. Madhya Pradesh is in the central zone and is full of opportunities. The biggest inhibiting factor, however, is an aversion towards entrepreneurship which is regarded as a fallback mechanism for enabling self-employment. It is fair to state that the first option for a vast majority of the population in the state is to secure a government job instead of fishing in the troubled waters of entrepreneurship. However, this space is also now squeezing. Government has reached its maximum capacity to offer jobs.

2. Department of Technical Vocational Education and Research (DTV&R)

DTVE&R continuously strived for entrepreneurship activities for the stakeholders. Training of Trainers programs on Entrepreneurship Development, FDPs, National and International Conferences were organized in the states of Madhya Pradesh, Gujarat, Maharashtra, Chhattisgarh and Goa. In DT&VE, Innovation, Incubation, and Entrepreneurship Development Center (IIED Center) will be established to create awareness of Startup activities, innovation, incubation, and entrepreneurship. The centre will be committed to offer meaningful and impactful assistance to the Startup ecosystem of the State/ stakeholders.

Recognizing the impediments of IIEDC to scale up as the main centre of innovation, incubation, and entrepreneurship, a state-of-the-art Incubation Centre will be established

to pursue its vision and mission. This IISP2020 document has been commissioned to prepare a comprehensive guideline for IIEDC and other stakeholders towards achieving the aim of setting up the Innovation and Startup hub that leapfrogs the contribution of centre at NITTTR Bhopal.

3. “NAVNOMESH” incubation Centre:

The Incubation Centre established at NITTTR Bhopal, shall be named as “NAVNOMESH. The term “NAVNOMESH’ means innovation and the center would also stress greening technologies, making the mother planet a more congenial place to live. Greening and Innovating would be the focus of the incubation Centre. The term ‘Green’ has to be seen in a broader perspective here and may not only mean the conventional green technologies as defined. NAVNOMESH will be the hub of innovation that shall rejuvenate Ed-tech Startups along with other Startups. The purpose is not just to add a facility to aid in an equipped manner; rather, pursue the journey through the vision of the Centre; churning the startups with a high success ratio would be the fundamental aim of the Centre. The three fundamentals of a robust approach to raise start-ups i.e. role of the accelerator, appropriate funding/financing agencies, and selection of genuine startup team, shall be our core strategy to follow in letter and spirit.

4. Vision of INCUBATION CENTRE:

To be a center of excellence in incubation to foster innovative mindsets through innovative eco-system to support the development of sustainable technologies for the globe.

5. Mission:

Become the pioneer in supporting the sustainable startup and entrepreneurship ecosystem in the region and partner with leading incubators/innovation centres in India.

6. Objectives

This vision can be achieved by IIEDC if it can successfully meet the below-listed objectives: -

- Identify innovative ideas for startup and incubation.
- Create an eco-system for entrepreneurship training.
- Train potential persons to become entrepreneurs.

7. Focus

The focus of the proposed incubator shall be to help the students, faculties, staff (including temporary or project staff), alumni, and potential startup applicants from outside the institution to augment their innovative ideas through technology support, team building, mentoring, funding, and incubation support into products and offerings for reinforcing national policies and schemes.

8. Focus Sectors

INCUBATION CENTRE shall have focus areas like- Green Tech Startups, Hi-Tech Startups, Ed Tech Startups, Social Startups, Medical & Health Care startups, Agri-Tech Startups, Food Processing Startups, etc.

INCUBATION CENTRE

- Ed-Tech Startups
- Hi-Tech Startups
- Green-Tech Startups
- Social Startups
- Medical & Health Care Startups
- Agri-Tech Startups
- Food Processing Startups

9. Incubator:

There shall be a separate establishment of IIEDC responsible for the execution and operations of INCUBATION CENTRE. It shall be registered as section 8 company, having its own constitution and rules and regulations in conjunction with the formalities as laid by the government. Since, INCUBATION CENTRE shall be a government-funded organization, all the guidelines as defined from time to time, by the controlling competent authority, shall be binding.

i. Governing Board

This shall be the supreme decision-making authority and strategic roadmap defining syndicate of INCUBATION CENTRE. The Chairman BoG, NITTTR Bhopal shall be its ex-officio Chairperson with Director, NITTTR Bhopal as its Vice-Chair. CEO INCUBATION CENTRE shall be the Member Secretary of the board. The board shall have a representative of MHRD, GoI, the designated representative of Government of MP, and representatives from strategic partners and alliances as may be deemed necessary for quick disposal of matters under the purview of the governing board.

Some of the key responsibilities of the governing board shall be:

- Defining the overall strategic roadmap for the INCUBATION CENTRE.
- Deciding on various proposals received for strategic alliance and partnerships for the benefit of incubatees.
- Approvals and monitoring of the budgets for various executions.
- Constitution of committees with respect to the procurement of equipment, infrastructure, and other assets for the centre.
- Appointment of the CEO of INCUBATION CENTRE and formation of the recruitment committee for hiring of staff.
- Appointment of expert committees and evaluation committees as per the incubation process laid down in this document.
- Relaxations of any nature in terms of extension of tenure of incubatee, etc., that may be brought to notice for necessary approvals.
- Delegation of powers – financial as well as administrative to the CEO INCUBATION CENTRE.

ii. Incubatee Selection Experts' Group (ISEG)

This is the apex body of eminent experts from divergent backgrounds who would select the incubatees having gone through the evaluation process as defined. The expert committee shall comprise of:

- i. Chairman BoG NITTTR, Bhopal (Chairman)
- ii. Representative from Industry (Co-Chair)
- iii. Director NITTTR Bhopal (Vice Chair)
- iv. CEO INCUBATION CENTRE (Member Secretary).
- v. Need based members from the domains of technology, education, business, industry, finance, and start-ups.
- vi. Representative from Agriculture Background.
- vii. Representative of recognized incubator– Member
- viii. Leading Start-up from Madhya Pradesh- Invitee Member
- ix. Leading Investor (Venture Capital Firm/Angel Investor) - Invitee Member.

The members of ISEG shall be appointed by the governing board of INCUBATION CENTRE. However, they shall work independently and their role shall remain confined to the selection of incubatees. The recommendations of ISEG with respect to selection shall be binding on the governing board. In case of any extensions sought by any existing incubate, the governing board may recommend a re-evaluation by ISEG along with new applicants.

The members shall be entitled to remuneration as per rules. INCUBATION CENTRE shall pay for their travel and stay. The ISEG shall not report to any of the official or boards of INCUBATION CENTRE.

iii. IEC:

This is the first level of evaluation of the business proposals' committee entrusted with evaluating the proposals based on techno-commercial feasibility. The Committee with a maximum of 5 members shall comprise of:

- i. Representative of NITTTR Bhopal, (at least of Professor Rank).
- ii. Representative Member of Governing Board.
- iii. Representatives from Industry, Academia, and other Incubators as deemed fit by the Governing Board.

IEC shall also work as an independent committee without reporting to any official or the board of INCUBATION CENTRE. The IEC members shall be remunerated as per rules. INCUBATION CENTRE shall bear the travel and stay expenses as admissible.

iv. CEO INCUBATION CENTRE

This is the key resource person at INCUBATION CENTRE. Reporting to the governing board, the CEO shall be responsible for all day-to-day activities of the centre for smooth functioning. Being appointed by the board, the CEO shall be responsible

for the initial booting up of the centre and later for the daily activities necessary to be performed within the powers and authority as may be delegated by the governing board.

Key functions of the CEO INCUBATION CENTRE shall be: -

- Maintaining financial as well as other types of office records.
- Day to day functioning of the centre.
- Convening of the meetings of the board and other committees/groups as may be required for the discharge of duties.
- To represent INCUBATION CENTRE in all forums as may be necessary for the functioning of the centre.
- To enter into agreements, MoUs, etc., after the necessary approvals of the governing board, if required.
- To procure resources including human resources for INCUBATION CENTRE as per the guidelines approved by the governing board.
- Operations of the centre in line with the budgets approved for operating expenses.
- Capital Expenditure purchases after administrative approval from the governing board to the extent of Rs 5 Lakh. For purchases above Rs 5 Lakh, the administrative, as well as financial approval of the board, shall be obtained.
- Ensuring strict adherence to the guidelines, procedures, and rules as laid by the governing board and/or competent authority.
- Compliance to any certifying body of which CAPEX purchases shall become a member. For instance, SO.

v. INCUBATION CENTRE Staff

The CEO shall be ably supported by a team of members responsible for the job roles defined. This team shall be responsible for the day-to-day activities of the incubator. It is proposed to have 18 members with the specific roles managing INCUBATION CENTRE, including the CEO.

INCUBATION CENTRE shall have a flat organizational structure to allow effective management along with quick communication. There shall be only three levels of hierarchy under the CEO. Each level shall be led by a Manager supported by an Executive and Assistant.

The general functions of the centre shall be administered directly from the CEO's office.

There are five important functions in INCUBATION CENTRE that require a dedicated leader to operationalize the work plan. These are:

- Incubation
- Alliances and Partnerships
- Marketing and Outreach
- Laboratories

- IT and Communications

10. **INCUBATION CENTRE Enablement's& Norms:**

- i. **Incubation Support:** Pre-incubation & Incubation support will be offered to the start-ups by applicants, students, staff, and faculty for a period of one year at the initial stage which can later after the approval of IESG be extended. However, in case the institute doesn't have a dedicated facility/infrastructure, it enables incubation facilities in other HEIs in order to facilitate access to their students, staff, and faculty.
- ii. **Attendance:** Students involved in setting up of startups shall be given a relaxation in attendance up to 50%.
- iii. **Semester/YearBreak:**
 - a. **Students:** The institute would allow their students to take a semester/year break (or even more depending upon the decision of the review committee constituted by the institute) to work on their start-ups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. Institute would set up a review committee (on case to case basis) for review of start-up by students, and based on the progress made, it may consider giving appropriate credits for academics.
 - b. **Faculty & Staff** (including temporary or project staff: The institute will allow faculty and staff to take off for a semester/year (or even more depending) as sabbatical/unpaid leave/casual leave/earned leave for working on startups and come back. Institution would 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 will be preserved for such staff or faculty.
- iv. **Mentoring:**

The mentor program will be for the time period of 3-6 months or by mutual agreement. The mentors would be allocated, based on the entrepreneurs' needs identified through the basic gap analysis. Mentor teams and entrepreneurs will agree to meet in person or connect by Skype or teleconference for a minimum of 2 hours over the mentoring period. The relationship can be extended or terminated upon the mutual agreement.
- v. **Financial Assistance:**

The predominant model of startup financing in entrepreneurship is debt financing and it is a big burden on the entrepreneurs. Equity financing is obviously entrepreneur-friendly and forms an integral part of the new age startup ecosystem.

 - a. Minimum 1 % fund of the total annual budget of the institution would be allocated for funding and supporting innovation and Startups related activities through creation of separate 'Innovation fund' and managed by the Head IIED Centre/CEO

INCUBATION CENTRE established as a section 8 company. The Seed funding to the Start-ups would be taken up on case-to-case basis.

- b. The Institute would also reach out to external funding agencies of 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 would also be encouraged.
 - c. To support technology incubations within the institute, the institutes may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
 - d. Institute would also raise funding through sponsorships and donations.
 - e. Institute would actively engage alumni network for promoting Innovation & Entrepreneurship (I&E) and invite them to angel funding into the Start-ups as well.
- VI. **Accommodation:** The institute would explore provision of accommodation to the student entrepreneurs within the campus for some period of time, depending upon availability of accommodation at no cost.
- VII. **Permission to register from institute's address:** Students faculty and staff under incubation, but are pursuing some entrepreneurial ventures will be allowed to use their address in the institute (e.g. hostel/other) to register their company with due permission from the institution.
- VIII. **Engagement in Startup and innovation:** Participation in startup-related activity will be considered as a legitimate activity of faculty in addition to teaching, R & D projects, industrial consultancy, and management duties will be considered while evaluating the annual performance. Product development and commercialization and participating/nurturing startups will be a faculty duty. Each faculty would choose a mix and match of these activities in addition to a minimum teaching load. The respective faculty will be evaluated accordingly for performance and promotion. The institute performance evaluation policy for faculty and staff will be changed accordingly. Employees under incubation, but are pursuing some entrepreneurial ventures will be allowed to use their address in the institute to register their company with due permission from the institution.
- IX. **Norms for Faculty Startups**
- a. If it is a technology startup then only those technologies will be taken for faculty startups which originate from within the institute.
 - i. Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
 - ii. 20% relaxation of duties will be permitted to faculty or staff to pursue his startup. Institutes
 - 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 will go on sabbatical/leave without pay / utilize existing leave.

- c. Faculty will clearly separate and distinguish ongoing research at the institute from the work conducted at the startup/company.
- d. In case of selection of a faculty startup 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) will be permitted to the faculty.
- e. Faculty will not accept gifts from the startup.
- f. Faculty will not involve research staff or other staff of the institute in activities at the startup and vice-versa.

X. Awards: NITTTR Bhopal will start annual 'INNOVATION & ENTREPRENEURSHIP AWARDS' to recognize outstanding ideas, successful enterprises, and contributors for promoting innovation and enterprises ecosystem within the institute.

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

- a. Stakeholder engagement will be given prime importance in the entrepreneurial agenda of the institute. Institutes will 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 will be ensured between institutes such as incubators, science parks, etc.
 - ii. Institute will organize networking events for better engagement of collaborators and should open up the opportunities for staff, faculty, and students to allow a constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
 - iii. Mechanism will be developed by the institute to capitalize on the knowledge gained through these collaborations.
 - iv. Care will be taken to ensure that events do not become an end goal. The first focus of the incubator should be to create successful ventures.
- b. The institute will develop policy and guidelines for forming and managing relationships with external stakeholders including private industries.
- c. Knowledge exchange through collaboration and partnership will 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 will be given the opportunities to connect with their external environment.
- ii. Connect of the institute with the external environment will 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 will be created in the institute for the students, faculty, collaborators, partners, and other stakeholders to ensure access to information.
- iv. Mechanisms will be devised by the institutions to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.

XII. Entrepreneurial Impact Assessment

- a. Impact assessment of institute's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education will 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 will 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 will be recorded and used for impact assessment.
 - iii. Impact will 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 will go hand in hand. The information on impact of the activities will be actively used while developing and reviewing the entrepreneurial strategy.
- c. Impact assessment for measuring the success will 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.

XIII Incubation/Pre-Incubation:

- a. All the Pre-Incubation/Incubation facilities would be accessible 24x7 to students, staff, and faculty of all disciplines and departments across the institution.

- b. The institute infrastructure in form of machines, equipment, tools, testing facilities and other resources available in various departments, workshops, laboratories, centers, CoEs etc. would be utilized for pre-incubation and incubation for nurturing innovators and start-ups, without hampering the normal academic schedule of the departments and centres.
- c. The institute would offer mentoring and other relevant services through Pre-incubation/Incubation units in return for fees, equity sharing, and (or) zero payment basis. The modalities regarding Equity Sharing in Startups supported through these units will depend upon the nature of services offered by these units and are elaborately explained below:
 - i. In return for the services and facilities, the institute would take 2% to 9.5% equity/ stake in the startup/company, (on case to case basis) based on brand used, faculty contribution, the support provided, and use of the institute's IPR (a limit of 9.5% is suggested so that institute has no legal liability arising out of the startup. The institute might normally take a much lower equity share unless its full-time faculty/ staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed funds, support for accounts, legal, patents, etc.
 - ii. For staff and faculty, the institute would take no more than 20% of shares that staff/ faculty takes while drawing a full salary from the institution; however, this share will be within the 9.5% cap of company shares, listed above.

XIV IPR Facilitation:

One of the important mandates of NITTTR Bhopal is to bring excellence to education, research, and innovation, however, it is equally important that protect Intellectual property. Therefore, it is important that the information with regards to rights over intellectual property is disseminated at the earliest. This policy should be applicable to all inventions and innovations belonging to NITTTR Bhopal and covers all different classes of Intellectual Property - Patent, Copyright, Design, Registration, Trademark, and Confidential Information.

The IPR provisions are created to provide a conducive environment leading to the development of the intellectual property. When institute facilities/funds are used substantially or when IPR has developed as a part of curriculum/ academic activity, IPR would be jointly owned by inventors and the institute. Inventors and institutes 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

- a. Upfront fees or one-time technology transfer fees
- b. Royalty as a percentage of sale-price

C. Shares in the company licensing the product

The institute would allow licensing of IPR from institute to start up: Ideally 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.

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.

If there is a dispute in ownership, a minimum five-member 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.

INCUBATION CENTRE will only be a facilitator or for providing services to faculty, staff and students. It will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If the institute is to pay for patent filing, the INCUBATION CENTRE 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. All institute's decision-making bodies 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. Interdisciplinary research and publication on startup and entrepreneurship will be promoted by NITTTR Bhopal.

11. Capacity Building Programs:
 - a. The institute would encourage training and development of faculty and staff involved in innovations and entrepreneurship development activities in the institute.
 - b. To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of faculty and staff would be developed with

- constant upskilling.
- c. Faculty and departments of the institutes have to work in coherence and cross-departmental linkages would be strengthened through shared faculty, cross-faculty teaching, and research in order to gain maximum utilization of internal resources and knowledge.
 - d. Periodically some external subject matter experts such as guest lecturers or alumni would be engaged for strategic advice and bringing in skills, which are not available internally.
 - e. Faculty and staff would be encouraged to do courses on innovation, entrepreneurship management, and venture development.
 - f. In order to attract and retain the right people, the institute would develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
 - g. The reward system for the employees will include sabbaticals, office and lab space for entrepreneurial activities, reduced work/teaching loads up to 20%, awards, training, etc.
 - h. The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest faculty, fellowships, associateships, etc.
 - i. A performance matrix would be developed and used for the evaluation of annual performance.

12. Idea Bank:

The 'INCUBATION CENTRE' shall also create an idea bank for small-scale improvements to innovations incubated from an idea through a development process. Students play an important role in bringing fresh thinking into various working models in any business. This can include improvements, and suggestions at early stages of an innovation process or even for an established system. The operating model allows all the innovators and students to participate and offer a common, easy-to-use channel for participation.

The Ideas stored in the bank can be identified with a unique identity number provided to them. The main characteristic of the idea bank has to be its openness and ease of use. The Ideas will be shared and development proposals shall be processed, in such a way that they can be further developed and exploited. The proposals then shall be forwarded to the right people for assessment and development for the further processing and exploitation proposals. An Institute will use the idea bank- operating model to collect, exploit and share information related to development and innovation activities.

13. Collaborations and Knowledge Exchange:

The Institute has to collaborate and forge alliances with each and every important

ecosystem member to result in the best of synergies.

One of the fundamental tenets on which the incubator is envisioned is collaborating extensively with the stakeholders to derive synergies resulting in optimal outcomes.

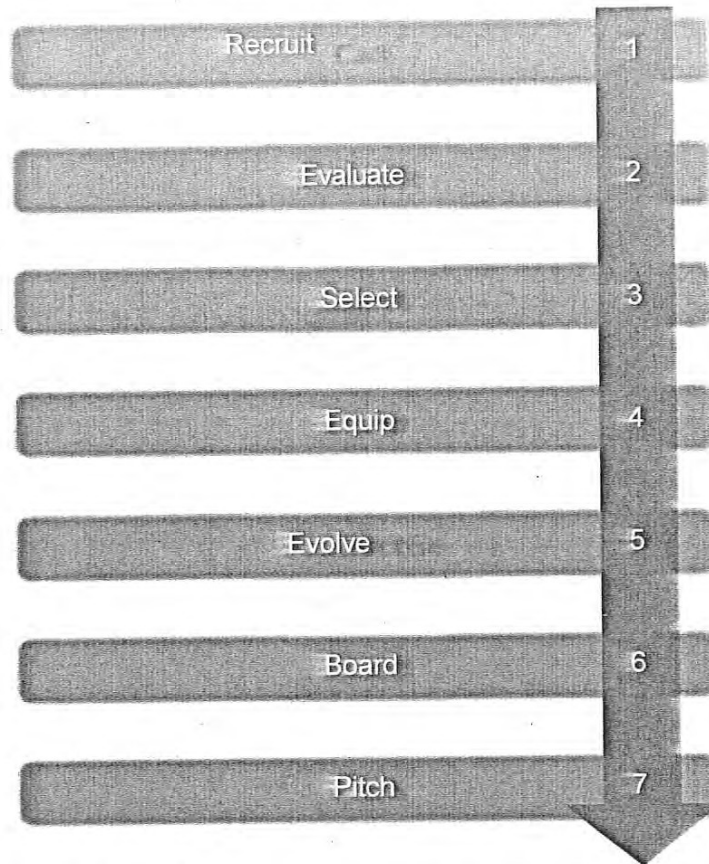
The support expected from the stakeholders is listed below: -

- Funding for CAPEX and OPEX investments.
- Mentorship pool.
- Integration with start-up ecosystem.
- Extension of existing start-up programmes helping incubators to build resources at concessional rates.
- Technology expertise.
- Incubation expertise and best practices adoption.
- Promotion of incubation centre in industry, academia and funding ecosystem.
- Collaboration amongst incubators.
- Virtual incubation.
- Recognition of incubates and the incubator.

14. The Incubation Process for Startups

The INCUBATION CENTRE is envisioned to be the hub of innovation and entrepreneurship in central India. It shall not remain confined to the students of NITTTR Bhopal, but also engage students and pass outs of other colleges and universities besides industry and any individual including faculty and staff having a need for incubating the idea. The incubation services shall not remain confined offering the core incubation services helping to productize the idea. INCUBATION CENTRE shall offer more than necessary exposure and connect with the relevant stakeholders to increase the chances of the idea becoming a product and further a commercial entity.

The 'incubation' step is a process of series of steps that encompass the overall incubation model proposed at INCUBATION CENTRE. The model proposed is as follows:



Recruit: It is one of the key success factors for any incubation centre. An outreach programme shall be designed essentially comprising of Digital / Print / Television / Radio and physical workshops to encourage people to come up with their ideas. Prospective Students Startups of the institute would be given first preference. Besides, workshops at various universities and colleges shall be conducted.

Evaluate: At the time of calling for ideas, INCUBATION CENTRE shall prescribe a format/template for the business plan essentially to ensure that all the major information required to evaluate an application is provided. There shall be two rounds of evaluation before the application is short listed for the selection process.

First Round: The first round of evaluation shall be done by the INCUBATION CENTRE staff subject to random verification of the IEC.

Second Round: The Evaluation at the second round shall be done by Incubatee Evaluation Committee (IEC) as defined.

The committee shall evaluate the proposals received and grade them as A, B and

Rejected. If the proposals marked A are at least thrice as much as ideas being considered for incubation, only such proposals shall be recommended for the selection process. Else, the proposals being graded B, shall be ranked and as many as the best of these shall be recommended for selection to achieve the minimum criteria of having at least 3 proposals to select from, for incubation at INCUBATION CENTRE. Otherwise, the INCUBATION CENTRE management shall convene an extra-ordinary governing board meeting to decide accordingly.

This shall be done immediately after the completion of 'First Round' of validating the business proposals received.

Select: Only the proposals having passed through the Evaluation stage, shall be considered for Selection. ISEG (Incubatee Selection Experts' Group) shall be the final selection committee.

The selection of an idea by the jury shall mean that the idea satisfies all the parameters including technical, commercial, know-how, and others defined by various stakeholders. At this stage INCUBATION CENTER shall issue a selection letter to the incubatee that needs to be formally accepted within the stipulated time.

Equip: The Equip stage is more about empowering the incubatee. Besides, providing the incubation space allotted to the incubatee, access to necessary resources of INCUBATION CENTRE shall also be granted. Based on their one-to-one interactions and agreement to work together, a mentor shall be mapped with the incubatee. Similarly, other services and experts as may be facilitated by INCUBATION CENTRE shall also be made available to the incubatee.

Evolve: Before the actual productisation kicks off, the incubatee shall have to submit a detailed project plan to the INCUBATION CENTRE. This shall calendarise the activities that are planned to be undertaken over the period of incubation and the resources / services that shall be put to use in due course.

A monthly status report shall be submitted by the incubate to the INCUBATION CENTRE management to keep a track of the project and justify the utilization of resources. However, if the scenario warrants, the incubatee may have to reveal all the details for which the INCUBATION CENTRE could enter into an NDA (Non-Disclosure Agreement).

Board: Once a breakthrough is achieved as per expected lines, the incubatees along with their mentor(s) and other experts involved, shall be asked to present the achievements before the board of experts. This board of experts (BoE) could be the same as IESG, may or may not have any of the IESG members as may be feasible and convenient for the time constraints or any other factor.

The board shall validate the genuineness of the claim in line with the product development details submitted in the business plan and reserve the right to declare an incubation a success or otherwise. If the board shall be of the opinion, that the incubation should be granted an extension as further research and development would result in remarkable value addition, the incubatee shall be re-admitted for a period of not more than 3 months. Any further extensions shall be recommended to the governing board of INCUBATION CENTRE

XV Key Performance Indicators

A. Short-term activities (one-year duration)

1. Numbers of students and faculty participated in awareness/training / programmes organized.
2. Numbers of students and faculty participation in events/programs organized by the external agencies
3. Numbers of ideas generated and number of innovations created
4. Numbers of innovative projects recognized at the national and international level
5. Number of ideas/innovations / start-ups supported through funds.
6. Number of Courses on Innovation, IPR and Entrepreneurship

B. Mid-term activities (two-year duration)

1. Number of intellectual property filed/provisionally granted
2. Number of patents granted
3. Number of technology transfers/commercialization
4. Grant / fund generated / received by institute to support Innovation & startup
5. Angel fund/venture fund / investment mobilized to support Innovation & start-up

C. Long-term program (three-year duration)

1. Number of successful innovations converted in to start-ups
2. Number of advance lab infrastructures, pre-incubation and incubation facilities created on-campus
3. Innovative solutions developed in-house and level of impact created so far after being adopted at institute or society

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National Innovation and Startup Policy 2019 (NISP) Implementation

https://mic.gov.in/start-up-policy/implementation_plan

Innovation and Startup Policy Implementation Strategy and
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National INNOVATION and STARTUP

Policy 2019 for Students and Faculty

https://mic.gov.in/assets/doc/startup_policy_2019.pdf

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<https://www.iiitdm.ac.in/img/academics/IIITDM%20NISP%20Version%201.0-%2011Mar2021.pdf>