

## I&E Policy Implementation Approval Committee at BIET Hyderabad:

A committee has been formed by identifying the experts having expertise and experience in the domain of innovation, IPR and startup to start the work of policy formation and implementation of guidelines at the institute

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Place: Hyderabad

  
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**Innovation, Entrepreneurship and Startup Policy for Students and Faculty of Bharat Institute of Engineering and Technology(BIET)**

This document outlines Innovation and Startup Policy for Students and Faculty of Bharat Institute of Engineering and Technology(BIET). This policy is framed to fulfill the objectives of Institution’s Innovation Council (IIC) of BIET. The BIET has established IIC with an objective 1) to enable minds of young technocrats, faculty and staff to think out of the box towards innovative solutions in engineering and bring them into reality in terms of working prototypes and then to commercial products, 2) to identify and develop potential entrepreneurs among students, faculty and staff. The policy also takes guidelines from the National Innovation and Startup Policy (NISP) 2019 for students and faculty by MHRD’s Innovation Cell (MIC). This policy shall be implemented for the entire institute in order to integrate the innovation and entrepreneurial activities across various centers, departments, faculties, within the institute, thus breaking the silos.

This document broadly details the following related to Innovation and Entrepreneurship policy of the institution:

1. Strategies and Governance
2. Enabling Institutional Infrastructure
3. Nurturing Innovations and Startups
4. Product Ownership Rights for Technologies Developed at Institute
5. Organizational Capacity, Human Resources and Incentives
6. Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level
7. Norms for Faculty Startups
8. Pedagogy and Learning Interventions for Entrepreneurship Development
9. Collaboration, Co-creation, Business Relationships and Knowledge Exchange
10. Entrepreneurial Impact Assessment

**Contents**

1. Strategies and Governance .....	3
2. Enabling Institutional Infrastructure .....	4
3. Nurturing Innovations and Start ups .....	4
4. Product Ownership Rights for Technologies Developed at Institute .....	7
5. Organizational Capacity, Human Resources and Incentives.....	8
6. Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level .....	9
7. Norms for Faculty Startups .....	10
8. Pedagogy and Learning Interventions for Entrepreneurship Development.....	11
9. Collaboration, Co-creation, Business Relationships and Knowledge Exchange.....	13
10. Entrepreneurial Impact Assessment.....	14
Annexure I: Glossary .....	16
Annexure II: Technology Readiness Levels (TRLs).....	18

## 1. Strategies and Governance

- a. Entrepreneurship promotion and development is one of the major dimensions of the Institution's strategy. To facilitate development of an entrepreneurial ecosystem in the organization, the institution has commissioned Institution's Innovation Council (IIC) and has joined the NISP Policy campaign for Policy adoption. The IIC is headed by the Principal of the institution who understands industry and business, also is well understood by the higher authorities and brings in required commitment. The IIC is continuously being guided by top notch of panel members from various Government & Private research organizations and industries. The IIC is comprised of experts from faculty from various backgrounds to plan, co-ordinate and carryout specific objectives and work out associated performance indicators.
- b. The following resource mobilization plan is worked out at the institute for supporting pre-incubation, incubation infrastructure and facilities with an objective to reduce the organizational constraints to work on the entrepreneurial agenda.
  - i. Investment in the entrepreneurial activities is taken as part of the institutional financial strategy. Accordingly, a separate 'Innovation Fund' will be created by allocating sufficient funds for the purpose. This Innovation Fund is to be utilized for supporting innovation and startups related activities.
  - ii. Raise funds from diverse sources. Bring 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 also leverage non-government sources also.
  - iii. The institute's IIC shall also approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013 to support technology incubators as necessary.
  - iv. The Institute shall also raise funds through sponsorships and donations. Institute shall actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).
- c. The hierarchical barriers shall be minimized and individual autonomy and ownership of initiatives shall be promoted for expediting the decision making.
- d. Importance of innovation and entrepreneurial agenda shall be made known across the institute and shall be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc.

- e. I & E action plans shall be formulated at Institution level by the respective expert members of IIC. These action plans shall be in line with this policy document along with well-defined short-term and long-term goals. Micro action plan shall also be developed in order to ensure 100% implementation of the policy objectives.
- f. Product to market (PTM) strategy for startups shall be developed by the concerned expert members of the IIC on case-to-case basis.
- g. In addition to developing entrepreneurship culture within the institution, the institute shall play the role of the driving force in developing entrepreneurship culture in its vicinity (regional, social and community level) over the time. This shall include giving opportunity for regional startups, provision to extend facilities for outsiders and active involvement of the institute in defining strategic direction for local development.
- h. Strategic international partnerships shall 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 shall also be promoted.

## **2. Enabling Institutional Infrastructure**

Creation of pre-incubation and incubation facilities for nurturing innovations and startups in institution shall be given due emphasis. Incubation and Innovation shall be organically interlinked. New enterprises are unlikely to succeed without innovation. The goal of the effort is therefore to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

- a. The institution shall create facilities for supporting pre-incubation as per the guidelines by MHRD's Innovation Cell, EDC, IEDC, New-Gen IEDC, Innovation Cell, Startup Cell, Student Clubs, etc. The institution shall also create facilities for Incubation/ acceleration by mobilizing resources from internal and external sources.
- b. This Pre-Incubation/Incubation facility shall be accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution.

## **3. Nurturing Innovations and Start ups**

- a. Institute shall establish processes and mechanisms for easy creation and nurturing of Startups/enterprises by students (UG, PG, and Ph.D.), staff (including temporary or project staff), faculty, alumni and potential startup applicants even from outside the institutions. Institutions will ensure to achieve the following while setting up these processes:
  - i. Incubation support: Offer access to pre-incubation & Incubation facility to start ups by students, staff and faculty for mutually acceptable time-frame.

- ii. The institute shall reach out to nearest incubation facilities in other HEIs in order to facilitate access to students, staff and faculty until we setup our own dedicated facility/infrastructure.
  - iii. Will allow licensing of IPR from institute to startup. 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, shall 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.
  - iv. Will allow setting up of a startup (including social startups) and working part-time for the startups while studying / working: Institute shall allow 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 HEIs/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models. Institute shall develop clear guidelines to formalize this mechanism. Student inventors shall 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 multi-disciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the startup.
- b. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying shall be allowed to use their address in the institute to register their company with due permission from the institution.
  - c. Students' entrepreneurs shall be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the university.
  - d. Institute shall allow students to take a semester/year break (or even more depending upon the decision of review committee constituted by the institute) to work on their startups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. Institute shall set up a review committee for review of startup by students, and based on the progress made, it may consider giving appropriate credits for academics after obtaining the permission from the university.
  - e. The institute shall explore provision of accommodation to the entrepreneurs within the campus for some period of time.

- f. Institute shall allow faculty and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the institute) as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back. Institution shall consider allowing use of its resource to faculty/students/staff wishing to establish start up as a fulltime effort. The seniority and other academic benefits during such period may be preserved for such staff or faculty.
- g. The long-term goal of institute is to start a part-time/full time MS/ MBA/ PGDM (Innovation, entrepreneurship and venture development) program where one can get degree while incubating and nurturing a startup company as per the AICTE guidelines for a similar program.
- h. Institute will facilitate the startup activities/ technology development by allowing students/ faculty/ staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:
  - i. Short-term/ six-month/one-year part-time entrepreneurship training.
  - ii. Mentorship support on regular basis.
  - iii. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product- costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.
  - iv. Institute shall also assist to link the startups to other seed-fund providers/ angel funds/ venture funds.
  - v. License institute IPR as discussed in section IV below.
- 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. Other factors for consideration shall be space, infrastructure, mentorship support, seed- funds, support for accounts, legal, patents etc.
  - i. For staff and faculty, institute shall take no-more than 20% of shares that staff/ faculty takes while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares, listed above.
  - ii. No restriction on shares that faculty / staff can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case the faculty/ staff hold the executive or managerial position for more than three months in a startup, then they need to go on sabbatical/leave without pay/ earned leave.

- iii. In case of compulsory equity model, Startup may be given a cooling period of 3 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 will not force startup to issue equity on the first day of granting incubation support.
- j. The institute shall also provide services based on mixture of equity, fee-based and/ or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the institute on rental basis.
- k. Institute shall extend this startup facility to alumni of the institute as well as outsiders.
- l. Participation in startup related activities shall be considered as a legitimate activity of faculty in addition to teaching, R&D projects, and industrial consultancy and management duties and shall be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.
- m. Product development and commercialization as well as participating and nurturing of startups shall now be added to a bucket of faculty-duties and each faculty can 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.
- n. Institution shall update/change/revise performance evaluation policies for faculty and staff as stated above.
- o. Institute shall 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 institute facilities / funds are used substantially or when IPR is developed as a part of curriculum/academic activity, IPR is to be jointly owned by inventors and the institute.
  - i. Inventors and institute could together license the product /IPR to any commercial organization, with inventors having the primary say. License fees could be either/or a mix of:
    - (aa) Upfront fees or one-time technology transfer fees
    - (ab) Royalty as a percentage of sale-price
    - (ac) Shares in the company licensing the product
  - ii. Institute may not be allowed to hold the equity as per the current statute, so SPV shall be requested to hold equity on its behalf.

- iii. If one or more of the inventors wish to incubate a company and license the product to this company, the royalties would be no more than 4% of sale price, preferably 1 to 2%, unless it is pure software product. If it is shares in the company, shares will again be 1% to 4%. For a pure software product licensing, there may be a revenue sharing to be mutually decided between the institute and the incubated company.
- b. On the other hand, if product/ IPR is developed by innovators not using any institute facilities, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product/ IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.
- c. If there is a dispute in ownership, a minimum five-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 it cannot find sufficiently experienced alumni / faculty of its own.
- d. Institute IPR cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If institute is to pay for patent filing, they can have a committee which can examine whether the IPR is worth patenting. The committee shall 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 shall have a say in patenting.
- e. All institute's decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / institute will have no say, including heads of department, heads of institutes, deans or registrars.
- f. Interdisciplinary research and publication on startup and entrepreneurship shall be promoted by the institutions.

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

- a. Institute shall recruit staff that has a strong innovation and entrepreneurial/ industrial experience, behavior and attitude. This will help in fostering I&E culture.
  - i. Some of the relevant faculty members with prior exposure and interest shall be deputed for training to promote I&E.
  - ii. To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff shall be developed with constant up-skilling.



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

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

- a. To ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market, following mechanisms shall be devised at institution level.
  - i. Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability shall be a part of the institutional entrepreneurial agenda.
  - ii. Students/ staff shall be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs shall innovate with focus on the market niche.
  - iii. Students shall be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, exhibitions, mentoring by academic and industry personnel,

throwing real life challenges, awards and recognition shall be regularly organized.

- iv. To prepare the students for creating the start up through the education, integration of education activities with enterprise-related activities shall be undertaken.
- b. The institute shall link their startups and companies with wider entrepreneurial ecosystem and by providing support to students who show potential, in pre-startup phase. Connecting student entrepreneurs with real life entrepreneurs will help the students in understanding real challenges which may be faced by them while going through the innovation funnel and will increase the probability of success.
- c. The institute established Institution's Innovation Council (IIC) as per the guidelines of MHRD's Innovation Cell and allocated appropriate budget for its activities. IICs shall guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts shall be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.
- d. For strengthening the innovation funnel of the institute, access to financing shall be opened for the potential entrepreneurs.
  - i. Networking events shall be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
  - ii. Provide business incubation facilities: premises at subsidized cost. Laboratories, research facilities, IT services, training, mentoring, etc. shall be accessible to the new startups.
  - iii. A culture is promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and return. While funding is taking risk on the entrepreneur, it is an obligation of the entrepreneur to make every effort possible to prove that the funding agency did right in funding him/her.
- e. Institute shall develop a ready reckoner of Innovation Tool Kit, which shall be kept on the homepage on institute's website to answer the doubts and queries of the innovators and enlisting the facilities available at the institute.

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

- a. For better coordination of the entrepreneurial activities, norms for faculty to do startups shall be created by the institute. Only those technologies shall 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. Institutes shall work on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.
  - iii. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- b. In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, they will go on sabbatical leave without pay/utilize existing leave.
  - c. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company.
  - d. In case of selection of a faculty 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) may be permitted to the faculty.
  - e. Faculty must not accept gifts from the startup.
  - f. Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa.
  - g. Human subject related research in startup shall get clearance from ethics committee of the institution.

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

- a. Diversified approach shall be adopted to produce desirable learning outcomes, which shall include cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery.
  - i. Student clubs/ bodies/ departments must be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies shall be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.
  - ii. Institutes shall start annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute.
  - iii. For creating awareness among the students, the teaching methods shall include case studies on business failure and real-life experience reports by startups.

- iv. Tolerating and encouraging failures: Our systems are not designed for tolerating and encouraging failure. Failures need to be elaborately discussed and debated to imbibe that failure is a part of life, thus helping in reducing the social stigma associated with it. Very importantly, this shall be a part of institute's philosophy and culture.
  - v. Innovation champions shall be nominated from within the students/ faculty/ staff for each department/ stream of study.
- b. Entrepreneurship education shall be imparted to students at curricular/ co-curricular/ extra- curricular level through elective/ short term or long-term courses on innovation, entrepreneurship and venture development. Validated learning outcomes shall be made available to the students.
- i. Integration of expertise of the external stakeholders shall be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.
  - ii. In the beginning of every academic session, institute shall conduct an induction program about the importance of I&E so that freshly inducted students are made aware about the entrepreneurial agenda of the institute and available support systems. Curriculum for the entrepreneurship education shall be continuously updated based on entrepreneurship research outcomes. This shall also include case studies on failures.
  - iii. Industry linkages shall be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.
  - iv. Sensitization of students shall be done for their understanding on expected learning outcomes.
  - v. Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based.
  - vi. Customized teaching and training materials shall be developed for startups.
  - vii. It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader, who would convert an innovation successfully into a product; others may join the leader and work for the startup. It is important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take risk.
- c. Pedagogical changes shall be done to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by the institutes for inculcating entrepreneurial culture shall be constantly reviewed and updated.

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

- a. Stakeholder engagement shall be given prime importance in the entrepreneurial agenda of the institute. Institutes shall 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 shall be ensured between institutes such as incubators, science parks, etc.
  - ii. Institute shall organize networking events for better engagement of collaborators and shall open up the opportunities for staff, faculty and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
  - iii. Mechanism shall be developed by the institute to capitalize on the knowledge gained through these collaborations.
  - iv. Care must be taken to ensure that events don't become an end goal. First focus of the incubator shall be to create successful ventures.
- b. The institute shall develop policy and guidelines for forming and managing the relationships with external stakeholders including private industries.
- c. Knowledge exchange through collaboration and partnership shall 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 programs, clubs, social gatherings, etc., faculty, staff and students of the institutes shall be given the opportunities to connect with the external environment.
  - ii. Connect of the institute with the external environment must be leveraged in form of absorbing information and experience from the external ecosystem into the institute's environment.

- iii. Single Point of Contact (SPOC) mechanism shall be created in the institute for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.
- iv. Mechanisms shall be devised by the institutions to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.
- v. Knowledge management shall be done by the institute through development of innovation knowledge platform using in-house Information & Communication Technology (ICT) capabilities.

## **10. Entrepreneurial Impact Assessment**

- a. Impact assessment of institute's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education shall be performed regularly by a committee established for the purpose (once in a month) 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 shall 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 shall be recorded and used for impact assessment.
  - iii. Impact shall also be measured for the support system provided by the institute to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.
- b. Formulation of strategy and impact assessment shall go hand in hand. The information on impact of the activities shall be actively used while developing and reviewing the entrepreneurial strategy.
- c. Impact assessment for measuring the success shall be in terms of sustainable social, financial and technological impact in the market. For innovations at pre-commercial stage, development of sustainable enterprise model is critical. COMMERCIAL success is the ONLY measure in long run.
  - i. Satisfaction of the participants in contests, workshops and training programs
  - ii. Participation in awareness programs
  - iii. Utilization of pre-incubation facilities by students
  - iv. Number of curriculum projects addressing real life problems

- v. Participation in various competitions and hackathons
- vi. Participation in pitching for fund raising and grants/support from government and non-government agencies
- vii. Contribution in industrial projects and consultancy projects
- viii. Idea to PoC projects
- ix. PoC to Prototype/MVP projects
- x. Product development and its launching in the market
- xi. Fund raising
- xii. Startup registrations and company incorporation
- xiii. Annual Turn over
- xiv. IPR application filing, grant and commercialization

## Annexure I: Glossary

Accelerators	Startup Accelerators design programs in batches and transform promising business ideas into reality under the guidance of mentors and several other available resources.
Angel Fund	An angel investor is a wealthy individual who invests his or her personal capital and shares experiences, contacts, and mentors (as possible and required by the startup in exchange for equity in that startup). Angels are usually accredited investors. Since their funds are involved, they are equally desirous in making the startup successful.
Cash flow management	Cash flow management is the process of tracking how much money is coming into and going out of your business.
Co-Creation	Co-creation is the act of creating together. When applied in business, it can be used as an economic strategy to develop new business models, products and services with customers, clients, trading partner or other parts of the same enterprise or venture.
Compulsory Equity	An equity share, commonly referred to as ordinary share also, represents the form of fractional or part ownership in which a shareholder, as a fractional owner, undertakes the maximum entrepreneurial risk associated with a business venture. The holders of such shares are members of the company and have voting rights.
Corporate Social Responsibility	Corporate Social Responsibility (CSR) is a self-regulating business model that helps a company for being socially accountable —to itself, its stakeholders, and the public.
Cross-disciplinary	Cross-disciplinary practices refer to teaching, learning, and scholarship activities that cut across disciplinary boundaries.
Entrepreneurial culture	A culture/ society that enhance the exhibition of the attributes, values, beliefs and behaviors that are related to entrepreneurs.
Entrepreneurial Individuals	An Individual who has an entrepreneurial mindset and wants to make his/her idea successful.
Entrepreneurship education	Entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings.
Experiential learning	Experiential learning is the process of learning through experience, and is more specifically defined as learning through reflection on doing.
Financial management	Financial Management is the application of general principles of management to the financial possessions of an enterprise.
Hackathon	A hackathon is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers, project managers, and others, often including domain experts, collaborate intensively on software projects.
Host Institution	Host institutions refer to well-known technology, management and R&D institutions working for developing startups and contributing towards developing a favorable entrepreneurial ecosystem.
Incubation	Incubation is a unique and highly flexible combination of business development processes, infrastructure and people, designed to nurture and grow new and small businesses by supporting them through the early stages of development.
Intellectual Property Rights Licensing	A licensing is a partnership between an intellectual property rights owner(licensor) and another who is authorized to use such rights (licensee) in exchange for an agreed payment(fee or royalty).
Knowledge Exchange	Knowledge exchange is a process which brings together academic staff, users of research and wider groups and communities to exchange ideas, evidence and expertise.
Pedagogy and	It refers to specific methods and teaching practices (as an academic subject or



Experiential Learning	theoretical concept) which would be applied for students working on startups. The experiential learning method will be used for teaching 'startup related concepts and contents' to introduce a positive influence on the thought processes of students. Courses like 'business idea generation' and 'soft skills for startups' would demand experiential learning rather than traditional class room lecturing. Business cases and teaching cases will be used to discuss practical business situations that can help students to arrive at a decision while facing business dilemma(s). Field based interactions with prospective customers; support institutions will also form a part of the pedagogy which will orient the students as they acquire field knowledge.
Pre-incubation	It typically represents the process which works with entrepreneurs who are in the very early stages of setting up their company. Usually, entrepreneurs come into such programs with just an idea of early prototype of their product or service. Such companies can the graduate into full-fledged incubation programs.
Prototype	A prototype is an early sample, model, or release of a product built to test a concept or process.
Science parks	A science park, also known as a research park, technology park or innovation centre, is a purpose-built cluster of office spaces, labs, workrooms and meeting areas designed to support research and development in science and technology.
Seed fund	Seed fund is a form of securities offering in which an investor invests capital in a startup company in exchange for an equity stake in the company.
Special Purpose Vehicle	Special purpose vehicle, also called a special purpose entity, is a subsidiary created by a parent company to isolate financial risk. Its legal status as a separate company makes its obligations secure even if the parent company goes bankrupt.
Startup	An entity that develops a business model based on either product innovation or service innovation and makes it scalable, replicable and self-reliant and as defined in Gazette Notification No. G.S.R. 127(E) dated February 19, 2019.
Technology Business Incubator	Technology Business incubator (TBI) is an entity, which helps technology-based startup businesses with all the necessary resources/support that the startup needs to evolve and grows into a mature business.
Technology Commercialization	Technology commercialization is the process of transitioning technologies from the research lab to the marketplace.
Technology licensing	Agreement whereby an owner of a technological intellectual property (the licensor) allows another party (the licensee) to use, modify, and/or resell that property in exchange for a compensation.
Technology management	Technology management is the integrated planning, design, optimization, operation and control of technological products, processes and services.
Venture Capital	It is the most well-known form of startup funding. Venture Capitalists (VCs) typically reserve additional capital for follow-up investment rounds. Another huge value that VCs provide is access to their networks for employees or clients for products or services of the startup.

## Annexure II: Technology Readiness Levels (TRLs)

Technology Readiness Levels (TRLs) are used for understanding the maturity of a technology during its acquisition phase. TRLs allow technical team/evaluators to have a consistent datum of reference for understanding technology evolution, regardless of their technical background. Current TRL scale is a metric with NINE Technology Readiness Levels for describing the maturity of a technology from ideation stage

