Innovation and Startup Policy

YENEPOYA
INSTITUTE OF TECHNOLOGY

YENEPOYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi, and Affiliated to VTU, Belagavi)

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Content

1. Introduction

At Yenepoya Institute of Technology, we stand as a bastion of knowledge, a crucible of creativity, and a hub of aspiring engineers. Guided by a profound understanding of the transformative potential of innovation and entrepreneurship, we set forth this Innovation and Start-up Policy with a resolute commitment to shaping the future of engineering education and practice.

Recognizing that innovation is the driving force behind societal progress, we embark on a journey to foster a culture of innovation that permeates every facet of our institution. We understand that the fusion of cutting-edge technology and inventive thinking paves the way for revolutionary breakthroughs, and we pledge to empower our students and faculty to be at the forefront of this movement. With a keen eye on the entrepreneurial horizon, we acknowledge that start-ups are the crucibles where bold ideas evolve into tangible solutions. As such, we are dedicated to nurturing an environment where entrepreneurship is not just a choice, but a natural consequence of rigorous education, mentorship, and access to resources.

This policy is a testament to our commitment to instil in our students the ethos of innovation. We believe in nurturing their curiosity, enabling them to question the status quo, and encouraging them to forge their own paths as they venture into uncharted territories. As we lay the groundwork for an ecosystem that celebrates innovation and supports start-ups, we prioritize collaboration over isolation. We pledge to create synergies among academia, industry, and the entrepreneurial world, recognizing that the cross-pollination of ideas is essential for true progress.

Equity, diversity, and inclusion are woven into the fabric of this policy. We recognize that innovation flourishes when diverse perspectives converge. Our doors are open to all, irrespective of background or circumstance, and we are committed to providing equal opportunities for all to engage in the transformative journey of entrepreneurship.

In writing this preamble, we declare our unwavering dedication to nurturing a generation of engineers who are not only proficient in the technical arts but are also pioneers in innovation. With this Innovation and Start-up Policy, we lay the foundation for a future where our institution's name becomes synonymous with ground breaking discoveries and trailblazing ventures.

2. Innovation and Startup Policy

2.1 Objective and Scope

a. The objective and scope of an innovation and startup policy are to foster a conducive environment for innovation, entrepreneurship, and the growth of startups within a country or region. Policies are designed to address various challenges faced by startups and innovative ventures, with the ultimate goal of boosting economic growth, creating jobs, and enhancing technological advancement.

b. Designing favorable regulations that reduce bureaucratic hurdles and create a supportive environment for starting and running a business. This can include streamlined business registration, simplified licensing procedures, and tax incentives. Creating mechanisms to facilitate access to various funding sources, such as venture capital, angel investment, government grants, and loans tailored to startups.

2.2 Strategies and Governance

a. Entrepreneurship promotion and development is one of the key dimensions of the YIT's vision and strategy. YIT will use the ARIIA ranking framework to set objectives and track the different performance indicators and guide actions.

b. The entrepreneurial agenda of the YIT will be the responsibility of the Head of the Institute. Since promoting entrepreneurship requires a different type of mindset as compared to other academic activities, this role may be staffed by a faculty or staff or external hire who understands the industry and above all business.

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

  i. Investment in the entrepreneurial activities should be a part of the institutional financial strategy. YIT will create a separate 'Innovation Fund' and work towards allocating a minimum 1% fund of the total annual budget of the institution for funding and supporting innovation and startups related activities.

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

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

  iv. YIT will try to raise funding through sponsorships and donations and will actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).

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

e. Importance of innovation and entrepreneurial agenda should be known across the YIT and will be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc. The Institute Innovation Council comprising student and faculty representatives will play an important role in the above, along with student clubs.

f. The I&E strategy will embrace the entrepreneurial activities across various centers, departments, faculties, within the YIT, thus breaking the silos. The objectives of the units will be aligned with the overall objectives and performance indicators.

g. Product to market strategy for startups will be developed by the YIT on case to case basis.

h. Development of entrepreneurship culture will not be limited within the boundaries of the institution. Faculty and staff may participate in initiatives to promote startups outside the YIT with prior approvals

    i. YIT is striving to be the driving force in developing entrepreneurship culture in its vicinity (regional, social and community level). This shall include giving opportunity for regional startups, provision to extend facilities for outsiders and active involvement of the YIT in defining strategic direction for local development.

    ii. Strategic international partnerships will 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 would also be promoted.

2.3 Startups Enabling Institutional Infrastructure

Incubation and Innovation need to be organically interlinked. Without innovation, new enterprises are unlikely to succeed. The goal of the effort should be to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

a. YIT will create and continuously improve facilities like IICs as per the guidelines by MHRD's Innovation Cell, EDC, Innovation Cell, Student Clubs to support pre-incubation and Incubation/ acceleration by mobilizing resources from internal and external sources.

b. The Pre-Incubation/Incubation facility will be accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution.

c. Pre-incubation facilities will be a separately registered entity as 'Incubation cum Technology Commercialization Unit' (ITCU) will be a separate entity preferably registered under Section-8 of Company Act 2013 or 'Society' registered under Society Registration Act with independent governance structure. This will allow more freedom to Incubators in decision making with less administrative hassles for executing the programs related to innovation, IPR and Startups.

d. YIT will offer mentoring and other relevant services through Pre- incubation/Incubation units' in- return for fees (or) zero payment basis. YIT may not hold the equity as per the current statute, so Section 8 Company may be requested to hold equity on its behalf. The modalities regarding Equity Sharing in Startups supported through these units will depend upon the nature of services offered by these units.

2.4 Nurturing Innovations and Startups

a. YIT will encourage creation and nurturing of Startups/enterprises by students, staff (including temporary or project staff), and faculty. They will be encouraged to apply for incubation with the YIT's incubator or any recognized incubator. However, the selection of the startup for incubation will be as per the guidelines of the incubator.

   i. YIT will allow licensing of IPR from YIT to start up as per the IPR policy. 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 YIT, may be given a license on the said technology as per the IPR policy.

   ii. YIT will encourage students to intern with the startups incubated in any recognized incubator while studying.

   iii. Student inventors will also be allowed to opt for developing their startup in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a startup may be interdisciplinary or multidisciplinary. 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 entrepreneurs will be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the YIT.

c. YIT will allow the students to take a semester/year break or even more depending upon the decision of review committee constituted by the YIT 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. YIT will set up a review committee for review of start up by students, and based on the progress made, it may consider giving appropriate credits for academics.

d. YIT, depending on availability, will provide accommodation to the entrepreneurs within the campus for some period of time.

e. YIT will allow faculty and staff to take off for a semester / year or even more depending upon the decision of review committee constituted by the YIT as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back. Institution should consider allowing use of its resource to faculty/students/staff wishing to establish start up as a fulltime effort. The seniority and other academic benefits during such period may be preserved for such staff or faculty.

f. YIT will facilitate the startup activities/ technology development by allowing students/ faculty/staff to use YIT 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. YIT will also link the startups to other seed-fund providers/ angel funds/ venture funds or itself may set up seed-fund once the incubation activities mature.

   v. License YIT IPR as discussed in the IPR policy.

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

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

i. YIT will also update/change/revise performance evaluation policies for faculty and staff as stated above.

j. YIT at no stage will have any liability accrue to it because of any activity of any startup. Students who intend to pursue entrepreneurial ventures cannot use the YIT address to register their company.

2.5   Product Ownership Rights for Technologies Developed at Institute

a. The ownership of IP will be as per the IPR policy of the YIT.

b. All YIT's decision-making body with respect to IPR / technology-licensing / incubation will consist of faculty and experts who have excelled in technology translation

c. Interdisciplinary research and publication on startup and entrepreneurship will be promoted by the YIT.

2.6   Organizational Capacity, Human Resources and Incentives

a. YIT will recruit staff that has a strong innovation and entrepreneurial/ industrial experience, behavior and attitude.

    i. Some of the relevant faculty members with prior exposure and interest will 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 will be developed with constant up skilling.

b. Faculty and departments of the YIT have to work in coherence and cross- departmental linkages will 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. Such experts will be paid honorarium as per the YIT norms.

d. Faculty and staff are encouraged to do courses on innovation, entrepreneurship management and venture development using their professional development fund.

e. In order to attract and retain right people, YIT in consultation with the Board of Governors will develop academic and non-academic 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 will 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, etc

    iii. A performance matrix will be developed and used for evaluation of annual performance

2.7 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, the YIT will rely on the following mechanisms:

    i. The Design Spine curriculum at undergraduate level will be the main channel for cultivating this process. Students shall be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers.

    ii. Entrepreneurs should innovate with focus on the market niche and students will be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills like design thinking, and critical thinking by inviting first generation local entrepreneurs or experts to address young minds.

    iii. 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 will be routinely organized.

    iv. This tight integration between design- centric education and enterprise related activities will be persisted by the YIT.

b. YIT will provide 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. YIT will allocate an appropriate budget for the Institute Innovation Council (IIC) for its activities. IIC will organize various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts will be required to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.

2.8 Norms for Faculty Startups

a. For better coordination of the entrepreneurial activities, norms for faculty to do startups will be created by the YIT. Only those technologies should be taken for faculty startups which originate from within the YIT.

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

    ii. 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 hold 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 YIT from the work conducted at the startup/ company.

d. In case of selection of a faculty start up by an outside national or international accelerator, a maximum leave (as sabbatical/ existing leave/ unpaid leave/ casual leave/ earned leave) of one semester/ year (or even more depending upon the decision of review committee constituted by the YIT) will 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 YIT in activities at the startup and vice-versa.

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

2.9 Pedagogy and Learning Interventions for Entrepreneurship Development

a. Diversified approach will be adopted to produce desirable learning outcomes, which should include cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery.

    i. Student clubs/ bodies/ departments will be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies will be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.

    ii. YIT will create an annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the YIT.

    iii. For creating awareness among the students, the teaching methods would 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 will be a part of YIT's philosophy and culture.

    v. The Institute Innovation Council may comprise innovation champions from within the students/ faculty/ staff for each department/ stream of study.

b. Entrepreneurship education will be imparted to students at curricular/ co-curricular/ extracurricular level through elective/ short term or long-term courses on innovation, entrepreneurship and venture development. Validated learning outcomes should be made available to the students.

    i. Integration of expertise of the external stakeholders will 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, YIT will conduct an induction program about the importance of I & E so that freshly inducted students are made aware about the entrepreneurial agenda of the YIT and available support systems. Curriculum for the entrepreneurship education will be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.

    iii. Industry linkages will be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.

    iv. Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based.

    v. Customized teaching and training materials will be developed for startups.

    vi. It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader, who would convert an innovation successfully into a product, others may join the leader and work for the startup. It is important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take risk.

c. Pedagogical changes need to be done to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by the YIT for inculcating entrepreneurial culture will be constantly reviewed and updated.

2.10 Collaboration, Co-creation, Business Relationships and Knowledge Exchange

a. Stakeholder engagement will be given prime importance in the entrepreneurial agenda of the YIT. YIT 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. YIT will organize networking events for better engagement of collaborators and should

open up the opportunities for staff, faculty and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.

     iii. Mechanism will be developed by the YIT to capitalize on the knowledge gained through these collaborations.

b. Knowledge exchange through collaboration and partnership will be made a part of institutional policy and YIT will 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 YIT will be given the opportunities to connect with their external environment.

     ii. Connect of the YIT with the external environment must be leveraged in form of absorbing information and experience from the external ecosystem into the YIT's environment.

     iii. YIT will plan for an innovation knowledge platform using in-house Information & Communication Technology (ICT) capabilities.

2.11 Entrepreneurial Impact Assessment

a. Impact assessment of YIT's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education will be performed using the Atal Ranking of Institutions on Innovation Achievement (ARIIA) on an annual basis.

     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 YIT will be recorded and used for impact assessment.

     iii. Impact will also be measured for the support system provided by the YIT to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.

b. Formulation of strategy and impact assessment should go hand in hand. The information on impact of the activities should be actively used while developing and reviewing the entrepreneurial strategy.

c. Impact assessment for measuring the success 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. COMMERCIAL success is the ONLY measure in long run.

3. Terminology

- 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 is 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: Corporate social responsibility (CSR) is a self-regulating business model that helps Responsibility a company be 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.
- Entrepreneurship: Entrepreneurship education seeks to provide students with the knowledge, skills education and motivation to encourage entrepreneurial success in a variety of settings.
- 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: Alicensing is a partnership between an intellectual property rights owner and another who is authorized to use such rights (licensee) in exchange for an agreed payment (fee or royalty). (licensor) Rights Licensing.
- 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.
- 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 and 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.
- 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: Technology commercialization is the process of transitioning technologies from Commercialization 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 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.