



KOLHAPUR INSTITUTE
OF TECHNOLOGY'S
**COLLEGE OF
ENGINEERING**
(AUTONOMOUS),
KOLHAPUR

Institutional Innovation and Startup Policy (IISP) for students and faculty

A Guiding Framework for Students & Faculty



Kolhapur Institute of Technology's College of Engineering (Autonomous), Kolhapur

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THE BEST WAY TO PREDICT THE FUTURE IS TO CREATE IT



This is for all those who

Refuse to give in

Embrace change

Keep Pushing



*Who invent , create and
wont stop until their ideas turn into life*

The one who Believe that future isn't something you wait for



ITS CHANCE , A CHALLENGE, AN INSPIRATION !

“ Through Thoughtful Policy Intervention and Strategic Investment, Drive Innovation and Entrepreneurial Ideas on and Off Campus, and Create A Vibrant Entrepreneurial Culture and Ecosystem to Create Multiple Economic Hubs.”

Approved in KIT Board Meeting No. 416 Dated 26th June 2021

KIT's Innovation and Startup Policy (IISP) committee

Sr. No.	Name	Organization	IISP Position
1	Dr. V. V. Karjinni	Director, KIT's College of Engineering Kolhapur	Chairman
2	Mr. Chandrashekar S. Dolli	Chairman Mayura Steels Pvt. Ltd. Kolhapur.	Industry Expert
3	Mr. Deepak Dhadoti	M.D. Servocontrols &Hydraulics India Pvt Ltd. Belgaum. Karnataka	Industry Expert
4	Mr. Atul Shinde	Director, Microlog Systems Kolhapur.	Industry Expert
5	Mr. Bipin Jirge	M.D. IFM Electronics India Pvt Ltd. Kolhapur.	Industry Expert
6	Mr. Vinayak Pachalag	Founder, Think bank and PTOLEMY, Pune.	Alumni Start-up
7	Mr. Amrut Patil	Deputy Director, Deshpande Foundation, Hubali Karnatka.	Incubation Expert
8	Mrs. Sayalee Bidwai	IPR Consultant, Sangali.	IPR Expert
9	Mr. Chaitannya Kulkarni	IPR Consultant, Kolhapur.	IPR Expert
10	Mr. Girish Degaonkar	Sr. Manager, COEP's Bhau Institute of Innovation Entrepreneurship & Leadership- Pune.	Incubation Expert
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13	Mr. Atul Nigvekar	Associate Professor & Head Department of E&TC Engineering KIT CoEK.	Senior Faculty and Internal Expert
14	Mrs. Vidula Waskar	Assistant Professor, Department of Civil Engineering KIT CoEK.	Faculty Member E-cell Coordinator
15	Dr. Girish Naik	Professor, Department of Mechanical Engineering KIT CoEK.	Member Secretary

We have been working to develop an entrepreneurship ecosystem at Kolhapur Institute of Technology's College of Engineering (Autonomous), Kolhapur for many years. Our future relies on fostering innovation, creativity and competitiveness. With the advent of industry 4.0 a structured approach to create an ecosystem of innovation is critical to stay relevant. This is a step forward in that direction. 'To develop an entrepreneurial ecosystem at campus in various upcoming areas of technology entrepreneurship with emphasis to product development and be among the leading incubators/innovation centers' with this vision in mind, KIT welcomes all our stakeholders to KIT's Innovation and Start-up Cell. I would like youngsters and entrepreneurs to grasp the benefits of the provisions made in the Institutional Innovation and Startup Policy (IISP). I am sure it will generate a conducive atmosphere and uplift talent to nurture innovative start-ups with creativity and skills to be job creators.

Shri. Bharat Patil

Chairman KITCoEK



Foreword by Chairman

Institutional Innovation and Startup Policy (IISP) aims at providing a framework for innovation and development in the areas of technology, sciences, and humanities by nurturing new ideas and research in an ethical environment, as well as teaching students and encouraging them to take up entrepreneurship as a preferred career choice. This platform intends to create a mechanism for knowledge generation and its commercial exploitation. This will ensure that students and faculty will lead at the frontiers of innovation. This move will encourage the job creators of India rather than job seekers, as well as help in the attainment of the 5 trillion economy. It will create a favorable environment for start-ups to grow with academic rigour, as well as promote market-driven research in the institute.



KOLHAPUR INSTITUTE
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COLLEGE OF
ENGINEERING
(AUTONOMOUS)
KOLHAPUR

Shri. Sunil Kulkarni

Vice-Chairman KITCoEK



Foreword by Vice-Chairman

We are here to establish a vibrant and dynamic start-up ecosystem across all the departments. Along with the setting up of an Incubation centre in 2019, the publication of IISP will invigorate the innovation culture at KIT to produce tech leaders for the future. It will promote synergetic collaboration between industry and academia. Also, it will enable the creation of a rich Intellectual Property (IP) resource base, providing us with opportunities for licensing and equity sharing. Our unique focus on small businesses will provide a further boost to innovation at the level of MSMEs. This will help the sector tide over its stagnation, and contribute to the national GDP at its full potential.



Shri. Dipak Chougule
Secretary KITCoEK



Kolhapur Institute of Technology's College of Engineering (Autonomous), Kolhapur, is a Premier Institute in Engineering & Technology established in 1983. We are committed to students and stakeholders to produce best in class engineering talent. Understanding the need of time to transform job seekers to job creators, management has proactively initiated an entrepreneurial skill development initiative on campus three years ago. IISP will provide a fillip to our efforts. I am certain that the continued support of my expert faculty will ensure the IISP will be a huge success. I encourage all students and faculty to embrace this innovation-based approach to conduct market-driven research with commercial utility. I firmly believe that the policy will be implemented not only in letter, but wholeheartedly in spirit.



Dr. V. V. Karjinni

Director KITCoEK



Foreword by Director

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PREAMBLE

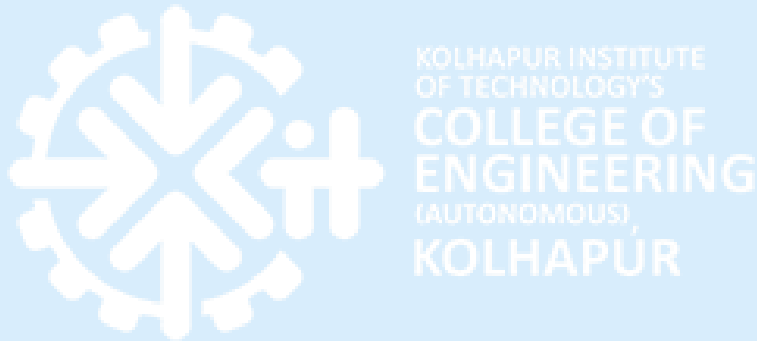
A dramatic technological revolution of incredible speed and of unprecedented proportions is shaping the contours of the new world order. Its impact on the economy and society demands a fundamental recasting of our vision. India has an enviable student strength in technology related disciplines. This intellectual wealth, if leveraged, can create great economic value in terms of innovation and job creation.

Entrepreneurship and Start-up Policies play a vital role in the economic and social development of a nation. In developing economies, these policies extend support to entrepreneurs and start-ups in overcoming the numerous barriers while trying to promote their start-ups. India, Brazil, and China have significant market potential and these countries have been designing and promoting entrepreneurship/start-up policies among various stakeholders towards filling their demand-supply gap and, at the same time, creating employment opportunities. Educational institutes in general and technical institutes in particular play an imperative role in shaping the start-up movement of a nation. This policy emphasizes the much-desired need for an appropriate start-up policy to propel the faculty and students through and beyond the 21st century. Therefore, its vision has been designed to underpin the nation's socio-economic progress and development through the promotion of technology-driven student start-ups. It emphasizes the need for a forward-looking, coherent, systematic, and comprehensive approach to design and implement their innovative ideas, leading to commercial success.

KOLHAPUR INSTITUTE OF TECHNOLOGY'S COLLEGE OF ENGINEERING (AUTONOMOUS), KOLHAPUR. It is a Premier Institute in Engineering & Technology, established in 1983 by a group of visionary industrialists, professionals, and educationalists. The vast exposure and experience of its founders has helped Kolhapur Institute of Technology's College of Engineering Kolhapur to establish its identity as an Institute of repute in the field of Engineering and Management education. The first among the self-financed engineering colleges in Maharashtra.

The Institute has been awarded 'A' Grade Status with CGPA 3.12 by the National Assessment and Accreditation Council (NAAC), Bengaluru. The Institute has successfully received accreditation for six departments (Civil Engineering, Computer Science &

Engineering, Environmental Engineering, Electronics Engineering, Mechanical Engineering, and Production Engineering) by the National Board of Accreditation (NBA), New Delhi, which is the Govt. body for accreditation of programs in institutes. The Institute has also received Permanent Affiliation from Shivaji University, Kolhapur and has received Autonomous status. We are committed to students and stakeholders for best results and following it successfully produced more than 15000 engineers getting campus placements and becoming entrepreneurs, becoming one of the most prominent and successful Institutes for Engineering Education in western Maharashtra.



VISION

To develop an entrepreneurial ecosystem on campus in various upcoming areas of technology entrepreneurship with an emphasis on product development (AgriTech, Biomedical, EnviroTech, and Electro Mechanical), and be among the leading incubators/innovation centers.

MISSION

To develop an effective interface between incubators, industry, and start-ups for identifying, promoting, and nurturing innovative ideas to develop commercialization of science & technology in the institute for mutual and societal benefit.

OBJECTIVES

1. To provide a framework to foster innovation and creativity in the areas of technology, science, and the humanities by nurturing new ideas and research, in an ethical environment.
2. Teaching students and encouraging them to take up entrepreneurship as a preferred career choice
3. To enable the institute to actively engage students, faculty, and staff in innovation and entrepreneurship related activities.
4. To facilitate the institute in terms of Intellectual Property (IP) ownership management, technology licensing and equity sharing.
5. To establish a vibrant and dynamic startup ecosystem across all the departments.
6. To create a mechanism for knowledge generation and its commercial exploitation.
7. Conduct various workshops, speaker sessions, and other such events and encourage college level students to start their own enterprise.
8. To foster within the academic community the ability to provide innovative technologies and business ideas and connect them to peers, mentors, and incubators.

1. Strategies and Governance

- a. Entrepreneurship promotion and development should be one of the major dimensions of the institute's strategy. To facilitate development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators should be defined for assessment.
- b. The entrepreneurial agenda should be the responsibility of director to bring in required commitment and must be well understood by the higher authorities.
- c. Resource mobilization plan should be worked out at the institute for supporting pre-incubation, incubation infrastructure and facilities.
 - i. Minimum 1% fund of the total annual budget of the institution should be allocated for funding and supporting innovation and startup related activities through the creation of separate 'Innovation fund'.
 - ii. Bringing in external funding through government (state and central) such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, etc. and non-government sources should be encouraged.
 - iii. To support technology incubators, institute may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
 - iv. The Institute may also raise funding through sponsorships and donations. The Institute should actively engage the alumni network to promote Innovation & Entrepreneurship (I&E).
- d. For expediting the decision making, hierarchical barriers should be minimized and individual autonomy and ownership of initiatives should be promoted.
- e. Importance of innovation and entrepreneurial agenda should be known across the institute and should be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc.
- f. Product to market strategy for startups should be developed by the institute on case to case basis.
 - i. Development of entrepreneurship culture should not be limited within the boundaries of the institution. Institute should 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 institute in defining strategic direction for local development.

- ii. Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, engaging the international faculties in teaching and research should also be promoted.

Innovation is about creating new value people are willing to use and pay for, whereas strategy is the plan for harnessing, for example, marketing, operations, finance, and R & D to support achieving the competitive goal.

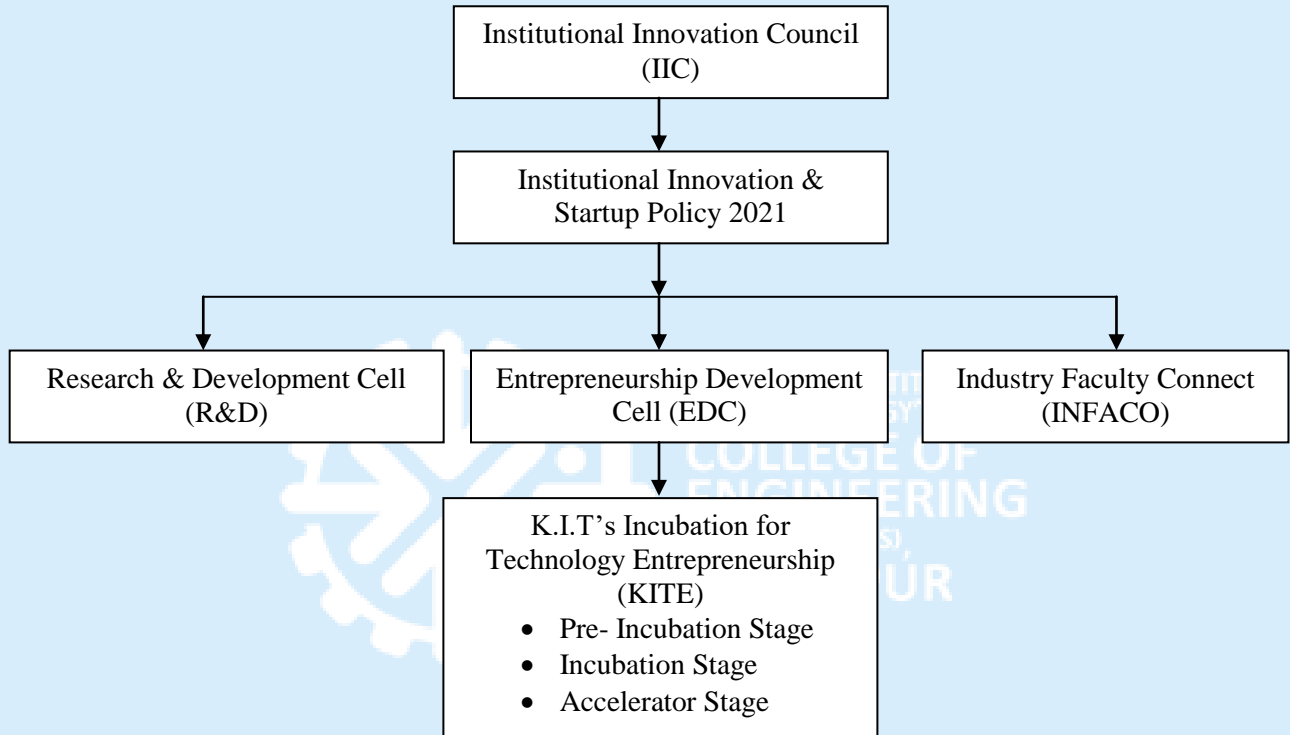
- Inspire and equip faculty and students to create and capture opportunities to design and implement innovative ideas to meet societal requirements.
- Shape the evolution of innovation ecosystems and contribute to the start-up system in ways that advance the public interest.
- Improve commercialization outcomes for inventors and entrepreneurs both inside and outside academia.
- Encourage social innovation towards the achievement of an inclusive and regenerative society.
- Partner with social and Indigenous enterprises to co-create culturally informed solutions to community identified challenges.
- Strengthen linkages between national level developmental institutions dedicated to entrepreneurship development and financial institutions for start-up promotion.
- Provide necessary support to faculty and students to explore innovative ideas and undertake risks in developing new products, processes, and services.
- The development process will be open and take different visions into consideration.
- The time, specific innovations will be promoted, leading to a start-up developing so that any gaps can be closed.
- Proactive innovation ideas will be promoted to achieve breakthroughs that
- Change the nature of products and services.
- To promote innovations needed to increase productivity and sustainability. In food and agriculture.

2. Startups Enabling Institutional Infrastructure

Creation of pre-incubation and incubation facilities for nurturing innovations and startups at the institute. Incubation and Innovation need to be organically interlinked. The goal of the effort should be to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

- a. Create facilities within institution for supporting pre-incubation (e.g. IICs as per the guidelines by MHRD's Innovation Cell, EDC, IEDC, New-Gen IEDC, Innovation Cell, Startup Cell, Student Clubs, etc.) and Incubation/ acceleration by mobilizing resources from internal and external sources.
- b. This Pre-Incubation/Incubation facility should be accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution.
- c. Pre-incubation facilities may or may not be a separately registered entity or Special Purpose Vehicle (SPV), but it is recommended that 'Incubation cum Technology Commercialization Unit' (ITCU) should be a separate entity preferably registered under Section-8 of Company Act 2013 or 'Society' registered under Society Registration Act with independent governance structure.
- d. The institute may 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 in Section3.

2.1 Institute infrastructure and various Cells to strengthen institute innovation and start-up policy



2.1.1 Institution's Innovation Council (IIC): Institute has established its IIC as per the AICTE-MoE's guideline and its composition of the Institution's Innovation Council's will be in line with the composition prescribed by AICTE-MoE's guideline from time to time. The major focus of IIC will be:

- To create a vibrant innovation ecosystem at campus.
- Identify & promote innovative ideas for Startup / Entrepreneurship supporting initiatives.
- Prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework (ARIIA)
- Establish a startup enabling ecosystem for scouting ideas and pre-incubator for ideas.
- Develop better cognitive abilities amongst students.

2.1.2 Research & Development Cell (R&D Cell): The function of the cell is to encourage the faculty and students in the area of Research & Development by providing seed funds for implementing their innovative research and product development ideas.

2.1.3 Entrepreneurship Development Cell (ED Cell): While 'Entrepreneurship' is growing to be one of the business world's biggest buzz words, the E-Cell at KITCoEK is responsible for inculcating entrepreneurship skills and attitudes among the students and also bridging the gap between the aspiring student entrepreneurs and well-known businessmen and entrepreneurs through a wide range of activities like workshops, competitions, boot camps, etc.

2.1.4 Industry Faculty Connect (INFACO): The function of the Cell is to promote closer interaction between the academic field and the professional field. Industry Interaction Cell is established to provide closer links with industries. The purpose of the cell is to find out the gap between the need of the industry and the end product of the institute.

The cell is the bridge between the industry, the real world and the institute. Industrial exposure to Faculty is very much helpful to guide students about the latest industrial practices. Faculty can familiarize himself/herself about recent developments and inventions in their fields and implement projects for the technologically driven economy

2.1.5 K.I.T's Incubation for Technology Entrepreneurship (KITE):

It is an academic incubation center which helps start-up companies by providing various services like management guidance, assistance with various services, consulting to young growing companies, and promoting the concept of growth through innovation and technology. Business incubation is support provided to start-up enterprises through the delivery of technical mentorship and entrepreneurship eco-system with the aim of improving their chances of survival in the early phase of their life span and establishing their later intensive growth. All alumni students and budding entrepreneurs in the western Maharashtra region are encouraged to take advantage of this incubation center. The incubator is developing a pool of mentors in different sectors to provide guidance to incubated start-ups. The service really helps start-ups to grow from ideation to successful product commercialization. We have a pool of mentors from local industry and academia to help start-ups at different levels.

3. Nurturing Innovations and Startups

- a. The institute is expected to establish processes and mechanisms for easy creation and nurturing of Startups/enterprises by students (UG, PG, Ph.D.), staff (including temporary or project staff), faculty, alumni and potential start up applicants even from outside the institutions.
- b. While defining their processes, institutions will ensure to achieve following:
 - i. Incubation support: Offer access to pre-incubation & Incubation facility to start ups by students, staff and faculty for mutually acceptable time-frame. In case an institute doesn't have a dedicated facility/ infrastructure of its own, then it may reach out to nearest incubation facilities in other HEIs in order to facilitate access to their students, staff and faculty.
 - ii. Will allow licensing of IPR from institute to start up: Ideally students and faculty members intending to initiate a startup based on the technology developed or co-developed by them or the technology owned by the institute, 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.
 - iii. Will allow setting up a startup (including social startups) and working part-time for the startups while studying / working: The institute may allow their students / staff to work on their innovative projects and setting up startups (including Social Startups) or work as intern
/ Part-time in startups (incubated in any recognized HEIs/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models. Student inventors may also be allowed to opt for startup in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a startup may be interdisciplinary or multidisciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a

student from the work being conducted at the start up.

- a. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the institute to register their company with due permission from the institution.
- b. Students entrepreneurs should be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage 50%, with due permission from the dean academics and approvals from COO incubation center.
- c. The institute should allow their 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. A review committee for review assessment of starts up by students, and based on the progress made, it may consider giving appropriate credits for academics.
- d. The institute should explore provision of accommodation to the entrepreneurs within the campus for some period of time if required.
- e. Allow faculty and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the institute) as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back. Use of institute's resource by faculty/students/staff wishing to establish start up as a fulltime effort should be permitted. The seniority and other academic benefits during such period may be preserved for such staff or faculty.
- f. 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.
- g. 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 the business.
 - iv. Institute may 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 institute IPR as discussed in section 4below.
- h. 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 v (The institute should normally take much lower equity share, unless its full-time and full-salary faculty/ staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed funds, support for accounts, legal, patents etc.
- i. For staff and faculty, institute can take no-more than 20% of the 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.
 - iii. In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, then they will go on sabbatical/ leave without pay/ earned leave.
 - iv. In the case of a compulsory equity model, a 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 cannot force startup to issue equity on the first day of granting incubation support.

- i. The institute should 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.
- j. The Institute could extend this startup facility to alumni of the institute as well as outsiders.
- k. Participation in startup related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.
- l. Product development and commercialization, as well as participating and nurturing of startups would now be added to a bucket of faculty-duties and each faculty would choose a mix and match of these activities (in addition to minimum required teaching and guidance) and then respective faculty are evaluated accordingly for their performance and promotion.
- m. Institutions might also need to update/change/revise performance evaluation policies for faculty and staff as stated above.
- n. Institute should ensure that at no stage any liability accrue to it because of any activity of any startup.

4. Product Ownership Rights for Technologies Developed at Institute

- a. When institute facilities / funds are used substantially or when IPR is developed as a part of a curriculum/ academic activity, IPR is to be jointly owned by the inventors and the institute.
 - i. Inventors and the 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
 - 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 policy/ guideline/ and revenue sharing to be mutually decided between the institute and the incubated company.)
 - ii. An institute may not be allowed to hold equity as per the current statute, so SPV may be requested to hold equity on their behalf.
 - iii. If one or more of the inventors wishes 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 policy/ guideline/ and 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.

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

- c. 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 should consist of faculty who have experience and excelled in technology development. If inventors are using their own funds or non-institute funds, then they alone should have a say in patenting.
- d. All the institute's decision-making bodies with respect to incubation / IPR / technology- licensing will consist of faculty and experts who have excelled in technology development. Other faculty in the department / institute will have no say, including heads of departments, heads of institutes, deans, or registrars.
- e. Interdisciplinary research and publication on startup and entrepreneurship should be promoted by the institutions.

4.1 Guidelines for Product Ownership Rights for Technologies Developed at Institute

The ultimate goal of these model guidelines is to promote student-led startups and ventures to protect and respect intellectual property.

These guidelines have the following objectives:

- i) To provide a framework to foster innovation and creativity in the areas of technology, sciences, and humanities by nurturing new ideas and research, in an ethical environment.
- ii) To protect intellectual property (IP) rights generated by faculty / personnel, students,

and staff of the academic institution, by translating their creative and innovative work into IP rights.

- iii) To lay down an efficient, fair, and transparent administrative process for ownership control and assignment of IP rights and sharing of revenues generated by IP, created and owned by the academic institution. Additionally, in cases of government funded research, the inventor(s)/ organization(s) should disclose their IP filings to the Government Agency(s) that have funded their research.
- iv) To promote more collaborations between academia and industry through better clarity on IP ownership and IP licensing.
- v) To create a mechanism for knowledge generation and its commercial exploitation. The purpose of IP commercialization is also to augment the financial self-sustenance goals of the academic institution & its labs and to reward faculty and researchers.

To establish an IP cell for supporting all innovation, creativity and IPR related endeavors of students, research scholars and faculty members.

Scope of Guidelines

- (i) These guidelines shall apply to all Intellectual Property created at the academic institution, as well as, all IP rights associated with them, from the date of implementation of these guidelines.
- (ii) These guidelines shall apply to all researchers who have established legal relationship with the academic institution, based on which the researcher is bound by these guidelines. Such a legal relationship may arise pursuant to the provision of law, collective agreement or individual agreement (may refer to employment/ retainer ship contract/ pursuance of studies or any other legal arrangement).
- (iii) These guidelines shall not apply in cases in which the researcher entered into an explicit arrangement to the contrary with the academic institution prior to the effective date of the guidelines, or the academic institution previously entered into an agreement with a third party concerning rights and obligations set out in these guidelines.

4.1.1 Ownership of IP

The ownership rights on IP may vary according to the context in which the concerned IP was generated. In this regard, a two-tier classification is suggested for adoption:

IP generated from research conducted by utilizing resources of the Academic Institution

I. Patents

- i. All inventions whether made by student/ researcher/ faculty (in furtherance of their responsibilities with the academic institution), developed by utilizing the resources of the academic institution, or with the mix of funds, resources and/or facilities of the academic institution, shall ordinarily be vested with the academic institution.
- ii. If the academic institution determines that an invention was made by an individual(s) on his/her own time and unrelated to his/her responsibilities towards the academic institution and was conceived or reduced to practice without the use of resources of the academic institution, then the invention shall vest with the individual(s)/inventor(s).

II. Copyright

- i. The ownership rights in scholarly and academic works generated utilizing resources of the academic institution, including books, articles, student projects/dissertations/ theses, lecture notes, audio or visual aids for giving lectures shall ordinarily be vested with the author(s).
- ii. The ownership rights in lecture videos or Massive Open Online Courses (MOOCs), films, plays, and musical works, institutional materials including, but not limited to, course syllabi, curricula, exam questions, exam instructions, and papers/ reports specifically commissioned by the academic institution, shall ordinarily be vested with the academic institution. The moral rights shall continue to vest with the author(s) wherever applicable.

III. Trademarks

- i. The ownership rights in all trademarks involving an academic institution shall ordinarily be vested with the academic institution. The academic institution may formulate necessary guidelines regarding the usage of the name of the academic institution through their trademark.
- ii. If the academic institution determines that the creator of the trade mark was created by an individual(s) on his/ her own time and unrelated to his/ her responsibilities [e.g. name of a company/ start-up venture by the student(s)], then the right to the same shall ordinarily be vested with the said individual(s).

IV. Industrial Designs

- i. All industrial designs whether made by students / researchers / faculty (in further reference of their responsibilities with the academic institution) developed by utilizing the resources of the academic institution, or with the mix of funds, resources and/or facilities of the academic institution, shall ordinarily be vested with the academic institution.
- ii. If the academic institution determines that the industrial design was created by an individual(s) on his/her own time and unrelated to his/her responsibilities towards the academic institution and was conceived or reduced to practice without the use of resources of the academic institution, then the industrial design shall vest with the individual(s).

4.1.2 Licensing Agreements and Revenue Sharing

4.1.2.1 Research outputs generated as a result of utilization of resources of the Academic Institution

The academic institution is free to enter into revenue sharing agreement(s) with the researcher(s), in cases of commercialization of innovation(s), creation(s), etc., as per the advice of the IP cell. The details of revenue sharing may be decided, based on the type of IP and the nature of commercialization. The academic institution may adopt various models for royalty sharing amongst creator(s)/ inventor(s) and institution/ organization.

- i. In case faculty/staff is drawing salary from institute, institute's stake/equity on startup should be limited to 20% of total share of faculty/staff or 9.5% of total stake whichever is minimum.
- i. In case the IP filing costs were not borne by the academic institution, the researcher may be allowed to first deduct the costs incurred for filing of applications and maintenance of such IP, from any income accruing from the commercial exploitation of the IP. This is particularly relevant, as provisional patent applications may have to be filed by the innovators before any disclosure of the innovation. Only the income beyond such costs needs to be shared with the academic institution.
 - ii. The researcher's share may continue to be paid, irrespective of whether or not the individual continues as a researcher at the academic institution.
 - iii. If more than one researcher is involved in the generation of IP, all the researchers who qualify for benefit sharing in that IP may sign at the time of filing the application (for example, at the time of filing of patent application), an agreement outlining the proposed distribution of any IP-related earnings based on their contribution. The agreement should specify the proportional percentage of distribution of earnings from IP to each of the researchers. The researcher(s) may, at any time, by mutual consent, revise the distribution of IP earnings agreement, and the academic institution, may approve the revised agreement, subject to the advice of the IP cell.
- v. With regard to the IP-related revenues earned by the academic institution, 50% of the revenue may be used for creating the academic institution IP management fund. This fund may be utilized for any activity relating to commercialization and maintenance of IPR or obtaining IPR in any other country, or for capacity building in the area of IP protection. Further, 10% of the share may be paid to the academic institution as administrative charges, and 40% may be made available to the concerned department for the purchase of equipment or materials, including Annual Maintenance Contracts (AMC), or for any other academic/research activity, including promotion of science and innovation.

- vi. In the case where the copyright vests with the author(s), the academic institution shall have a non-exclusive, royalty free, irrevocable, and worldwide license to use the IP for research, non-commercial and educational purposes. Additionally, in cases where the academic institution is the owner of copyright in lecture videos and/or MOOCs, the author(s) shall have a non-exclusive, royalty free, irrevocable, and worldwide license to use the IP for research, non-commercial and educational purposes.

4.1.2.2 Research outputs generated in collaboration with external partners

- i. The revenue sharing on any IP generated from a partnership between the academic institution and external partners may be based on the agreement signed between the academic institution and the external partner at the beginning of such collaborations.
- ii. In circumstances wherein the assignee or the licensee has not taken adequate steps towards the commercialization of the academic institution owned intellectual property, the academic institution may consider revocation of the license and assigning it to another party, after following due process. It is important to add this as a clause in any agreement entered into by the academic institution, with regard to commercialization of technologies.

4.1.2.3 Limitation of Liability

All commercialization agreements shall clearly mention that the academic institution is protected and indemnified from all liability arising from development and commercialization of the IP.

4.1.2.4 Sharing of Costs with regard to IP protection

With regard to the costs involved in IP protection, the following is suggested:

- i. The expenses involved in obtaining and maintaining IP protection may be shared between the parties, depending on who owns the IP. If the academic institution is the sole owner of IP, the costs of IP protection should be borne

by the academic institution.

- ii. In case the academic institution refuses to incur expenditure in protecting IP, inventor may be allowed to file IP applications in the name of the academic institution inventor at their own costs. Under such circumstances, IP filing costs may be recouped as per the provisions relating to benefit sharing as described under the licensing agreements and revenue sharing section.
- iii. If the IP ownership is shared with external partners, the costs for IP protection may be shared by both the parties, based on the terms and conditions provided in the agreement.
- iv. It is preferable that any costs involved in the transfer of rights/ ownership of the academic institution – owned IP may be borne exclusively by the licensee, assignee or person acquiring such rights.

4.1.2.5 Waiver of IP rights by the Academic Institution

- i) Subject to any associated agreements, or any other agreement thereof, the academic institution may waive its rights, if the academic institution decides not to pursue the protection of IP within a period fixed by the academic institution, from sufficient disclosure by the researcher(s) to the academic institution (for example: nine months).
- ii) The academic institution shall take all efforts to convey the decision to the researcher, whether to pursue or not pursue the protection of IP, within a stipulated time period, after sufficient disclosure by the researcher, to the academic institution. Under all such circumstances, unless explicitly agreed to, the academic institution shall retain a non-exclusive, royalty-free, irrevocable, and worldwide license to use the IP for research and educational purposes.

4.1.2.6 Use of Academic Institutions' IP Resources

The academic institution may allow the use of the following IP resources by third parties as per conditions given there under:

- (i) Intellectual Property already in existence and owned by the academic institution;
- (ii) Usage of the name, logo, or trademark of the academic institution in the creation and marketing of intellectual property.

Conditions:

1. They will be used only in public interest;
2. They will be used:
 - In a responsible manner to create a product/process conforming to environmental safety and good manufacturing practices promoted by the Government of India and its regulatory bodies;
 - In promoting truthful claims and information, i.e., not for misleading the society or users;
 - Without any liability on the institute in case of misuse of trademark(s) or accidental damage accruing due to use of trademark(s).

4.1.3 Dealing with IP rights owned by third parties

4.1.3.1 Use of technology protected by IPRs like patents and designs

It is possible that researchers may have to use diverse technology/ design/ software, as part of their research. Under all such circumstances, due care and attention must be given, for not infringing the IP rights of third parties. Some of the licenses may have restrictions with regard to kind of usages permitted. It is important to ensure that due and necessary permissions are obtained from IP owners prior to engaging in any use which moves beyond the terms of license or as permitted under the relevant statute(s) in India.

4.1.3.2 Use of copyrighted materials

Whenever researchers use copyrighted material for teaching or research purposes, it needs to be ensured that the use is within the permission obtained from the concerned copyright holder(s) or is within the boundaries of exceptions provided under the Indian copyright law. The scope of different educational use-related exceptions under Indian copyright law has been interpreted by different courts in India.

- i) An academic institution may create an Institutional Repository and a link to the same may be provided on their official website. This repository shall include dissertations, theses, papers, publications, and other in-house publications. In the absence of an institutional repository, the researchers may submit such works in other open repositories in the relevant subject area.
- ii) Researchers maybe encouraged to license their works under an open license so that other researchers can also use the research outputs by providing appropriate attribution to the researchers.

4.1.4 Promotion of the use of Free and Open Source Software (FOSS)

The use of Free and Open Source Software (FOSS) can help in furthering the software- related skills of students and researchers. Wide adoption of FOSS would also improve the quality of software and lower the long-term costs of research in the universities. Hence the academic institution may:

- Actively promote the use of FOSS among researchers, along with adoption of open standards;
- Regularly organize training programmers in FOSS for researchers;
- License academic institution–owned software under open licenses; and
- As far as possible, use FOSS for all official purposes.

4.1.5 Confidentiality, Data Protection and Privacy

All users of information, documents and/or data within the academic institution, must ensure that the same is always held securely and all activities pertaining to such information, documents and/or data will be kept confidential by the user(s) and will be used only for purpose of such activities. The academic institution shall strive to protect the data and personal information against unauthorized access, loss, destruction or breach. It is suggested to have proper non- disclosure agreements with the user(s) in place to secure such confidential information, documents and/or data.

Notwithstanding the above, any information which falls within one of the following shall not be treated as Confidential Information:

- Already under public domain;
- Is required by law or regulation to be disclosed;
- Is independently developed by the researcher, and
- Is received from a third party having no obligations of confidentiality to the disclosing party.

4.1.6 Publications

- Any publication, document and/or paper arising out of research activities shall be owned jointly by the academic institution and researcher(s). The use of name, logo and/ or official emblem of the academic institution shall not be done without prior written permission from the institution.
- While the researcher may publish material relating to the research, it may be better for both the researcher and the academic institution or jointly decide on any publication to be made.
- Particular care needs to be taken that no publication is made till the patent, if applicable, is filed.
- The academic institution may retain the right to require exclusion of certain portions from the information being published.

4.2 Disputes & Appeals

- i) The academic institution may appoint a committee of experts to address the concerns of the aggrieved person(s) and all disputes there under shall be dealt with by this committee.
- ii) The decision taken by this committee should be within a prescribed time period (as decided by the academic institution/committee) from submission of said concern.

Over and beyond the above, with respect to any legal dispute arising under these guidelines, the relevant provisions of law shall be applicable.

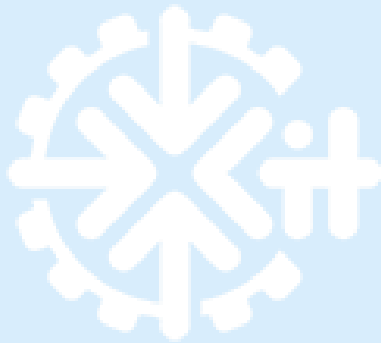
- iii) In case of any disputes between the academic institution and the inventor(s)/creator(s)/any other aggrieved person(s), regarding the implementation of these guidelines, scope, operation or effect of any contract/ agreement entered into, or the validity or breach thereof, the inventor(s) / creator(s)/ any other aggrieved person(s) may appeal to this committee appointed by the academic institution.

5. Organizational Capacity, Human Resources and Incentives

- a. Institute should recruit staffs that have a strong innovation and entrepreneurial/ industrial experience, behavior and attitude. This will help in fostering the I&E culture.
 - i. Some of the relevant faculty members with prior exposure and interest should be deputed for training to promote I&E.
 - b. Faculty and departments of the institutes have to work in coherence and cross-departmental linkages should 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 should be encouraged to do courses on innovation, entrepreneurship management and venture development.
 - e. In order to attract and retain right people, institute should 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 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, and associateships etc.
 - iii. A performance matrix should be developed and used for evaluation of annual performance.

Institutes Human Resource Capacity Building Approach

- Continuous innovation is impossible without knowledge assets.
- Only knowledge enables customer needs to be anticipated.
- It needs knowledge to leverage all organizational capabilities.
- Knowledge is the only core competence for coping with change.
- The exclusive source of knowledge for organization is people.
- A learning organization philosophy will be employed to encourage faculty and
- Staff to learn to produce the results they desire.



KOLHAPUR INSTITUTE
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COLLEGE OF
ENGINEERING
(AUTONOMOUS),
KOLHAPUR

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

5 Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level:

- a. To ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market, mechanisms should be devised at institution level.
 - i. Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability should be a part of the institutional entrepreneurial agenda.
 - ii. Students/ staff should be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs should innovate with focus on the market niche.
 - iii. Students should be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, boot camps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.
 - iv. To prepare the students for creating the startup through the education, integration of education activities with enterprise-related activities should be done.
- b. The institute should 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 should establish Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities. IICs should guide institutions in conducting various activities related to

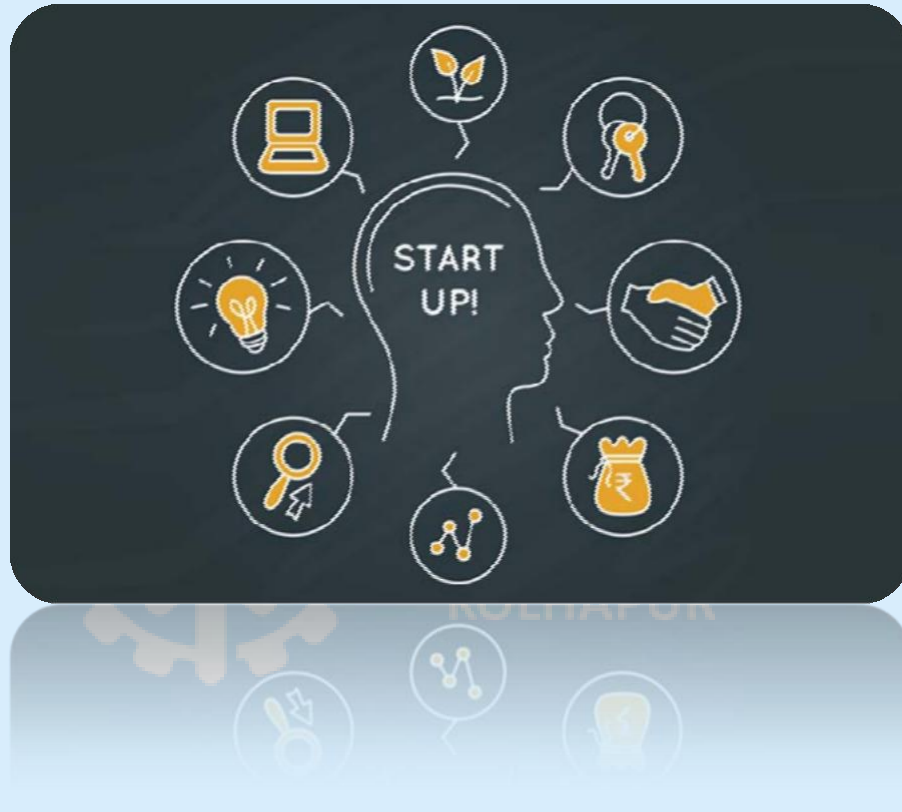
innovation, startup and entrepreneurship development. Collective and concentrated efforts should be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.

- d. For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.
 - i. Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
 - ii. Provide business incubation facilities: premises at subsidized cost. Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new startups.
 - iii. A culture needs to be 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.

Institute must develop a ready reckoner of Innovation Tool Kit, which must be kept on the homepage
- e. Institute's website will provide information pertaining to innovation tool kit and innovators and enlisting the facilities available at the institute.

Separate Pathway guideline is provided for projects through Incubation center

Guidelines for internship & project Accounted through KITE



Prepared by
**K.I.T.'s Incubation for Technology
Entrepreneurship (KITE) & E-cell**

GUIDELINES FOR INTERNSHIP & PROJECT ACCOUNTED THROUGH KITE

Under Category IV internship Accounted through incubation center (Project Prototype through entrepreneur development and Startup) undertaken by Students need to adhere to guidelines set by KITE for conduct of entrepreneur activity during span of project of Final Year B.Tech. Faculty mentor and E-cell departmental faculty coordinator of respective department will be monitoring student's progress periodically. Mode of execution under this category is as follows

PROCESS FLOW

Stage I: Enrollment (Final Year B.Tech.Sem-I)

- A. Enrollment: Applicant should submit his Application in given format as per Annexure attached below.
- B. Along with the application form he has to submit document stating
 - i. Problem Identification
 - ii. Problem validation (customer survey, market analysis)
 - iii. Business Model Canvas (If Applicable)

Synopsis (Hard & Soft)

Stage II: After Enrollment (Final Year B.Tech Sem. - I)

- A. Short Course Related to skill development in Entrepreneurship.
- B. Internship for 4 weeks in nearby incubation center.
- C. Submission of P.O.C. (Proof of Concept.)
- D. Submission of Final Business Plan

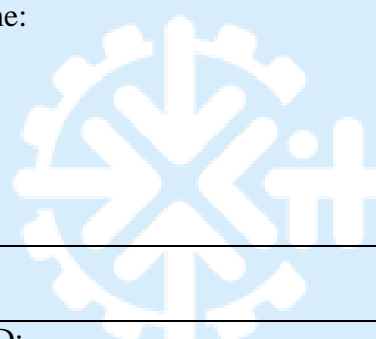

Stage III: Final Product Development (Final Year B.Tech Sem.II)

- A. Minimal viable product development
- B. Formation of Company / Patents and its registration
- C. Company presentation to selection committee.

Step. No.	Description of Activity	Responsibility	Timeline
Stage I: Before Enrollment (Final Year B.Tech Sem I)			
1	Identification of Problem	Student	Vacation Between 6 th and 7 th Sem.
2	Student identifies Startup then has to communicate with domain expert faculty and Departmental Ecell faculty coordinator.	Student	Vacation Between 6 th and 7 th Sem.
3	Enrollment: Applicant should submit his Application in given format	Faculty /Students	In First Two Week of 7 th Sem.
4	Along with the application form he has to submit Synopsis	Faculty /Students	In First Two Week of 7 th Sem.
Stage II: After Enrollment (Final Year B.Tech.Sem-I)			
5	Short Course Related to skill development in Entrepreneurship.	Students	Before Starting of 7 th Sem.
6	Internship for 4 weeks in nearby incubation center.	Students	At the end of 7 th Sem.
7	Submission of P.O.C. (Proof of Concept.)	Faculty /Students	End of 7 th Sem.
8	Submission of Final Business Plan	Students	End of 7 th Sem.
9	Presentation of Final Business Plan in front of Ecell Faculty Committee	Students	End of 7 th Sem.
Stage III: Final Product Development (Final Year B.Tech Sem II)			
10	Minimal viable product development	Faculty /Students	in 8 th Sem.
11	Formation of Company /Patent and its registration	Faculty /Students	in 8 th Sem.
12	Company presentation to selection committee.	Faculty /Students	End of 8 th Sem.

Startup Activity should be spanned between Final year of B. tech. Also, student should appear for Institute examination during 7th and 8th semester. Students to adhere to protocol of KITE Incubation Center and academics defined.

INCUBATION APPLICATIONFORM

Name/Proposed name of Start-Up/Company*:	
Focus Area:	
<p>(* If business entity has not been formed yet, please indicate the name of the Co-Founder of the startup)</p>	
Name of Lead Entrepreneur (A separate resume may also be attached)	
1. Full Name:	
	 <div style="text-align: right;">Photograph</div>
2. Gender:	3. Adhaar No.
4. E-Mail ID:	5. Contact No:
6. Educational Qualifications	7. Name of faculty Mentor
8. Postal Address	9. Department
10. Brief Description of the Product/Services/Technology business you plan to incubate in KITE	
11. Brief description of the R&D efforts and other technological inputs you hope to resource from KIT (Please also indicate names of faculty member(s), dept./centers of the Institute you plan to associate and equipment's facilities to be used)	

12. How do you think your past experience is going to help you in this new venture?
13. Have you estimated and identified your seed funding needs/ source?
14. What is the business you are planning to develop and in which City / Village / Region?
15. Why do you feel /believe that this business is good and will succeed in your City / Village / Region?
16. Have you interacted with the concerned faculty and has he/she/they consented to collaborate with you?
17. Who are your potential customers? What marketing tools will you use to sell your products or service?
18. Are there competitors for this business? If so what is your competitive edge? (Why would they come and buy from you and not your competitor?)
19. How much money do you need to start this business? What do you need it for?
20. Infrastructure requirement for space, workstations or PCs:
21. List any special requirements for usage of KIT Kolhapur laboratory facilities:
22. Specify requirement of Mentoring and other professional services/ support:

23. Have you prepared a Business Plan? If yes, please submit a copy.	
24. Please indicate your sources of funds	
25. Profile of your Company (Type of business, details as date of registration etc. ,membership of stock exchange if any, key personnel/associates, specific achievements etc.)	
26. Profile of Directors and Promoters: (Attach brief resume)	
27. Any other detail which would help in evaluating your proposal	
<p>Declaration:</p> <p>I certify that the information contained in this application is correct to the best of my knowledge. I understand that to falsify information is grounds for refusing to incubate me at KITE/ cancel my application/eviction from the centre in future, if incubated/pre-incubated. I authorize any person, organization or company listed on this application to furnish you any and all information concerning my previous employment, education and qualifications for employment. I also authorize you to request and receive such information. In consideration for my application, I agree to abide by the rules and regulations of the KITE, which rules may be changed, withdrawn, added or interpreted at any time, at the KITE's sole option and without prior notice to me. I also acknowledge that my incubation may be terminated, or any offer or acceptance of incubation/pre-incubation withdrawn, at any time, with or without cause, and with or without prior notice at the option of the KITE or myself.</p>	
Name of Applicant/s:	Signature of Applicant:/s
Date:	Place:
Signature of Department Faculty Coordinator	Signature of Head of Department
Kindly send a hard copy of filled application of this application with required documents to:	
a) COO K. I. T's Incubation for Technology Entrepreneurship (KITE) K.I.T's College of Engineering, Kolhapur.	
b) Department E Cell Faculty Coordinator.	

7. Norms for Faculty and Student Driven Innovations & Startups

A. Incentivizing Students for Innovation and Entrepreneurship

HEIs should establish process/clear guideline and mechanism for easy creation and nurturing of startups/enterprises by students (UG, PG and PhD), faculty and staff of HEI by setting up a committee and working committees on following:

- Allow students to setup Startup (Social and tech and non- tech) or working part-time for the startup while studying/working as intern
- Allowing students to earn credit for working on Innovative prototypes/business Models.
- Student Innovators/entrepreneurs may allow to opt for startup in place mini project /major project, seminar and summer training etc.
- Allow student entrepreneurs to take a semester break/year break to work on their startup allowing student entrepreneurs/innovators to sit for the examination. (institute need to set minimum attendance and after reviewed by committee on case to case basis
- Allowing Student entrepreneurs to use the address of Hostel (or) pre-incubation and (or) incubation unit to register their venture while studying at HEI.

B. Incentivizing Faculty for Innovation and Entrepreneurship

- Allowing faculty to start Startup based on the technology developed in the lab at the institute or previously developed somewhere else but have ownership on IP, if technology based.
- Allow faculty and staff to take off for a semester/year as sabbatical/unpaid leave/casual leave /earned leave for working on startup and comeback.
- No restriction on shares that staff and faculty can take as long as they don't spend more than 20% of office time on the startup.






- In advisory or consultant's role and don't compromise with their existing academic and administrative work or duties.
- In case faculty/staff is drawing salary form institute, institute's stake/equity on startup should be limited to 20% of total share of faculty/staff or 9.5% of total stake whichever is minimum.

The necessary resources required for producing innovation will be provided to interested faculty members and staff. In order to encourage and support innovation the organizational structures and practices will be put in place to encourage and support innovation.

Following support will be provided for faculty start up

1. Providing faculty/staff with challenging projects with MOU's with reputed organization.
2. Providing freedom to innovate through formal incentive process of IISP.
3. Providing the support and resources needed to create new ideas/products.
4. Providing diversity of perspectives and backgrounds within groups for innovation.
5. Providing mentor support team for encouragement.
6. Providing organizational support for innovation, entrepreneurship activities and start-up related initiatives.
7. The strategic focus will be on developing culture of innovation. It will be ensured that all faculty/staff and students will feel comfortable experimenting and offering suggestions without fear of criticism or punishment for mistakes.
8. Faculty /staff and student successfully launching their start-up and those who get approval for their patent will be recognized as distinguished contributor for Innovation commercialization.

KITE- Work Space facility & Charges for student startups

					
Category	Public Startup	KIT Alumni Startup	KIT Student Startup	KIT Student Startup (Under Women Empowerment Initiative)	Virtual Startups
Charges	Rs.2000 per seat/per month	Rs. 1500 per seat/per month	No Fees till student of KITCOEK /IMER Rs. 500 per seat per month post 6 months of BE Result	No Fees till student of KITCOEK/ IMER	No fees but Enrolment to Singapore Poly course mandatory
Working space	Dedicated cabin with table -1No. Chairs 5 No., Whiteboard - 1 No, Electric power connection of 5 Amps Socket. A ceiling fan	Dedicated cabin with table -1 No. Chairs- 5 No., Whiteboard- 1 No, Electric power connection of 5 Amps Socket. A ceiling fan	Dedicated cabin with table -1No. Chairs-5 No., Whiteboard- 1 No, Electric power connection of 5 Amps Socket. A ceiling fan	Dedicated cabin with table -1 No. Chairs-5 No., Whiteboard- 1 No, Electric power connection of 5 Amps Socket. A ceiling fan	NA
Internet (Subject to KITCOEK Internet usage policy)	5 dedicated LAN IPs provided by KITCOEK. Internet by LAN/WiFi	5 dedicated LAN IPs provided by KITCOEK Internet by LAN/WiFi	5 dedicated LAN IPs provided by KITCOEK Internet by LAN/WiFi	5 dedicated LAN IPs provided by KITCOEK Internet by LAN/WiFi	NA
Audio Video Support	Shared	Shared	Shared	Shared	Shared
Conference hall	Shared	Shared	Shared	Shared	Shared
Parking	Shared	Shared	Shared	Shared	Shared
Library (Subject to KITCOEK Library usage policy)	Refundable Deposit Rs. 1000. one book at a time	Refundable Deposit Rs. 1000. one book at a time	Refundable Deposit Rs. 1000. one book at a time	Refundable Deposit Rs. 1000. one book at a time	NA

- a. For better coordination of the entrepreneurial activities, norms for faculty to do startups should be created by the institutes.
 - i. Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or a member of the startup.
 - ii. Institutes should ensure that the regular duties of the faculty of conducting teaching activities as per time table 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 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 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 should get clearance from ethics committee of the institution.

8. Pedagogy and Learning Interventions for Entrepreneurship Development

- a. Diversified approach should 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 must be created for organizing competitions, boot camps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.
 - ii. Institutes should start annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute.
 - iii. For creating awareness among the students, the teaching methods should include case studies on business failure and real-life experience reports by startups.
 - iv. Tolerating and encouraging failures: Our systems are not designed for tolerating and encouraging failure. Failures need to be elaborately discussed and debated to imbibe that failure is a part of life, thus helping in reducing the social stigma associated with it. Very importantly, this should be a part of institute's philosophy and culture.
 - v. Innovation champions should be nominated from within the students/ faculty/ staff for each department/ stream of study.
- b. Entrepreneurship education should be imparted to students at curricular/ co-curricular/ extra curricular level through elective/short term or long- term courses on innovation, entrepreneurship and venture development. Validated learning outcomes should be made available to the students.
 - i. Integration of expertise of the external stakeholders should be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.

- ii. In the beginning of every academic session, institute should conduct an induction program about the importance of I&E so that freshly inducted students are made aware about the entrepreneurial agenda of the institute and available support systems. Curriculum for the entrepreneurship education should be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.
 - iii. Industry linkages should be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.
 - iv. Sensitization of students should 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 should 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 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 institutes for inculcating entrepreneurial culture should be constantly reviewed and updated.

5.1 Pedagogy and Learning Interventions for Entrepreneurship Development.

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

KIT's college of engineering will offer courses pertaining to entrepreneurship and innovation and small business management. Main focus is teaching entrepreneurship as a discipline. Its objective is the transmission of knowledge in the field of entrepreneurship, the development of the entrepreneurial mindset (to undertake a project and see it through) as well as entrepreneurship (to create a for-profit business). Teachers will share their knowledge of launching businesses and set up activities and projects that bring students to produce goods, a service or an innovative event that is worthwhile for their milieu.

To implement this vision of entrepreneurship education, institute will offer mini projects, internship and mega projects at its center for technology incubation. All support will be provided from institute in starting up businesses, or venture creation.

Entrepreneurial pedagogy (entrepreneurship as a learning tool)

Students will learn by dealing with real world challenges like those they may encounter in their adult lives (in a job, for example). It is necessarily an active pedagogy. It brings the students to develop the spirit of entrepreneurship, which means to:

- Imagine, innovate and create
- Broaden their field of action
- Translate their ideas into projects
- Engage in a project and see it through
- Take initiatives
- Meet challenges
- Be accountable to others
- Work in a team
- Contribute to solving social problems

To implement entrepreneurial pedagogy institute will use four pillar approach to achieve desired outcomes

- It is empowering. It encourages students to take charge of their own learning.

- It is experiential. It allows the student to learn through experience rather than learn from the experience of others.
- It is reflexive. It encourages students to think about what is learned and how it is learned.
- It is cooperative. Collaborative work enables the different members of a team to contribute to the learning process of others.

• The 4 principles of entrepreneurial pedagogy and their objectives	
• Pedagogical Principle	• Objectives
• Empowering activity	• Increase autonomy and the sense of responsibility
• Experiential activity	• Engage students in concrete experiences
	• Promote learning through authentic and meaningful situations
• Reflexive activity	• Help structure ideas by systematically exploiting knowledge
	• Promote mental activity (meta cognition) and the construction of knowledge
	• Stimulate attitudes of commitment, perseverance, creativity, pride and self-confidence
• Cooperative activity	• Encourage teamwork at a distance
	• Develop and strengthen social skills
	• Support learning by social interactions (Socio cognitive conflict)
	• Reinforce team spirit, motivation, active listening, sharing and humility

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

- a. Stakeholder engagement should be given prime importance in the entrepreneurial agenda of the institute. Institutes should find potential partners, resource organizations, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs.
 - i. To encourage co-creation, bi-directional flow/ exchange of knowledge and people should be ensured between institutes such as incubators, science parks etc.
 - ii. Institute should organize networking events for better engagement of collaborators and should open up the opportunities for staff, faculty and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures etc.
 - iii. Mechanism should 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 should be to create successful ventures.
- b. The institute should develop policy and guidelines for forming and managing the relationships with external stakeholders including private industries.
- c. Knowledge exchange through collaboration and partnership should be made a part of institutional policy and institutes must provide support mechanisms and guidance for creating, managing and coordinating these relationships.
 - i. Through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc., faculty, staff and students of the institutes should be given the opportunities to connect with their external environment.
 - ii. 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/ COO) mechanism should be created in the institute for the students, faculty, collaborators, partners and other stakeholders to

- ensure access to information.
- iv. Mechanisms should be devised by the institutions to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.
 - v. Knowledge management should be done by the institute through development of innovation knowledge platform using in house Information & Communication Technology (ICT) capabilities.

Collaboration, the flow of ideas between different innovation centers, and access to knowledge are all increasingly important ingredients of innovation. Today innovation ecosystems have become more complex and are now built on more internationalized, collaborative, and open innovation models and knowledge markets.

Collaboration between institution and industries is critical for skills development (education and training), the generation, acquisition, and adoption of knowledge (innovation and technology transfer), and the promotion of entrepreneurship (start-ups and spin-offs). The benefits of Institute-industry linkages are wide-reaching: they can help coordinate R&D agendas and avoid duplications, stimulate additional private R&D investment (additionality effect), and exploit synergies and complementarities of scientific and technological capabilities. Institute-industry collaboration can also expand the relevance of research carried out in public institutions, foster the commercialization of public R&D outcomes. Collaboration may be more or less intense and may focus on training or research activities. Collaboration may be formal or informal, from formal equity partnerships, contracts, research projects, patent licensing, and so on, to human capital mobility, publications, and interactions in conferences and expert groups, among others. Also it is useful to differentiate between short-term and long-term collaboration. Short-term collaborations generally consist of on-demand problem solving with predefined results and tend to be articulated through contract research, consulting, and licensing. Long-term collaborations are associated with joint projects and public-private partnerships (including private-funded university institutes or chairs, joint university-industry research centres, and research consortia), often allowing firms to contract for a core set of services and to periodically re-contract for specific deliverables in a flexible manner. Longer term collaborations are more strategic and open-ended, providing a multifaceted platform where firms can develop a stronger innovative capacity in the long run, building upon the capabilities, methods, and tools of institutes.

KIT's strategy is to

1. Strengthen relationship with nearby micro small and medium sized enterprise through MOU'S for carrying out industry-based projects.
2. Institute will promote 'Idea Presentation Contests" for students to encourage them for innovative ideas for start-ups.
3. Institutes Alumni network will be used for promoting entrepreneurship and innovation agenda.
4. Institute will encourage students and faculty to undertake projects in the upcoming areas in the leading companies through its MOU policy.
5. Institute will provide necessary training to students and staff to undertake their Innovation initiatives.
6. Transfer of institute-generated IP (such as patents) to firms (e.g., via licensing).and Commercialization of intellectual property
7. Development and commercial exploitation of technologies pursued by academic inventors through a company they (partly) own (spin-off companies).
8. Training of industry employees, internship programs, postgraduate training in industry, secondments to industry of university faculty and research staff, adjunct faculty of industry participants.
9. Training of industry employees, internship programs, postgraduate training in industry, secondments to industry of university faculty and research staff, adjunct faculty of industry participants.
10. Inter-organizational arrangements for pursuing collaborative R&D, including research consortia and joint projects.
11. Research-related activities commissioned to institute by industrial clients, including contract research, consulting, quality control, testing, certification, and prototype development.

10. Entrepreneurial Impact Assessment

- a. Impact assessment of institute's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education should be performed regularly using well defined evaluation parameters.
 - i. Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning should be assessed.
 - ii. Number of startups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by the institutes should be recorded and used for impact assessment.
 - iii. Impact should also be measured for the support system provided by the institute to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem etc.
- 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 should 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.

KITCOEK's Institute innovation council is the empowered body to successfully implement Institution Innovation and Start Policy. Impact assessment of entrepreneurial education and entrepreneurial initiatives will be carried out with the well-defined key performance indicators for the short term, medium term and for the long term periods. Institute IIC is fully authorized to plan, organize, motivate, lead and control all activities concerning pre-incubation, incubation and entrepreneurship education for effective and efficient execution

of Institute Innovation and Start up policy. The expert committee resolved in its first meeting that Dean –INNOVATION AND LINKAGES is the SINGLE POINT OF CONTACT (SPOC) to all the internal and external stakeholders.

- The IISP policy will come in to force from: 15- 08 – 2021
- IISP Policy review period: Every Year
- IIC Activity Audit: Every Semester

Key Performance Indicators to achieve the objectives of the policy are

VISION, MISSION & OBJECTIVES OF IISP		Targets	Key Performance Indicators 1- Year Action Plan	Key Performance Indicators 3- Year	Key Performance Indicators 5- Year
VISION	To develop an entrepreneurial ecosystem at campus in various upcoming areas of technology entrepreneurship with emphasis to Product development (AgriTech, Biomedical, EnviroTech, and Electro Mechanical), and be among the leading incubators/innovation center.	Quarterly Activities Related to I/E/IPR & Number of courses to be offered related to I/ED/IPR	Quarterly Activity Plan from IIC	NA	NA
	MISSION	To develop an effective interface between incubators, industry and start-ups for identifying, promoting and nurturing innovative ideas to develop commercialization of science & technology in the institute for mutual benefit.		Number of Commercialized Projects from Dept.	7
OBJECTIVES	To create awareness among faculty and students of engineering departments and educate students as an alternative career option.	Quarterly Activities Related to I/E/IPR		NA	NA
	To conduct various workshops, speaker sessions and other such events and encourage college level students to start their own enterprise.	Number of Hackathons / Competitions related to I/ED/IPR		3	5
	Foster within the academic community the ability to provide innovative technologies and business ideas and connect them to peers, mentors and incubators	Number of Patents Targeted		7	10
	Develop self-esteem of young entrepreneurs through mentorship and network.	Number of startups Targeted		2	5
To promote student's and faculty driven innovations & startups					

11. Policy Implementation

- A. IISP Implementation: Institute innovation council
- B. The policy will be reviewed annually by IISP Expert Committee.
- C. IISP Audit:
 - a. External Audit: Annual Audit of IISP by experts.
 - b. Internal Audit: Half yearly internal audit of IISP by experts.
- D. Single Point of Contact (SPOC) : Dean (Innovation & Linkages)
- E. Committees for policy implementation:
 - 1. IP Cell
 - a. Patent attorney
 - b. KITE COO
 - c. IPR coordinator
 - d. Patent owning faculty /Patent expert faculty
 - e. Patent expert alumni
 - f. Valuation expert
 - 2. Student/ faculty startup (GO/ NO GO) and privileges approval cell
 - a. Director
 - b. KITE COO
 - c. Dean Academic
 - d. Concerned HODs
 - e. COE
 - f. Business expert industry (Min 2)
 - g. Finance expert
 - 3. Dispute resolving committee
 - a. Director
 - b. Legal adviser of KIT
 - c. Concerned HODs
 - d. Senior faculty members
 - e. IPR Attorney
 - f. Business expert industry
 - g. Valuation expert
 - 4. Ethics Committee
 - a. Director
 - b. Legal adviser of KIT
 - c. Concerned HODs
 - d. Senior faculty members
 - e. IPR Attorney
 - f. Valuation expert

GLOSSARY

1	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.
2	Corporate Social Responsibility	corporate social responsibility (CSR) refers to practices and policies undertaken by corporations that are intended to have a positive influence on the world
3	Co-Creation	Co-creation is a form of collaborative innovation: ideas are shared and improved together, rather than kept to oneself.
4	Entrepreneurial Culture	The attitude, values, skills, and power of a group or individuals working in an institute or an organization to generate income.
5	Experiential Learning.	Experiential learning is an engaged learning process whereby students “learn by doing” and by reflecting on the experience
6	Financial Management.	Financial management refers to the strategic planning, organizing, directing, and controlling of financial undertakings in an organization or an institute. It also includes applying management principles to the financial assets of an organization, while also playing an important part in fiscal management.
7	Hackathon	The purpose of a hackathon is a for a group of programmers to work together on a collaborative project. Most hackathons are competitions where several teams are competing to create prototypes that innovate on a theme or improve upon an existing project
8	Incubation	In startup Journey Incubation stage will be 6-12 months where startup companies graft product development and prepare themselves for marketing
9	Intellectual Property Rights.	Intellectual property rights are legal rights that provide creators protection for original works, inventions, or the appearance of products, artistic works, scientific developments, and so on.
10	knowledge Exchange	It refers to any process through which academic ideas and insights are shared, and external perspectives and experiences brought in to academia.
11	Pedagogy and Learning Interventions	Pedagogy is the method and practice of teaching, especially as an academic subject or theoretical concept& a learning intervention is a fantastic way to master knowledge whenever you quickly need to dive into a topic and have a specific learning question
12	Pre-Incubation	During this period, the entrepreneur takes up the role of a 'techno-evangelist' who develops the idea to into a proof of concept and prepares him for understanding the technical feasibility of the idea proposed.
13	Prototype	a first full-scale and usually functional form of a new type or design of a construction

14	Startup ecosystem	A startup ecosystem is formed by people, startups in their various stages and various types of organizations in a location (physical or virtual), interacting as a system to create and scale new startup companies.
15	Seed Fund	Seed fund is the money raised to begin developing a business or a new product.
16	Special Purpose Vehicle	A special purpose vehicle (SPV) is a subsidiary company that is formed to undertake a specific business purpose or activity
17	Startup	A startup or start-up is a company or project undertaken by an entrepreneur to seek, develop, and validate a scalable business model.
18	Technology Business Incubator	Business incubators are specially designed programs to help young startups innovate and grow. They usually provide workspaces, mentorship, education and access to investors for startups or sole entrepreneurs.
19	Technology Commercialization.	Technology commercialization is the process of transitioning technologies from the research lab to the marketplace.
20	Technology Licensing.	The most important commercial arrangement for the transfer of technology is the license agreement pursuant to which one party, the 'licensor', grants intellectual property rights to another party, the 'licensee'.
21	Technology Management	The integrated planning, design, optimization, operation and control of technological products, processes and services, a better definition would be the management of the use of technology for human advantage.
22	Venture Fund	Venture capital (VC) is a form of private equity and a type of financing that investors provide to startup companies and small businesses that are believed to have long-term growth potential.




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