



Khalsa College of Engineering & Technology

ਖਾਲਸਾ ਕਾਲਜ ਆਫ ਇੰਜੀਨੀਅਰਿੰਗ ਐਂਡ ਟੈਕਨੋਲੋਜੀ

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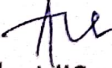
Date 6-09-2022

Institute Innovation Cell

Start-Up Policy

The start-up policy alongwith the additions to the National Innovation and Startup Policy 2019 (NISIP) published by MoE Innovation cell has been approved by the competent authority and is now available on Institute website. All are requested to make a note of it. The following team members from college shall be responsible for its execution.

Name	Department	Designation	Role
Dr. Atul Agnihotri	Dean (Research)	Faculty	Overall Coordinator
Dr. Ripin Kohli	IQAC Incharge	Faculty	Event Planning & execution
Dr. Pooja Sharma	Applied Sciences	Faculty	Member: Event Planning & execution
Ms. Deepika Pathak	Applied Sciences	Faculty	Member: Event Planning & execution
Dr. G S Grewal	HOD (ECE & AIML)	Faculty	Student Mobilization
Er. Harmeet Singh	Civil	Faculty	Member: Student Mobilization
Mr. Muteeb	Paramedical Sciences	Faculty	Member: Student Mobilization
Ms. Parneet Kaur	HOD (BBA & BCA)	Faculty	Monitoring of Events
Ms. Jasleen Kaur	BBA BCA	Faculty	Member: Monitoring of Events
Ms. Rajbir Kaur	BBA BCA	Faculty	Member: Monitoring of Events
Er. Maneet Kaur	Deputy Dean	Faculty	Mentoring & Incubation support
Ms. Shivani Mahajan	BBA & BCA	Faculty	Member: Mentoring & Incubation support
Ms. Simranjot Kaur	Applied Sciences	Faculty	Member: Mentoring & Incubation support
Ms. Rohinee Pandita	Applied Sciences	Faculty	Member: : Mentoring & Incubation support


President-IIC
Dr Atul Agnihotri


Director
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Startup & Innovation Policy

1. Strategies and Governance

- a. Entrepreneurship promotion and development will be one of the major dimensions of the HEIs strategy. To facilitate development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators are defined for assessment.
- b. Implementation of entrepreneurial vision at the institute will be achieved through mission statements rather than stringent control system. The entrepreneurial agenda will be the responsibility of a senior person at the level of dean/ director/ equivalent position to bring in required commitment and must be well understood by the higher authorities. However, one must understand that promoting entrepreneurship requires a different type of mindset as compared to other academic activities. Therefore, this person should be very carefully chosen from someone who understands the industry and above all business.
- c. Resource mobilization plan will be worked out at the institute for supporting pre-incubation, incubation infrastructure and facilities. A sustainable financial strategy will be defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.
 - i. Investment in the entrepreneurial activities will be a part of the institutional financial strategy. Minimum 1% fund of the total annual budget of the institution is allocated for funding and supporting innovation and startups related activities through creation of separate 'innovation fund'.
 - ii. The strategy will 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, 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. Institute may also raise funding through sponsorships and donations. Institute should actively engage alumni network for promoting 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.





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- f. Student and faculty startup Policy and action plan should be formulated at university level, which is in line with the current document along with well-defined short-term and long-term goals. Micro action plan should also be developed by the affiliated institutes to accomplish the policy objectives
- g. Institute should develop and implement I & E strategy and policy for the entire institute in order to integrate the entrepreneurial activities across various centers, departments, faculties, within the institutes, thus breaking & silos.
- h. 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.
- i. HEIs 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.

2. Startups Enabling Institutional Infrastructure

Creation of pre-incubation and incubation facilities for nurturing innovations and startups in HEIs institutions should be undertaken. 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 ENTREPRENEURS to FINANCIAL SUCCESS.

- a. All HEIs are advised to create facilities within their 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 we recommend 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. This will allow more freedom to Incubators in decision making with less administrative hassles for executing the programs related to innovation IPR and startups.





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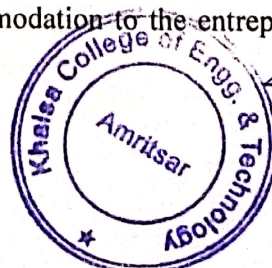
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3. Nurturing Innovations and Start ups

- a. HEIs are 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 startup applicants even from the outside applicants.
- b. While defining their processes, institutions will ensure to achieve following:
 - i. Incubation support: offer access to pre-incubation & Incubation facility ; startups 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 and faculty.
 - ii. Will allow licensing of IPR from institute to start up: Ideally students and faculty members intending to initiate a start up based on the technology developed or co-developed by them or the technology owned by the institute, Should be allowed to take a license on the said technology on easy term, either in terms of equity in the venture and/ or license fees and/ or royalty to obviate the early stage financial burden.
 - ii. Will allow setting up a start up (including social start ups) and working part-time for the start ups while studying I working: HEIs may allow their students / staff to work on their innovative projects and setting up start ups (including Social Start ups) or work as intern / part-time in startups (incubated in any recognized HEIs/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models. Institute may need to develop clear guidelines to formalize this mechanism. Student inventors may also be allowed to opt for start up in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a start up 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.
- c. 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.
- d. Students entrepreneurs should be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the institute.
- e. HEIs 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 start ups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. Institute should 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.
- f. The institute should explore provision of accommodation to the entrepreneurs within the campus for some period of time.





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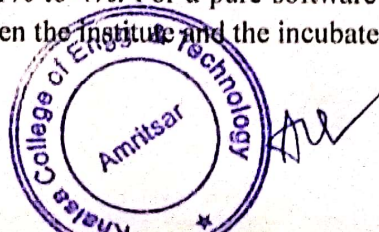
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- g. Allow faculty and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the institute) as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back. Institution 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.
- h. Institute should ensure that at no stage any liability accrue to it because of any activity of any startup.
- i. Where a student/ faculty startup policy is pre-existing in an institute, then the institute may consider modifying their policy in spirit of these guidelines.
- After due approvals, faculty/staff may be granted a extra ordinary leave for 6 months - one year depending upon the plan submitted and committee's approval. The leave would be leave without pay sabbatical/ leave accumulated under PL. His/her seniority however shall not be affected by this leave.
 - Student will be allowed a semester off as a special case after recommendation from mentor/standing committee. The semester off can be extended by another semester on recommendations of the committee only.
 - Grant of leave shall be solely at discretion of Principal.
 - In event of shortage of attendance for student entrepreneur, Entrepreneur student may be allowed to sit for after recommendation from mentor/ standing committee and approval from Principal.

4. Product Ownership Rights for Technologies Developed at Institute

- a. When institute facilities / funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by inventors and the institute.
- i. Inventors and institute could together license the product / IPR to any commercial organization, with inventors having the primary say. License fees could be either / or a mix of
1. Upfront fees or one-time technology transfer fees
 2. Royalty as a percentage of sale-price
 3. Shares in the company licensing the product
- ii An institute may not be allowed to hold the 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 wish to incubate a company and license the product to this company, the royalties would be no more than 4% of sale price, preferably 1 to 2%, unless it is pure software product. If it is shares in the company, shares will again be 1% to 4%. For a pure software product licensing, there may be a revenue sharing to be mutually decided between the Institute and the incubated company.



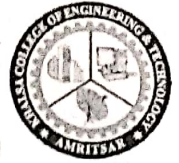


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b. On the other hand, if product/ IPR is developed by innovators not using any institute facilities, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product/ IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.

c. If there is a dispute in ownership, a minimum five membered committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the institute's alumni/ industry experts (having experience in technology commercialization) and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, 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.

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.

ii. To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff should be developed with constant up skilling.

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, associate ships, etc.





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

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

a. To ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market, 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.

b. 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.

ii. A culture needs to be promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and rectum. While funding is taking risk on the entrepreneur, it is an obligation of the entrepreneur to makes every effort possible to prove that the funding agency did right in funding him/ her.

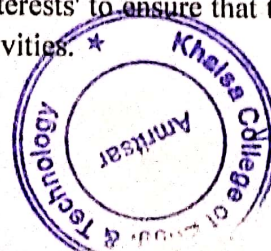
e. Institute must develop a ready reckoned of Innovation Tool Kit, which must be kept on the homepage on institute's website to answer the doubts and queries of the innovators and enlisting the facilities available at the institute.

7. Norms for Faculty Startups

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

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

ii. Institutes should work on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.





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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

ii. 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. 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.

ii. Single Point of Contact (SPOC) mechanism should be created in the institute for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.

iii. Mechanisms should be devised by the institutions to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.

iv. Knowledge management should be done by the institute through development of innovation knowledge platform using in house Information & Communication Technology (ICT) capabilities.

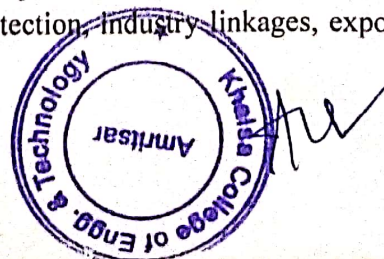
10. Entrepreneurial Impact Assessment

a. Impact assessment of institute's entrepreneurial initiatives such as pre-incubation, incubation., entrepreneurship education 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.





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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 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.

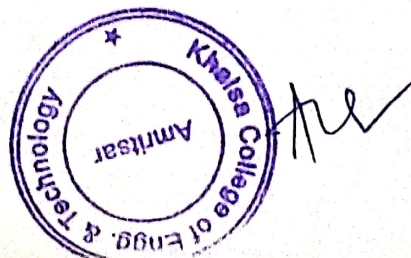
i. Student clubs/ bodies/ departments must be created for organizing competitions, boot camps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.

b. 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.

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.





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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.

