



MHRD'S
INNOVATION CELL
(GOVERNMENT OF INDIA)



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD Initiative)

MALNAD COLLEGE OF ENGINEERING

HASSAN – 573 202



**MALNAD ENCLAVE FOR RESEARCH, INNOVATION,
INCUBATION, STARTUPS & ENTREPRENEURSHIP**

(ME-RIISE)



**INNOVATION & STARTUP POLICY FOR
STUDENTS AND FACULTY**

2020

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Innovation and Start-up Policy 2020

1. Strategies and Governance

- a.** Entrepreneurship promotion and development is one of the major dimensions of the Institution strategy. To facilitate development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators is been defined for assessment.
- b.** Implementation of entrepreneurial vision at the institute is achieved through mission statements rather than stringent control system. The entrepreneurial agenda is the responsibility of a senior person at the level of dean/ director/ equivalent position to bring in required commitment.
- c.** Resource mobilization plan is worked out at the institute for supporting pre-incubation, incubation infrastructure and facilities. A sustainable financial strategy is defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.
 - i.** Investment in the entrepreneurial activities is also 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 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 is also encouraged.
 - iii.** To support technology incubators, academic institution approaches private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
 - iv.** Institute also raises funding through sponsorships and donations and actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).
- d.** For expediting the decision making, hierarchical barriers is minimized and individual autonomy and ownership of initiatives is promoted.
- e.** Importance of innovation and entrepreneurial agenda is known across the institute promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc.

- f. Institute also 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 the silos.
- g. Product to market strategy for startups is developed by the institute on case to case basis.
- h. Development of entrepreneurship culture is not limited within the boundaries of the institution.
 - i. Institution is driving force in developing entrepreneurship culture in its vicinity (regional, social and community level). This also 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 is 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 is also promoted.

2. Startups enabling Institutional Infrastructure

Creation of pre-incubation and incubation facilities for nurturing innovations and Startups in institution has been undertaken. The goal of the effort is to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

- a) Institution has created facilities within 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 is accessible 24x7 to students and faculty of all disciplines and departments across the institution.
- c) Pre-incubation facilities is 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. Moreover, we will have better accountability towards investors supporting the incubation facility.
- d) Institution 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 Section 3.

3. Nurturing Innovations and Start ups

- a) Institution has established processes and mechanisms for easy creation and nurturing of Startups/enterprises by students, faculty, alumni and potential start up applicants even from outside the institutions.
- b) Our institution will ensure to achieve following:
 - i. Incubation support: Offer access to pre-incubation & Incubation facility to start ups by students and faculty for mutually acceptable time-frame.
 - 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, is 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 start-up (including social start-ups) and working part-time for the start-ups while studying / working: Institution allow our students / faculty to work on their innovative projects and setting up start-ups (including Social Start ups) or work as intern / part-time in Startups while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models. 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 multi- disciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the 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 is allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the institute.
- e) Our Institute will explore provision of accommodation to the entrepreneurs within the campus for some period of time.
- f) Allow **students 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 consider

allowing use of its resource to faculty/students wishing to establish start up as a fulltime effort. The seniority and other academic benefits during such period may be preserved for such or faculty.

- g) 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. AICTE has already issued guidelines for a similar program.
- h) Institute will facilitate the startup activities/ technology development by allowing students/ faculty to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:
 - i. Short-term/six-month/ one-year part-time entrepreneurship training.
 - ii. Mentorship support on regular basis.
 - iii. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product- costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.
- i) 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.
 - a. In return of the services and facilities, institute may take 2% to 8% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided and use of institute's IPR (a limit of 8% is suggested so that institute has no legal liability arising out of startup. The institute will normally take much lower equity share, unless its full-time faculty/ have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed- funds, support for accounts, legal, patents etc.
 - For faculty, institute can take no-more than 20% of shares that faculty takes while drawing full salary from the institution; however, this share will be within the 8% cap of company shares, listed above.
 - No restriction on shares that faculty can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case the faculty 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.

- In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of services offered by the institute/incubator. In that case, during the cooling period, institute cannot force startup to issue equity on the first day of granting incubation support.
- j) The institute also provide services based on mixture of equity, fee-based and/ or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the institute on rental basis.
- k) Institute could extend this startup facility to alumni of the institute as well as outsiders.
- l) 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 are encouraged to mentor at least one startup.
- m) 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.
- n) Institutions might also need to update/change/revise performance evaluation policies for faculty and as stated above.
- o) Institute ensures that at no stage any liability accrue to it because of any activity of any startup.

4. Product Ownerships 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 organisation, 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. Institute is 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.
- b) On the other hand, if product/ IPR is developed by innovators not using any institute facilities, outside office hours (for 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 , 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.
 - d) Institute incubation center will only be a coordinator and facilitator for providing services to faculty, and students. Institute 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 translation. If inventors are using their own funds or non- institute funds, then they alone should have a say in patenting.
 - e) Institute's decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / institute will have no say, including heads of department, heads of institutes, deans or registrars.
 - f) Interdisciplinary research and publication on startup and entrepreneurship should be promoted by our Institution.

5. Organizational Capacity, Human Resources and Incentives

- a) Institute will recruit that have a strong innovation and entrepreneurial/ industrial experience, behaviour 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 in entrepreneurial activities, institutional policy on career development of will be developed with constant upskilling.
- b) Faculty and departments of the institutes have to work in coherence and cross-departmental linkages will be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.
- c) Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills which are not available internally.
- d) Faculty and will be encouraged to do courses on innovation, entrepreneurship management and venture development.
- e) In order to attract and retain right people, institute will develop academic and non-academic incentives and reward mechanisms for all and stakeholders that actively contribute and support entrepreneurship agenda and activities.
 - i. The reward system for the faculty 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 will be developed and used for evaluation of annual performance.

6. Creating Innovation pipeline and pathways for Entrepreneur's 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 is devised at institution level.
 - i. Spreading awareness among students, faculty and about the value of entrepreneurship and its role in career development or employability is a part of the institutional entrepreneurial agenda.

- ii. Students/ will 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 are encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.
 - iv. To prepare the students for creating the start up through the education, integration of education activities with enterprise-related activities are conducted.
- b) The institute link their start ups 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 has established Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and will 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 are 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 is opened for the potential entrepreneurs.
- i. Networking events will be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
 - ii. Provides business incubation facilities: premises at subsidised cost. Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new startups.
 - iii. A culture has been promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and return. While funding is taking risk on the entrepreneur, it is an obligation of the

entrepreneur to make every effort possible to prove that the funding agency did right in funding him/ her.

- e) Institute will develop a ready reckoner of Innovation Tool Kit, which will 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 institute. Only those technologies are 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. Institute will work on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.
 - iii. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- b) In case the faculty/ 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 or other 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 is adopted to produce desirable learning outcomes, which include cross disciplinary learning using mentors, labs, case studies, games, etc.

in place of traditional lecture-based delivery.

- i. Student clubs/ bodies/ departments will be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.
 - ii. Institute will 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 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 is also a part of institute's philosophy and culture.
 - v. Innovation champions will be nominated from within the students/ faculty/ for each department/ stream of study.
- b) Entrepreneurship education will 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 can 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 will conduct an induction program about the importance of I&E so that freshly inducted students are made aware about the entrepreneurial agenda of the institute and available support systems. Curriculum for the entrepreneurship education will be continuously updated based on entrepreneurship research outcomes. This also include case studies on failures.
 - iii. Industry linkages will be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.
 - iv. Sensitization of students will be done for their understanding on expected

learning outcomes.

- v. Student innovators, startups, experts are engaged in the dialogue process while developing the strategy so that it becomes need based.
 - vi. Customized teaching and training materials will be developed for startups.
 - vii. It must be noted that 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 will be done to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by the institute for inculcating entrepreneurial culture can be constantly reviewed and updated.

9. Collaboration, co-relation, Business Relationships and Knowledge Exchange

- a) Stakeholder engagement will be given prime importance in the entrepreneurial agenda of the institute. Institute shall find potential partners, resource organizations, micro, small and medium- sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs.
- i. To encourage co-creation, bi-directional flow/ exchange of knowledge and people are ensured between institute such as incubators, science parks, etc.
 - ii. Institute will organize networking events for better engagement of collaborators and will open up the opportunities for , faculty and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
 - iii. Mechanism is developed by the institute to capitalize on the knowledge gained through these collaborations.
 - iv. Care is taken to ensure that events DON'T BECOME an end goal. First focus of the incubator is to create successful ventures.
- b) The institute will develop policy and guidelines for forming and managing the relationships with external stakeholders including private industries.
- c) Knowledge exchange through collaboration and partnership will be made as a part of institutional policy and institute 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, and students of the institute are be given the opportunities to connect with their external environment.
- ii. Connect of the institute with the external environment has to be leveraged in form of absorbing information and experience from the external ecosystem into the institute's environment.
- iii. Single Point of Contact (SPOC) mechanism has been created in the institute for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.
- iv. Mechanisms is devised by the institution to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.
- v. Knowledge management is 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 is performed regularly using well defined evaluation parameters.
 - i. Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning will be assessed.
 - ii. Number of startups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by the institute will be recorded and used for impact assessment.
 - iii. Impact will also be measured for the support system provided by the institute to the student entrepreneurs, faculty and for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.
- b) Formulation of strategy and impact assessment will go hand in hand. The information on impact of the activities will be actively used while developing and reviewing the entrepreneurial strategy.

- c) Impact assessment for measuring the success will be in terms of sustainable social, financial and technological impact in the market. For innovations at pre-commercial stage, development of sustainable enterprise model is critical. COMMERCIAL success is the ONLY measure in long run.