



Brainware University
398 Ramkrishnapur Road, Barasat, North 24 Parganas
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BRAINWARE UNIVERSITY

Student Startup Policy 2020



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INTRODUCTION

Preamble

Studying entrepreneurship without doing it is like studying the appreciation of music without listening to it. Until you confront the fear and discomfort of being in the world and saying, "Here, I made this", it's impossible to understand anything at all about what it means to be an entrepreneur.

- Seth Godin-

In November 2016, All India Council of Technical Education (AICTE) released a Startup Policy document for AICTE approved institutions, to address the need of inculcation of innovation and entrepreneurial culture in higher education institutions (HEIs). The policy primarily focused on guiding the AICTE approved institutions in implementing 'Startup Action Plan' of Government of India. Subsequent to release of the Startup policy by AICTE and further interaction & feedback received from education institutions, a need was felt for a more elaborate and comprehensive policy guiding document, which could be applicable for all the HEIs in India.

In September 2019, Ministry of Human Resource and Development, Government of India formulates detailed guidelines for various aspects related to innovation, Startup and entrepreneurship management in HEI. For India to emerge as a global innovation hub, the youth of our country, especially in higher education institutions (HEIs) need to play a crucial role to create a sustainable innovation ecosystem. Hence, ideally all HEIs should have a comprehensive and functional mechanism to convert research into innovations. This ecosystem will encourage, inspire and nurture young students by exposing them to new ideas and processes resulting in innovative activities in their formative years.



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Vision

India aspires to become 5 trillion-dollar economy by 2024. To reach the mark, it needs to evolve systems and mechanisms to convert the present demographic dividend into high quality technical human resource capable of doing cutting edge research and innovation and deep-tech entrepreneurship. The 'National Student and Faculty Startup policy 2019' is a guiding framework to envision an educational system oriented towards startups and entrepreneurship opportunities for student and faculties. The guidelines provide ways to Indian HEIs for developing entrepreneurial agenda, managing Intellectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises established by faculty and students. In India, innovation is still not the epicenter of education. In order to achieve the cultural and attitudinal shift and to ensure that 'Innovation and Startup' culture is the primary fulcrum of our higher education system, a policy framework and guidelines are the need of this hour. These guidelines will enable institutions to actively support their faculty, staff and students to participate in innovation and entrepreneurship (I&E) related activities, thus encouraging students and faculty to consider startups and entrepreneurship as a career option. These recommendations and guiding principles will also help HEIs in creating their own policy framework, if required. Moreover, these guidelines will facilitate Ministry of Human Resource Development in bringing uniformity across HEIs in terms of IPR ownership management, technology licensing and institutional startups policy, thus enabling creation of a robust innovation and Startup ecosystem across all HEIs. These guidelines will also help emphasize that the entrepreneurship is all about creating a business, which is financially successful.



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Salient Point in NISP-2019

The Policy is split into ten key portions that are the strategic building blocks towards a world-class startup ecosystem namely **Strategies and Governance**, **Startups Enabling Institutional Infrastructure**, **Nurturing Innovations and Startups**, **Product Ownership Rights for Technologies Developed at Institute**, **Organizational Capacity**, **Human Resources and Incentives**, **Norms for Faculty Startups**, **Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level**, **Pedagogy and Learning Interventions for Entrepreneurship Development**, **Collaboration, Co-creation, Business Relationships and Knowledge Exchange**, **Entrepreneurial Impact Assessment**.

1. Strategies and Governance

- a. Entrepreneurship promotion and development should 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 should be defined for assessment.
- b. Implementation of entrepreneurial vision at the institute should be achieved through mission statements rather than stringent control system. The entrepreneurial agenda should 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 should be worked out at the institute for supporting pre-incubation, incubation infrastructure and facilities. A sustainable financial strategy should be defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.
 - i. Investment in the entrepreneurial activities should be a part of the institutional financial strategy. Minimum 1% fund of the total annual budget of the institution should be allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'.



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



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to extend facilities for outsiders and active involvement of the institute in defining strategic direction for local development.

- k. 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 ENTREPRISES 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. Moreover, they will have better accountability towards investors supporting the incubation facility.



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- d. HEIs 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 Section 3.

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 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: HEIs 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. Institute may need to develop clear guidelines to formalize this mechanism. 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



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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.
- 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. 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.
- i. 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:



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- i. Short-term/ six-month/ one-year part-time entrepreneurship training.
 - ii. Mentorship support on regular basis.
 - iii. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.
 - iv. Institute 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 4 below.
- j. 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 (a limit of 9.5% is suggested so that institute has no legal liability arising out of startup. The institute should normally take much lower equity share, unless its full-time 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 shares that staff / faculty takes while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares, listed above.
 - ii. No restriction on shares that faculty / staff can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case the faculty/ staff 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.
 - iii. In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of services offered by the institute/incubator. In that case, during the cooling period, institute cannot force startup to issue equity on the first day of granting incubation support.



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- k. 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.
- l. Institute could extend this startup facility to alumni of the institute as well as outsiders.
- m. Participation in start up 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.
- n. 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.
- o. Institutions might also need to update/change/revise performance evaluation policies for faculty and staff as stated above.
- p. Institute should ensure that at no stage any liability accrue to it because of any activity of any startup.
- q. 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.

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



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- 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.
- b. On the other hand, if product/ IPR is developed by innovators not using any institute facilities, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product/ IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.
 - c. If there is a dispute in ownership, a minimum five member committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the institute's alumni/ industry experts (having experience in technology commercialization) and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. Institute can use alumni/ faculty of other institutes as members, if they cannot find sufficiently experienced alumni / faculty of their own.
 - d. Institute IPR cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If institute is to pay for patent filing, they can have a committee which can examine whether the IPR is worth patenting. The committee 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. All institute's decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / institute will have no say, including heads of department, heads of institutes, deans or registrars.
 - f. Interdisciplinary research and publication on startup and entrepreneurship should be promoted by the institutions.

5. Organizational Capacity, Human Resources and Incentives



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- 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, associateships, 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.



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- 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, 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 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



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meet investors and pitch their ideas.

- ii. Provide 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 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.
- e. Institute must develop a ready reckoner 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.
 - 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



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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, 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. 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.



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- 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.

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.



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- 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) 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.

10. Entrepreneurial Impact Assessment



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- 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.



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Brainware University Policy

Brainware University (BWU) will set up an Innovation and Startup Policy Formulation Committee where various policies will be discussed, debated and will be put under test; these policies will be related to student startups in general and other similar areas. The BWU Startup Policy Formulation Committee will hold dialogues, discussions, and conferences to assemble wider perception and learn from best practices. It shall then develop its own best practices for student entrepreneurship across state university systems. Brainware University startup policy aims at generating multiple student startup ideas every year. BWU's Policy aims to achieve the following;

- To make the students job creators than job seekers.
- Encourage/Facilitate/Incubate at least 1 innovative technology product startups per department annually
- To convert proof of concepts into successful start-ups and scalable enterprises.
- To encourage enterprises, which serve social and economic needs.
- To synergize the polyadic relationship of university-industry-government-community for building better Innovation system and enabling knowledge flow;

Academic Policy

- The incubation policy will cover incubation facilities for all students and alumni, irrespective of their streams.
- BWU will create indicators to measure and rank all the departments. The Annual Student Start-up Index will put equal stress on process and output driven indicators along with structures and outlay driven indicators.
- BWU will create an easily understandable ranking system, including the Student Start-up Index, in accordance with the accreditation systems in India. This would include the work and the outcomes in student start-ups/ faculty ventures, patent / IPR/ tech transfer, besides the usual academic and outcome-based criteria.



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- BWU will facilitate start-up processes by seamlessly integrating the incubation value chain into the academic programs in order to have early exposure of incubation value chain to potential student start-ups.
- A student or a Faculty Member will also be permitted to apply for approval of a special elective, designed especially by the student or the Faculty Member. This will permit the student-entrepreneurs of scalable start-ups to opt for special elective by these budding entrepreneurs.
- BWU will provide the required infrastructure as available for incubation and startups as specified in its 'Incubation Policy'.
- Final year students of BWU will be required to take a practical problem applicable in real life, and solve it as a part of academic curricula through their final year project.
- The students, who have completed the best of such projects and who want to convert their projects into products/services and want to set up start-ups, will be supported through incubators. The department should extend training and basic facilities to help its innovators file patent applications.
- Patent Search and Analysis Report (PSAR) will be introduced with the objective of avoiding repetitive kind of projects. In this activity, each student of pre-final semester is asked to study at least 5 patents related to his/ her project and has to prepare Patent Search and Analysis Report (PSAR). Patent Drafting Exercise (PDE) will be introduced for students of final year students. Every team of students is asked to draft provisional patent documents for their final year project considering its
- Innovativeness & Patentability. Students will be taught about provisional patent drafting, filing procedure (for various patent filing forms), steps & fees and other required details.
- Final Year students develop their projects usually in groups of 2-4 students from a similar discipline. Inter-disciplinary projects will be permitted and such teams may consist of students from more than one branch of Engineering. For such a project, there will be a faculty Guide from each of the concerned departments and the guides will work together to support the project.
- Students may be permitted to develop their ideas and their products at External Incubators / companies, if these entities, have been certified by BWU. Wherever the syllabi require the students to make presentations and/or give seminars, students may be permitted to make their presentations at the Open House and present their project seminars where they are working for their project. The mentors from Incubator / Companies can act as an external project/thesis Guide. In such a case, the



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Incubators / Companies will be required to furnish full information about the project and the students along with the names of the Mentors for the Project to the University, the Dean of the Schools and to the HODs in the departments, within three weeks of the start of the semester. If a department wants to use some of the Massively Open On-line Courses (MOOCs) as a part of the syllabus, department will be advised to choose appropriate online courses (MOOCs) as electives and apply to the University, under the existing academic regulations. Student can choose various minor projects, MOOC based certification programs, assignments in place of regular assignments in particular subjects, under internal evaluation by a Faculty Member, assigned by the HoD of department. BWU will facilitate start-ups by its alumni (within normally 3 years of graduation).

- Alumni Startup candidates will be selected by the department on the basis of an intensive review of each project submitted for the scheme. The selected candidate will be required to function from university Incubator on day-to-day basis and may be required to mentor various start-up related programs for the department.
- Student Start-ups or Alumni startups, which have made an extraordinary impact and which had an early stage connection with departments Incubator will be given suitable recognition/citation/ awards for their achievements.
- BWU will create a collaborative online platform for linking student start-ups so that they may be able to share their challenges, to link with suitable mentors and to catalyze cross pollination of innovative ideas and to leverage complimentary resources and skill sets.
- Students may be permitted to apply for grant of official leave at a time for entrepreneurial initiatives during their study depending on the prospect of the work.
- A pilot scheme shall be introduced for University professors who work along with students at an incubator to move out and pursue entrepreneurship for a specified time and on failure will be allowed to join back.
- Students are permitted to undertake their Industrial Seminar, Project Seminar and Industrial Visit at State level Technology Business Incubators where the additional facilities are being setup.
- In order to promote education in hardware manufacturing and creating prototypes of hardware products, mini-fab labs will be provided by the university for creating prototypes/proof of concepts for successful implementation of innovative ideas.



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- Student entrepreneurs working on a startup idea even from the first year of university may be permitted to convert their startup project as their final year project towards degree completion. Mentors assigned by Incubators may be involved in the conduct of project viva-voce of those students.

Activity Policy

- Every BWU program will dedicate a few hours of its academic time where students and teachers will pursue certain activities for inculcating and strengthening the spirit of entrepreneurship. Every week some time will be set apart for student activities including entrepreneurship. The Departments will have a choice of building such activities according to the local environment. But, the impact of every activity/process will be required to be benchmarked by departments, semester-wise.
- BWU will recommend to all its departments to nurture as many student start-ups as possible. Each department may thus help at least one of their student start-ups to emerge, to grow and to scale every year through the help of all the resources in campus.
- BWU will continue to organize and continuously improve its practices in IPR to help young start-ups in IPR related issues. The ownership rights of IP on account of start-ups have been detailed in IPR Policy of BWU. University will create a network of attorneys that will guide and help potential student patentees along with other private firms and agents.
- Department Level Entrepreneurship Development Clubs (Entrepreneurial Boot camps) will be established through incubators to foster innovation and entrepreneurial spirit at the school and department levels.
- BWU will regularly host startup-related national level dialogues, workshops and conferences to benchmark its own progress and help create futuristic policies and action strategies to promote Innovation and student start-ups in departments.
- BWU will celebrate an annual day jointly with the annual Poster Exhibition for Final Year projects.
- BWU will provide common facilities for operations such as legal, accounting and basic administration.



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- BWU will also attempt to provide basic common minimum tools and facilities that a good number of startups, if obtaining them for multiple users turn out to be cheaper and on demand. These may include server space, online tools such as team collaboration, etc.

Financial Policy

- BWU will set up its own fund or set up a fund with support from multiple stakeholders and create Prototype Fund that will help very early-stage startups.
- BWU will financially support the student projects based on merit within the availability of funds.
- BWU will also work with banks and other financial institutions to set up a student startup angel fund in suitable format. This will support the best spin offs at university level in a hassle-free manner.
- BWU will create linkages with external angel networks, incubators, TBIs and help link suitable spinoffs to them to help student start-ups, wherever in need, on a real time basis.
- BWU will work with various venture and angel fund groups and governmental institutions to help students obtain seed funding at their early stage of inception when the students are found to have a Minimum Viable Product (MVP).