



Asansol Engineering College
Innovation and Startup Policy
for Student and Faculty



Vivekananda Sarani, Opp. Jubilee Petrol Pump, Kanyapur, Asansol,
West Bengal, PIN-713305



Contact us

Students those have any innovative idea and want to establish a successful startup are advised to contact the following faculty of their branch. The nominated faculties will help them to show direction to avail pre-incubation and incubation facility

Serial No	Faculty Name	Designation/Department/Affiliation	Contact Number
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Introduction:

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. This leads to the 'National Innovation and Startup Policy (NISP)'. In context to the NISP A nineteen membered committee was constituted in Asansol Engineering College(AEC) to formulate detailed guidelines for various aspects related to innovation, Startup and entrepreneurship management. This committee deliberated on various facets for nurturing the innovation and Startup culture in Asansol Engineering College(AEC), which



covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, AEC Innovation and Startup Policy was prepared for students and faculties of Asansol Engineering College.

Vision:

"To Create a Centre of Excellence for entrepreneurship development based on quality learning, skill development and producing successful entrepreneurs with leadership qualities by translating innovative ideas into viable enterprises"

Mission:

1. To be an acknowledged unit by prospective entrepreneurs.
2. Competent authorities and committed to entrepreneurship education, training and research through competition, self motivated and self-driven practices.
3. To promote employment opportunities.

Objective:

1. To create awareness on entrepreneurship among the students.
2. To promote employment opportunities.
3. To develop management personnel at appropriate levels for non-corporate and unorganized sectors like education, rural development, small-scale industry etc.

NISP Policy in detail

1. Strategies and Governance

- A. One of the key facets of the HEIs strategy should be entrepreneurship promotion and development. Asansol Engineering College will develop specific targets and related performance indicators for evaluation in order to promote the establishment of an entrepreneurial ecosystem in the organization.
- B. Asansol Engineering College will develop a resource mobilization strategy to support pre-incubation, incubation infrastructure, and facilities. In order to



remove organizational limitations and concentrate on the entrepreneurial agenda, a long-term financial plan should be established.

i. Investing in entrepreneurial activity will be a part of institutional financial strategy. Through the formation of a separate "Innovation fund," a minimum of 1% of the institution's total yearly budget will be reserved for funding and supporting innovation and startup-related activities.

ii. The strategy will also involve raising funds from diverse external sources through government (state and federal) and non-government sources such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, and many others.

iii. Asansol Engineering College will approach private and corporate sectors to raise money for technological incubators as part of their Corporate Social Responsibility (CSR) obligations under Section 135 of the Company Act 2013.

C. Product to market strategy for startups can be developed by the Asansol Engineering College on case-by-case basis

D. Development of entrepreneurship culture should not be limited within the boundaries of the institution.

2. Startups Enabling Asansol Engineering College Infrastructure

Pre-incubation and incubation facilities for nurturing innovations and startups at the institute will be created. Incubation and innovation can be organically interlinked. The goal of the effort will be to link innovation to enterprises to financial success.

A. Asansol Engineering College will create facilities for supporting Innovation, Incubation, Entrepreneurship, pre-incubation (e.g. IICs as per the guidelines by MHRD's Innovation Cell, EDC, Innovation Cell, Startup Cell, Student



Clubs, etc.) and Incubation/ acceleration by mobilizing resources from internal and external sources.

- B. This Pre-Incubation/Incubation facility will be accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution.
- C. Pre-incubation facilities will be managed by Institution Incubation Foundation, which will be a separate entity, registered under Section-8 of Company Act 2013. This will allow more freedom to Technology Business 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.
- D. The institute will provide 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.

3. Nurturing Innovations and Start ups

According to guidelines of Govt. of India, this institute frames the mechanism which will facilitate the students, alumni, faculties and staffs to go for "start up"

It is as follows:-

- A. College will offer pre-incubation and incubation facility to the students, alumni, faculties and staffs with respect to fulfillment of conditions. If necessary college will take support from others institutions.
- B. College will ask the beneficiaries to follow the standard IPR protocol and it will be done on mutual consent.
- C. College will allow students, staffs to work on their innovative projects and Frame start up or work as intern in start up. Student entrepreneur certainly earn credits for working on innovative prototypes/business models as per university guidelines.
- D. Students who are under incubation, pursuing entrepreneurial ventures are allowed to use college address to register their organization with respect to fulfillment of conditions.
- E. College will offer few relaxation to the student entrepreneurs regarding attendance etc. as per university guidelines and permissible limit.
- F. Student entrepreneurs may take Semester break/Year break for the progress of their venture if necessary subject to permission of the review committee of the college.



- In this regard college will constitute a review committee by the senior faculty members. Review committee will evaluate each aspects.
- G. College will allow faculties/staffs to frame start up and allow them to take "leave" for a certain period of time so that they can engage themselves on full time basis for their venture so that it can speed up. The matter will be dealt by HR Section.
 - H. College will consider to start Full time/Part Time M.B.A./P.G.D.B.A. program on " Innovation, Entrepreneurship & Venture Development" so that participants get a degree and while incubating and nurturing a start up.
 - I. College will facilitate the faculties/staffs/students in different ways:-
 - i. Providing mentorship support on regular basis
 - ii. Short term training program(specific areawise)
 - iii. College will arrange the communication link with different seed fund Providers.
 - iv. Settle IPR related issues.
 - J. In return of the service and facility college will take 9% equity/stake in the start up.
 - K. In case of compulsory equity model start up will be given a cooling period of 3 months to use incubation service on rental basis subject to satisfaction of of services offered by institute. During cooling period college will not force start up to issue equity.
 - L. College ensures that at no stage any liability will be accrued to it because of any activity of start up.
 - M. Besides other duty of teaching college will encourage all faculties for start Up activities and it will be considered as important parameter in Performance Appraisal.

4. Product Ownership Rights for Technologies Developed at Asansol Engineering College

- A. When AEC 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 AEC.
 - i. Inventors and AEC could together license the product / IPR to any commercial organization, with inventors having the primary say. License fees could be either / or a mix of
 - a. Upfront fees or one-time technology transfer fees
 - b. Royalty as a percentage of sale-price



c. Shares in the company licensing the product

- ii. AEC will not hold the equity as per the current statute, so AEC Incubation Foundation will 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 AEC Incubation Foundation and the incubated company.

B. On the other hand, if product/ IPR is developed by innovators not using any AEC 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 AEC industry experts / alumni (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. AEC can use alumni/ faculty of other institutes as members, if they cannot find sufficiently experienced alumni / faculty of their own.

D. AEC Centre of Innovation or Technology Business Incubator 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 however in specific case, clarifications can be sought. When Institute is paying for patent filing, College authority will constitute 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. AEC decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation.

F. Interdisciplinary research and publication on startup and entrepreneurship will be promoted by AEC



5. Organizational Capacity, Human Resources and Incentives

- A. Asansol Engineering College will be recruit staff that have a strong innovation and entrepreneurial/ industrial experience, behaviour and attitude. This will help in fostering the I&E culture.
- B. 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.
- C. Faculty and staff will be encouraged to do courses on innovation, entrepreneurship management and venture development.
- D. In order to attract and retain right people, institute will develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
 - i. The reward system for the staff can include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, training etc.
 - ii. The recognition of the stakeholders can include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships etc.
 - iii. A performance matrix will be developed and used for evaluation of annual performance.

6. Creating Innovation Pipeline and Pathways for Entrepreneurs at Asansol Engineering College

- A. Mechanisms will be created at the institution level to guarantee that the maximum number of students are exposed to innovation and pre-incubation activities at an early stage, as well as to support the pathway from ideation to innovation to market.



- i. The institutional entrepreneurial agenda should include developing awareness of the importance of entrepreneurship and its role in career development or employability among students, teachers, and staff.
 - ii. Students and staffs will be educated that innovation (technology, process, or business innovation) is a vehicle for resolving societal and consumer problems. Entrepreneurs will create with a market niche in mind.
 - iii. Students will be encouraged to acquire an entrepreneurial attitude through experiential learning by exposing them to cognitive skill training (e.g. design thinking, critical thinking, etc.) and by inviting first-generation local entrepreneurs or experts to speak to young minds. Idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, and exhibitions, as well as mentoring from academic and industry experts, real-world challenges, rewards, and recognition, should all be held on a regular basis.
- B. The institute will connect their start-ups and businesses to a larger entrepreneurial ecosystem, as well as provide support to students in the pre-startup phase who show promise.
- C. Connecting student entrepreneurs with real-life entrepreneurs will assist students understand the real-world problems they can face as they progress through the innovation funnel, increasing their chances of success.
- D. According to the requirements of the MHRD's Innovation Cell, college already formed Institutional Innovation Councils (IICs) and give adequate funds for their work. Institutions will use IICs to guide them through various activities linked to innovation, startup, and entrepreneurship development. To further facilitate students' entrepreneurial journeys, a concerted effort will be made to uncover, scout, acknowledge, support, and reward proven student ideas and inventions.
- E. The institute will create a handy reckoner of Innovation Tool Kit, which will be put on the homepage of the institute's website to answer innovators' questions and enlist the institute's resources.
- F. It is necessary to foster a culture that recognises that money is not free and that it is risk capital. These monies must be used and returned by the entrepreneur. While funding places a risk on the entrepreneur, it is the entrepreneur's responsibility to make every attempt to demonstrate that the funding agency made the right decision in sponsoring him or her.



7. Norms for Faculty Startups

- A. For better coordination of the entrepreneurial activities, norms for faculty to do startups will be created by the institutes. Only those technologies will be taken for faculty startups which originate from within the same institute.
 - i. Role of faculty can vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
 - ii. Institutes 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 can 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) can be permitted to the faculty.
- E. Faculty do not accept gifts from the startup.
- F. Faculty do not involve research staff or other staff of institute in activities at the startup and vice-versa.
- G. Human subject related research in startup will get clearance from ethics committee of the institution.



8. Pedagogy and Learning Interventions for Entrepreneurship Development

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



should be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.

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

iii. It is true 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.

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

A. Stakeholder engagement will be given prime importance in the entrepreneurial agenda of Asansol Engineering College (AEC). Asansol Engineering College (AEC) will find potential partners, resource organizations, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs.

i. To encourage co-creation, bi-directional flow/ exchange of knowledge and people will be ensured between institutes / organization such as incubators, science parks, etc.

ii. Asansol Engineering College (AEC) will organize networking events for better engagement of collaborators and will 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 Asansol Engineering College (AEC) to capitalize on the knowledge gained through these collaborations. Care must be taken to ensure that events don't become an end goal. First focus on the incubator, who will create successful ventures.

B. Asansol Engineering College (AEC) 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 a part of Asansol Engineering College (AEC) policy and the institute will provide support mechanisms and guidance for creating, managing and coordinating these relationships.

- i. The faculty, staff and students of the Asansol Engineering College (AEC) will be given the opportunities to connect with external environment through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings.
- ii. Connect of Asansol Engineering College (AEC) 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 will be created in Asansol Engineering College (AEC) for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.

10. Entrepreneurial Impact Assessment

A. Impact assessment of Asansol Engineering College 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 start ups 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 will 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 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.

[Handwritten Signature]
31/08/2021

Principal
Asansol Engineering College

(Principal, Asansol Engineering College)