
Innovation-to-Enterprise (*i2e*)



Start-up Policy in State Public Universities and Institutes of Higher Education

Document submitted
to

Higher and Technical Education Department
State of Maharashtra
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Summary

The Government of Maharashtra, through a GR No. Committee 2017/ No. 448/ 17/ VISHI-3 dated 30th November 2017 constituted a Committee to formulate a Startup Policy for the State Public Universities and Institutions of Higher Education for Entrepreneurship and Innovation under the Chairmanship of Dr. V G Gaikar, Vice-Chancellor, Dr. Babasaheb Ambedkar Technological University. The main mandate of the Committee was to prepare guidelines for establishing framework for facilitating startup culture in public universities and higher educational institutes, irrespective of the discipline.

The Committee members met with different stake holders, from faculty members to the University officers at different levels, industry personnel, Industry organizations, individually as well as a team at several locations in the State to understand the current status of the Startup activities in the Public Universities and sought inputs from industries and professionals working in the startup ecosystems. The members also reviewed the startup policy of AICTE, and those of other states in the country along with the visits to incubation centres at a few engineering colleges. The policy has been prepared to provide an enabling ecosystems for the young graduates, faculty and staff members in the Universities to explore their potential in entrepreneurship. Guidelines are suggested for necessary academic activities. The draft was shared with authorities of all Public Universities for dissemination within the Universities, industry organizations, and researchers. Comments, whenever received, were taken into account in several revisions of the document.

This policy document provides a framework for inclusion of all stakeholders, i.e., students, faculty, staff, college management, universities and also the Government, keeping in mind the basic objective of promotion of startup culture in the higher educational institutes. The Skill Development Department of the State Government has formulated simultaneously the Startup policy of the State of Maharashtra. This Startup Policy in public universities has, therefore, been proposed to take advantage of the general Startup Policy of the State, emphasizing on pre-incubation activities at the college and University levels.

Also added are action points to the document at each level and corresponding outcomes are defined with Key Performance Indicators for the colleges and the Universities. The Committee has suggested a establishment of State Level Monitoring mechanism for overseeing the implementation of the policy on regular basis at all the Public Universities. The Universities are expected to follow the provisions of Sections 53 and 54 of the Maharashtra Public Universities Act 2016 to take necessary academic and financial decisions to implement the policy and monitor the startup activities in University departments and affiliated colleges.

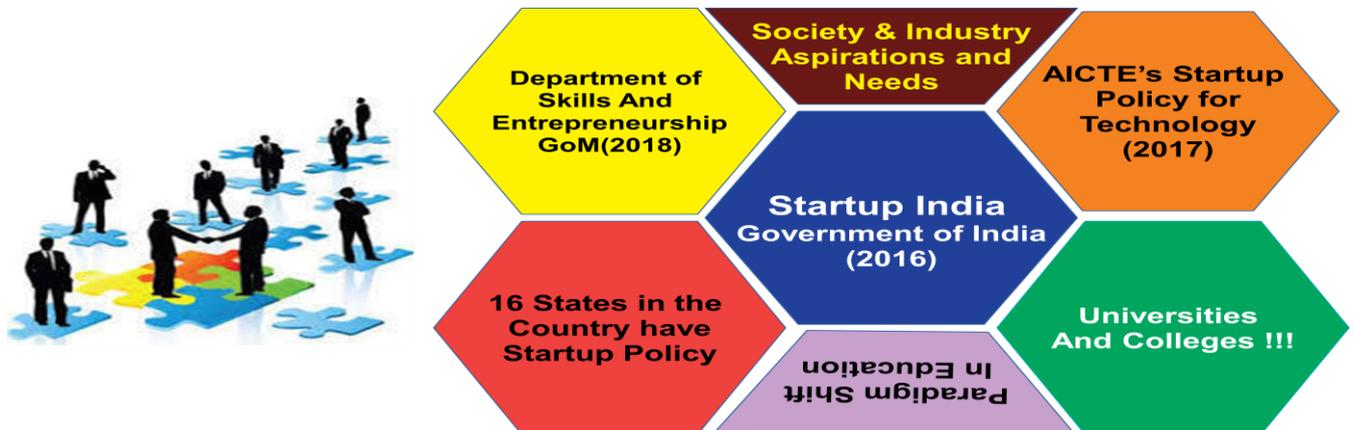
India's new-age startups are important not only because they can create jobs and wealth for many, but also because they hold the promise of solving many of our biggest problems - something that the government has recognised, by putting together a formal Startup Action Plan for the country. With their entrepreneurial mindset, startups can turn India's biggest problems into opportunities, and solve them at the scale of more than one billion people. It is hoped that with strong support from the State Government, the Higher and Technical Education and Skill development Departments of Ministries of the State Government, the culture of Startup can be developed in all Public Universities and Higher Educational Institutes in the next two to three years. The sustained Startup efforts can develop further

the State's economy while addressing the needs of the Society and industry at affordable costs.

All Committee members are acknowledged for their cooperation and timely input, along with several individuals from industries and entrepreneurs from startup space, University authorities for facilitating interaction with faculty members and research students and dissemination of the draft policy within the University, industry organizations in different corners of the State and State Government authorities.

Committee for Formulating Startup Policy for Public Universities

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Content

Sr. No	Innovation-to-Enterprise (i2e) Start-up Policy in State Public Universities and Institutes of Higher Education	Page Number
1.1	Preamble	5
1.2	ment vs Employability	5
1.3	Start-up Policy of the State of Maharashtra	6
1.4	Innovation and Entrepreneurship in State Public Universities	7
1.5	Eco-System for Start-ups	8
1.6	Key questions for formulating the Startup Policy	9
2.0	Innovation-2-Enterprise(i2e) Start-up Policy of Government of Maharashtra in State Universities and Institutions of Higher Education	10
2.1	Objectives of the Policy	10
2.2	Specific Goals of the i2e Policy	10
2.3	Stakeholders of the i2e start-up Policy	11
2.4	and Responsibilities of Stake Holders e University ard of Innovation, Incubation and Enterprise of the University ntre for Innovation, Incubation and Enterprise at the University e College (E) i2e Club at the College (F) Role of Faculty member(s) in the University and Colleges (G) Mentors, Mentorships and Their Investments in Start-ups (H) Ecosystem at Government Level (I) Key Performance Indicators of start-up Activities	12
3.0	Action Plans for Implementation of the Start-up Policy (A) College/ University Department/ Research Institution (B) The University (C) The Government (D) Faculty and Students	24
4.1	Innovation to Enterprise Index of College/ University Department	34
4.2	Innovation to Enterprise Index of University	
	Annexures I. List of Current Incubators in the State of Maharashtra II. Number of Registered start-ups in the State of Maharashtra III. Startup Initiatives of Government of India	36



1.1 Preamble

The Hon'able Prime Minister of India launched the Start-up Action plan in January 2016 with the intention to build a strong eco-system for nurturing innovation and start-ups in the Country, particularly in strategic areas of science and technology, biotechnology, healthcare, heavy industries and defense. The Atal Innovation Mission(AIM) established by the Government of India is an innovation promotion platform involving academics, entrepreneurs, and researchers.

Innovation is a key for economic prosperity. The need to innovate is strongly felt only when either technology is denied to the country or an exorbitant price asked for products or technology. It is never in the national interest to get adversely affected by external limiting factors. Self-reliance, as a Nation, is a must.

Several national and multinational companies are engaging with their employees, vendors and customers to co-create new products, processes and services. It is realized even by local companies that innovating continuously is the need in the time of severe competition in businesses. The younger generation too, has become more aware of their intellectual capital in the global context. We need to use this large human resource of students and researchers from Universities and colleges for innovation to solve problems that the country faces. The advances in communication technology and improved connectivity are providing an insight to the population into markets, in identifying opportunities and making them to aspire to a better standard of living.

1.2. Employment vs Employability

The India Strategy report of J M Financials, June 2017, shows that the ratio of the number of students who earned higher education degrees to new jobs created had worsened from 9x for the three year period FY11-12 to 27x for FY15-16. Further, an increase in labor productivity, increased automation and decline in private capex are adversely impacting the ability of the private sector to be the primary driver of job creation. Efforts are required to improve employment generation along with generating more graduates and professionals. The key to improving the Higher Education sector is to educate and train graduates to create new products, new processes and new systems and thus develop a new economy. It also means having newer models of functioning and better accountability.

In the Country, 16 States have implemented start-up policies since October 2014. The Government of Maharashtra, too, through its Ministry of Skill Development and Entrepreneurship has rolled out a start-up Policy in January 2018, where almost every district will have one Incubation Centre, established in PPP mode.

If the innovations in educational institutions is supported by such facilitating policies and necessary mechanisms by the State Government, then the spirit of entrepreneurship can be spread throughout the State's Higher Education system. Start-up initiatives, nationally and regionally, require a clear road-map and a cultural change. It is essential to create an appropriate mindset in the early stages of higher education. The system needs to inspire young students with disruptive ideas, exposure to start-up frameworks, and excite them to do good for society with interventions that are wealth generating. The students' start-up is a recent phenomenon but restricted to few premier institutes like IITs, IIMs and NITs. All India Council for Technical Education(AICTE), New Delhi, has recommended a start-up policy for technical institutions. The State University systems have not been geared up to this challenge yet, barring a few technical and management Institutes. In the recent past, however, the scenario is changing and student's start-up activities are considered as additional credentials even by firms looking for fresh talent. With India becoming the youngest nation in the world, job generation is a critical priority and the emerging startups will create hundreds of jobs and internships for real life experience to fresh graduates.

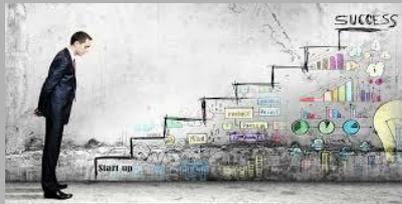
1.3. Start-up Policy of the State of Maharashtra

Maharashtra has been the hub of commercial, financial and industrial activities in India for decades and has been at the forefront of economic growth, being the most entrepreneurial State in India.

The objective of the Startup policy, created by the Skill Development Department of GoM, is to catalyze the growth of an innovation-driven entrepreneurial ecosystem in the State to achieve wholesome and inclusive socio-economic development. The policy aims to drive economic growth and job creation in coming years by encouraging entrepreneurs to design novel solutions in new age sectors such as biotechnology, artificial intelligence, internet of things, clean energy, etc., as well as revamping traditional sectors. A holistic approach is expected entailing establishing a network of incubators, connecting relevant stakeholders, simplifying the regulatory environment and making strategic investments to foster entrepreneurship across the state. It is envisaged in the policy that the Government shall promote innovative start-ups by providing necessary infrastructure, connecting communities to enable sharing of ideas, experience and knowledge and mitigate regulatory and other challenges that impede innovation.

The State Universities can take advantage of this enabling environment that the State's start-up policy provides to guide their students towards becoming entrepreneurs instead of seeking jobs. The Higher Education system and universities have researchers and scientists active in research but often the output is confined to research publications. Many research projects have the potential of moving from lab to market and are scalable. But in the absence of access to an enabling ecosystem, the research work does not reach the market place. Creation of start-up ecosystem within the Universities is, therefore, necessary where faculty & researchers can transfer IPs to start-ups and mentor them till they mature. An essential component of start-up culture requires basic knowledge in business and entrepreneurship for

aspirants from all disciplines. The courses can be embedded in the regular degrees as additional credits.



Startup Policy Perspective

<i>Students and Faculty</i>	<i>University</i>	<i>Government</i>
<p>Can Startups create incremental or fresh value in the ecosystem for long term success?</p> <p>Employment vs Employability – Create new jobs through New Businesses</p>	<p>Can University and higher Education Institutes support transformation of research into businesses?</p> <p>Can HE institutes promote a culture of entrepreneurship among their student community instead of creating job seekers?</p> <p>Can University incorporate entrepreneurship in their formal curriculum?</p>	<p>Can government provide guidelines through a policy for uniform functioning of Startup Centres in the Universities?</p> <p>Can Government support startup activities for job creation?</p>

1.4. Innovation and Entrepreneurship in State Public Universities

The Higher Education Department of GoM has recognized the need for Innovation and Entrepreneurship while formulating the Public Universities Act 2016. The Sections 53 & 54 of the Act have made provisions institutionalizing the principle of Innovation and Entrepreneurship through establishing a Board of Innovation, Incubation and Enterprise, in each State University for creation of an enabling environment to propagate innovation and to convert ideas into working models through incubation that finally leads to the creation of new enterprises. Each university shall have an independent Centre for Innovation, Incubation and Enterprise to carry out the objectives of the Board. The Centre is to have adequate representation from industries, banks, the University and college faculty and Government. The Board is to devise policy and an operative level mechanism for co-operation between research and development activities in university departments, colleges and various industries in the State and in other States, to create synergy and incubation of good ideas in products, processes, and services, in scalable mode, to establish small, medium and large industries, to support protection of intellectual property rights and to establish a system to guide and help young entrepreneurs in operational and legal matters, business model creation and financial support.

Startups are fundamentally different from traditional SMEs, involving highly qualified founders and employees, designed for scale, designed for speed, with technology permeating every aspect of the operation. Technology, healthcare, telecommunications, and industrial sectors support the largest number of startups.

The Universities and Institutions of higher education are, therefore, best suited to take up the challenge using their existing infrastructure and talented graduates to create the startup space in their own premises. Globally, 56% startups are located in Universities, indicating the important role played by universities in supporting entrepreneurship and startups.



There is a need for a working and facilitating framework at the University level to implement the Sections 53 and 54 in the University Departments, institutes of higher education, and at the conducted and affiliated colleges. The Start-up policy of the State of Maharashtra has not exclusively taken into account the potential of students in the Universities and colleges. The AICTE policy of start-up 2016 has targeted only the engineering and technology institutes. The Ministry of Higher and Technical Education, Government of Maharashtra has, therefore, appointed a Committee with the specific task of formulating the start-up Policy for Higher Education Institutes to promote State Public Universities and affiliated higher education Institutes.

1.5. Eco-System for Start-ups

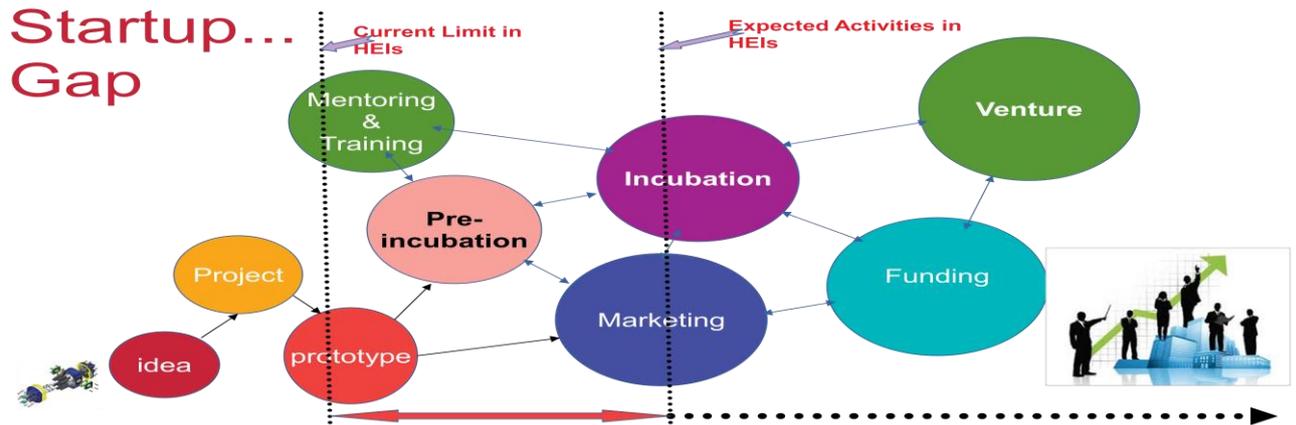
The Start-up ecosystem comprises of entrepreneurs, educational and research institutes, mentors, investors, industries, service providers, funding organizations and research organizations. There is a dire need to connect these stakeholders together to ensure there is sufficient flow of information and knowledge sharing. Young aspirants not only need financial assistance but also require technical expertise and learnings from experienced entrepreneurs to succeed in their current venture. Having a great product is not sufficient for a successful start-up enterprise but scaling it up to level of business reaching to masses is equally important. The skill-set required for marketing to right audience and particularly to investors is different from the skills required in laboratories. Apart from revenue at the 'top' of strategy, the net profit at the 'bottom' has to be understood by the entrepreneurs early in the start-up cycle. Thus the role of mentors and expert managers cannot be ruled out in the early phase of the start-ups. The required Eco-System is envisaged at the college level, University level and State level with increasing degree of complexity and competence.

The Startup starts with the idea, but an ecosystem in terms of funding, availability of space and mentors, ease of doing business in the State and incentives from the level of incubation to commercialization is needed to support the venture to success.

1.6. The Committee has taken into account the following key questions while formulating the policy

1. How can higher education institutions support transformation of education and research into business propositions?

2. How can educational institutions promote a culture of entrepreneurship among their students?
 3. How readily can Universities incorporate entrepreneurship into class curriculum with practice?
 4. How can government promote vibrant start-up activity to improve economic conditions in view of rising unemployment of graduates?
 5. How can government encourage other economic stakeholders to participate in start-up systems and promote them in educational institutes?
 6. How can government support engagement between start-up ecosystems in Universities and other major global centers?
 7. How does a start-up create incremental or fresh value in the ecosystem for long-term success?
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Need for Startup Policy in Higher Education

Provision of Innovation, Incubation and Enterprise in Public Universities Act 2016

Researchers in Higher education have scalable work and Students are with ideas for innovative solutions

But...

- No policy for startups from Universities and colleges
- lack of entrepreneurship electives
- Absence of incubation system
- Lack of supporting ecosystem
- Fear of failures
- Pressure for conventional careers
- Disconnect between Academia, Industry and Government for society/ Industry aspirations and needs

2. Innovation-2-Enterprise(i2e) Start-up Policy of Government of Maharashtra in State Universities and Institutions of Higher Education

2.1. Objectives

The i2e Start-up Policy in Higher Education has the following Broad Objectives

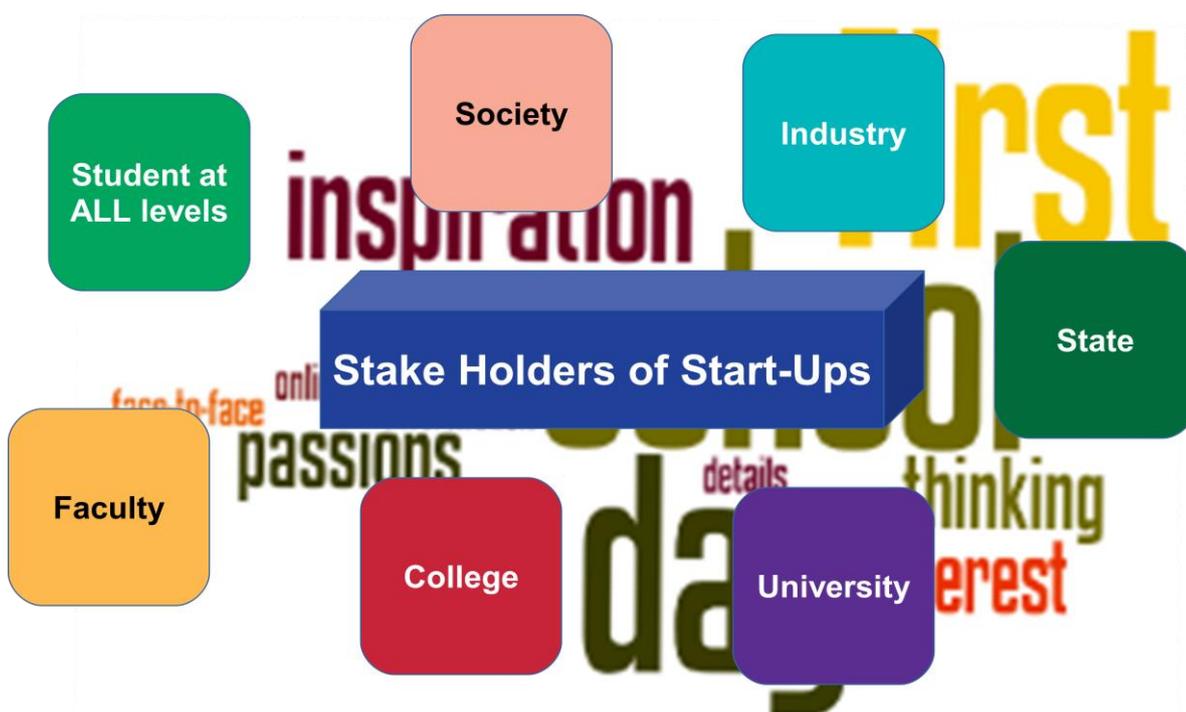
- (1) To encourage universities and affiliated colleges to setup an entrepreneurship culture
- (2) To create uniform framework for start-up initiatives in the State Universities and affiliated colleges.
- (3) To embed courses on Entrepreneurship with relevant interventions at the University
- (4) To provide a policy framework for incentives, and benchmarks for innovative start-ups and associated efforts at all levels in the Universities and Educational Institutes
- (5) To develop pre-incubation ecosystem to translate research from laboratories and classrooms of Universities and colleges into practical applications addressing the market and social needs
- (6) To facilitate sectoral and regional entrepreneurial efforts in the State Universities towards wealth, economy and employment generation.
- (7) To link Government, Academia, Society, and Industry through systematic ways for further entrepreneurial opportunities.

2.2 The Specific Goals of the i2e Policy are:

- (1) To motivate students, faculty members and non-academic staff in the State universities and affiliated colleges to gain benefits from State's Start-up initiative and Government's 'Start-up India' programme.
- (2) To create a framework to encourage higher Educational Institutions, Students, Faculty, immediate alumni and staff members to participate in the Start-up activities, and to showcase and upscale innovations to business enterprise
- (3) To provide end-to-end support to students, for launching their start-ups during the course of their study or within three years of graduation.
- (4) To establish special purpose systems to support business ideas of students, faculty and staff
- (5) To equip students and faculty members with the necessary skills and knowledge for managing their business enterprise and provide mind-to-market pathways for successful start-ups
- (6) To support SMEs with innovative concepts for solutions to improve their productivity and competitiveness by harnessing human resources in colleges and Universities
- (7) To encourage industry and government to engage with universities on problems needing solutions through start-ups
- (8) To create platforms for engagement for funding opportunities for start-ups in competitive as well as collaborative manner
- (9) To create internship opportunities at start-ups for students to have first hand experience in start-up activities.

2.3. Stakeholders of the i2e start-up Policy for Universities and Colleges

The following are stakeholders of the *i2e start-up Policy*



- (1) **Students-** UG, PG and PhD students of all disciplines of State Universities and affiliated colleges, during their course of study shall be covered under this policy. Diploma program students shall also be considered.
- (2) **Faculty-** All teachers of State Universities and affiliated colleges willing to translate their research and innovations into enterprises, are stakeholders.
- (3) **Staff-** All non-teaching staff members of State Universities and affiliated colleges, are eligible for activities under this policy.
- (4) **Alumni-** The policy also covers graduates of the University/ colleges for three years from the date of their graduation of the last degree.
- (5) **College management-** College managements are facilitators of incubation activities as the colleges shall derive financial and other intangible benefits of successful enterprises from the colleges.
- (6) **University-** The policy covers the University as a cradle of innovation that provides support to Entrepreneurs, in terms of facilities and mentorship.
- (7) **Industry-** Industry is a partner for identifying opportunities, providing support to the enterprise activities of students, faculty and staff in the University and colleges and shall be beneficiary of the innovations at higher educational institutions
- (8) **Society-** Society is beneficiary of innovations from educational institutes and may participate in identification of problems to be solved and receive affordable solutions in return. A new business enterprise may lead to employment opportunities in the area.
- (9) **Government-** Government has a major stake in the policy as a facilitator of incubation activities and facilitating establishment of businesses which contribute eventually to the State's economy and improve employment prospects for the local population.

2.4. Role and Responsibilities of Stake Holders

(A) The University

The University shall take advantage of Government of Maharashtra's start-up Policy, Central Government schemes such as Atal Innovation Mission (AIM) and National Science and Technology Entrepreneurship Development Board (NSTEDEV) to develop incubation centres for its students and faculty in the University Departments.

The University shall -

- (a) Establish a Board of Innovation, Incubation and Enterprise as per Sections 53 and 54 of the Public University Act 2016 within six months with appropriate members on the Board for adoption of the *i2e* start-up policy in higher education institutes.
- (b) Establish a Centre for Innovation, Incubation and Enterprise on its campus or its sub-campus(es) within three years to carry out objectives of Start-up policy under directions of the Board
- (c) Make a provision in the budget for start-ups from University departments and Institutions for the start-up activities of students;
- (d) Devise a process of fund allocation and disbursement to start-up of the Students from the University Departments and Institutions;
- (e) Provide an enabling environment for pre-incubation to lead the incubation idea into creation of an enterprise.
- (f) Offer credit courses covering basic aspects of Business enterprise, entrepreneurship, ideation, design thinking and gap analysis. The courses will also cover basic communication, funding and financial management, business planning and marketing skills and could be taken by any student from any discipline. The course outcome should be in terms of creation of Business plans, sources of finance /funding.
- (g) Decide in conjunction with Incubators the number of credits and evaluation methodology for successfully completing notified online courses (MOOCs) and their insertion as electives for students to opt for. Students should be free to learn electives even in first or second year of college as part of degree completion.
- (h) Bring elective courses relevant to entrepreneurship in first two years of UG Course and in the first year of PG Course by appropriate ordinances, specifically for students who wish to opt for entrepreneurship over jobs. Industry Experts may be leveraged to teach courses at incubators and students who are interested may elect these courses.
- (i) Collaborate with online education platforms to design courses for promoting start-up culture among students and offer online courses to support their formal education. The University will make necessary amendments in existing ordinances or resolve new ordinances to support practical training for minimum six weeks for students in all courses, in industry or in field during the entire course period and provide necessary credit for such activities.
- (j) Take into account the recommendations of state policy for start-ups while framing academic policies framework for promoting start-up activities.
- (k) Include 'Design oriented' courses and corresponding activities in the syllabi of courses conducted by it.
- (l) Offer incentives, such as stakes in the enterprise and leave such as 'gap year' for innovation and enterprise activities to students and faculty.
- (m) Develop a policy for revenue sharing with entrepreneurs, start-ups, and other external agencies,

- (n) Define policy for equity stake for mentors and incubators in start-ups. Mentors may be allowed to take personal equity but the incubator should get equity.
 - (o) Allow student entrepreneurs to be eligible for campus placements for up to two years after their graduation, in case of failure of the start-up.
 - (p) Offer an option of undertaking a minor in courses related to Innovation, Incubation and Entrepreneurship, along with their primary course degree which may be designed in conjunction with other Universities, Institutes of higher learning, Institutes of national eminence, other top academic institutions, industry organizations, training centres, and industry experts.
 - (q) Earmark internal resources including financial and infrastructural support to add to the start-up resources provided by the State.
 - (r) Earmark an amount for supporting students' entrepreneurship activities and train-the-trainers program for faculty at least five days by group of Business experts.
 - (s) Approach industry, angel investors, venture capitalists and other organizations to avail CSR and other such resources for supporting start-up. Many industries provide grant-in-aid or equity fund to start-ups in specific areas of their domain.
 - (t) Provide autonomy to the Centre for Innovation, Incubation and Enterprise to function as an autonomous corporate body but owned by the University and make corresponding statutes or ordinances.
 - (u) Organize a State Level Business Plan Competition, by rotation among State Universities, for identifying best business ideas and to provide prizes and opportunities for collaboration with investors and industry.
 - (v) Appreciate institutes which are making serious efforts at campus or college level for promoting start-up practices and entrepreneurship amongst its students.
 - (w) Introduce the concept of Student Entrepreneur in Residence. Outstanding students who wish to pursue entrepreneurship can take a break of one year to pursue entrepreneurship full time. This may be extended to two years at the most and these two years would not be counted for the time for the maximum time for graduation. The Gap Year facility may be given to ensure syllabus continuity at the time of joining back and after an appraisal process by an incubator where the student is attached.
 - (x) Allow the Student entrepreneurs working on a Start-up idea from first year of college to convert their Start-up project as their final year project towards degree completion. Mentors assigned by Incubators may be allowed to conduct Viva Voce. Project reports certified by the Incubators may be sent back to the respective colleges for forwarding to university.
 - (y) Introduce sabbatical leave for faculty who wish to venture out along with the students and pursue entrepreneurship for a specified time and on failure allowed to join back
 - (z) Support inviting experts from National and international level as mentors for the Startup activities.
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ACADEMIC PERSPECTIVE

State university shall establish a Board of Innovation, Incubation and Enterprise as per The Sections 53 and 54 of the Public Universities Act within six months on adoption of the IZE Startup Policy

The credits to be linked with ideation activities, Training programs, Skill development, research And development, Innovation, entrepreneurship, And Society relevance, in quantifiable manner through academic bodies and IIE Board

The University shall develop a policy of revenue Sharing with innovators, startups of students And faculty and incubation centre

The University will offer incentives to Students and faculty for innovation and startup activity in terms of credits, leave and awards

The University will create and cultivate an Enabling ecosystem to propogate the Concept of innovation and convert innovative Ideas into working models

(B) Board of Innovation, Incubation and Enterprise (IIE Board) of the University

The Board shall -

- (a) Conceive a student-centric and student-driven innovation and entrepreneurship agenda and devise an operative level mechanism for co-operation between university departments, affiliated colleges and industries for building a start-up Eco-system.
- (b) Prepare an Annual action plan with various milestones and targets with tangible outcomes and a basic flow map of capacity building of university departments and constituent colleges in start-up activities to achieve them
- (c) Create a structured outreach and awareness strategy to reach out to every possible stakeholder, primarily students and faculty members through university circulars, web portal, mailers, newsletters, social media and other frequent activities
- (d) Train the faculty from University departments and affiliated colleges in innovation and entrepreneurship
- (e) Connect with Central policy and Schemes of AICTE, Atal Innovation Mission, NITI Aayog, DIPPI, different central and State government agencies offering programs on Innovation and Start-up
- (f) Facilitate networking of i2e cells of colleges with incubation facilities, industry mentors, and angel investors.
- (g) Devise and manage all intellectual property, i.e. patents, copyrights, etc., of the University Research.
- (h) Establish a system to help young entrepreneurs in operational, legal, business model creation and financial support for IPR protection.
- (i) Make a database of existing resources, infrastructure, and expertise in the University as a pool of common resources for sharing through a common window and engage them for deploying start-up mandate at the University departments.
- (j) Analyse carefully strengths of the University and weakness in order to remove the inertia hindering development of culture of innovation.
- (k) Draw insights from other universities about start-up ecosystems from within and outside the country and for innovation and student start-ups and share them with all stake holders.
- (l) Conduct a diligent examination of the sources of research funding and applicable research agreements to ensure they are compatible with each other and that the university's interest is protected for start-up/ business development

- (m) determine whether granting rights to the start-up is the “best mode” for commercialization, as opposed to a licensing agreement with a third-party commercial sponsor;
- (n) Help to identify outside professional advisers and other resources to aid a faculty member in structuring, organizing and managing a start-up company and obtaining capital financing;
- (o) Define and negotiate a technology license with a start-up company
- (p) Build tieups with other incubators in the State and Country
- (q) Focus on startups by students by conducting surveys and/or research on trends in technology, research, innovations, and market intelligence on niche theme
- (r) Develop a policy to incentivize faculty, Staff, experts, mentors, incubators, and other stakeholders so that they can meaningfully engage and contribute to a start-up
- (s) Establish awards, appreciations, citations and/or such incentives to acknowledge best efforts of all stakeholders in startups and inspire them.
- (t) Develop a mechanism for impact analysis of its start-up Policy of the University

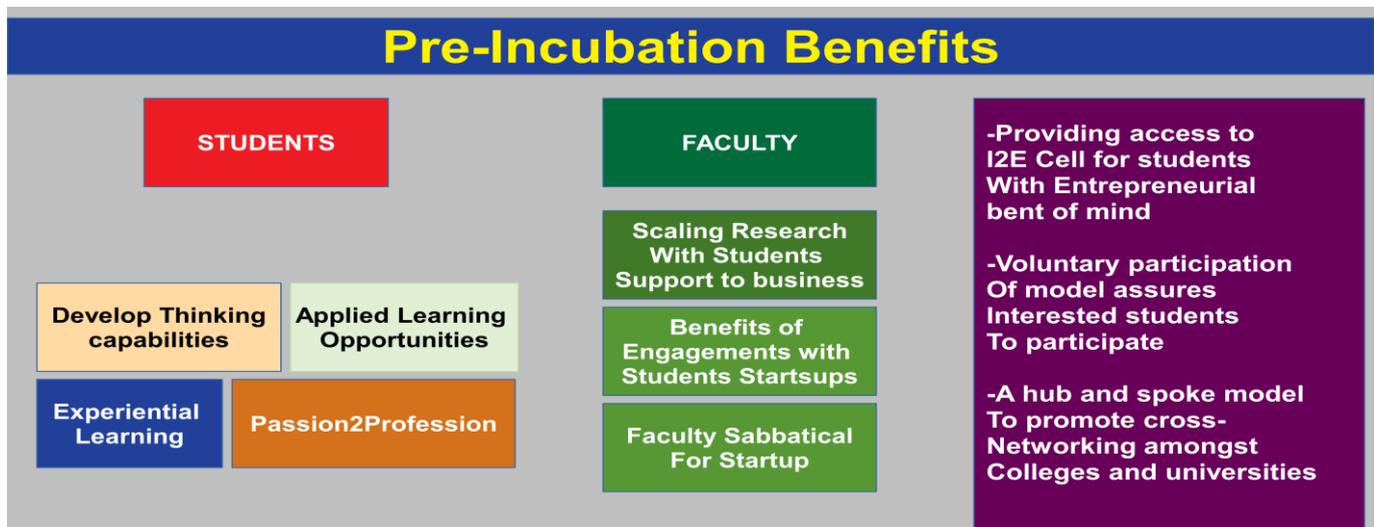
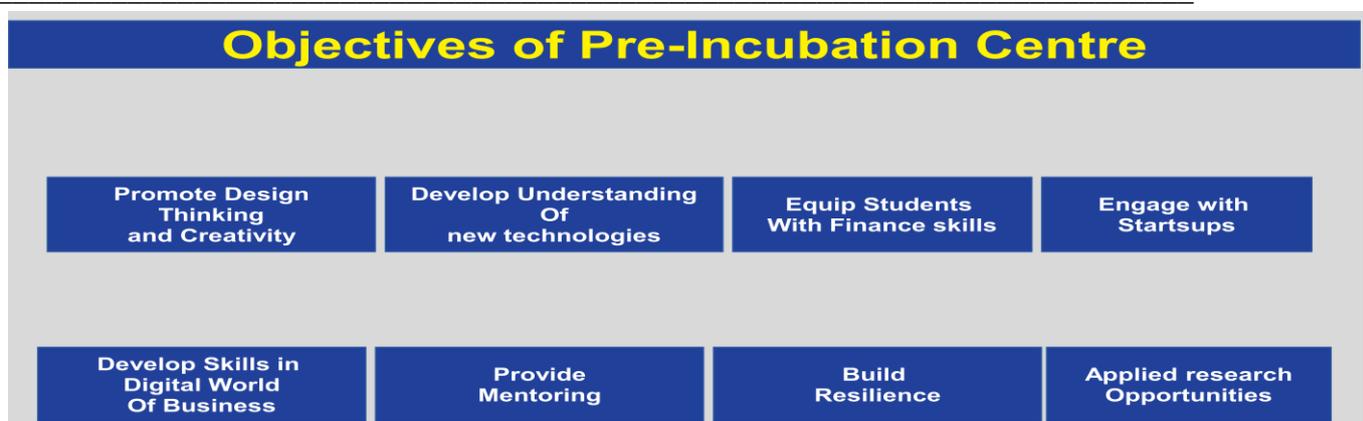


(C) Centre for Innovation, Incubation and Enterprise at the University

- (1) The University will establish a Centre for Innovation, Incubation and Enterprise within three years of implementation of this policy which shall function as an autonomous corporate body.
- (2) Department of the Skill Development of GoM has prepared a policy for promoting start-ups in the State with an enabling ecosystem. This enabling policy shall be used by the University to establish Innovation, Incubation and Enterprise Centres.
- (3) The Centre will be headed by whole time Salaried Director, preferably with independent charge, with corporate management background, and experience in business development, supported by administrative staff. He shall be entrusted with development and growth of the Centre to make the Centre self-supportive in five years.
- (4) The Centre shall have an Advisory Committee which shall be consisting of

- (i) Dean/ Director (R&D)
 - (ii) Five Industry members of the University's Board of Innovation, Incubation, and Entrepreneurship; One of the Industry members shall be the Chairman, elected by the members among themselves.
 - (iii) The Director of the Centre shall be the Secretary of the Committee.
- (5) The University shall conduct the Centre, as a Section 8 Company with necessary infrastructure and human resources. The University shall make relevant ordinances to that effect to make the Centre free from the bureaucratic processes but shall make it accountable for its own operations.
- (6) The **Executive Committee of the Centre**, will consist of
- (i) The Director of the Centre (Chairperson),
 - (ii) Dean/Director of the University (R&D)
 - (iii) Three faculty members from University Departments or colleges affiliated to the University
 - (iv) Three external experts having experience in Science and Technology, Management, Social Science and Finance and interested in mentoring the incubation activities.
- The services of the teachers to the Centre shall be accounted for in their normal duties.
- (7) The University shall conduct the Centre, preferably, as a Section 8 Company with necessary infrastructure and human resources. The University shall make relevant ordinances to that effect to make the Centre free from the procedural delays of the University system but shall make it accountable for its own operations.
- (8) The Executive Committee shall evaluate the incubation proposals received by the Centre and may invite independent experts for opinions, if necessary, and facilitate all operational issues of the Centre to support incubation activities and mentor entrepreneurs in the incubator.
- (9) The Centre shall-**
- (a) Establish an incubation space with necessary hardware(s) and software(s) to support incubation activities, common IT infrastructure, servers, device testing labs, Fab labs, offices, lab space, meeting space, conference rooms, accounts, stores and legal cell for students and faculty of University and colleges under the University and provide them to Entrepreneurs at nominal cost or on the basis of deferred payment.
 - (b) Provide support to entrepreneurs in technical, operational and legal matters
 - (c) Facilitate identification of mentors and investors for the start-ups of the students and this maintain necessary database.
 - (d) Conduct a campaign about start-up activities for freshly inducted students in the University at the beginning of every academic session
 - (e) Conduct workshops to inculcate entrepreneurial skills i.e. risk taking, critical thinking, digital literacy etc. at university departments and colleges in association with organizations that specialize in the field.
 - (f) Conduct competitions for Innovation ideas and business plan at the University at two levels; one for the students in first two years of the UG programme and another for final year, PG and PhD students.
 - (g) Coordinate with different departments of the University and colleges to assess the availability of facilities for pre-incubation.
 - (h) Work as a platform to bring innovators and users together on regular basis.
 - (i) Interact with incubation centres at constituent colleges, State Level Start-up centres, or Skill Development department for any State level support

- (j) Develop action plan with time lines for a start-up that has crossed the pre-incubation stage with ready prototype and ready proof of the concept.
- (k) Prepare annual action plan to promote and support the student innovation and start-ups.



(D) Colleges

- (1) The College shall establish incubation space with necessary hardware(s) and software(s) to support incubation activities, offices, lab space, meeting space, conference rooms, accounts, stores and legal cell for the students and faculty of college and provide them to students at nominal cost or on the basis of deferred payment The college may take advantage of Central Government schemes such as Atal Innovation Mission (AIM) for developing incubation facility at the college.
- (2) The college shall prepare and put in place the annual action plan to promote and support the student innovation and start-ups in the college
- (3) The college shall create a Students-driven Idea-to-Enterprise Club (**i2e** Club) to enable the students to undertake entrepreneurial activities.
- (4) The **i2e** Club can be operated by a team of one or two enthusiastic faculty members and a group of student volunteers interested in the start-up activities. The students of the college can have internship at the Club itself for providing logistics support to the activities of the club.

- (5) The college shall send 2 to 3 faculty members for **i2e** training to provide them an exposure to corporate field/Industry
- (6) The college may invite industries, big or small, and even NGOs to offer the services of the students at affordable internship even to work on small problems for innovative solutions but with the potential for commercialization.
- (7) The College may incentivize external experts or mentors and stakeholders to meaningfully engage and contribute to Start-up activities of the Club.
- (8) The faculty and staff will be allowed to hold an equity stake in a start-up co-founded or mentored by them with students. The college will specify the policy to that effect or adopt the policy proposed by the University.
- (9) Autonomous colleges shall include entrepreneurship courses as credit courses as in-built mechanism to promote start-up activity amongst its students.
- (10) The college shall invite entrepreneurs from own alumni base to support start-up initiatives and provide internships to their own students. A Time table of such meetings shall be prepared by the Club coordinators
- (11) The College shall document and share existing scenario of innovation and entrepreneurship among all stakeholders in the college and streamline Informal activities and start-up efforts.

(E) I2E Club at the College

(1) The Club shall-

- (a) Organize One Induction Workshop for all NEW students in the beginning of the academic year to inspire them for entrepreneurship
- (b) Register interested students at a nominal registration fee for engaging in them in innovation and enterprise activities of the Club.
- (c) Invite experienced faculty from other Institutes with start-up experience, entrepreneur alumni or other experts from industry as mentors and for interaction with the Club members on a regular basis.
- (d) Conduct internal discussions, ideation workshops and competitions to identify feasible potential ideas for participating in the competition at University/State/National levels, including AICTE Hackathon or for a product/process/system identified by a systematic survey or discussions with industry or an NGO or community, needed to address an issue/problem with a specific target group.
- (e) Form interdisciplinary teams to develop identified product/ process/ system prototypes, and prepare business plan to participate in the State level competition hosted by a State University by rotation every year.
- (f) Coordinate with different departments of the college to assess the availability of facilities to be used for developing proof-of-concept for pre-incubation.
- (g) Help teams working on selected ideas for preparation of business plans for selected ideas using internal as well as external resources, in conducting market survey to identify target group, scale of demand, necessary product attributes and economic feasibility to support business plan preparation and invite interested parties from industry for discussion for participation and support.
- (h) Develop and maintain a portal for linking innovators, industry and incubators at the college
- (i) Interact with industries in and around the college and elsewhere in the State to raise funding for innovation and start-up activities and shall develop a high speed

communication channel among its members, if necessary, using social media for faster dissemination of information on funding opportunities and start-up competitions and idea generation.

- (j) Offer internships to the next batch of students to sustain innovation activities of the college.

(F) Role of Faculty member(s) in the University and Colleges

- (1) A faculty member who has done research work or an idea that is scalable with commercial value, and ready for lab-to-market transition can access the Incubation Centre facilities at the University and at any other Incubation facility established by the State
- (2) A faculty member, accessing the incubation facility for his own start-up, may provide internships to students registered for Entrepreneurship courses offered by the University or College.
- (3) A Faculty member mentoring a start-up shall be allowed to make an investment in the start-up but shall agree to provide mentorship to the same start-up for a period up to 3h per week. Providing only mentorship alone may not give the faculty member any stake in the start-up's equity.
- (4) Intellectual Property Rights of work done by a faculty at the University Departments shall be owned by the University. However, any royalty of technology transfer done by the University to a third party shall be shared with the faculty, students and staff involved in the development through an appropriate policy made by the University.
- (5) Faculty members may be permitted to start their own start-up(s) and hold a position in the management of the start-up. However, any remuneration received by a faculty member from own or any other start-up, during the period of service with the University, shall be treated as his consultancy income and corresponding rules of the University shall become applicable. The University, however, shall not have any liability towards the operations or business of such start-ups.
- (6) Faculty members shall comply with all university policies, including employment in start-ups, intellectual property and conflict of interest policies and shall sign corresponding agreements with the University. No faculty member shall be permitted to membership of any Committees of the University who have financial or any other dealing with the start-up on the same faculty. A faculty member shall not be permitted to become member of any Committee dealing with Policy making or its execution regarding the start-up activities of the University.
- (7) A faculty member who is developing an enterprise based on his own work at the University and using the Incubation facility of the University for his own start-up will provide for University's equity in the start-up/enterprise not less than 10%.
- (8) Faculty member involved with a start-up company shall fully disclose his activities and ownership to any trainees, fellows or students working on his research projects and their stakes, if any, in the endeavour.
- (9) A Full-time faculty or staff member who wish to work full time for a start-up company will be required to take Special Leave keeping lien on his position at the university for a specified period of time, not exceeding three years, in mutual agreement with the University without affecting his seniority and increments in the pay scale. No salary shall be payable to him though during this special leave.

- (10) The students in the laboratory of a faculty member will not be permitted to function as employees of a start-up company, and shall not be compensated under the research contract to ensure that they are free to pursue publication and thesis defense without restriction.
- (11) Staff members of a University, participating in the start-up activities of the faculty members, have to follow the same set of rules as faculty members for time spent in the incubation centre activities, regarding leave, and stakes in the enterprise. If they are paid for their services by the University or the start-up in the start-up activities in the incubation Centre, they shall not have any stake or equity in the Startup enterprise. It shall be prerogative of the Entrepreneurs to allocate rights or equity, if any, or additional payments in such case to such Staff.
- (12) The College may adopt the policy of the University or make one separately without adversely affecting interests of the Innovators and Entrepreneurs from the college.

(G) Mentors, Mentorships and Their Investments in start-ups

- (1) There shall be mentors from Industry and/or University associated with the start-up activities of students in a University or colleges and they bring immense value to the success of a Start-up.
- (2) Mentors shall not have any stake in the start-up simply giving an advice, however, they will be allowed to take a stake in the enterprise by investment at any stage of the Start-up with appropriate valuation on the basis of potential of the start-up.
- (3) The % equity offered to mentors shall be discussed with the University in advance before Investment in the Start-up. The University shall prepare its own policy in this regard as soon as possible.

(H) Ecosystem at Government Level

The Government would work together with Universities, industries, industry associations and academic institutions towards creating infrastructure facilities for the start-ups. The focus shall be on creating an environment that facilitates idea generation to enterprise development. The Government would support enhancing infrastructure at existing universities and to train the faculty for promotion of innovation.

- (1) The State may conduct competitions of start-up ideas and business plans and promote award winning entries as startup under Skill Development Ministry's initiative.
- (2) The Government would facilitate creation of support infrastructure for development of innovation ecosystem to attract new entrepreneurs at each University such as Common testing labs & tool rooms, Enterprise software, shared hardware and services like legal, accounting, technology, patent filing, investment banking, other amenities like hostel rooms.
- (3) The Government may issue a notification to district authorities to prepare a list of their needs and engage with IIE Boards of University and i2E cells in colleges in their regions to evaluate available solutions and identify feasible ideas for proof-of-concept development and deployment.
- (4) Grand Challenge may be organized by the Government each year by designing problem statements around the state's most pressing issues and inviting proposals for solutions by working in incubators planned in the State's start-up policy.

- (5) The State plays a facilitating role between entrepreneurs and innovators especially in the social enterprise space. This is crucial because innovators invest on improving the kind of product/service but entrepreneurs take these innovations as products to the market.
- (6) For products/ processes developed by a University or any college in the State of Maharashtra to solve real life and/or specific problem(s) proposed by a Government Department, the concerned department shall develop a support system to-
 - (a). To take the innovation to the level of implementation, financial and other support should be extended to the team by the concerned department from the department funds.
 - (b). Department may purchase/ procure a product or offer a reasonable amount for a solution developed by the team and implemented through government.
- (7) For any other innovative product or service developed by a start-up to solve a real life problem faced by a Department of the Government, it is suggested that the Government departments may be empowered to procure innovative products from innovative start-ups of the State University, without going into tendering procedure.

Provided that the start-up

- (i) is registered in Start-up India portal or similar platforms.
 - (ii) complies to Start-up India definitions and basic requirements
 - (iii) gets its product benchmarked by a State Level Committee of subject experts on pre-defined factors in consultation with the Concerned Ministry
- (8) A State-wide Network of incubators at the Universities would be created for sharing resources and expertise to address problems of the State.
 - (9) The State shall encourage the financial institutions to extend their schemes of lending to startups on convenient terms or provide State funds on matching grant principle.
 - (10) The State will provide performance linked assistance to the Universities with operating grant based on number of startups incubated in a year and their impact on the State's economy in terms of job creations.
 - (11) The State PSUs may be encouraged to provide startup support through their Corporate Social Responsibility funds, preferably to create Corpus funds for supporting startups of societal relevance with a well defined mechanism.
 - (12) The State may provide patent filing cost of students for their technology oriented startups with high potential for impact on State's economy
 - (13) The State will identify and recognise startups at the State level by the way of awards for their potential, performance and impact on economy, and provide financial incentives for further growth.

Roles and Expectations...

University

- Establishment of pre-incubation facilities
- Inclusion of electives & A Structured modular curriculum
- Host ideation competition
- promote faculty involvement In students startups

Government

- umbrella policy governing universities
- Contribute problem statements That need solutions
- promote business of students Startups in government departments

Industry

- be a knowledge partner
- placement and internship Oportunities
- mentorship
- Investments, grants
- Business opportunities

(I) Key Performance Indicators of start-up Activities

Colleges and State Universities will map their Innovation and Enterprise activities in terms of **Innovation-to-Enterprise (I2E) index.**

- (1) Benchmarking indicators shall be developed by the Board of Innovation, Incubation and Entrepreneurship(IIE) of a University.
- (2) The Board will prepare a Key Performance Indicator matrix to gauge the start-up initiatives and their impact at each department and affiliated college and monitor the activity and *i2e* Indices of all colleges.
- (3) Each department of a University and college affiliated with the University will make special efforts to see that it achieves key goals as expected to fulfil through the performance indicators matrix.
- (4) There shall be a certain minimum innovation and incubation activity at university departments and its affiliated colleges.
- (5) University should ensure that maximum of its constituent colleges take part in start-up efforts. The number of colleges/ students participating in Start-up activities should be one of the parameters in *i2e* index of a University.
- (6) University should create a strategy to ensure that students, irrespective of locations, sectors and year of study, can take part through various activities at different levels of start-ups.
- (7) University should aim to create a mechanism to enable minimum 1% of its graduates to be either self-employed or job creators.
- (8) The major weightage of *i2e* index should be given to number of start-ups gone to incubation level from pre-incubation stage
- (9) The University shall evolve its own sustainability approach for the Innovation, Incubation and Enterprise Centre. Internal revenue generation shall form part of the *i2e* index
- (10) University will collaborate with other universities in joint efforts to promote innovation and entrepreneurship in particular sector or geographical location of mutual interest. Such collaborative effect should be counted in the *i2e* index.
- (11) The University should tie up with other incubators, accelerators, innovation promotion organizations to develop joint initiatives to support student innovators and start-ups. The collaborative efforts should be counted in the *i2e* index.
- (12) University shall engage itself in efforts for sustainable long term cooperation with supporting organizations, incubators, investors and industry. Number of such associations and corresponding revenue generation should be counted in the matrix
- (13) Availability of information on the web portal regarding mapping of core strengths, database of core competencies of departments and affiliated colleges and, collaboration tools on digital platforms, available prototypes and virtual depository of students innovations shall be counted in the *i2e* index of the University.
- (14) Pedagogical and other necessary changes need to be embraced within the university system to improve the *i2e* index every year.

3.0 ACTION PLAN FOR IMPLEMENTATION OF I2E POLICY IN STATE UNIVERSITIES AND INSTITUTES OF HIGHER EDUCATION

(A) College/ University Department/ Research Institution

Sr. No.	Activity	Time Frame	Expected Outcome
1	Formation of Startup club and allocation of funds, if available	3-6 Months	Formation of at least one club with a focused/ identified area
2	Information of Startup initiative of the college on its web portal	3 months	Active web portal for dissemination of Startup activities of college
3	Identification of faculty coordinator	3 months	Identification of a team of minimum three faculty members in the college
4	Registration of interested students in the club	3-6 months	Registration of at least 10% of students in the college in startup activities
5	Identification of Mentor Pool from the local ecosystem	3-6 Months	Identification of minimum 10 mentors from industry, academia and practice.
6	Training of interested faculty members in startups	3-6 months	Minimum three faculty members trained in Startup activities
7	Induction workshop for New students	3 months	Minimum Two Workshops every year
8	Visits of club members to startup units	3-12 months	Minimum one visit per month
9	Creation of Incubation Space	Three months - one year	Availability of necessary space and facilities for startups
10	Preparation of an Action Plan for Startup activities	Three months	Availability of Action plan on the website of the College
11	Exposure of students and Faculty to Startups culture	1-6 months	Weekly In-house discussions on need and culture of startup
12	Organization of lectures of entrepreneurs	1-12 months	At least one lecture in a month

13	Formation of Industry Interaction Cell for getting industry problems and inviting experts as mentors	3 months	Visits to industries, at least one per month, for identification of issues
14	Formation of Social Entrepreneurship Cell	3 months	Visits with NGOs for identification of problems needing solutions, at least one per month
15	Formation of groups of students and faculty interested in starting a Startup	6-12 months	At least one startup in a year
16	Introduction of Audit/extra lectures on Entrepreneurship, Certificate courses for interested students	3-12months	Exposure to students and faculty for entrepreneurship,
17	Involvement of Alumni in college Startup	3-12months	At least one visit of Alumnus Entrepreneur, per month
18	Market surveys for identified products/ processes/ systems	3-12 months	Survey for at least 10 products/ processes/ systems
19	Development of a Portal of the Startups initiated by college	12 months	At least one portal for industry participation, involvement of alumni
20	Awards and appreciation to noted innovators and start-ups of the institute	1 Year	Motivation and Culture Building.
21	Students should be encouraged to participate in E-summit, hackathons and similar start-up and innovation related exposure programmes at various places	1 Year	Min.2% student, faculty members should be encouraged for such initiatives
22	IPR Cell creation for promoting and facilitating Intellectual Property Rights related endeavours.	1 Year	Creation of IP Cell and execute mandated activities.
23	Scouting and Value addition of Local Innovations/innovators	1 Year	Supporting around 10 Innovators/ entrepreneurs from formal and informal sectors in the local ecosystem.
24	Access to existing labs and similar infrastructure to student innovators and start-ups beyond class hours	3 months	Optimum usage of existing infrastructure while reducing transaction cost of students.

25	Best Practices Documentation and Dissemination	1 Year	Lateral Learning Opportunities with showcasing major efforts and impacts.
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(B) University

Sr. No.	Activity	Time Frame	Expected Outcome
1	Establishment of Board of Innovation, Incubation and Enterprise	6 Months	Establishment of the Board and its First meeting
2	Establishment of A Centre for Innovation, Incubation and Enterprise on the campus	12-36 months	Establishment of the Incubation Centre and availability of Incubation Space for students, faculty and Staff
3	Establishment of framework for the Centre to function as an Autonomous corporate Centre	One year	Policy in place
4	Registration of Centre for Innovation, Incubation and Enterprise as Section 8 company with good governance practices and as per the Company Act 2013	Two years	Registration of the Company Appointment of Director of the Centre and necessary Staff
5	Provision of Annual Budget for Incubation Activities of University students and Faculty, and Staff	One year	A certain percentage of budget earmarked in annual budget to be earmarked for students of the University departments
6	Formation of Acting Groups of faculty members and Students for identification of potential startups in the University Departments	Three months	Working group for Startup activity
7	Creation of Annual Action plan for Startup activities	Three months	On line availability of the information
8	Conduct of a campaign about start-up activities in University Departments and affiliated colleges	3-6 Months	Number of registered students for startups
9	ct workshops to inculcate entrepreneurial skills in registered students	3-6 Months	On line availability of the information

10	ct competitions for Innovation ideas and business plan, one for UG and another senior level	Six Months	On line availability of the information
11	Setting up a portal for registration of faculty and students of University for startup activities	Six Months	Availability of the Portal
12	Allocation of Budget to the potential Startup ideas from University departments and affiliated colleges	Six Months to one year	Identification of at least one potential startup per University Department.
13	Provisional Space for Incubation	Six Months	Minimum one provisional Incubation Space in the University
14	Identification of mentors and investors from own alumni database	One year	Availability of mentors to students and faculty depending upon the field and funds
15	Training of faculty and Staff in entrepreneurship activities	Six Months	Minimum One faculty per Department
16	Creation and implementation of Ordinances for introduction of Entrepreneurship oriented credit/audit courses for Startup under CBCS, in UG/PG levels	Six Months- One year	Ordinances to be in place in ONE Year
17	Collaboration with State/ National Level Incubation Centres	One year	Tieups with Incubation Centres for facilities if not available within the University
18	Creation of Ordinances for recognizing online courses for credits on Entrepreneurship, marketing, financial managements	One year	Ordinances in place in ONE year.
19	Collaboration with online portals such as SWAYAM for offering courses for entrepreneurship	One year	Availability of Courses to interested students on demand and of choice.
20	Framing Policies for the University departments and affiliated colleges for credits for Startup activities	One year	Availability of Policy Framework for Startups of faculty and students of University Departments
21	Inclusion of Design oriented courses and corresponding activities in the curricula	One year- two years	Availability of relevant courses in the University syllabi to interested

			students. Mandatory for students registering for Startup activities
22	Incorporation of incentives such as gap year in academic framework	One year	Policy in place
23	Incorporation of Startup leave for faculty and Staff in policies	One year	Policy in place
24	Development of Policy for revenue sharing, Equity stake, and incentives to the faculty and Staff from successful startups	One year	Policy in place
25	Framework of Minor in courses related to Entrepreneurship	One year	Framework in Place
26	Identification of Internal strengths of faculty for startups	One year	Data available on web portal of the website
27	Identification of startup opportunities from Research and Development from University Departments	One year	Data available on web portal
28	Legal support for registration of Startups	One year	Number of Startups registered.
29	Organizing University level Business plan competition	One year	Conduct of one competition
30	Participation of students in State and National level Competitions such as Hackathon, Business Plan competitions	One year	Participation of 10% students in the competitions
31	Collation of data on startups from affiliated colleges	One year	Consolidated report of Startups activities and successful starups
32	Establishment of Mechanism for cooperation between University and affiliated colleges for startup activities	One year	Availability of platform.
33	Support to be provided to Startups of affiliated colleges and availability of support on competitive basis	One year	Information on web Portal

34	Support for establishment of Incubation Centre from GoM-Skill development Department	Six Months	Submission of proposal and grant approval, incubation of startups
35	Collaboration with Business experts and interaction with registered faculty and students	One year	Minimum One interaction per month
36	Identification or Collation of Opportunities for Startup funds from industry and disseminating the information to the students	One year	Availability of information on funding availability to the stake holders registered for Startup activities on web portal
37	Interaction of Students and faculty with angel investors, venture capitalists, bank officials and other funding agencies	One year	Minimum One interaction per month
38	Provisions of bringing Startup Entrepreneurs and funders together by conference or other activities, and for pitching for the funds	One year	Minimum Two conferences per year
39	Digital platform to Disseminate information on Startup policies and incentives offered at the University level and affiliated colleges	One year	Availability on web portal
40	Provision of providing basic information on Startup on Web Portal of the University	Six Months	Availability of web portal
41	Organizing One State Level Business Plan/Model, Innovation and Entrepreneurship related Competitions	One year	At least , One competition by One University in the State by Rotation, by competitive bidding to hold it in the University
42	Development of Key performance Indicators of Startup activities of affiliated colleges and departments	One year	Available on Web portal and Continuous Update on monthly basis of the Indicators
43	Institute Awards and appreciations of Startups and Publicize them	One year	On line availability of the information
44	Making information on funding opportunities on website	One year	On line availability of the information

45	Making information available on web portal on Startups seeking funds	One year	On line availability of the information
46	Set up a University level Monitoring Mechanism for startup activities at the University and Affiliated colleges	Three Months	Availability of data analysis on the website
47	Benchmarking affiliated colleges on Innovation to enterprise index	Every year	Availability of data of webportal
48	MoU's and meaningful collaborations with national and International stakeholders promoting Innovation and entrepreneurship	Every Year	MoU's in activation mode while benefiting the innovators and start-ups
49	Student project/research work and thesis to be converted as products and enterprises.	Every Year	Min. 1% Meaningful projects to be converted.
50	Specialize to develop world class innovation and start-ups, based upon the core capabilities of the institution, based upon core capabilities	One Year	In min 3 Thrust areas
51	IP facilitation centre	1 Year	IP Creation, Commercialisation, Enterprise based upon IP
52	Solve Local Challenges and create enterprises from it.	1 Year	SME, Civil Society, Rural Areas should benefit from the research and innovation of the university in the locality.
53	Best Practices Documentation and Dissemination	1 Year	Lateral Learning Opportunities with showcasing major efforts and impacts.
54	Weightage of minimal innovation and entrepreneurship support system in annual appraisal of affiliating colleges by University.	1 Year	Inspire Institutes to implement University Innovation and Startup Mandate in its own campus.

(C) Government

Sr. No.	Activity	Time Frame	Expected Outcome
1	Set up a State level Monitoring Mechanism under the Higher and Technical Education Department to monitor the Startup Activities at the Universities and affiliated colleges.	Three months	Formation of State Startup Review Committee with appropriate budget for manpower and technical support. Compilation of Data available from Universities on quarterly basis
2	Setup a Portal for Submission of Data by Individual Universities of their Startup activities, particularly those with support from Skill Development Department	Six Months	Availability of a Portal in appropriate format, for collection of data on utilization of funds provided to University Startups.
3	Conduct State Level Business Plan Competition through one of State Universities.	One year	One Competition per year
4	Organize Grand Challenge for inviting solutions for Government Departments' issues through one of the State Universities	One year	One challenge per year
5	Development of Policy for procuring preferentially products/ processes/ services/ systems from Startups from State Universities	Two years	Policy developments
6	Benchmarking the Universities on the basis of Startup activities and Economy generation activities	One year	Benchmarking the Universities on the Innovation to Enterprise Index on Competitive Basis
7	Conducting impact analysis of cost to benefit ratio of the Startup activities	Yearly review	Improving employment and economy
8	Integration of Academia led startup ecosystem as a key component, in the mainstream startup strategy of the state of Maharashtra	One Year	To ensure creation of successful innovation pipeline for the state ecosystem.

(D) Faculty and Students

Sr. No.	Activity	Time Frame	Expected Outcome
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1	Formation the Startup Activity Clubs and creation of action plan for one year	Three Months	Awareness of Startup policy of the higher education
2.	Registration of interested students in the clubs, Conduct of Ideation Workshops and Business planning activities, gap analysis	Three to Six Months	College-wise List of students interested in startup and registration in entrepreneurship courses
	Register for courses, electives if necessary, in business planning, financial management, marketing, economics,	Six Months to two years	Increased awareness about financial management and entrepreneurship
3	Organization of Lectures by entrepreneurs, interaction with registered students for learning from other's experience	Minimum One every month	Exposure to students of businesses and corporate culture
4	Interaction with industry personnel for Startup activities and Financial management	Minimum one every month	Understanding business requirements
5	Visits to Incubation Centres, Experience in Marketing at local level,	Six Months	Develop understanding of incubation, marketing and commercialization
6	Survey of Industries for identification of interventions to improve competency of industries	One year	List of Opportunities available on college portal
6	Survey of local communities.	One year	List of problems, needing support systems or products, services or systems,
7	Discussions for identification of startup ideas from the industry and community surveys	Three Months to one year	List of potential solutions and startup ideas
8	Collaborate with college management for funding or with University's incubation Centre	One year	Raising funding for pre-incubation
9	Identification of Incubation Centres for domain specific funding and availability of the data on portal for the benefit of club members	Six Months	Database of Funding agencies for startups with the Startup Club members

10	Marketing and Commercialization training by taking practical experience in marketing at small scale.	One year	Availability of training courses to students registered with startup clubs
11	Prototype building either for Industry or local community for identified business opportunities	One year	A set of Prototypes available, one from Each Startup club of the College
12	Marketing the prototypes to interested users, Pitching to funding agencies on competitive basis	One to Two years	Experience in raising funds
13	Participation in Statewide Business plan competition	One year	Exposure to business field and corporate culture
14	Participation in Grand Challenge Competition	One year	Fund raising experience
15	Seek internship in startup companies and other industries	One Internship per year, for minimum four weeks	Experience in startup activities
16	Networking with alumni, building database of successful entrepreneurs in alumni	One year	Increased interaction with alumni and industries

4.1 Innovation to Enterprise Index of College/ University Department

Sr. No.	Key Performance Index	Scale	MaxScore
1	Establishment of Innovation, Incubation and Entrepreneurship Cell, <i>preferably as a Section 8 Company</i>	5	5
2	Appointment of a Working Committee for Startup activities	5	5
3	Availability of Startup Activities within own incubation space and having at least one Active unit in the Incubation Space	10	10
4	% of Students from the college/ Department registered in its Startup Program	5 Max for 10% participation	5
5	Number of Startups in Incubation Centre of the College/ Department at any time	5 per Startup (Max 25)	25
6	Number of Startups moved from incubation stage into business space in the year from the college/ department	10 per company (Max 30)	30
7	Collaboration with other colleges/department for incubation and Startup with active incubation of minimum one company	5	5
8	Collaboration with other Non-State Incubators for incubation of students startups with active Incubation with minimum one active company	5	5
9	Availability of information of Startup activities of the college on the web portal	5	5
10	Monitoring mechanism at the College and Availability of Quarterly reports on the website	5	5
		Total	100

4.2 Innovation to Enterprise Index of the University

Sr. No.	Key Performance Index	Scale	Max Score
1	Ordinances for availability of credits for courses on Entrepreneurship, design thinking, Business and marketing skills as per choice of the students	5	5
2	Policy Framework for Revenue Sharing, Incentives, gap year, etc., for faculty and students	5	5
3	Establishment of Innovation, Incubation and Entrepreneurship Centre Section 8 Company	5	5
4	Appointment of a full time Director of the Centre	5	5
5	% of Affiliated Colleges involved with Startup Activities with own incubation space and having at least one Active unit in the Incubation Space	15	15
6	% of Students from University Departments registered in Startup Program	10 Max if 10% participation	10
7	% of Students from affiliated colleges registered in Startup Program	10 Max if 10% participation	10
8	Number of Startups in Incubation Centre of the University at any time	5 per startup (Max 25)	25
9	Number of Startups moved from incubation stage into business space in the year from the University and Affiliated colleges'	10 per company (Max 50)	50
10	Collaboration with other State Universities for incubation and Startup with active incubation of minimum one company	5	5
11	Collaboration with other Non-State Incubators for incubation of students startups with active Incubation with minimum one active company	5	5
12	Availability of information Startup activities of the University and affiliated colleges on the web portal	5	5
13	Monitoring mechanism and Availability of quarterly reports on the website	5	5
		Total	150

Annexure-I

List of Some Incubators in the State of Maharashtra

Sl. No.	Name	Thrust Area	Address	Website Application Process	Contact Person Designation Contact details
1	NASSCOM-10000 start-up Warehouse Pune	1) IT 2) Software	NASSCOM 10000start-up Warehouse,4th Floor,406,MIDC ITtower,Kharadi,Pune 411014	www.10000st art-ups.com	Darryl Zuzarte Manager darryl@nasscom.inM: 9850813443
2	NASSCOM 10000 Start Ups Warehouse – Navi Mumbai	1) IT and enabled Technologies	Unit no. 304, Bldg 2, Sector 1, Millennium Business Park, Navi Mumbai, Maharashtra 400710	http://10000st art- ups.comhttp:// 10000start- ups.com/start- up- warehouse- form/	Sahil Gupta, Deputy Manager sahil@nasscom.in T: 022-27784414
3	Venture Center	Agnostic	Venture Center, National Chemical Laboratory 100 NCL Innovation Park National Chemical Laboratory Campus Pune - 411008	http://www.ve nturecenter.co .in/	Dr.V.Premnath, Director 1) y.premnath@ncl.res.in 2) director@venturecenter.co.in T: 020-2590-2986, 020- 6401-1024 ,020-2590- 2185 Fax: 91- 20-2589- 3104
4	MITCON Technology Business Incubation Centre	Biotechnology, Ayurveda, Biomedicine, Renewable Energy, Environment, IT, Engineering electronic sectors	Near DIC, Agriculture College Campus, Shivajinagar, Pune - 411005	http://www.mit conbiopharma .com/wp- content/uploa ds/2015/12/	Dr. Pradeep Bavadekar, Managing Director md@mitconindia.com T: 020 - 66289452M: 08308809265
5	Science And Technology Park	Open Source & Open Platform Technology, Renewable Energy & Clean Technology, Pharma & Biotechnology, Mobile Computing, Project Management, Data Centers, Social Incubation, IT/ITeS Education, Agri & Food Processing Technology, Remote Sensing & GIS, Electronics & Telecommunications, Cyber Security, Health	Savitribai Phule Pune University Campus, Ganeshkhind Road, Pune - 411007	http://scitechp ark.org.in	Dr.Rajendra P.Jagdale, Director General stp@scitechpark.org.in T: +91-20-25699206 / 25693449
6	SINE (Society for Innovation & Entrepreneurship)	Agnostic	3rd Floor CSRE Building, IIT Bombay Campus, Powai - 400 076	http://sineiitb.org/sine/home/ http://sineiitb.org/sine/incubation/apply/	Mr. Rakesh Rajiv , Business Executive sine@sineiitb.org rakesh@sineiitb.org T: +91 22 2576 7016Fax: +91 22 2572 1220
7	DKTE Technology Business Incubator	Clothing and textile technology	D.K.T.E.Society's Textile & Engineering Institute, P.O.Box-130 "Rajwada", Ichalkaranji-416 115. Dist-Kolhapur. Maharashtra .	http://www.dkt etbi.com/http:// www.dktetbi. com/tbi_Incub ation.htm	Prof.(Dr.) P.V.Kadole, Principal pvkadole@gmail.com T: 0230-2421300

Annexure -II



Number of Registered start-ups in the State of Maharashtra

Location	No of registered start-ups	Domain of start-up
Akola Bazar	2	Manufacturing, social Network
Amravati	5	IT management, Real Estate, Education, Software Training,
Aurangabad	24	Technology Consulting and Services, Business Analytics and others
Baramati	2	Social Networking, Agriculture
Bhandara	1	Business services
Bhusawal	1	Business Analytics
Boisar	1	Real Estate
Ichalkaranji	1	Business services
Jalna	4	Web-Mobile advt, SEO, e-Build Technology, Finance
Jejuri	1	Art
Kalyan	7	Enterprise security, real estate, health care, social media, IT Management
Kolhapur	13	Organic food, SEO, Real Estate, Mobile Applications, Social media, Food delivery,
Malegaon	1	Printing
Mira Bhayandar	2	e-Commerce, SEO
Mumbai	3890	All domains
Mumbai Suburban	40	Many
Nagpur	112	Many
Nashik	21	Many
Navi Mumbai	91	Many
Pimpri-Chinchwad	3	e-Services, web design
Pune	1551	Many
Ratnagiri	2	web design, android
Satara	5	web design, transport, marketing
Thane	35	Financial Decision Optimisation, Software to boost process efficiency, Technology Consulting and Services, Food and Beverages, Hardware Analytics, App products and consultancy, Health & Fitness b2c platform, Training for networking, Community Management, Career Profiling, Healthtech, build brands, ERP for Project based, Lifestyle Design, Recruitment, Web Development and Digital Marketing, E-Learning company, B2B E-commerce, Numerical Production Relay, Events, Entertainment,
Wardha	1	Aerial leisure

Washim	1	Textbook Sharing
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Ref: <https://Angel.co/>

Annexure-III



Startup Initiatives of Government of India and Government of Maharashtra

Sl. No	Agency	Policy
1	All India Council for Technical Education	Startup Policy AICTE-2016 for Engineering and Technology Institutes. The policy aims to create 100,000 technology based student start-ups and a million employment opportunities within the next 10 years (2025). A Startup Implementation Committee is constituted by the Council .
2	Department of Science and Technology, Gol.	Technology Business Incubators (TBI)
3	NITI Aayog	Atal Innovation Mission (AIM) including Self-Employment and Talent Utilization (SETU) to set up Atal Incubation Centres with suport of 10 Cr each.
4	Ministry of Electronics and Information Technology (MeitY), Gol	Technology Incubation and Development of Entrepreneurs (TIDE).
5	Ministry of Skill Development and Entrepreneurship, GoM.	Start up Policy of State of Maharashtra