Sri Indu
College of Engineering & Technology
UGC Autonomous Institution
Recognized under 2(f) & 12(B) of UGC Act 1956,
NAAC, Approved by AICTE &
Permanently Affiliated to JNTUH
Estd.2001

NAAC
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

SICET INNOVATION STARTUP POLICY

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

INSTITUTION VISION

To be a premier Institution in Engineering & Technology and Management with competency, values and social consciousness.

INSTITUTION MISSION

IM_1 Provide high quality academic programs, training activities and research facilities.

IM_2 Promote Continuous Industry-Institute interaction for employability, Entrepreneurship, leadership and research aptitude among stakeholders.

IM_3 Contribute to the economical and technological development of the region, state and nation.

Objectives

To cater the needs of young student entrepreneurs with innovative ideas of social relevance and there by introducing a culture of entrepreneurship inside campus which will strengthen our education system and there by promoting the national economic and social growth.

Short Term Goals

- To help student groups to prototype their ideas.
- To improve innovation, creative and design thinking among student community.
- Incubation facility for faculty driven start-up and student/Alumni start-up.
- Organize FDP, seminars and workshops, distinguish talks for students, Faculty and Alumni and promote entrepreneurial culture.

Long Term Goals

- Associate with DST, CII, MSME and other academic institutions for transferring world class facility.
- Improve quality of research work among students and to attain patent which can be commercially used in production
- Provide a platform for students to develop innovative products with global recognition and generate business opportunities.
- Generate revenues through consultancy work and student start-ups.
- Spread awareness to students and faculty regarding IPR related activities.
- Strategic partnership linkage with
- Entrepreneurship Development Institute of India(EDII),
- National Innovation Foundation (NIF) of India to submit ideas and apply for schemes
- Procure fund from AICTE for Entrepreneurship Development Cell

Committee for SICET National Innovation and Start up Policy

List of Coordinators	Designation	Role
Dr. P. Mallesham	Director (Mechanical)	Chairperson
Dr. Sampath Korra	Associate Professor/CSE	NISP Coordinator
Dr.N.C. Sendhilkumar	Professor/ECE	Member
Dr. Naga Malleshwar	Professor/EEE	Member
Dr.P.Ramesh	Associate Professor/ECE	Member
Prof. Abdul Khaja Pasha	Assistant Professor/ECE	Member
Prof.E.Parusha Ramu	Assistant Professor/ECE	Member
Deekshith Saganti	Student	Member
Siva Pranam Tunguturi	Student	Member
Nannuri Ruchika Reddy	Student	Member
Dr.I.SATYANARAYANA	External	Member
G.Bhaskar	External	Member

Introduction

SICET Innovation, Incubation, Entrepreneurship & Startups, is set up to promote innovation and entrepreneurship among the Faculty, Staff, Students at Sri Indu College of Engineering and Technology. To accomplish its goal, SICET innovation startup cell runs and manages a innovata schemes and policies. This policy will also facilitate Intellectual Property ownership management, technology licensing and institutional Startup policy, thus enabling creation of a robust innovation and Start up ecosystem across the institution.

1. Strategies and Governance

A. Entrepreneurship promotion development will be one of the major dimensions of our strategies. To facilitate development of an entrepreneurial ecosystem in the SICET and nearby area, specific objective and associated performance indicator will be periodically defined for assessment.

B. Implementation of entrepreneurial vision in SICET will be achieved through mission statements rather than stringent control system. The entrepreneurial agenda will be responsibility of the Chairperson & Coordinator to bring in required commitment and well understood by the Top Management. However, promoting entrepreneurship requires a different type of mind set as compared to other academic activities.

C. Resource mobilization plan will be worked out at the institution level for supporting innovation, pre-incubation, incubation infrastructure and facilities. A sustainable financial strategy will be defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.

   i. Investment in the entrepreneurial activities will be a part of the institutional financial strategy. Minimum 1% fund of the total annual budget of the institution will be allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'.

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

   iii. To support technology incubators, institution will approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) activities.

   iv. We will actively engage alumni network for promoting Innovation & Entrepreneurship.

D. For expediting the decision making, hierarchical barriers will be minimized through empowering the SICET Council team and individual autonomy and ownership of initiatives will be promoted.

E. Importance of innovation and entrepreneurial plan will be known across the institution and will be promoted and highlighted at Academic Calendar programs such as conferences, convocations, workshops, etc. Action plan will be formulated at institution level, having well-defined short-term and long-term goals.

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

   i. SICET will be the driving force in developing entrepreneurship culture in its vicinity (regional, social and community level). This shall include giving opportunity for regional startups, provision to extend facilities for outsiders and active involvement of the institution in defining strategic direction for local development.

   ii. Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, engaging the international faculties in innovation and entrepreneurship will also be promoted.

2. Startups Enabling SICET Infrastructure

Pre-incubation and incubation facilities for nurturing innovations and startups will be created. Incubation and Innovation can be organically interlinked and effort will be to link Innovation to Enterprises to Financial Success.

A. Our institution will create Centre of Innovation, Incubation, Entrepreneurship and Startup under which Centre of Innovation, Technology Business Incubator and Student Innovation and Entrepreneurship Club will be working by mobilizing resources from internal and external sources.

B. Pre-Incubation/Incubation facility will be accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution including startup from vicinity.

C. Technology Business Incubator (TBI) will offer mentoring and other relevant services through Pre-incubation/Incubation process in-return for fees, equity sharing and (or) zero payment basis. The modalities regarding Equity Sharing in Startups supported through TBI will depend upon the nature of services offered.

3. Nurturing Innovations and Start ups

A. SICET will establish processes and mechanisms for easy creation and nurturing of Start-ups/enterprises by students, staff, faculty, alumni and potential start up applicants even from outside the institutions.

B. Technology Business Incubator will define their processes and will ensure to achieve the following:

i. Incubation support: Pre-incubation & Incubation facility to start ups by students, staff and faculty for mutually acceptable time-frame.

ii. SICET may allow their students / staff to work on their innovative projects and setting up start-ups (including Social Start-ups) or work as intern / part-time in start-ups (incubated in any recognized Incubators) while studying / working with due approval of competent authority. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models.

iii. SICET will develop clear guidelines to formalize this mechanism. Student inventors may also be allowed to opt for start-up in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a start-up may be interdisciplinary or multidisciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the start up.

C. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying will be allowed to use their address in the institute to register their company with due permission from the Director and principal.

D. Students entrepreneurs will be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from Director and principal.

E. SICET will allow their students to take a semester/year break (or even more depending upon the decision of review committee constituted by the institute) to work on their start-ups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise.

F. SICET will facilitate the startup activities/ technology development by allowing students/ faculty/ staff to use infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:

   i. Short-term/ six-month/ one-year part-time entrepreneurship training.

   ii. Mentorship support on regular basis.

   iii. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.

   iv. SICET may also link the startups to other seed-fund providers / angel funds/ venture funds or itself may set up seed-fund once the incubation activities mature. Further, necessary incentive in terms of resources, infrastructure, finance, time and support for students and faculties will be provided as per need basis.

G. In return of the services and facilities, Technology Business Incubator may take 2% to 9.5% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided and use of institute's IPR (a limit of 9.5% is suggested so that institute has no legal liability arising out of startup. The institute will normally take much lower equity share, unless its full-time faculty/ staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed funds, support for accounts, legal, patents etc.

   - For staff and faculty, institute can take no-more than 20% of shares that staff / faculty takes while drawing full salary from the institute; however, this share will be within the 9.5% cap of company shares, listed above.
   - No restriction on shares that faculty / staff can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, then they will go on sabbatical/ leave without pay/ earned leave.

- In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of services offered by the TBI.

4. Ownership Rights for Technologies Developed

A. When facilities / funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by inventors and the institution.

   i. Inventors and institution could together license the product / IPR to any commercial organization, with inventors having the primary say. License fees could be either / or a mix of

      1. Upfront fees or one-time technology transfer fees
      2. Royalty as a percentage of sale-price
      3. Shares in the company licensing the product

   ii. 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 Incubation centre and the incubated company.

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

D. SICET 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 institution is paying for patent filing, institute 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-institutional funds, then they alone should have a say in patenting.

E. SICET decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Interdisciplinary research and publication on startup and entrepreneurship will be promoted.

5. Organizational Capacity, Human Resources and Incentives

A. The institution will recruit staff that have a strong innovation and entrepreneurial/ industrial experience, behaviour and attitude. This will help in fostering the Innovation and entrepreneurial culture.

i. Some of the relevant faculty members with prior exposure and interest should be deputed for training to promote innovation and entrepreneurial.

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

B. Faculty and departments of the SICET will work in coherence and cross-departmental linkages will be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.

C. Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills which are not available internally.

D. Faculty and staff will be encouraged to do courses on innovation, entrepreneurship management and venture development.

E. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.

F. The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships, etc.

G. A performance matrix will be developed and used for evaluation of annual performance.

6. Creating Innovation Pipeline and Pathways for Entrepreneurs

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

i. Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability will be a part of the entrepreneurial agenda.

ii. Students/ staff will be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs will innovate with focus on the market niche.

iii. Students will be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition will be routinely organized.

iv. To prepare the students for creating the start up through the education, integration of education activities with enterprise-related activities will be done.

B. SICET will link their start-ups and companies with wider entrepreneurial ecosystem and by providing support to students who show potential, in pre-startup phase. Connecting student entrepreneurs with real life entrepreneurs will help the students in understanding real challenges which may be faced by them while going through the innovation funnel and will increase the probability of success.

C. The institution will establish Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities. IICs should guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts should be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey

D. For strengthening the innovation funnel of the SICET, access to financing must be opened for the potential entrepreneurs.

i. Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.

ii. Provide business incubation facilities: premises at subsidized cost. Laboratories, research facilities, IT services, training, mentoring, etc. will be accessible to the new startups.

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

7. Norms for Faculty Startups

A. For better coordination of the entrepreneurial activities, norms for faculty to do startups will be created. Only those technologies will be taken for faculty startups which originate from within the institution.

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

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

   iii. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.

B. In case the faculty/ 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 institution 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) may be permitted to the faculty.

E. Faculty must not accept gifts from the startup.

8. Pedagogy and Learning Interventions for Entrepreneurship Development

A. Diversified approach should 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 will be created for organizing competitions, boot camps, workshops, awards, etc. These bodies will be involved in institution's strategy planning to ensure enhancement of the student's thinking and responding ability.

   ii. SICET will start annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute.

iii. For creating awareness among the students, the teaching methods will include case studies on business failure and real-life experience reports by startups.

iv. Innovation champions will be nominated from within the students/ faculty/ staff for each department/ stream of study.

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. Integration of expertise of the external stakeholders will be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.

ii. In the beginning of every academic year, institution will conduct an induction program about the importance of Innovation and Entrepreneurship, so that freshly inducted students are made aware about the entrepreneurial agenda of the institution and available support systems. Curriculum for the entrepreneurship education will be continuously updated based on entrepreneurship research outcomes. This will also include case studies on failures.

iii. Industry linkages will be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.

iv. Sensitization of students will be done for their understanding on expected learning outcomes.

v. Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based.

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

vii. It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader, who would convert an innovation successfully into a product, others may join the leader and work for the startup. It is

important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take risk.

C. Pedagogical changes need to be done to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by the institution for inculcating entrepreneurial culture will be constantly reviewed and updated.

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

A. Stakeholder engagement will be given prime importance in the entrepreneurial agenda of the institution. SICET 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/ organizations such as incubators, software technology parks of India and science parks, etc.

ii. Institution 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 and lectures etc.

B. SICET 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 and will provide support mechanisms and guidance for creating, managing and coordinating these relationships.

i. Through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc., faculty, staff and students will be given the opportunities to connect with their external environment.

ii. Single Point of Contact (SPOC) mechanism will be created in the institution for the students, faculty, collaborators, partners and other

stakeholders to ensure access to information.

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

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

10. Entrepreneurial Impact Assessment

A. Impact assessment of SICET entrepreneurial initiatives such as pre- incubation, incubation, entrepreneurship education will 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 will be assessed.

ii. Number of start-ups created, support system provided at the institution level and satisfaction of participants, new business relationships created by the institution will be recorded and used for impact assessment.

iii. Impact will also be measured for the support system provided by the institution 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.

IIC Institutes should guide student innovation on the following Thrust Areas:

1. Healthcare & Biomedical devices.
2. Agriculture & Rural Development.
3. Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.
4. Food Processing.
5. Robotics and Drones.
6. Waste management.
7. Clean & Potable water.
8. Renewable and affordable Energy.
9. IoT based technologies (e.g. Security & Surveillance systems etc.)
10. ICT, cyber-physical systems, Blockchain, Cognitive computing, Cloud computing, AI & ML.