



NAGARJUNA

COLLEGE OF ENGINEERING & TECHNOLOGY

**NCET - NATIONAL INNOVATION AND
STARTUP POLICY (ISP)**

National Innovation and Start-Up Policy 2022 for Students and Faculty-NCET

Preamble

The Innovation and Startup Policy will facilitate the institute to actively engage students, faculty members, members of staff, and alumni in Innovation and Entrepreneurship related activities on the campus. The framework will also make the Institute's Innovation and Startup Policy, stakeholder participation, Rewards, Support, and Performance Parameters clear, enabling the Institute to create a cutting-edge innovation and startup environment. This policy document outlines rules and best practices for fostering innovation and entrepreneurship, as well as the infrastructure at the Institute that will be made available to companies.

The Innovation Pipeline and Pathways for Entrepreneurs at the Institute Level, as well as Pedagogy and Learning Interventions for Collaboration and Entrepreneurship Development, are further elaborated in this document.

This policy is in line with the IPR policy released by the trust, which covers all matters about IP and product ownership rights for technologies produced by Members Affiliated to the Institute devoting either time during the official working hours and/or using the institute infrastructure. In addition, it is in line with the IEC policy of the Trust, which accounts for and organizes all the efforts being made by the institute for promoting and nurturing innovation and entrepreneurship and was adopted as the third vertical of the institute.

By seamlessly fusing the technical and creative skills of students to address modern issues, NCET Bengaluru seeks to spark an entrepreneurial community that will lead to an increase in knowledge, wealth, and employment.



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Vision

By 2024, India hopes to have a \$5 trillion economy. To succeed, it must develop the structures and mechanisms necessary to transform the current demographic dividend into highly skilled technical manpower capable of leading-edge research, innovation, and deep-tech entrepreneurship.

The 'National Student and Faculty Startup policy 2019' is a guiding framework to envision a for HEIs educational system oriented toward start-ups and entrepreneurship opportunities for students and faculties.

To create a world-class startup ecosystem in the state through strategic investment and policy interventions leveraging the robust innovation climate in NCET Bangalore.

Mission

Institute Innovation Council – NCET shall meet the global socio-economic needs through:

1. Establishing the state-of-the-art infrastructure in emerging areas in collaboration with globally reputed organizations to support the startups, incubators & preincubation.
2. Building the network of Experts & Mentors, business entrepreneurs, project funding agencies, and enablers for profiting the investors.

1. Strategies and Governance

To encourage the innovation and startup culture among students and faculty members, the institute has taken the initiative to establish the Innovation and Entrepreneurship Development Cell and the Innovation and Startup Policy (IS policy). The IS policy has been put into practice using the following stages.

- i. There is now a dedicated Innovation and Entrepreneurship Development Cell. The cell's specific goal is to develop and support an innovative and entrepreneurial culture among students and professors.



- ii. Funding for IEC-related activities will be allotted 1% of the annual budget. This cash will be included in the current "SEED Money" program. To minimize the pressure on the Institute, the recipients of the funds are urged to start making money from the initiative as soon as possible.
- iii. Encouragement will be given for obtaining funds from various sources to support the developmental initiatives.
- iv. The faculty and students will be encouraged and motivated to submit grant requests to government (state and central) organizations/agencies including Startup India, DST, TIFAC, VTU, VGST, KSTePS, ISRO, DSIR UGC, AIC, NRDC, TDB, CSIR, NAL, BIRAC, MeitY, MSDE, and MSME.
- v. Funding for IEC-related activities will be granted 1% of the annual budget, and faculty and students are encouraged to work with both private and public sector enterprises to mobilize the cash they have set aside for meeting their obligations. This funding will be a part of the ongoing "SEED Money" program. The fund recipients are urged to begin profiting from the effort as soon as possible in order to ease the strain on the Institute. Support for Innovation and Entrepreneurship through Corporate Social Responsibility (CSR).
- vi. They will also be urged to solicit donations from NCET alumni who are enthusiastic about supporting innovation and entrepreneurship.
- vii. ED Cell shall organize events such as Seminars, workshops, Ideation, Design/Quiz Competitions, Hackathons, and project exhibitions to create awareness regarding the importance of innovation and entrepreneurship across the institute.
- viii. Each of the startups will have a unique micro-level product-to-market strategy designed.
- ix. Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, and engaging the international faculties in teaching and research should also be promoted.


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2. Infrastructure for Startups

- i. NCET- modern infrastructure that supports startups and innovation on campus. The institution has received money from several funding organizations to help with campus innovation and prototyping. The campus has a dedicated infrastructure with more than 15,000 square feet of operational space in a multipurpose building that includes a well-equipped room for startups and research labs with all the amenities for prototyping, IPR mentoring, marketing, business plan development, and product development, etc.
- ii. The pre-incubation and incubator facilities for promoting innovations and startups will be upgraded by NCET. The roadmap from INNOVATION to ENTREPRISES to FINANCIAL SUCCESS is reflected in the innovation policy document.
- iii. The list of all the pre-incubation units on campus, including the Innovation Cell, EDC, advanced Research labs, and centers of excellence, has been circulated. These include technical clubs, student clubs working on various technologies, and centers of excellence. The campus's innovation, entrepreneurship, and startup-related activities are managed by a fully operational NCET Startup Cell and NCET Innovation Cell.
- iv. All students, faculty, and staff of all disciplines are allowed to access PreIncubation/Incubation facilities 24x7 across the institute.
- v. Through NCET Evolute - Startup Cell and NCET Innovation Cell, mentoring services are provided for a small cost, in exchange for equity sharing, or for free.

3. Nurturing Innovations and Startups

- i. The protocols and mechanisms developed by NCET will be followed by faculty, staff, alumni, students, and potential startup applicants from outside the institute for the simple formation and nurturing of Startups.
- ii. NCET will establish the procedures and will ensure to accomplish the following:
 - a. Incubation support in the NCET and NCET Innovation Cell.
 - b. Licensing IPR of the developed prototypes/products.


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- c. Allowing students/faculty to work on their innovative projects/ideas and set up startups (including Social Startups) or work as interns / part-time in startups (incubated in any recognized Incubators).
 - d. Students who are part of a startup will be allowed to showcase their achievements in the project and will get credits as deemed fit by an assessment committee and can be used to fulfill their academic requirements instead of their mini project/ major project, seminars, or summer internship.
- iii. The protocols and mechanisms developed by NCET will be followed by faculty, staff, alumni, students, and potential startup applicants from outside the institute for the simple formation and nurturing of Startups.
 - iv. Students who run their enterprises will be able to take their exams even if they don't satisfy the required attendance requirements as long as they have permission from the principal.
 - v. To focus on their startups, NCET student's involvement in startups may take a sabbatical from their academic work (for a period determined by the review committee established by the University) and return to it later to finish their degree. Students who start their own enterprises may receive academic credit for their work. A review committee will be established by NCET for student evaluation of the startup, and depending on the results, the institution might think about awarding suitable academic credit.
 - vi. NCET will explore the possibility of providing accommodation to the entrepreneurs within the campus for some period of time.
 - vii. By allowing students, faculty, and staff to utilize the infrastructure and facilities of the Institute, NCET will facilitate startup activities and the development of new technologies.
 - viii. Based on the brand used, faculty contribution, and support given, NCET can claim anywhere between 2% and 9.5 percent (nine and a half percent) equity/stake in the startup/company.
 - a. If a staff member or faculty member receives their full income from the university, NCET will not take more than 20% of their shares;


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- nevertheless, this share will not exceed the previously mentioned 9.5 percent cap on firm shares.
- b. As long as they don't spend more than 20% of their office time on the startup in an advisory or consultative capacity and don't conflict with their current academic and administrative responsibilities, there are no restrictions on the shares that can be vested to the faculty and staff who are involved in the startup.
 - c. Startups will be able to hire the incubation center's premises for a three-month term, after which they can decide whether or not to proceed with the enterprise if the institute decides to get equity from it depending on their satisfaction with the services provided.
- ix. Additionally, NCET will offer services using a combination of equity, fee-based, and/or no payment models. Therefore, upon payment of the fees set forth for the service, a company may elect to utilize simply the support, rather than seed investment, provided by the Institute.
- x. NCET will consider the faculty participation in startup-related activities as official activity and will be considered along with their academic and industrial consultancy activities for their performance appraisal. In addition, every faculty member will be encouraged to mentor at least one startup in the institute.

4. IP and Product Ownership Rights for Technologies Developed at Institute

- i. IPR will be jointly owned by inventors and the Institute when NCET facilities/funds are used substantially for developing the product.
- ii. Licensing the product / IPR to any commercial organization is done jointly (Institute and Inventors). The License fees shall be a mix of :
 - a. Shares in the company.
 - b. Upfront fees /one-time technology transfer fees
 - c. Royalty as a percentage of the sale price


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- iii. NCET will not take more than 4% of the sale price of the product when the incubators license the product and produce it in the same company which they have incubated. If it is a software product then the Institute will either take preferably between 1% and 2% of the sale proceeds or accept a revenue sharing scheme and this can be mutually decided between the institute and the incubated company.
- iv. If the product/ IPR is developed by innovators without using any facilities of the Institute and the faculty members of the staff members involved in the company have not done any work on this project during the official working hours of the institute) or is not as a part of the curriculum of the 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.
- v. A committee with at least five members committee will be formed to resolve any disputes. This committee will consist of:
 - a. Two faculty members (having developed sufficient IPR and translated to commercialization) of NCET.
 - b. Two of the institute's alumni/ industry experts (having experience in technology commercialization)
 - c. One legal advisor with experience in IPR.
- vi. This committee will examine the issue after meeting the inventors and help them settle this, hopefully to the satisfaction of everybody.

Note: Institute can use alumni/ faculty of other institutes as members if they cannot find sufficiently experienced alumni/faculty in NCET.
- vii. NCET Innovation cell will only be a coordinator and facilitator for providing services to faculty, staff, and students.
- viii. NCET decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation.
- ix. NCET will promote Interdisciplinary research and publication on startups and entrepreneurship.

5. Organizational Capacity, Human Resources, and Incentives

This policy document is applicable to all Innovation and Entrepreneurship related activities and programs at NCET.

- i. NCET will hire academics and employees with strong innovation and entrepreneurial/industrial experience, conduct, and attitude in order to develop a culture of innovation and entrepreneurship.
 - a. Some of the relevant faculty members with past experience and an interest in training to support innovation and impart entrepreneurial skills will be delegated by NCET.
 - b. In order to improve faculty and staff engagement in entrepreneurial activities, NCET policy on career development of faculty and staff will be created with continuous upskilling.
- ii. The Institute's faculty and departments will collaborate and create connections with one another. By utilizing shared faculty, cross-faculty teaching and research, and maximizing the use of internal resources and knowledge, these connections will be strengthened.
- iii. Periodically subject matter experts(SMEs) such as guest lecturers or alumni will be engaged for strategic advice and bridging the skill gaps.
- iv. Faculty and staff will be encouraged to enroll in courses on innovation, entrepreneurship management, and venture development
- v. All employees and stakeholders that actively contribute to and support the goals of this entrepreneurship development program will receive academic and non-academic incentives, as well as reward systems, from NCET in order to attract and retain the right human resources:
 - a. Sabbaticals, office and lab space for business endeavors, a lighter teaching load, prizes, training, etc. are all part of the staff reward system.
 - b. The development of performance metrics will be utilized to assess annual performance.
 - c. Offering facilities and services, developing a shared risk strategy, engaging in guest teaching, and receiving fellowships and associateships, among

other things, are all examples of ways that stakeholders will be recognized.

vi. Establishing Innovation Pipeline and Pathways


1. Early on in their time at NCET, students will be exposed to issues linked to innovation and pre-incubation activities. NCET has also built methods to help the progression from ideation to innovation to market.
 - a. Regular orientation programs will be held to educate instructors, staff, and students on the importance of entrepreneurship and its role.
 - b. Faculty and students would receive education to understand that innovation is a method to address societal and consumer issues.
 - c. The institute would regularly host events like "ideation and invention" competitions, hackathons, workshops, boot camps, lectures, conferences, exhibitions, mentoring by academic and business professionals, and exposure to real-world difficulties.
 - d. NCET will integrate the educational activities with enterprise-related activities to prepare the students for creating startups.
2. In order to help students understand the real problems they are likely to experience while moving through the innovation funnel and to boost the likelihood of success, NCET will create connections between student entrepreneurs and established business owners.
3. In accordance with the directives of the MHRD's Innovation Cell (MIC), NCET formed the Institution's Innovation Cell (NCET-IC) to carry out various activities relating to startup, innovation, and entrepreneurship development in the Institute allotted a suitable budget for its operations. EDC was established by NCET with the goal of helping students develop their entrepreneurial journeys by identifying, scouting, acknowledging, supporting, and rewarding successful ideas they have suggested.
4. NCET will provide financial support to potential entrepreneurs in order to strengthen its innovation funnel.


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- a. NCET will host networking events so aspiring business owners can meet investors and present their concepts.
 - b. The new firms will receive discounted access to NCET's laboratories, buildings, research facilities, incubator facilities, IT services, training, mentoring, etc.
 - c. NCET will hold a promotion event to help people realize that money is risk capital and that it is not FREE.
5. To answer the questions of innovators and list the facilities offered by the institute, NCET- Innovation Tool Kit (NCETITK) will be created and made accessible on the institute's website.

vii. Faculty Startups

- i. For faculty members who want to incubate their firms at the institute, NCET will establish standards. Only technology developed by the institute itself will be permitted for faculty startups by NCET.
 - a. The function of the faculty might range from being a startup's onboard member to being an owner, adviser, or direct promoter.
 - b. The institute will create a conflict-of-interest policy to ensure that the faculty member's normal responsibilities are not jeopardized by his or her involvement in startup operations.
 - c. Faculty startups can be made up entirely of faculty members or can also include students, faculty from other institutions, alumni, and other business owners.
- ii. When a member of the faculty or staff has contributed in an executive or administrative role for a period of more than three months in a startup, NCET will permit them to take a sabbatical, leave without pay, or use existing leave.
- iii. Faculty members who are employed by startups must explicitly distinguish between their startup activities and ongoing research projects at their institutions.


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- iv. Faculty members who are employed by startups must explicitly separate and distinguish between ongoing research projects at the institute and work done at the startup/company.
- v. Faculty must not accept gifts from the startup.
- vi. Faculty are not permitted to participate in Startup activities with research staff or other Institute employees.
- vii. If any study involving human subjects is planned for the startup, ethics committee approval from this institution must be secured before the research can begin.

8. Pedagogy & Learning Interventions for Entrepreneurship Development

The learning journey of aspirant entrepreneurs from their first semester in NCET. NCET initiated a certification program with a diversified approach to teaching and learning pedagogy.

The resource team for this micro degree certification program will include business and industry experts as well as mentors from various fields of business and enterprise.

This program uses a blended learning pedagogy that combines Coursera courses, online learning through the MOOC platform, and project- and problem-based learning.

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

1. Through its engagement with stakeholders, NCET will be given top priority for the entrepreneurial agenda. NCET will seek out suitable partners, including micro, small, and MSMEs, resource organizations, alumni, social enterprises, entrepreneurs, and professional bodies, in order to foster entrepreneurship and co-design.
2. For the purpose of establishing and maintaining partnerships with external stakeholders, NCET has developed its own rules and norms.


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3. NCET would enable knowledge exchange through partnership and collaboration. It will offer a support system and instructions for establishing, directing, and organizing these interactions.
 - a. Technical clubs, internships, hackathons, teaching and research exchange programs, and other formal and informal procedures will all receive support from NCET. The chance for instructors, staff, and students to interact with the outside world would be provided.

x. Entrepreneurial Impact Assessment:

The various parameters to be considered for Entrepreneurial Impact Assessment are

1. Satisfaction of the participants in micro degree certification programs, workshops, and training programs.
2. Participation in awareness programs.
3. Utilization of pre-incubation facilities by students.
4. The idea for PoC projects.
5. PoC to Prototype/ Minimum Viable product(MVP).
6. The number of projects in the curriculum addressing real-life problems.
7. Startup registrations and company incorporation.
8. IPR application filing, grant, and commercialization
9. Participation in various idea, PoC, Prototype, b-plan competitions, and hackathons
10. Participation in pitching for fundraising and grants/support from government and non-government agencies.
11. Product development and its launching in the market.
12. Fundraising.
13. Contribution to industrial projects and consultancy projects.
14. Annual Turnover.

The NCET-IC team under the chairmanship of the principal will be responsible for assigning appropriate weightage to the above parameters depending on the maturity of


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the process. A separate document regarding this will be made available by NCETIC and reviewed annually.

Review of the Policy

Considering the feedback from the assessment team which is the reflection of the impact of the existing policy, the Principal shall organize the review committee meeting and finalize the recommendations of the review committee.

NISP Coordinator

Principal
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