



NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS) COIMBATORE - 18 INNOVATION AND ENTREPRENEURSHIP POLICY

Supported by





NATIONAL INNOVATION AND START-UP POLICY

(For Students and Faculty)

Dr. A. Sahaya Sudha Convener

Dr .Sr. M. Helen
President

NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS)

COIMBATORE - 18

NATIONAL INNOVATION AND STARTUP POLICY

VISION

Empower and inspire students to become passionate innovators and entrepreneurs.

MISSION

- To create a nurturing ecosystem for enabling continuous upskilling among students.
- Test and validate innovative prototypes by leveraging the various professional industrial/ research tie ups.
- Enabling students to earn while they learn.

THRUST AREAS

- Bio-gas
- · Bio-fertilizers
- Apiculture
- Manufacturing of natural self-care products
- Computer based design development
- Industrial Internet of things (IoT) with Automation
- Green Energy Technologies
- Computer Vision
- Artificial Intelligence / Machine Learning for sustainable development
- Data Analyst
- Cyber Security

OBJECTIVES

- To create awareness amongst the students and faculty about Innovation and Entrepreneurship.
- To focus on utilizing available resources to establish viable start-ups.
- To identify and evaluate opportunities to ensure efficient management and successful launching of new ideas.

- To leverage social media marketing effectively to enable student start-ups to reach target customers.
- To develop effective marketing strategies for all the start-ups.
- To exert dedicated efforts to build a pool of practising entrepreneurs as mentors for students who pursue their entrepreneurial aspirations.
- To conduct annual events to recognise, reward and encourage student/ faculty's innovative start-up ideas.
- To organise webinars, workshops, conferences and interaction with entrepreneurs, Industry/ R&D experts to develop knowledge and skills.
- To visit Industries, Laboratories, Technology Business Incubators and Tech parks.
- To participate in competitions and explore professional networking/collaboration possibilities.

SHORT TERM GOALS

- To conduct students to register in the innovation and entrepreneurship development programs.
- To create opportunities to involve the students/faculty in National and International level entrepreneurial and Innovation forum.
- To create blended learning experience in interdisciplinary research areas.
- To interact with researchers from various fields to bring in volunteers and manage them.
- To conduct intellectual property awareness workshop.

LONG TERM GOALS

- To embrace and enhance the quality of research by exposing them to latest research developments.
- To collaborate with government and private funding organizations.
- To ensure the success of the programs through effective communication and internal marketing strategies.
- To build an innovation and entrepreneurial ecosystem in the campus.
- To strengthen and maintain the relationship between industry and institution continuously.
- To register copyrights, trademarks and patent to establish trust on the start-ups and their products.

- To develop an Incubation Centre and Innovation lab.
- To strengthen the business acumen among students and faculty to channelize their outcome towards achieving the mission.

STRATEGIES AND GOVERNANCE

- Entrepreneurship promotion and development is one of the key dimensions of the institute's vision and strategy.
- The Dean will be the responsible for the entrepreneurial agenda of the institute. (Design, Innovation and Incubation). Since promoting entrepreneurship requires a different type of mind-set as compared to other academic activities, this role may be shared by a faculty or external hire who understands the Industry and the Economic activities.
- Resource mobilization plan should be worked out at the institute for supporting preincubation, incubation infrastructure and facilities. A sustainable financial strategy
 should be defined in order to reduce the organizational constraints to work on the
 entrepreneurial agenda
- Investment in the entrepreneurial activities should be a part of the institutional financial strategy. The institute will create a separate 'Innovation Fund' and work towards allocating a minimum 1% fund of the total annual budget of the institution for funding and supporting innovation and start-ups related activities
- The strategy should also involve raising funds from diverse sources to reduce dependency on the public funding. Bringing in external funding through government (state and central) such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Start-up India, Invest India, MeitY, MSDE, MSME, etc. and nongovernment sources..
- To support technology incubators, College may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
- Institute may also raise funding through sponsorships and donations. Institute should actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).
- For expediting the decision making, hierarchical barriers should be minimized and individual autonomy and ownership of initiatives should be promoted.
- Importance of innovation and entrepreneurial agenda should be known across the institute and should be promoted and highlighted at institutional programs such as

- conferences, convocations, workshops, etc. The Institute Innovation Council comprising student and faculty representatives will play an important role in the above, along with student clubs.
- The I&E strategy will embrace the entrepreneurial activities across various centres,
 Departments, within the institute, thus breaking the silos. The objectives of the units
 may be aligned with the overall objectives and performance indicators.
- Product to market strategy for start-ups may be developed by the institute on case to case basis.
- Development of entrepreneurship culture should not be limited within the boundaries of the institution.
- The institute must strive to be the driving force in developing entrepreneurship culture in its vicinity (regional, social and community level). This shall include giving opportunity for regional start-ups, provision to extend facilities for outsiders and active involvement of the institute in defining strategic direction for local development.
- Strategic partnerships should be developed using bilateral and multilateral channels
 with national and international innovation clusters and other relevant organizations.
 Moreover, international exchange programs, internships, engaging the international
 faculties in teaching and research should also be promoted.

STARTUPS ENABLING INSTITUTIONAL INFRASTRUCTURE

- Nirmala College for Women will facilitate all the students, faculties, to utilize its vast available resources and infrastructure as needed.
- The Institute also supports Pre-incubation and Incubation by mobilizing resources
 from internal and external sources. This Pre- incubation / Incubation facility will be
 accessible to students of all disciplines across the institution.
- The Institute will offer mentoring and other relevant services through Preincubation/ Incubation units in-return for fees, equity sharing and (or) zero payment
 basis. Full co-operation will be extended by the institute on resource mobilization
 from financial institutes such as MSME, IEDC, DST, MHRD, AICTE, CSIR,
 NRDC, Start-up India, Invest India, etc., and other non-governmental organizations
 etc.,

NURTURING INNOVATIONS AND STARTUPS

- The institute is devoted for the upliftment of the Women involving the participation of the students in all entrepreneurial activities, to empower themselves.
- The institute will encourage creation and nurturing of Start-ups/enterprises by students (UG, PG, Ph.D.) and faculty. They will be encouraged to apply for incubation within the institute's incubator. However, the selection of the start-up for incubation will be as per the guidelines of the incubator.
- Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the institute to register their company with due permission from the institution.
- 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 the institute.
- The institute should allow their students to take a semester/year break (or even more
 depending upon the decision of review committee constituted by the institute) to work on
 their start-ups and re-join academics to complete the course.
- Institute should set up a review committee for review of start- up by students, and based on the progress made, it may consider giving appropriate credits for academics.
- Allow faculty to take off for a semester / year (or even more depending upon the decision
 of review committee constituted by the institute) as sabbatical/unpaid leave/ casual leave/
 earned leave for working on start-ups and come back.
- Institution should consider allowing use of its resource to faculty/students wishing to
 establish start up as a fulltime effort. The seniority and other academic benefits during
 such period may be preserved for such staff or faculty.
- Institute will facilitate the start-up activities/ technology development by allowing students/ faculty to use institute infrastructure and facilities, as per the choice of the potential entrepreneur. Other factors for consideration should be space, infrastructure, mentorship support, seed funds, support for accounts, legal, patents etc.
- Institute could extend this start-up facility to alumni of the institute as well as outsiders.
- Participation in start-up related activities needs to be considered as a legitimate activity of
 faculty in addition to teaching, R&D projects, industrial consultancy and management
 duties and must be considered while evaluating the annual performance of the faculty.
 Every faculty may be encouraged to mentor at least one start-up.

- Institute should ensure that at no stage any liability accrued to it because of any activity of any start-up. Where a student/ faculty start-up policy is pre-existing in an institute, then the institute may consider modifying their policy in spirit of these guidelines.
- The institute will allow licensing of IPR from institute to start up as per the IPR policy.
- The institute will encourage students to intern with the start-ups incubated in any recognized incubator while studying.
- Student inventors will also be allowed to opt for developing their 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.
- Institute may facilitate the start-up activities/ technology development by allowing students/ faculty/staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners.
 - > Short-term/ six-month/ one-year part-time entrepreneurship training.
 - Mentorship support on regular basis Innovation and Start-up Policy.
 - 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.
 - Institute may also link the start-ups to other seed-fund providers / venture funds or itself may set up seed-fund once the incubation activities mature.

PRODUCT OWNERSHIP RIGHTS FOR TECHNOLOGIES DEVELOPED AT INSTITUTION

- When the institution facilities / funds are used substantially or when IPR is developed
 as a part of curriculum / academic activity, IPR is to be jointly owned by investors
 and the Institution.
- Investors and Institution could together license the product / IPR to any commercial
 organization, with investors having the primary. License fees could be either / or a
 combination of upfront fees or one-time technology transfer fees, royalty as a
 percentage of sale price, shares in the company licensing the product (applicable
 after establishing SPV).

- If there is a dispute in ownership, a minimum five member committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the Institute's alumni/ industry experts (having experience in technology commercialization) and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction.
- Institute IPR cell or incubation centre will only be a coordinator and facilitator for providing services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If institute pays for patent filing, they shall have a committee which can examine whether the IPR is worth patenting. The committee should consist of faculty who have experience and excelled in technology transfer.
- The IPC (Intellectual Property Committee) will bring out brochures/newsletters and
 make necessary announcements in various media for creating awareness among
 academic community in regards to advancements on technology, patentable and
 commercial technologies, IP laws and amendments and legal aspects related to IP.
- The IPC will conduct seminars, workshops, talks by eminent scientists and practitioners on IP related issues, and shall organize student groups to create greater participation.
- The IPC is empowered to progress technology / knowledge transfer, conduct negotiations and conclude formal deals between the Institute and the identified industry partners including signing of working MOUs/ agreements to progress across the knowledge value chain.
- The IPC shall establish formal benefit sharing arrangements with the creators on earnings resulting from commercialisation of their creations and IPR.
- IPC will ensure that formal agreements have been signed between the creators and the
 Institute on the benefit sharing arrangements between the institute and the creators. In
 cases where a student, with faculty mentor as part of Institute's Academic
 Programmes, conducts exploratory entrepreneurial activity promoted by the Institute
 the IPC shall provide appropriate frameworks for the transfer of the IP ownership.
- Interdisciplinary research and publication on start-up and entrepreneurship shall be promoted by the institution. The record for which may be maintained by the R&D cell of the Institution.

ORGANIZATION CAPACITY, HUMAN RESOURCES AND INCENTIVES

- Institute will facilitate the start-up activities/ technology development by allowing students/ faculty to use institute infrastructure and facilities, as per the choice of the potential entrepreneur.
- In search of acquiring knowledge and maximum utilization of the resources of the Institution, the interdepartmental linkages should be enabled via shared faculty teaching and research experiences.
- Guest lecturers and subject matter experts can be engaged for tactical advice for the development of the faculty and students as well.
- The academic and non- academic incentives and reward mechanism should be developed by the institute in order to retain the efficient faculty.
- Entrepreneurship management practices and programmes can be conducted and practiced to promote the attitude of Innovation in faculty and Staff.
- As a part of annual performance, a matrix can be done for evaluation the contribution and achievements of faculty and Students and stakeholders.
- To achieve better engagement of staff in entrepreneurial activities constant up skilling and a suitable institutional policy on career development of staff has been developed.
- The Institute will provide a suitable infrastructure both physical and human resources to nurture the Incubation centre.

CREATING INNOVATION PIPELINE AND PATHWAYS FOR ENTREPRENEURS AT INSTITUTE LEVEL

- 1. 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 shall be devised at Institution level.
 - Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability.
 - Students/staff shall be educated that innovation (technology, process or business
 innovation) is a mechanism to solve the problems of the society and consumers.
 Entrepreneurs should innovate with focus on the market niche.
 - Students shall be encouraged to develop entrepreneurial mind set 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, boot camps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.

- To prepare the students for creating the start-ups, integration of education activities with enterprise-related activities shall be encouraged.
- 2. The institute shall link their start-ups with wider entrepreneurial ecosystem and by providing support to students who show potential in pre-start-up 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.
- 3. The IIC (Institution Innovation Council) of the Institution shall be a pioneer in implementing the above mentioned points.
- 4. For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.
 - Networking events shall be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
 - Business incubation facilities shall be provided at subsidized cost (as decided by the Head of the Institution from time to time). Laboratories, research facilities, IT services, training, mentoring, etc. shall be accessible to the new start-ups.
- 5. A culture needs to be promoted to understand that money is not FREE and is a risk capital. The entrepreneur must utilize these funds and pay back.
- 6. Institute shall develop a ready reckoner of Innovation Tool Kit, which must be kept on the homepage on Institute's website to answer the doubts and queries of the innovators and enlisting the facilities available at the Institute.

NORMS FOR FACULTY START-UPS

- Role of faculty may vary from being an owner or direct promoters, mentors, consultants or as on member of the start-up.
- Institutes should work on developing a policy on 'conflicts of interest' to ensure that the regular duties of the faculty don't suffer owing to her involvement in the start-up activities.
- Faculty start-up may consist of faculty members alone or with students or faculty of other institutions or alumni or with other entrepreneurs.

- If the faculty holds managerial post for more than three months in a start-up, they will go leave without pay/ utilize the existing leave.
- Faculty must distinguish the on-going research at the institution from the work conducted at the start-up.
- In case of selection of a faculty start up by an outside national or international accelerator, a maximum of one semester or year may be permitted depending on the review of committee.
- Faculty must not accept gifts from the start-up.
- Faculty must not involve research staff of the institution in activities at the start-up and wise versa.
- Human subject related research in start-up should get clearance from ethics committee of the institution.

NORMS FOR THE STUDENT'S START-UP

- In order to run a smooth start up for the students, the organization should help to
 ensure the institution or the incubation with technologies and advanced techniques
 adopted to the work area.
- Students should be provided with innovative policies upgraded at specific intervals and create a student body to run a smooth cell.
- To provide a complete ownership over the business or any small-scale start-ups for students and encourage in long-term achievement.
- Availing students with scholarship, guideship from the mentors and furthermore to provide with the gifts in the form of incentives at all cost.
- To make sure faculties are providing proper guideship and encouragement to the entrepreneur/students.
- To implement managerial skills in order to exchange knowledge with other collaborated work-field and materials by conducting Workshops, Seminars and collaborations for the entrepreneur/students.
- To provide liberty to the students to work both as full time or part time job, so as to
 work at any free time that permits outside their academic hours and can have special
 leaves.
- To indulge students with science and technology-based research relating it to the diversified necessity of the present situation.

 To ensure that MSME has been inhabited in the student's progress and enlighten them about apps that provide the E-Gov services for loans.

PEDAGOGY AND LEARNING INTERVENTIONS FOR ENTREPRENEURSHIP DEVELOPMENT

- 1. Diversified approach shall be adopted to produce desirable learning outcomes, which should include cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery.
 - The clubs and associations in the Institution, along with the IIC of Nirmala College for Women, shall focus on organizing various programs pertaining to innovation, entrepreneurship and IPR to nurture students towards innovation.
 - Institution shall start a special annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises eco system within the Institute.
 - For creating awareness among the students, the teaching methods shall include case studies on business failure and real-life experience reports by start-ups.
 - Tolerating and encouraging failures: Our systems are not designed for tolerating and
 encouraging failure. Failures need to be elaborately discussed and debated to imbibe
 that failure is a part of life, thus helping in reducing the social stigma associated with
 it. Very importantly, this should be a part of Institute's philosophy and culture.
 - Innovation champions shall be nominated from within the students/ faculty/ staff for each department/stream of study.
- 2. Entrepreneurship education shall be imparted to students at curricular/ co-curricular/extra-curricular level through elective/short term or long-term courses on innovation, entrepreneurship and venture development.
 - Integration of expertise of the external stakeholders should be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.
 - In the beginning of every academic session, Institute shall conduct an induction program about the importance of I&E so that freshly inducted students are made aware about the entrepreneurial agenda of the Institute and available support systems. Curriculum for the entrepreneurship education shall be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.

- Industry linkages should be leveraged for conducting research and survey on trends in Technology, research, innovation and market intelligence. More MoU's with start-ups may also be inked for knowledge sharing purpose.
- Sensitization of students should be done for their understanding on expected learning outcomes.
- 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 start-up. 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.
- 3. Pedagogical changes shall be carried out to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by the Institute for inculcating entrepreneurial culture shall be constantly reviewed and updated.

COLLABORATION, CO-CREATION, BUSINESS RELATION AND KNOWLEDGE

- The institute should have a team of potential partners, resource organization, MSME's, Social enterprises, Alumni, Professional bodies and entrepreneurs to support entrepreneurship and co design the program.
- The institute should seek internal and external Stakeholders to manage the relationship among various teams.
- Faculty and students should be given an opportunity to connect with the external environment through knowledge sharing such as internships, teaching and research exchange programs, clubs and social gathering.

ENTREPRENEURIAL IMPACT ASSESSMENT

- 1. Impact assessment of institute's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education should be performed regularly using well defined evaluation parameters.
 - Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning should be assessed.
 - Number of start-ups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by the institutes should be recorded and used for impact assessment.

- Impact should also be measured for the support system provided by the institute to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.
- 2. Formulation of strategy and impact assessment should go hand in hand. The information on impact of the activities should be actively used while developing and reviewing the entrepreneurial strategy.
- 3. Impact assessment for measuring the success should be in terms of sustainable social, financial and technological impact in the market. For innovations at pre-commercial stage, development of sustainable enterprise model is critical. Commercialization is the critical metric in long run.

Governing Body Members

- 1. Rev. Mother Santhana Mary Augustina
- 2. Rev.Sr.Immaculate Pushparani
- 3. Mrs.Bindu Ajeet
- 4. Rev.Dr.Sr. M .Helen
- 5. Rev.Dr.Sr. Mary Fabiola
- 6. Rev.Dr.Sr. Ruby Alangara Mary
- 7. Rev.Sr. Paulin Mary
- 8. Rev.Dr.Sr. Arul Seeli
- 9. Rev.Dr.Sr. Kulandai Therese

Signature

Sr Saultana Mary Jugustina

1. Harofri

16-11 jui

Wieles

Sa. Laly Ammy

Sr. Arulseeli

So hulandar The

CERTIFICATE

This is to certify that National Innovation and start-up policy at Nirmala College for Women, Coimbatore is approved by the council members of governing body and it is effectively implemented in the campus to promote innovation among student community.



Head of the Institution

Principal

Nirmala College for Women

(Autonomous)

Coimbatore - 641 018.