EXCEL ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NBA, NAAC with "A+" and Recognised by UGC (2f &12B)
KOMARAPALAYAM - 637303

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

INNOVATION AND START- UP POLICY

For Students and Faculty Members

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PREAMBLE

In November 2016, All India Council of Technical Education (AICTE) released a Startup Policy document for AICTE approved institutions, to address the need of Innovation and Entrepreneurial culture in Higher Education Institutions (HEIs). The policy primarily focused on guiding the AICTE approved institutions in implementing 'Startup Action Plan' of Government of India. Subsequent to release of the Startup policy by AICTE and further interaction & feedback received from education institutions, a need was felt for a more elaborate and comprehensive policy guiding document, which could be applicable for all the HEIs in India. This leads to the 'National Innovation and Startup Policy (NISP) 2019'.

In context to the NISP, a 10 member committee was constituted in EEC to formulate detailed guidelines for various aspects related to Innovation, IPR, Startup and Entrepreneurship management. This committee deliberated on nurturing the Innovation and Startup culture in EEC, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, EEC's Innovation and Startup Policy was prepared for students and faculty members of Excel Engineering College.

Vision

- To create competitive human resources in the fields of engineering for the benefit of the society to meet global challenges.

Mission

- To provide a conducive ambience for better learning and to bring about creativity among students.
- To develop a sustainable environment for innovative learning to serve the needy.
- To meet global demands for excellence in technical education.
- To train young minds with values, culture, integrity, creativity and leadership.

1. STRATEGIES AND GOVERNANCE

The NISP initiative has created a path way towards development of culture among students and faculty members to adopt entrepreneurship as one of the carrier options. Following steps have been taken to implement NISP.

1. A dedicated Centre for Entrepreneurship Development Cell (EDC) with defined specific objectives and associated performance indicators for assessment has been established to facilitate development of an entrepreneurial ecosystem in the organization.
2. EEC has initiated the setup of student owned EDC-Cell to propagate and involve the student community to take up enterprising activities.

3. Minimum 1% fund of the total annual budget of the institution is being allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'.
4. To support innovation and entrepreneurship promotional activities, that shall be highly encouraged and appreciated to approach private and corporate sectors to generate funds, under Corporate Social Responsibility.
5. Encouragement shall be given for raising funds through government (state and central) funding agencies such as DST, DBT, MoE, AICTE, DSIR, CSIR, BIRAC, NSTEDB, Startup India, MSME as well as non-government sources.
6. Centre for Entrepreneurship development Cell (EDC) will organize institutional programs such as conferences, symposium, workshops etc. to spread the awareness regarding importance of innovation and entrepreneurial agenda across the institute.
7. Heads of all departments, IIC, NISP coordinator of EEC shall work together to successfully implement the entrepreneurship ecosystem.
8. Students with entrepreneurial attitude shall be identified and encouraged to develop models using our incubation facilities.
9. EEC will be acting as a innovation hub to promote entrepreneurship culture in Tamil Nadu by providing opportunities to young minds.

2. START-UPS ENABLINGINSTITUTIONAL INFRASTRUCTURE

EEC has developed institutional infrastructure to enable startups and progressed in this direction from establishing the EDC-Cell to formation of the Excel Technology Business Incubator (Excel TBI). This startup enabling structure and its success is acknowledged by various ministries and bodies of Government of India and the state government by approving their flagship program i.e. Seed Fund Scheme by NSTEDB, DST, AICTE and Startup scheme by government of Tamil Nadu. As a part of the developed infrastructure, a dedicated building with 2500 sq. ft. of operational area consisting of well-equipped cubicles is made available for startup working, incubation facilities, prototyping, mentoring for IPR, marketing, business plan development and product development.

i. Thus creation of pre-incubation and incubation facilities for nurturing innovations and startups in EEC has already taken place and reflects the roadmap of Innovation to Enterprises tofinancial success.

ii. The list of all the pre-incubation units in the campus i.e. Students clubs, Technical clubs, EDC-cell, advanced labs and design centers, centres of excellence, IPR Cell and Institute innovation's Council (IIC) has been disseminated. A functional IIC is managing all the activities regarding innovation, entrepreneurship and startup related activities within the institute.

iii. Entrepreneurship Cell, a part of CEI is responsible for structured and unstructured support to the students and faculty through advanced labs and design centers with all the facilities available for conversion of idea into prototype.

3. NURTURING INNOVATIONS ANDSTARTUPS

The policy document addresses all the issues of the Students who are opting for entrepreneurship as carrier option and are pursuing some entrepreneurial ventures while studying.

a. To recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute. Annual Entrepreneur Day shall be celebrated in which "Best Innovator Award", "Best IPR Award" (Patent and Copyright), "Best Start-up Award" shall be given to recognize and motivate students and faculty.

b. With the help of resources available EEC shall facilitates aspirants 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, branding, human resource management as well as compliance to law and regulations impacting abusiness.

c. EEC will allow setting up a startup (including social startups) and working part-time while studying and allow students/faculty to work on their innovative projects.

d. Student inventors may also be allowed to opt for startup projects in place of mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a startup may be interdisciplinary or multi-disciplinary. However, the student must describe how they would distinguish their ongoing research activities as a student from the work being conducted at the startup.

e. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying may be allowed to use the address of the institute to register their firm with due permission from the institution.

f. EEC may allow faculty and staff to take off for a semester/year (or even more depending upon the decision of the review committee constituted by the institute) as unpaid leave/casual leave/earned leave for working on startups and come back. Institution shall consider allowing the use of its resources to staff or faculty.

g. The institute shall facilitate the startup activities/ technology development by allowing students/faculty/staff to use institute infrastructure facilities.

h. The institute may also link the startups to the seed-fund provider/angel funds/venture funds. EEC itself may provide seed-funds when required.

i. The institute may extend this startup facility to alumni of the institute as well as outsiders.

j. Participation in startup related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, and industrial consultancy, administrative duties and shall be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.

k. Product development and commercialization as well as participating and nurturing of startups would now be added to a bucket of faculty-duties and each faculty would choose a mix and match of these activities (in addition to minimum required teaching and guidance) and then respective faculties are evaluated accordingly for their performance and promotion.

4. IP AND PRODUCT OWNERSHIP RIGHTS FOR TECHNOLOGIES DEVELOPED AT INSTITUTE

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

b. On the other hand, if product/ IPR is developed by innovators not using the institutes facilities, outside office hours (for staff and faculty) or not as a part of the curriculum by student, then product/ IPR will be entirely owned by inventor's in proportion to the contributions made by them. In this case, inventors may decide to license the technology to third parties or use the technology themselves.

c. The institutes IPR cell or the incubation centre shall be a coordinator and facilitator for providing services to faculty, staff and students. If the institute is expected to pay for patent filing, they can 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 translation.

d. Interdisciplinary research, publication out of startup research and entrepreneurship would be promoted by the institution.

5. ORGANIZATIONAL CAPACITY, HUMANRESOURCES ANDINCENTIVES

A. EEC will recruit staffs that have a strong innovation and entrepreneurial/ industrial experience, behavior and attitude. This will help in fostering Innovation and entrepreneurial culture.

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

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

D. In order to attract and retain right people, EEC will develop academic and non-academic incentives/ reward mechanism for all staff and stakeholders who actively contribute and support entrepreneurship agendaandactivities.

6. CREATING INNOVATION PIPELINE AND PATHWAYS FOR ENTREPRENEURS AT INSTITUTE LEVEL

1) Programs are conducted by EDC, IIC and Incubation centre under their structured Entrepreneurship Awareness Camps during the induction programs for first year students and introduce the students to entrepreneurship and innovation.
2) Specialized workshops and short-term courses in IPR, entrepreneurship development, various technology-based skill development programmes etc. help students to develop skills required for their entrepreneurial journey.
3) The institute shall establish Institution's Innovation Councils (IICs) as per the guidelines of MoE Innovation Cell and allocate appropriate funds for its activities. IICs shall guide the institutein conducting various activities related to innovation, startup and entrepreneurship development.
4) For strengthening the innovation funnel of the institute, access to financing must be opened for the potentialentrepreneurs.
5) Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new startups.
6) Specific committees have been set up for selection of incubates and monitoring committees in the incubation center; consisting of experts from incubation and entrepreneurship, prototype development, IPR, marketing, finance and technology firms.
7) Students shall present their proposal in front of the Project Selection Committee for sourcing funds through various government schemes and agencies.
8) For prototype or product development, fabrication and rapid prototyping facilities are being provided by EEC through laboratories and design centres.
9) When incubatee registers his/her company, he/she is mentored and introduced to angel investors, venture capitalists and investors for scaling up his/her business.
10) The reward system for the staff in entrepreneurial activities may be through reducing teaching loads and confirming awards, etc.

7. NORMS FOR FACULTY STARTUPS

A For better coordination of the entrepreneurial activities, norms for faculty to undertake startup projects should be created by theinstitutes.

B Institutes should developing a policy on 'conflictof interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startupactivities.

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

D In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, they will go on leave without pay/utilize existing leave.

E Faculty must clearly separate and distinguish on-going research at the institute from the work conducted atthestartup/company.

F. In case of selection of a faculty startup by an outside national or international accelerator, a maximum leave (as existing leave/ unpaid leave/ casual leave/ earned leave) of one semester/ year (or even more depending upon the decision of the review committee constituted by the institute) may be permitted.

G Faculty must not accept gifts fromthestartup.

H Faculty must not involve research staff or other staff of the institute in activities at the Startup andvice-versa.

8. PEDAGOGY AND LEARNING INTERVENTIONS FOR ENTREPRENEURSHIP DEVELOPMENT

- EEC initiated a diversified approach in teaching and learning pedagogy including cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture- based delivery. Experts from industry, mentors from different areas of business and enterprise will be a part of the resource team. This blended learning mode of pedagogy consists of project and problem-based learning, online learning with MOOC platform.
- EDC is responsible to co-ordinate all student clubs, whereas individual departments are responsible for running technical hobby clubs, projectworkshops/labs.
- Entrepreneurship Cell is responsible for organizing competitions, boot- camps, workshops, awards and administration activities.
- As a part of awareness program we about entrepreneurial ecosystem present in the institute, introductory sessions will be organized for all the students of all the programme.
- A dedicated Industry Institute partnership cell and R&D cell with well drafted policy is responsible for conducting research and survey on trends in technology, research, innovation, and market intelligence. Industrial consultancy, industrial visits and student internship related activities will be coordinated by this Centre.

- To promote student ideas, projects and innovations based around real life challenges, boot-camps, visits to rural and undeserved areas in nearby region and hackathons will be organized by IIC-EEC on regular basis. These activities and other IIC calendar activities will be displayed in the institute's activitycalendar.
- Innovation champions should be nominated from within the students/ faculty/ staff for each department/stream of study.
- Institute should start as annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprising ecosystem within the institute.

9. COLLABORATION, CO-CREATION, BUSINESS RELATIONSHIPS AND KNOWLEDGE EXCHANGE

1) For all the activities relevant to the entrepreneurial agenda of the institute, participation and collaboration of industry partners, institutes of national importance, international institutions, social enterprises, schools, alumni, professional bodies and entrepreneurs will beencouraged.
2) The EDC and team will be the Single Point of Contact (SPOC) in the institute for the students, faculty, collaborators, partners and other stakeholders.
3) Institute has collaborations with CII, various government departments and ministries like DST, AICTE, poly-technique institutes, research organizations like IIT, Anna University, entrepreneurship promoting institutes EDII, IP firms and network of angel investors and venture capitalists. All these collaborations prove to be beneficial to the students in their entrepreneurial journey.

10. ENTREPRENEURIAL IMPACTASSESSMENT

The various parameters to be considered for Entrepreneurial Impact Assessment are

a. Satisfaction of the participants in conference, symposium, workshops and training programmes.
b. Participation in awareness programmes.
c. Utilization of Excel TBI incubation facilitiesbystudents.
d. Number of curriculum projects addressing real-lifeproblems.
e. Participation in various idea, Prototype, B-plan competitions and hackathons.
f. Participation in pitching for fund raising and grants/support from government andnon-governmentagencies.
g. Contribution in industrial projects andconsultancyprojects
h. Product development and its launch inthemarket
i. Fundraising.
j. Startup registrations andcompanyincorporation

k. Annual Turnover

l. IPR application filing, grantandcommercialization

The EDC team will be responsible for assigning appropriate weightages to the above parameters depending on the maturity of the process. A separate document regarding this will be made available by IIC and reviewed annually.

11. REVIEW OF THE POLICY

Considering the feedback from the assessment team, EEC shall call for the review committee meeting and finalize the recommendations of the review committee.

12. WAY FORWARD

Successful implementation of the EEC Innovation and Startup Policy' (EISP) for students and faculty and to achieve this, full-fledged support of all the academic, non -academic and supporting departments will be important. The roadmap suggested through this document is a broad guideline and this policy document is appended with previously existing policy documents on innovation and entrepreneurship council, IPR, Industry-Institute partnership cell (IIPC) and research anddevelopment.

13. COMMITTEE MEMBERS

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29/10/2022

Coordinator – NISP

29/10/22

Principal

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