



## **FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING**

( Affiliated to Mumbai University and Approved by AICTE)

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# **INNOVATION AND STARTUP POLICY**

A Guiding Framework for Faculty and Students

*Paving the way of Entrepreneurship*

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(HEI Approved Version)

**Fr.CRCE – INNOVATION AND STARTUP POLICY COMMITTEE****NISP Policy Formulation and Implementation Team with support of Institution's  
Innovation Council team.**

<b>Name of the Member</b>	<b>Member Type</b>	<b>Role of the member</b>
Dr. Srijia Unnikrishnan	Head of the Institute	Chairman
Prof. Swati Ringe	Faculty	NISP Coordinator
Prof. Kranti Wagle	Faculty	President – IIC
Mr. Mahesh Sharma	Training and Placement	Network Enabler
Dr. D.V. Bhoir	Professor Dean-Student affairs	ARIIA Coordinator
Dr. V. S. Jorapur	H.O.D. - Production dept.	Head - Startup Cell
Dr. Sapna Prabhu	H.O.D. - E.C.S. dept.	Formulation & Implementation
Dr. B.S. Daga	H.O.D. - Computer dept.	Formulation & Implementation
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Dr. Hemant Khanolkar	H.O.D. – Humanities dept.	Formulation & Implementation
Dr. Sunil Surve	Dean Academics	Formulation & Implementation
Dr. Bhushan Patil	Professor and Dean R&D	IPR Cell In-charge
Prof. Hitendra Vaishnav	Faculty	Startup Cell
Prof. Prachi Patil	Faculty	Internship Activity Coordinator
Prof. Heena Pendhari	Faculty	Innovation Activity Coordinator
Prof. Prajakta Bhangale	Faculty	E-Cell in-charge
Mr. Ayush Jain	Alumni- UthopiaTech	Alumni Entrepreneurs
Mr. Manthan Dakshni	Alumni	Startup Founder
Mr. Parag Doshi	Alumni	Entrepreneur-Industry Associate
Mr. Gangan Rajendra	External	Entrepreneur -Industry Associate
Mr. Dinesh Jairam Israni	External	Naman Angels-Industry Associate
Mr. Sagar Sarvade	External	Entrepreneur
Mr. Saif Naqvi	Student	Startup Founder
Mr. Rohit Madke	Student	Startup Founder

**INSTITUTE INNOVATION COUNCIL- (IIC-FrCRCE) 2020-21**

<b>Position</b>	<b>Designation</b>	<b>Name</b>
Chairman	Principal	Dr. Srija Unnikrishnan
President	Assistant Professor	Prof. Kranti Wagle
Vice President	Assistant Professor	Prof. Ashwini Pansare
Convener	Assistant Professor	Prof. Dileep C.C.
NISP Coordinator	Assistant Professor	Prof. Swati Ringe
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Internship Activity Coordinator	Assistant Professor	Prof. Prachi Patil
IPR Activity Coordinator	Professor and Dean R&D	Dr. Bhushan Patil , Prof. Deepali Bhise
Social Media Coordinator	Assistant Professor	Prof. Sangeeta Parshionikar
ARIIA Coordinator	Professor Dean-Student affairs	Dr. D. V. Bhoir
NIRF Coordinator	Assistant Professor	Prof. Ketaki Joshi
E-Cell in-charge	Assistant Professor	Prof. Prajakta Bhangale
Tinkering Lab	Assistant Professor	Prof. Saurabh Kulkarni
Member	Assistant Professor	Prof. Vaibhav Godbole
Member	Assistant Professor	Prof. Prajakta Dhamnaskar
Member	Assistant Professor	Prof. Vaibhav Godbole
Innovation Coordinator (Student)	Student Coordinator	Yash Kane
Startup Coordinator (Student)	Student Coordinator	Advait Bhushan Marde
IPR Coordinator	Student Coordinator	Sahil S Nikalje
Social Media Coordinator	Student Coordinator	Aryan Patil
Internship Coordinator	Student Coordinator	Hritik Manish Kothari
Representative from nearby Incubation Centre	Member	Prof. K. T. Talele, SPIT, Mumbai
Representatives of SIDBI / NABARD / Lead Bank / Investor	Member	Mr.Sanjeev Kumar, Sr. Manager, Corporation Bank,HillRoad Bandra-w
Technical Experts from nearby Industry	Member	Mr. Samir Kaji, M.D. Selec Controls P. Ltd
Alumni Entrepreneurs	Member	Mr. Ayush Jain, UthopiaTech
<b>INSTITUTES TECHNICAL AND NON TECHNICAL COUNCILS</b>		
Students from the host institution	Council in-Charge Student	Sakshi Dave Mayank Mishra Divita Phadakale Cyril Varghese Kanjiramyalil Nijo Ninan Sheetal Sharma Kaylynn Rodrigues Shreya Bilonikar Sherwin Dsouza Carol Mendonca Lancylord Dmonte

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**DEFINITIONS**

MoE:-	Ministry of Education
AICTE:-	All India Council of Technical Education
MIC:-	MoE Innovation Cell
IIC-FrCRCE :-	Institute Innovation Council of Fr. C. R.C. E.
NISP:-	National Innovation and Startup Policy
E-Cell:-	Entrepreneurship cell
IPR:-	Intellectual Property Rights
SPV:-	Special Purpose Vehicle is a subsidiary created by parent company to isolate financial risk
Pre-Incubation:-	It represents process which works with entrepreneurs who are in early stages of setting up their company. Usually entrepreneurs come into such programs with just an idea of early prototype/product/service.

## **Preamble**

Ministry of Education Innovation cell (MIC) along with All India Council of Technical Education (AICTE) released National Innovation and Startup Policy 2019 in September 2019.

With the understanding of recent trends, Fr. Conceicao Rodrigues College of Engineering (Fr.CRCE) have joined this NISP campaign to nurture “Innovation and Startup” culture.

The committee comprising faculty members from Institute Innovation Council(IIC), Entrepreneurship Cell(E-Cell), Start-up Cell, Intellectual Property Rights (IPR) cell, Internship coordinator and External members like startup founders, Entrepreneurs, Alumni is formed to discuss, formulate institute level startup policy and implementation of all innovation and entrepreneurship related activities within the institute. The institute is in the process of applying the incubation facility within the campus.

## **Vision**

**“Moulding Engineers Who Can Build The Nation”**

## **Mission**

To Facilitate a platform for innovative minds to transform their ideas into viable business propositions to start a business venture.

## **Short Term Objectives**

1. To facilitate generation of Innovative solution for real life problems.
2. To encourage and stimulate campus startups in the institution.

## **Long Term Objectives**

To link INNOVATION to ENTERPRISES leading to FINANCIAL SUCCESS.

## 1. Strategies and Governance

- Innovation and Entrepreneurship (I & E) Promotion is an important activity at Fr. Conceicao Rodrigues College of Engineering (Fr.CRCE). Specific objectives and associated performance indicators are to be identified for assessment.
- Implementation of Entrepreneurial vision will be achieved through mission statements rather than Stringent Control System.
- The NISP implementation team is formulated to achieve this agenda.
- Investment in entrepreneurial activities is a part of the institutional financial strategy. Currently 0.3% of budget of the total annual budget of the institution is allocated for funding and supporting innovation and startups related activities through the creation of separate "Innovation Fund". Minimum 1% of total annual budget is proposed.
- The financial strategy involves raising funds from diverse sources as mentioned below.
  - Encourage to bring in external funding through government (state and central) agencies such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, UoM etc. and non-government sources.
  - Approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) to support technology incubators.
  - Engage alumni actively to get Sponsorships, Mentoring or Consulting support.
- Importance of innovation and entrepreneurial agenda is known across the institute. It is promoted and **highlighted at institutional programs such as conferences, convocations, workshops etc.**
- Action plan is formulated at Institute level, which is in line with the current document along with well-defined short-term and long-term goals. Micro action plans are to be developed by the departments to accomplish the policy objectives.
- Product to market strategy for startups will be developed.
- Development of entrepreneurship culture will not be limited within the boundaries of the institution.
- This Policy will be updated time to time as per the need.

## 2. Startups Enabling Institutional Infrastructure

- Creation of pre-incubation and incubation facilities for nurturing innovations and startups at the institute is the high priority. Objective is to link INNOVATION to ENTREPRISES leading to FINANCIAL SUCCESS.
- IIC-FrCRCE cell is established as per the guidelines issued by MoE Innovation Cell at the institute. In order to support pre-incubation; IPR cell, Startup cell, E-cell and Student clubs have been set up for facilitating and mobilizing resources from different sources.
- This facility is available 24x7 to all the stakeholders of the institution.
- Mentoring and other relevant services through Pre- incubation/Incubation units will be offered in turn for fees and(or) zero payment basis. The modalities regarding equity sharing will depend upon the nature of services offered by these units.
- A separate incubation facility may be established as a support system at the institutional level for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.

## 3. Nurturing Innovations and Startups

Institute will facilitate the startup activities / technology development by assisting student/faculty/staff (the potential entrepreneur) in the following manner.

- Permission to use institute infrastructure and facilities like Project lab, Computers, Printer, scanner, Fax machine, Internet Connection, Cubicle for brainstorming sessions, access to college library, conference room and video conferencing facility as per the requirement.
- Encouragement to do Short term/Part-time entrepreneurship training.
- Mentoring support on regular basis.
- Facilitation in a variety of areas including technology development, ideation, 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.
- At present Mumbai University does not allow student entrepreneurs to earn credits for working on innovative prototypes/Business Models. Efforts to be made so that student inventors may be allowed to opt for start-up in place of their **mini project/major project**, seminars, internship.



- The area in which a student wants to initiate a startup may be **interdisciplinary** or multi-disciplinary. 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.
- Student entrepreneurs are allowed to use the address of Hostel (or) pre-incubation and (or) incubation unit to register their venture while studying at the institute.
- Student entrepreneurs will be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, by taking prior permission from the institute with some criteria.
- Every faculty may be encouraged to mentor startups.
- Participation in start-up related activities needs to be considered as a legitimate activity of faculty and considered while evaluating the annual performance of the faculty. Institute will update/change/revise performance evaluation policies for faculty and staff as stated above.
- Institute incubation facility may link the startups to other seed-fund providers/angel funds/venture funds or itself may set up seed fund once incubation activities mature.
- Institute incubation facility may extend startup facility to Alumni of the institute as well as outsiders.
- Institute incubation facility will allow licensing of IPR from institute to start up. Ideally students and faculty members intending to initiate a start-up based on the technology developed or co-developed by them or the technology owned by the institute, should be allowed to take a license on the said technology on easy term, either in terms of equity in the venture and/ or license fees and/ or royalty to obviate the early stage financial burden.
- In return for the services and facilities, the legal entity designated by the institute incubation facility may take 1 to 5% equity/ stake in the startup/ company, based on use of brand, faculty contribution, infrastructure support and use of the institute's IPR. The legal entity designated by the institute would normally take nominal 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, the legal entity designated by the institute would not take more than 20% of shares that staff faculty takes while drawing full salary from the institution; however, this share will be within the 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 an 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 may 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 make a final decision based on satisfaction of services offered by the legal entity designated by the institute/incubator. In that case, during the cooling period, the legal entity designated by the institute cannot force startups to issue equity on the first day of granting incubation support
- The institute could consider providing services based on a mixture of equity, fee-based and/ or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the institute on rental basis.

#### **4. Product Ownership Rights for Technologies Developed at Institute**

- When institute 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 institute.
- Inventors and institute could together license the product / IPR to any organisation including for commercial benefits, with the patentee having the primary say. License fees could be either / or a mix of
  - Sale and transfer fees or one-time technology transfer fees
  - Royalty as mutually agreed
  - Shares/partnership in the company licensing the product
- An institute may not be allowed to hold the equity as per the current statute, so SPV may be requested to hold equity on their behalf or as amended from time to time.
- On the other hand, if product/ IPR is developed by innovators not using any institute 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.
- 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 can use alumni/ faculty of other institutes as members, if they cannot find sufficiently experienced alumni / faculty of their own.
- Institute IPR cell or incubation center 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 the institute is

to pay for patent filing, they can have a committee which can examine whether the IPR is worth patenting and own the patent. The committee should consist of faculty who have experience and excelled in technology translation.

- The institute's decision-making body with respect to incubation / IPR technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / institute, including heads of department, heads of institutes, deans or registrars, will have no say in the above.
- Institute promotes Interdisciplinary research and publications or startup and entrepreneurship.

## **5. Organizational Capacity, Human Resources and Incentives**

- All departments work in coherence for development interdisciplinary projects by student teams.
- Periodically some external subject matter experts such as guest lecturers or alumni are engaged for strategic advice and bring in skills which are not available internally.
- Faculty and staff is encouraged to do courses on innovation, entrepreneurship management and venture development.
- The stakeholders who actively contribute and support entrepreneurship agenda are rewarded with sabbaticals, office and lab space for entrepreneurial activities, institutional awards, training, points in the appraisal for consideration of promotion.

## **6. Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level**

- NISP awareness is generated among students, faculty and staff to know the value of entrepreneurship and its role in career development or employability from time to time.
- Students are encouraged to select elective subjects like entrepreneurship development. Integration of education activities with enterprise-related activities is done in teaching learning process.
- Students are encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills and 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 are routinely organized.

- Institute endeavours to link their start-ups and companies with a wider entrepreneurial ecosystem and by providing support to students who show potential, in the 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.
- Institute has established the Institution's Innovation Council (IIC) as per the guidelines of MoE's Innovation Cell and allocates appropriate budget for its activities. IICs guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts are undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.
- Networking events may be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
- Institute may provide business incubation facilities like premises at subsidized cost. Laboratories, research facilities, IT services, training, mentoring etc. to the aspiring startups.
- A culture is 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.
- Institute envisages to develop a ready reckoner of Innovation Tool Kit, which must be kept on the homepage on the institute's website to answer the doubts and queries of the innovators and enlisting the facilities available at the institute.

## 7. Norms for Faculty Startups

- Roles of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
- Institute should 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.
- Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company.
- 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 by the institute) may be permitted to the faculty.

- Faculty must not accept gifts from the startup.
- Faculty must not involve research staff or other staff of the institute in activities at the startup and vice-versa.
- Human subject related research in startups should get clearance from the ethics committee of the institution.

## **8. Pedagogy and Learning Interventions for Entrepreneurship Development**

- Institute has adopted a diversified approach like cross disciplinary learning, mentoring, innovative lab experiments, case studies, presentations to produce desirable learning outcomes focusing innovation.
- Student clubs/ bodies/ departments are created for organizing competitions, bootcamps, workshops, awards, etc.
- Institute has started awarding annual 'INNOVATION TROPHY' to motivate students to come up with outstanding ideas.
- Entrepreneurship education is imparted to students at curricular/ co-curricular/ extra- curricular level through elective/ short term or long-term courses and seminars on innovation, real life success and failure stories by internal and external stakeholders to evolve the culture of collaboration.
- In the beginning of every academic session, the institute conducts an induction program about the importance of Innovation and Entrepreneurship so that freshly inducted students are made aware about the entrepreneurial agenda of the institute and available support systems.
- Pedagogical changes need to be done to ensure that the maximum number of student projects and innovations are based around real life challenges.

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

- Institute incubation facility will collaborate with potential partners, resource organizations, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies, entrepreneurs, incubators, finance teams, legal teams, Government bodies like BMC to build an ecosystem to support entrepreneurship and co-design the programs with stakeholder involvement.
- Institute incubation facility will organize networking events for better engagement of collaborators and knowledge gain.
- Knowledge management should be done by the institute through development of innovation knowledge platforms using inhouse Information & Communication Technology (ICT) capabilities.

## 10. Entrepreneurial Impact Assessment

Impact assessment with well-defined evaluation parameters should be done for all entrepreneurial activities like

- Engagement of all departments and faculty in the entrepreneur teaching and learning.
- Support system provided at the institutional level for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.
- Satisfaction of participants.
- New business relationships created by the institutes.
- Number of startups created.

Impact assessment for measuring the success should be in terms of sustainable social, financial and technological impact in the market. COMMERCIAL success is the ONLY measure in the long run.