



### R.M.K. ENGINEERING COLLEGE

### (An Autonomous Institution)

Affiliated to Anna University, Chennai /Approved by AICTE, New Delhi/ Accredited by NAAC with A+ grade / ISO 9001:2015 Certified Institution/All eligible UG programs are accredited by NBA, New Delhi

## RMKEC- INNOVATION AND START-UP POLICY

For Students and Faculty Members
(Aligned with National Innovation and Startup Policy 2019)



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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 13 membered committee was constituted in RMKEC 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 RMKEC, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, RMKEC Innovation and Startup Policy (RISP)was prepared for students and faculties of R.M.K. Engineering College.

#### Vision

To be the most preferred destination in the country for students to opt startup and entrepreneurship as a carrier and support them to evolve self- sustaining business models for strengthening the national economy.

#### **Mission**

- Tocreatetheeducationalstructureoftheinstitutetowards innovation, start-ups and entrepreneurship opportunities for student and faculties.
- To provide enabling mechanisms through training and skill development, capacity building, networking, access to innovationbased entrepreneurship.
- To provide the guidelines for developing entrepreneurial agenda, managing Intellectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises established by faculty and students.

### 1.STRATEGIES AND GOVERNANCE

The NISPinitiativehascreatedapathwaytowardsdevelopmentofculture among students and faculties to adopt entrepreneurship as one of the carrier options. Following steps have been taken to implement RISP.

- 1. A dedicated Center for Innovation and Entrepreneurship (CIE) with defined specificobjectives and associated performance indicators for assessment, has been established to facilitate development of an entrepreneurial ecosystem in the organization.
- 2. 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'.
- 3. Encouragement shall be given for raising funds through government (state and central) such as DST, DBT, MoE, AICTE, DSIR, CSIR, BIRAC, NSTEDB, Startup India, MSME aswellasnon-governmentsources will also been couraged.
- 4. To support innovation and entrepreneurship promoting activities, it will be highly encouraged and appreciated to approach private and corporate sectorstogeneratefunds, under Corporate Social Responsibility (CSR).
- 5. Centre for Innovation and Entrepreneurship (CIE) will organize institutional programs such as conferences, symposium, workshops etc. to spread the awareness regarding importance of innovation and entrepreneurial agenda across the institute.
- 6. RMKEC has initiated the setup of student owned E-Cell to propagate and involve student community to take enterprising activity.

# 2. START-UPS ENABLING INSTITUTIONAL INFRASTRUCTURE

RMKEC has developed institutional infrastructure to enable startups and progressed in this direction from E-Cellestablish mention its promotion into RMKEC Incubation center (Approved by MSME, Government of India). This startup enabling infrastructure and its success is acknowledged by various ministries and bodies of Government of India and stategovernment i.e. by

approving their flagship program i.e. SeedFundSchemebyNSTEDB,DST, AICTE and Startup in scheme by government of Tamilnadu.

As a part of developed infrastructure, a dedicated building with 2500 sq. ft. of operational area consisting of well-equipped cubicles for start upworking incubation facilities of prototyping, mentoring for IPR, marketing, business plan development, product development.

- i. Thus creation of pre-incubation and incubation facilities for nurturing innovations and startups in RMKEC has already taken place and reflects the roadmap of Innovation to Enterprises to financial success.
- ii. The list of all the pre-incubation units in the campus i.e. Students clubs, Technical clubs, E-cell, advanced labs and design centers, centers of excellence, IPR Cell, IEDC 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. RMKEC Incubation center ( Approved by MSME, Government of India) has all the incubation related facilities .
- iv. Entrepreneurship Cell, a part of CIE 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 AND STARTUPS

- a. 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.
- b. 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 awards for Best Innovator Award, best IPRawarded (Patentand Copyright), best Start-upaward shall be given to felicitate students and faculty.
- c. With the help of resources available RMKEC 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, brand-development, human resource management as well as law and regulations impacting abusiness.
- d. RMKEC will allow setting up a startup (including social startups)andworkingpart-timewhilestudyingand allowtheirstudents/facultytoworkontheirinnovativeprojects.
- e. Student inventors may also be allowed to opt for startup in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a startup may be interdisciplinaryormulti-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 startup.
- f. Studentswhoareunderincubation, butarepursuing some entrepreneurial ventures while studying should be allowed to use their address in the institute to register their company with due permission from their stitution.
- g. RMKEC allow faculty and staff to take off for a semester/year (or even more depending upon the decision of review committee constituted by the institute) as unpaid leave/casual leave/earned leave for working on startups and come back. Institution should consider allowing use of its resource to faculty/students/staff wishing to establishstart upasafulltimeeffort. These niority and other academic benefits during such period may be preserved for such staff or faculty.
- h. Institute will facilitate the startup activities/ technology development by allowingstudents/faculty/stafftouseinstituteinfrastructureandfacilities.
- i. Institute may also link the startups too the seed-fund provider/angel funds/venture funds or itself may set up seed-fund once the incubation activitiesmature.
- j. Institutecouldextendthisstartupfacilitytoalumnioftheinstituteaswell asoutsiders.
- k. Participation in startup related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancyandmanagementduties and must be considered while evaluating the annual performance of the faculty. Every faculty may be courage to mentor at least one startup.
- 1. 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 faculty 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 IPR 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 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 deemfit.
- c. Institute IPR cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. If institute is 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. If inventors are using their own funds or non-institute funds, then they alone should have anowner ofpatenting.
- d. Interdisciplinary research, publication on startup and entrepreneurship would be promoted by theinstitution.

## 5. ORGANIZATIONAL CAPACITY, HUMAN RESOURCES ANDINCENTIVES

- A. RMKEC will recruit staff that have a strong innovation and entrepreneurial/ industrial experience, behaviour and attitude. This will help in fostering the Innovation and entrepreneurialculture.
- B. Some of the relevant faculty members with prior exposure and interest should be deputed for training to promote innovation andentrepreneurial.
- C. Faculty and staff will be encouraged to do courses on innovation, entrepreneurship management and ventured evelopment.

D. In order to attract and retain right people, RMKEC will develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.

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

- 1) The awareness programs conducted by E- Cell, IIC and Incubation center under their structured Entrepreneurship Awareness Camps of 3 day duration and awareness sessions conducted during induction programs for first year students by E- cell and IIC coordinators to introduce the students to entrepreneurship andinnovation.
- 2) Specialized workshops and short-term courses in IPR, entrepreneurship development, various technology-basedskill development programs etc. help students to develop various skills required in their entrepreneurial journey.
- 3) TheinstituteshouldestablishInstitution'sInnovationCouncils (IICs) as per the guidelines of MoEInnovation Cell and allocate appropriate budget for its activities. IICs should guide institutions in 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 potential entrepreneurs through laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the newstartups.
- 5) Wehavespecificcommitteesforselectionforincubationandproject monitoringcommitteeinIncubation center consistingofexpertsfromincubationand entrepreneurship,prototypedevelopment,IPR,marketing,financeand technology experts. Students who have exhibited interest in entrepreneurship and innovation by participating inprograms
- 6) The students incubated in RMKEC Incubation center shall be presenting their proposal in front of Project Selection Committee for funding through various government schemes and agencies.
- 7) For prototype or product development, fabrication and rapid prototyping facilities are being provided by RMKEC through laboratories and design center
- 8) When incubated student registers his/her company, he/she is mentored and introduced to angel investors, venture capitalists and investors for scaling up his/herbusiness.

- 9) The reward system for the staff in entrepreneurial activities byreducing teaching loads, awards, trainings, etc.
- 10)A performance matrix will be developed and used for evaluation of annual performance.

### 7. NORMS FOR FACULTY STARTUPS

- A. For better coordination of the entrepreneurial activities, norms for faculty to do startups should be created by the institutes.
- B. Institutes should work on 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 startup activities.
- C. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with otherentrepreneurs.
- 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 existingleave.
- E. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at thestartup/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 review committee constituted by the institute) may be permitted to thefaculty.
- G. Faculty must not accept gifts from thestartup.
- H. Faculty must not involve research staff or other staff of Institute in activities at the Startup and vice-versa.

# 8. PEDAGOGY AND LEARNING INTERVENTIONS FOR ENTREPRENEURSHIP DEVELOPMENT

a) RMKEC initiated a diversified approach in teaching and learning pedagogy including cross disciplinary learning using mentors, labs, case studies, games,

- etc. in place of traditionallecture-baseddelivery. Experts from industry, mentors from different areas of business and enterprise will be the part of resource team. This blended learning mode of pedagogy which consists of project and problem-based learning, online learning with MOOC platform and courses from course era.
- b) CIE isresponsibletoco-ordinateallstudentclubs, whereas individual departments are responsible for running technical hobby clubs, projectworkshops/labs.
- c) Entrepreneurship Cell is responsible for organizing competitions, boot- camps, workshops, awards and administered by students is totally involved in strategic planning and implementation of these activities.
- d) Asapartofawarenessprogramaboutentrepreneurialecosystempresentin the institute, introductory sessions will be organized for all the students of all the program.
- e)A dedicated Industry Institute Interaction Centers(CoE) with well drafted policy is responsible for conducting research and survey on trends in technology, research,innovation,andmarketintelligence.Industrialconsultancy,industrial visits and student internship related activities will be coordinated by thisCenters.
- f)To promote student ideas, projects and innovations based around real life challenges, boot-camps, visits to rural and underprivileged areas in nearby region and hackathons will be organized by IIC-RMKEC on regular basis. These activities and other IIC calendar activities will be displayed in the institute's activitycalendar.
- g)Innovation champions should be nominated from within the students/ faculty/ staff for each department/stream ofstudy.
- h) Instituteshouldstartannual INNOVATION & ENTREPRENEUR SHIPAWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within thein stitute.

## 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 CIEandhisteamwillbeSinglePointofContact(SPOC)intheinstitute for the students, faculty, collaborators, partners and otherstakeholders.
- 3) InstitutehascollaborationswithCII,variousgovernmentdepartmentsandministriesl ikeDST,AICTE, poly-technique institutes, research organizations like IIT, Anna University, entrepreneurshippromotinginstitutesEDII,IPfirmsandnetworkofangelfundingand venturecapitalistsetc.All these collaborations prove to be beneficial to the students in their entrepreneurial journey.

### 10. ENTREPRENEURIAL IMPACT ASSESSMENT

The various parameters to be considered for Entrepreneurial Impact Assessment are

- a. Satisfaction of the participants in conference, symposium, workshops and trainingprograms
- b. Participation in awarenessprograms
- c. Utilization of pre-incubation facilities bystudents
- d. Number of curriculum projects addressing real lifeproblems
- e. Participation in various idea, PoC, Prototype, B-plan competitions and hackathons
- f. Participation in pitching for fund raising and grants/support from government and non-governmentagencies
- g. Contribution in industrial projects and consultancyprojects
- h. Idea to PoCprojects
- i. PoC to Prototype
- j. Product development and its launching in themarket
- k. Fundraising
- 1. Startup registrations and companyincorporation
- m. Annual Turnover
- n. IPR application filing, grant and commercialization

The CIE 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 assessment team which is the reflection of impact of the existing policy, RMKEC shall or ganize the review committee meeting and finalize the recommendations of the review committee.

### 12. WAY FORWARD

Successful implementation of the 'RMKEC Innovation and Startup Policy' (RISP) 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 broad guidelines and this policy document is supported by previously existing policy documents on innovation and entrepreneurship council, IPR, Industry-Institute interaction and research and development.

#### 13. COMMITTEE MEMBERS

1.	Dr.K.A. Mohamed Junaid	President
	Principal, R.M.K. Engineering College	
2.	Dr.N.M. JothiSwaroopan	Convener
	Professor/ R.M.K. Engineering College	
3.	Dr. K.K.SivagnanaPrabhu	Coordinator
	Placement officer/ R.M.K. Engineering College	
4.	Dr.M. Somasundaram	Innovation
	Professor/ R.M.K. Engineering College	Ambassador
5.	Dr.B. Jaison	Innovation
	Associate Professor/ R.M.K. Engineering College	Ambassador
6.	Mr. P Ravi Kumar	Industrialist
	Kamachi Group- Kamachi Industries Limited	

7.	Er.P.K.Hari, Director, Big Foxx Branding & Ernen Branding	Alumni /Entrepreneur
8.	Dr. SudhirVaradarajan , Dean (Design, Innovation, Incubation), IIITM	Incubation Service
9.	Mr. O. Prasad Roa Deputy Controller, IP India, Govt. of India	Patent Expert
10.	Mr. Vishnuvardhan J VATIO Energy India Pvt. Ltd.	Alumni/Start-up
11.	Mr. G. Marimuthu Asst. Professor/ R.M.K. Engineering College	Faculty /Start-up
12.	Dr. Padmavathy T V Professor/ R.M.K. Engineering College	Faculty /Start-up
13.	Dr. Y. Sukhi Professor/ R.M.K. Engineering College	Faculty /Start-up