



# KEC INNOVATION AND STARTUP POLICY 2020



KONGU ENGINEERING COLLEGE

PERUNDURAI ERODE 638060

#### **Message from President, KVIT Trust**



#### Thiru. V.K.Muthusamy

"The Kongu Vellalar Institute of Technology Trust" (KVITT), founded in the year 1983, has been promoting institutions which excel in varied fields such as Arts, Science, Engineering & Technology, Architecture, Medicine and Management to meet out the societal requirements. The current scenario requires an education system which brings innovation and entrepreneurship

as one of its focal point. I firmly believe that the recommendations/guidelines provided in this document will pave way for developing and supporting an entrepreneurial culture at KEC and I wish a grand success for this mission. I appeal to KEC team to adopt and popularize these guidelines amongst the faculty, staff and students and encourage them to actively pursue the path of innovation and entrepreneurship.

Thiru. V.K.Muthusamy

#### Message from Secretary, KVIT Trust



Thiru. P.C.Palanisamy

KVITT came into being on account of the continuous and magnanimous efforts of a group of illustrious people from all walks of life during 1983. Kongu Engineering College, established by the Trust in 1984, has been offering quality technical education and preparing the students for not only to meet out the industry requirements but also for entrepreneurial journey. I am delighted that Kongu Engineering College has come up with a nice start-up

policy titled as KISP 2020. Surely, this policy will be a reformative tool to shape the engineering career of the students, faculty and staff at KEC. I hope KISP 2020 will transform this college into an innovation-led campus, serving the society and country by all possible means. I appreciate the work done by all the members involved in framing the KISP 2020 and wish these policy guidelines are implemented in their true spirit.

Thiru P.C.Palanisamy

#### Message from Treasurer, KVIT Trust



Thiru. E.R.Kaarthikeyan

On the outset, I would like to congratulate the team for coming up with KISP 2020, which I hope will change the destiny of many young aspirants and create an efficient ecosystem for nurturing campus start-ups. This policy can give an opportunity to the student community for transforming their ideas to a successful technology driven product. Also, the teaching fraternity can gain experiences upon their involvement in these start-up activities which will help shaping their innovative abilities and in-turn their

entrepreneurial pedagogy. I wish good luck for the team towards successful implementation of KISP 2020.

Thiru. E.R.Kaarthikeyan

#### Message from Correspondent, Kongu Engineering College



Thiru. P.Sachithanandan

Kongu Engineering College was established in the year 1984 with a vision to be a top class educational institution for development and dissemination of knowledge in applied science, Technology, Engineering and Management for the Nation and beyond. For the past three and half decades, KEC has been serving the society by uplifting the students from all walks of life by providing quality

technical education. In order to embrace its vision, KISP 2020 has been framed to create a forceful impact on the science and engineering communities. KISP 2020 will help in transforming the young inventors of KEC to be successful entrepreneurs. At this juncture, I would like to appreciate the Principal and the committee for coming up with this immaculate policy, which will guide the students, faculty and staff in their entrepreneurial journey.

Thiru. P.Sachithanandan

#### Message from Principal, Kongu Engineering College



Dr. V.Balusamy

Kongu Engineering College, one of the foremost multi professional research-led Institutions, is internationally recognized for its professional and career-oriented education. Affiliated to Anna University Chennai, the college has completed more than three and half decades of dedicated service to the people from different parts of the country in the field of Technical Education. Ministry of Education and Anna University, Chennai

have devised guidelines to promote innovation and entrepreneurship among the students and faculty of higher education institutions. Based on these guidelines, KEC has framed KISP 2020 for the students, faculty and staff of Kongu Engineering College. This policy guidelines will help in creating an efficient ecosystem in the college towards promotion of creating start-ups.

Dr. V.Balusamy

# **KEC Innovation and Start-up Policy (KISP) 2020 for Students, Faculty and Staff of Kongu Engineering College**

#### **Abstract**

KEC Innovation and Start-up Policy (KISP) 2020 is a guiding framework to engage the students, faculty and staff of Kongu Engineering College (KEC) in innovation and entrepreneurship related activities. KISP 2020 will help them to know the guidelines and strategies that the college has proclaimed for the next three years, towards creating Science & Technology driven Start-ups, which will benefit the inventor, nation and beyond.

# Committee for framing 'KEC Innovation and Start-up Policy 2020' for Students, Faculty and Staff of Kongu Engineering College

1.	<b>Dr. R. Parameshwaran</b> Professor, Mechatronics Engineering Chief Coordinator, TBI@KEC	Chairman
2.	<b>Dr. G. Murugesan</b> Professor, Electronics & Communication Engineering Chief Coordinator, Academic	HEI Member
3.	<b>Dr. S. Shankar</b> Professor, Mechatronics Engineering Chief Coordinator, R&D	HEI Member
4.	Mr. Hariprakash Govindarajalu Co-Founder & CTO, M/s. Logic Research Labs, Kumbakonam	Alumni Entrepreneur
5.	Mr. T. Kumar Managing Partner, M/s. Realtech Systems, Erode	Start-up Founder
6.	Mr. T. Thiyagarajan Chairman, Young Indians, Erode Chapter	I&E Ecosystem Enabler
7.	Mr.D.Shanmugasundaram, Native Angel Network, Erode Chapter	I&E Ecosystem Enabler
8.	Mr. P. S. Kannan Manager, TBI@KEC	Incubation Representative
9.	<b>Dr. S. M. Senthil</b> Assistant Professor (SRG), Mechanical Engineering Project Coordinator, TBI@KEC	Member Secretary

### **Policy Implementation Team**

1.	Dr. S. Praveen Kumar Assistant Professor (SRG), Mechatronics Engineering Innovation Ambassador – Innovation and Design Thinking (IIC KEC)	
2.	Dr. G. S. Rampradheep	
	Associate Professor, Civil Engineering	
	Innovation Ambassador – IPR (IIC KEC)	
3.	Mr. B. Venkatesan	
	Assistant Professor (SRG), Electronics & Instrumentation Engineering	
	Innovation Ambassador – Pre-incubation & incubation(IIC KEC)	
4.	Mr. R. P. Karthick	
	Assistant Professor, Electronics & Communication Engineering	

#### **KEC INNOVATION AND STARTUP POLICY 2020**

#### for Students, Faculty and Staff of Kongu Engineering College

#### 1) Preamble

In November 2016, All India Council of Technical Education (AICTE) released a Start-up Policy document for AICTE approved institutions, to address the need of inculcating innovation and entrepreneurial culture in higher education institutions (HEIs). The policy primarily focused on guiding the AICTE approved institutions in implementing 'Start-up Action Plan' of Government of India. During 2018, the Government of Tamil Nadu, released the Tamil Nadu Start-up and Innovation Policy 2018-2023 with an aim to nurture innovation and entrepreneurship ecosystem in the State. In February 2019, Ministry of Human Resource Development (MHRD) along with AICTE and MHRD's Innovation Cell (MIC), released the "National Innovation and Start-up Policy (NISP) 2019" for students and faculty of HEIs. Based on NISP 2019 and Tamil Nadu Start-up and Innovation Policy 2018-2023, Anna University released Anna University start-up policy guidelines for faculty, staff and students to create a robust innovation and Start-up ecosystem in the University.

Based on the above policies, Kongu Engineering College (KEC) has framed the KEC Innovation and Start-up Policy (KISP 2020) to cater to innovation and entrepreneurial needs of its students, faculty and staff.

#### 2) Vision

To be an innovation led entrepreneurial hub by producing successful Science & Technology driven campus Start-ups and Entrepreneurs.

#### 3) Mission

We are committed to groom Science & Technology driven Start-ups and Entrepreneurs by providing required eco-system, infrastructure, mentoring, financial and networking support.

#### 4) Policy Statement

To provide guidelines for creating an ecosystem for fostering innovation and entrepreneurial spirit among Students, Faculty and Staff, that promotes the establishment of Science & Technology Driven Start-ups which benefits the society, nation and beyond.

#### 5) Policy Objectives

- a) To encourage students to take up innovation led entrepreneurship as a preferred career choice and provide assistance for the successful launch of their start-ups.
- b) To promote faculty and staff led start-ups to convert ideas/ innovations into commercially viable product / process as per KEC IPR policy.

#### 6) Definitions

Accelerators

Start-up Accelerators design programs in batches and transform promising business ideas into reality under the guidance of mentors and several other available resources.

Angel Fund

An angel investor is a high network individual who invests his or her personal capital and shares experiences, contacts, and mentors (as possible and required by the start up in exchange for equity in that start up). Angels are usually accredited investors. Since their funds are involved, they are equally desirous in making the start-up successful.

Co-Creation

Co-creation is the act of creating together. When applied in business, it can be used as an economic strategy to develop new business models, products and services with customers, clients, trading partner or other parts of the same enterprise or venture.

Equity

An equity share, commonly referred to as ordinary share also, represents the form of fractional or part ownership in which a shareholder, as a fractional owner, undertakes the maximum entrepreneurial risk associated with a business venture. The holders of such shares are members of the company and have voting rights.

Entrepreneurial culture

A culture/ society that enhance the exhibition of the attributes, values, beliefs and behaviours that are related to entrepreneurs.

Entrepreneur

An individual who has an entrepreneurial mindset and wants to make his/her idea successful.

Entrepreneurship Education

Entrepreneurship education seeks to provide students with the knowledge, skills and mentoring to encourage entrepreneurial success in a variety of settings.

Fab Lab or Prototype lab A fab lab is a small-scale workshop offering digital fabrication. A fab lab is typically equipped with an array of flexible computer-controlled tools that cover several different length scales and various materials, with the aim to make "almost anything".

Hackathon

A hackathon is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers, project managers, and others, often including domain experts, collaborate intensively on software projects.

Incubation

Incubation is a unique and highly flexible combination of business development processes, infrastructure and people, designed to nurture and grow new or innovative and small businesses by supporting them during the early stages of development.

Intellectual property Rights (IPR) licensing

A licensing is a partnership between an intellectual property rights owner (licensor) and another who is authorized to use such rights (licensee) in exchange for an agreed payment (fee or royalty).

Pre-incubation

It typically represents the process which works with entrepreneurs who are in the very early stages of setting up their company. Usually, entrepreneurs come into such programs with just an idea of early prototype of their product or service.

Prototype

A prototype is an early sample, model, or release of a product built to test a concept or process.

Seed fund

Seed fund is a form of securities offering in which an investor invests capital in a start-up company in exchange for an equity stake in the company

Start-up

An entity that develops a business model based on either product innovation or service innovation and makes it scalable, replicable and self-reliant and as defined in Gazette Notification No. G.S.R. 127(E) dated February 19, 2019.

Faculty / Staff / Student Start-up

A Start-up that is initiated by Faculty (s) / Staff (s) / student(s) enrolled in any academic institution recognized/approved by AICTE.

Technology Business incubator (TBI) TBI is an entity, which helps technology-based Start-ups with all the necessary resources/support that are needed to evolve and grow into a mature business.

Technology commercialization

TC is the process of transitioning technologies from the research lab to the marketplace.

(TC)

Technology licensing

Agreement whereby an owner of a technological intellectual property (the licensor) allows another party (the licensee) to use, modify, and/or resell that property in exchange for a compensation.

Venture Capital

It is the most well-known form of start-up funding. Venture Capitalists (VCs) typically reserve additional capital for follow-up investment rounds. Another huge value that VCs provide is access to their networks for employees or clients for products or services of the start-up.

Technology Readiness Level (TRL)

- o TRL 0: Idea- Unproven Concept, No testing has been performed
- o **TRL 1**: **Basic Research-** Principles postulated and observed but no experimental proof of concept available
- TRL 2: Technology Formulation- Concept and application have been formulated
- TRL 3: Applied Research- First Laboratory test completed;
   Proof of Concept (PoC)

- TRL 4: Small Scale Prototype built in a laboratory environment ("Ugly" Prototype)
- o TRL 5: Large Scale Prototype tested in intended environment
- TRL 6: Prototype System tested in intended environment close to expected performance
- TRL 7: Demonstration System operating in operational environment at pre-commercial scale
- TRL 8: First of kind commercial system- Manufacturing issues resolved
- TRL 9: Full Commercial application- Technology available for consumers

#### 7) Strategies & Governance

- a) The Faculty Coordinator for National Innovation and Start-up Policy (NISP) 2019 of the college will hold the responsibility to promote innovation, entrepreneurship and start-ups in the Institute.
- b) The following facilities and teams will be collectively headed and coordinated by the NISP Faculty Coordinator towards implementation of KISP policy and promotion of start-ups:
  - i) Entrepreneurship and Management Development Cell (EMDC)
  - ii) Institution's Innovation Council KEC (IIC KEC)
  - iii) Intellectual Property Rights (IPR) Cell
  - iv) Technology Business Incubator @ KEC (TBI@KEC) A separate entity registered under Society Registration Act 1975
- c) These Pre-Incubation and Incubation facilities will be made accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution.
- d) A sustainable financial strategy has been defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.
  - i) Investment for these activities not to be less than 1% of the total annual budget of the Institute (Innovation Fund)
  - ii) The strategies for raising funds from diverse sources will be devised. Bringing in external funding through government (state and central) such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, etc. and non-government sources will be encouraged.
  - iii) KEC may also raise funding through sponsorships and donations. KEC will actively engage alumni network for promoting Innovation & Entrepreneurship (I&E) and tap private and corporate sector funds under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013
- e) KEC will 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.
- f) KEC will offer mentoring and other relevant services through Preincubation/Incubation units in-return for fees, equity sharing and (or) zero payment basis.

#### 8) Nurturing Innovation and Start-ups

#### a) EMDC

- i) Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development.
- ii) To promote entrepreneurship as a viable career and provide pre-incubation support to innovators / students to culminate in campus start-ups / new ventures.
- iii) EMDC to comprise of Overall Coordinator, Departmental Faculty Coordinators, Departmental Student Coordinators and student members.

#### b) IIC KEC

- i) To work in accordance with the Annual calendar activities prescribed by the MIC and promote innovation-led activities.
- ii) Organize periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators / Hackathons, idea competition, mini-challenges etc. with the involvement of industries.
- iii) IIC KEC to comprise of President, Vice President, Convenor, Faculty Coordinator, Innovation Ambassadors, Faculty and Student Coordinators for various activities, Departmental Faculty Coordinators and student members.
- **c) KEC** will 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:
  - i) Short-term/six-month/one-year part-time entrepreneurship training.
  - ii) Mentorship support on regular basis.
  - iii) 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.
  - iv) The way in which nurturing is done in KEC is shown in Figure 1. To support early stage innovators for prototyping, KEC has two funding schemes to support
    - KEC student seed money support upto Rs.10,000/- per idea (TRL 0-3)
    - KEC spark fund support upto Rs.50,000/- per idea (TRL 4-5)

A separate committee will receive the applications, shortlist worthy ideas which are scalable and monitor the progress of sanctioned ideas.

- v) In addition, to channelize and create innovation pipe line and pathways for innovators/ Entrepreneurs at Institute level, mentoring and networking will be done to help them to pitch in their ideas for various schemes like EDII Innovation Voucher Program (IVP) and TBI'S Nidhi Prayas schemes.
- vi) License institute IPR as discussed in Annexure A.
- vii) In order to attract and retain right people, institute should develop academic and non-academic incentives and reward mechanisms for all faculty/staff who actively contribute and support entrepreneurship agenda and activities.

- The reward system for the staff may include sabbatical leave, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.
- Evaluation of annual performance will be made by the Monitoring committee.
- viii) In return of the services and facilities, institute may take 2% to 9.5% equity/ stake in the start-up/ company, based on brand used, faculty contribution, support provided and use of institute's IPR
- ix) A start-up may choose to avail only the support, not seed funding, by the institute on rental basis.
- x) Institute will update/change/revise performance evaluation policies for faculty and staff based on innovation policy periodically.

#### d) TBI@KEC

- i) TBI to provide incubation facilities.
- ii) TBI to comprise of Chief Coordinator, Manager, Project Coordinators and Technical staffs.
- iii) All facilities in TBI are made available to students, faculty and staff 24x7.
- iv) Prayas Shala / Prototyping Lab will host regular training programs to promote innovation activities among students / faculty and facilitate them to convert their ideas into prototype.
- v) TBI may also link the start-ups to other seed-fund providers/ angel investors/ venture capitalists or itself may set up seed-fund once the incubation activities mature.
- vi) TBI will extend this start-up facility to alumni of the institute as well as outsiders.

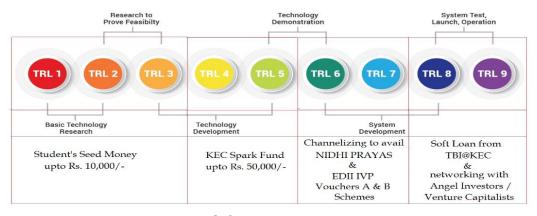


Fig.1 Framework for nurturing start-ups in KEC

#### 9) Norms for Students Start-ups

- a) Students will be allowed to set up a start-up (including social start-ups) and work part-time for these start-ups while studying.
- b) Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. Student Entrepreneurs can earn a maximum of 1 credit for innovative Proof of Concept (PoC) development (during 5<sup>th</sup> semester), maximum of 1 credit for prototypes or Minimum Viable Product (MVP) development (during 6<sup>th</sup> semester), maximum of 1 credit when the student teamed up and formulates a company with business plan in place (during 7<sup>th</sup> semester). TBI@KEC and KISP committee will evaluate and recommend the credits.

- c) Student inventors will also be allowed to opt for start-up in place of their mini project/ major project, seminars, summer trainings, with approval from Chief Coordinator (Academic), KISP committee and head of the institution. Students will be permitted to use the start-up idea / prototype development as their major project work for the Institute academic requirements. The area in which student wants to initiate a start-up may be interdisciplinary or multidisciplinary.
- d) KEC will exempt students affiliated with the TBI@KEC to avail maximum up to 20% attendance in any semester. Including this grace of 20% attendance, student should secure minimum attendance percentage as prescribed by KEC in each subject to appear for the end semester examination. Potential student entrepreneurs may be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the head of the institution.
- e) Students will be allowed for semester/year break or even more depending upon the decision of review committee constituted by the institute (after sixth semester), to work on their start-ups and re-join academics to complete the course.
- f) Students who are under incubation, but are pursuing some entrepreneurial ventures while studying to be allowed to use their address in the institute to register their company with due permission from the head of the institution.

#### 10) Norms for Faculty Start-ups

- a) Faculty and departments of the institute have to work in coherence and cross-departmental linkages to be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.
- b) Some of the relevant faculty members with prior exposure and interest should be deputed for training to promote innovation & Entrepreneurship.
- c) Faculty and staff will be allowed 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. KEC will consider allowing use of its resource to faculty/students/staff 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.
- d) Those technologies which originate from KEC should be only taken for faculty start-ups.
  - i) Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the start-up.
  - ii) KEC will develop 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 start-up activities.
  - iii) Faculty start-up may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- e) For staff and faculty, KEC can take no-more than 20% of shares that staff / faculty takes while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares.
- f) No restriction on shares that faculty / staff can take, as long as they do not spend more than 20% of office time on the start-up in 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 start-up, then they will go on sabbatical/ leave without pay/ earned leave.

- g) Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the start-up/company.
- h) A Company owned or co-owned by a faculty/ staff will normally be required to incubate at TBI@KEC. However, in exceptional cases, where the faculty / staff /wants to incubate outside the institute, a sufficient justification has to be provided for the approval of the Institute. Decision of the Institute is final and binding in this case.
- i) Faculty must not accept gifts from the start-up.
- j) Faculty must not involve research staff or other staff of institute in activities at the start-up and vice-versa.
- k) Human subject related research in start-up should get clearance from ethics committee of the institution.
- 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.
- m) Participation in start-up related activities will be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and will be considered while evaluating the annual performance of the faculty. Every faculty is encouraged to mentor at least one start-up.

#### 11) Entrepreneurial Pedagogy

- a) Faculty are encouraged to adopt a diversified approach 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.
- b) Students are encouraged to choose courses like Economics & Management, Entrepreneurship development, Innovation and Business Plan Development, Product design and development, Principles of Management & Industrial Psychology in order to develop their knowledge in entrepreneurial conduct.
- c) EMDC, IIC KEC and TBI@KEC will jointly organize idea &design competitions, demo days, networking events, boot camps, workshops, etc. to ensure enhancement of the student's thinking and responding ability. During these activities, the following are to be ensured:
  - i) Stakeholder engagement should be given prime importance in the entrepreneurial agenda.
  - ii) Open up the opportunities for staff, faculty and students to allow constant flow of ideas and knowledge.
- d) KEC will create MoUs with potential partners, resource organizations, micro, small and medium sized enterprises (MSMEs), social enterprises, universities, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs

- i) Single Point of Contact (SPOC) mechanism created in the institute for the students, faculty, collaborators, partners and other stakeholders will ensure access to information.
- ii) Faculty, staff and students of the institutes are encouraged to take part in formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc. to connect with their external environment.
- e) KEC will constitute annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute.
- f) Innovation champions will be nominated from within the students and faculty in each department.
- g) In the beginning of every academic session, KEC INNOVATION & ENTREPRENEURSHIP FORUM will conduct an induction program about the importance of Innovation & Entrepreneurship so that freshly inducted students / faculty are made aware about the entrepreneurial agenda of the institute and available support systems.
- h) Periodic pedagogical changes will be done to ensure that maximum number of student projects and innovations are based around real life challenges.
- i) Learning interventions developed for inculcating entrepreneurial culture will be constantly reviewed and updated.

#### 12) IPR Policy

As per Annexure A

#### 13) Monitoring and Assessment

- a) A monitoring and assessment committee for KISP will be nominated by the head of the institution which will involve the KISP coordinator, senior faculties and other stakeholders. This committee is responsible for the impact assessment and report generation regarding KISP activities.
- b) Impact assessment for measuring the success should be in terms of sustainable social, financial and technological impact in the market. The following Key Performance Indicators are used to measure the attainment levels as per the targets set for every three years:

#### **Key Performance Indicators**

#### A. Short-term activities (one-vear duration)

- 1. Numbers of students and faculty participated in awareness / training / programmes organized by KEC
- 2. Numbers of students and faculty participation in events/ programmes organized by the external agencies
- 3. Numbers of ideas generated and number of innovations created
- 4. Numbers of innovative projects recognized at national and international level
- 5. Number of ideas / innovations / start-ups supported through funds by KEC / TBI@KEC
- 6. Number of Courses on Innovation, IPR and Entrepreneurship

#### B. Mid-term activities (two-year duration)

- 1. Number of intellectual property filed/provisionally granted
- 2. Number of patents granted

- 3. Number of technology transfers/commercialization's happened
- 4. Grant / fund generated / received by institute to support Innovation & start-up
- 5. Angel fund/venture fund / investment mobilized to support Innovation & start-up

#### C. Long-term program (three-year duration)

- 1. Number of successful innovations converted in to start-ups
- 2. Number of advance lab infrastructures, pre-incubation and incubation facilities created on-campus
- 3. Innovative solutions developed in-house and level of impact created so far after being adopted at institute or society

#### 14) Review

This policy will be reviewed once in 3 years, as per the changes in MoE National Innovation and start-up policy for students and faculty, and Tamil Nadu Government start-up policy and Anna University Start-up policy for faculty, students and staff.

#### References

- a) National INNOVATION and STARTUP Policy 2019 for Students and Faculty MHRD, GOI. www.mhrd.gov.in / www.mic.gov.in
- b) Tamil Nadu Startup and Innovation Policy 2018-23, Entrepreneurship Development and Innovation Institute, Chennai. www.editn.in
- c) Startup Policy 2016, AICTE New Delhi. www.aicte-india.org
- d) Anna University Startup Policy Guidelines for Faculty, Staffs and Students 2020, Centre for Entrepreneurship Development, Anna University, Chennai, Tamil Nadu
- e) Atal Ranking of Institutions on Innovation Achievements (ARIIA) ranking framework/ <a href="https://www.ariia.gov.in/">https://www.ariia.gov.in/</a>

#### Annexure - A

### KONGU ENGINEERING COLLEGE IPR POLICY

#### Part A: Preamble

Kongu Engineering College, Erode (hereafter referred to as KEC or Institute) is an autonomous engineering college that is focused on the core areas of Engineering and Technology such as Civil, Mechanical, Electrical, Chemical, Electronics & Communication and Computer Science Engineering and their applications in other domains. A synergistic relationship has come to exist at the Institute between basic and applied research. Faculty carries out a number of academic industrial research projects, and a few companies have been incubated based on the research done at the Institute.

The mission of KEC is to contribute to transforming industry and society, by delivering research-led education, promoting innovation, and fostering human values. KEC acknowledges the role of numerous stakeholders in the creation of its Intellectual Property (IP), namely the government of Tamil Nadu & INDIA, faculty, staff, research scholars, postgraduate and graduate students, guest researchers, sponsors, technology transfer units and the national IP offices.

KEC recognizes the importance of innovations and assists in translating them into products, processes and services for both commercial benefits and achieves the widest public good. The features of this IP Policy aim to meet such needs and enable KEC to achieve its mission. KEC's IP policy is designed to identify, protect and leverage the bouquet of IPs that is generated from research, patents, copyrights, design rights and trademarks amongst others, that serve the purpose of knowledge diffusion and commercialization.

#### Part B: The KEC Intellectual Property (IP) Policy

This policy is applicable to all the KEC Personnel, students, faculty, staff, researchers and others related. KEC personnel should be aware of the various Intellectual Properties that get created in the course of their research and teaching that has potential for increased productiveness or break through development/inventions and creative activities as a means of effective communication and dissemination.

Further, they should recognize that protecting inventions and creative works through IPRs entitles them and KEC to commercial benefits, and publication without evaluation of the possibility of IPR protection (particularly patent protection), could jeopardize the possibility of obtaining IPRs and the monetary benefits accrued through licensing of IPR.

Evaluation for protection of IPRs will be conducted by an IPR Committee, consisting of at least 3 faculty members of the institute constituted by the head of the institution at time to time. Evaluation may be based on the technical and commercial merit, market size and potential, interest from industry partners, as well as novelty and inventiveness based on a patentability search conducted by an independent party, such as a patent agent.

After taking due steps for evaluating the possibility of IPR protection and either after obtaining IPR protection or clearance to proceed without it, they are entitled to decide that the results of any research undertaken by them in the course of their employment / engagement with the Institute shall be disseminated through publications or disclosed as they wish in accordance with normal academic practice.

However, the concerned parties under situations where a particular invention / development come under both the sub policies, the IP Inventions Policy will supersede. The Institutes ability to grant waivers to the creators from non-application of the IP policy is delegated to the head of the Institute.

**Ownership**: The IP policy has to be accepted and signed by all KEC Personnel. KEC owns all the Intellectual Property (IP) that is produced by all KEC personnel. KEC reserves the right to apply for IP protection in India, US, and specific countries for suitable protection of the IP generated by all KEC personnel.

**Funding of IPR costs**: In cases where the proposal for IP protection has been approved by the IPR Committee, the institute will bear all the costs for IP protection, including Government fees, administrative costs, and attorney fees. In cases where the institute has chosen not to pursue IP protection themselves, the inventors may proceed to patent individually by funding the costs themselves, however, they would still have to name the institute as a joint applicant and execute an IP assignment agreement that will stipulate the level of ownership of the institute on a case to case basis.

**Disclosure**: KEC encourages timely disclosure of all potential IP / Inventions / Innovations generated (conceived or reduced to practice in whole or in part) by members of the faculty or staff (including research staff, doctoral students, students and visiting scholars) of the Institute in the course of their Institute related activities. KEC identifies the relevant statutory and other mechanisms not limited to Patent, Copyright, Trademark, Design Rights, Integrated Circuits, etc., towards registration. Disclosure enables prompt action by KEC to appropriately protect and disseminate the research activities occurring at KEC.

**IP Licensing and Agreements:** KEC understands the legitimate commercial needs and the security required in the form of IP especially for breakthrough technologies. The licensing will be done by KEC which handles the evaluation, marketing, negotiations and licensing of the entire institute owned IP (Refer <u>Annexure 2</u> for information on Agreements). In certain cases, KEC might use the services of a third party for licensing the technology developed, under mutually agreed terms and conditions with such party, within the framework of the KEC IP Policy.

**Technology License / Transfer Options**: KEC recognizes the inventor(s) / creator(s) as a key component for successful commercialization process. KEC shall use the following options to utilize the IP generated. Licensing may be made either directly to third parties or through incubation or through licensing agents. It is to be noted that the IP generated would preferably be licensed and not assigned. KEC reserves its march-in rights in the case of assigned IP. Any licensing done by KEC will be on an "as is where is" basis.

**Technology licensing:** This would be as per the current policy and revenues earned will be shared with the inventor(s) and KEC in a **70:30** ratio. The 70% to the KEC inventor(s) will be distributed as per the separate inventor's agreement entered into between the inventors. In the case of multiple KEC inventors, the default inventors, royalty share is done on an equal basis in the absence of an alternate revenue sharing agreement. Details of royalty sharing are given in <u>Annexure 1.</u> Salient features of the licensing includes the following:

- Preferred mode is Non Exclusive licensing. Exceptions to this will be based on the funding of the project and any other relevant requirements.
- Exclusive license will be subjected to periodic review of license not limiting to usage status, application and / or region specific, royalty generation for continuing such license agreement.

**Renewal of IP:** KEC will renew IP for period of five years in all cases where patent is taken by the Institute. If the patent has been commercially exploited, then renewal will be based on the mutual agreements between the parties. If the patent has not been commercially exploited within the first five years, the creator(s) shall pay the subsequent installments of renewal fees. If the creator(s) does not show interest in such renewals, the Institute may withdraw application for Patent protection at its discretion.

Infringements, Damages, Liability and Indemnity Insurance: KEC shall, in any contract between the licensee and KEC, seek indemnity from any legal proceedings including without limitation manufacturing defects, production problems, design guarantee, upgrades, debug obligations and the content created. The policy also supports the need to indemnify KEC personnel built into the license agreements for sponsored research and consultative work. KEC shall retain the right to engage in any litigation concerning its IP and license infringements.

**Jurisdiction:** All agreements to be signed by KEC will have the jurisdiction of the court in Erode and shall be governed by appropriate laws of India.

#### Part C: The Inventions related IP Policy

**Relevant inventions and Ownership**: Under this policy, title to such inventions including software where applicable, designs and integrated circuit layouts and patentable subject matter that are created in KEC with the use of significant KEC resources are assigned to and owned by KEC, regardless of the source of funding, if any. All inventors / creators are required to ensure that an inventor's agreement is filled at the time of submission of an invention disclosure to KEC. This agreement would among other aspects, include ratio of sharing any revenue received from commercialization of the said technology amongst the KEC inventors / creators. Absence of such an agreement will be considered as equal sharing amongst the KEC inventors / creators.

**External Funded / Collaborative Development**: For the relevant invention(s) including software, designs and integrated circuit layouts, produced during the course of a sponsored and / or collaborative activity (internal / external), specific provisions related to IP made in contracts governing the collaborative activities are to be referred along with this policy.

- KEC is the sole owner of the IP generated from the funding provided.
- The IP generated is owned jointly with the collaborative partner having the first rights of refusal towards commercialization.
- In the case of a collaborative / multiple consortium based IP generation, the IP terms of such agreement is to be considered along with the policy. In the absence of any specific IP agreement in such cases, KEC follows its IP policy.
- KEC can assign the IP generated, to the funding agency based on the nature of the technology, funding and specific applications.

Under all circumstances, KEC always reserves the right to use the IP generated for its academic and research purposes.

**Design Rights**: The design right for a created component (physical or graphic, any dimension) follows the IP inventions policy as indicated in this section.

**Trade Mark(s)** / **Service Mark(s)**: The logo of KEC would be the trademark of the Institute. It is to be noted that the logo of KEC cannot be used on any of the private communication of any of the KEC personnel. Official activities that are part of the officially recognized bodies of KEC, web pages hosted on the KEC domain, project websites and reports in which KEC is a project member, student thesis are allowed by default to have the KEC logo. The usage of the KEC logo, KEC name in full or partial for all other activities has to get the due approval of KEC.

#### Part D: The Expressions related IP Policy

**Applicability & Requirements**: This policy is applicable to all KEC personnel as defined in the overall IP policy and their range of activities during their engagement with KEC such as, but not limited to, teaching, research, distance education, continuing education, consultancy, sponsored work, collaborative activity (internal and external), Institute designated or sponsored work (academic, cultural) and the range of creations includes copyrightable works and related necessary confidential information.

**Relevant creations and ownership**: Title to such creations including literary works, software, music, cinematography, sound and other rights covered under the Copyright Act of India, 1956 and amendments thereof, where applicable, that are created in KEC with the use of significant KEC resources under this policy are assigned to and owned by KEC.

KEC is the owner to the administrative and other documents created as part of designated work. Examples include course outline documents, question papers, answer sheets, grade ranking sheet, and other such creations. All the creations are required to ensure that the inventor's agreement is filled at the time of submission to KEC. This agreement would among other aspects, include ratio of sharing of any revenue received from commercialization of the said creation. Absence of such an agreement will be considered as equal sharing amongst the creators.

#### **Teaching / Course material**

- KEC acknowledges that the author is the owner of teaching materials created for teaching purposes during author's engagement with at KEC.
- As most of the course content is created cumulatively and in order to enable a wider usage and distribution of the teaching materials created, KEC by default gets a license to the copyright and all other rights of the content created by the creator for fair dealing under academic and research context.
- KEC is not liable for any of the copyright violations by its personnel for the content created. The author is expected to carry out due diligence in the course of content creation.

**Books, articles and related literary works**: KEC encourages its personnel to spread knowledge and books, technical articles, etc. are ways in which this vision can be achieved. In this respect, KEC does not claim ownership of copyright on books authored by KEC personnel. In cases where the books are related to the multiple research groups / faculty teaching the course in the Institute, it is expected that the interested author shall

get the relevant no objection certificate from co-authors / other contributors. Students who wish to publish their thesis, prior to submission for an academic degree, as a book or any other type of publication are required to seek a prior written approval from KEC.

## Part E: Annexure 1. Revenue Sharing

Net earnings from the commercialization of IP owned by KEC would be shared as follows:

- The inventor (s) / creator(s) share would be declared annually (or as revenues are received) and disbursement will be made to the inventor (s) / creator(s), their legal heir, whether or not the inventor (s) / creators are associated with KEC at the time of disbursement.
- The revenue sharing ratio between the inventor team and KEC will be a fixed 70:30 in favour of the inventor team. IP protection costs will be part of the license revenue sharing agreement between KEC and inventor(s).
- Where applicable and when KEC reassigns the rights of the IP to its creator(s) for any country, the cost and revenue sharing will be governed by a separate agreement between KEC and the inventor / creator(s).
- The inventors may at any time by mutual consent revise the distribution of IP earnings agreement.

#### **Annexure 2. Contracts and Agreements**

All agreements including but not limited to the following categories, for activities undertaken by any KEC personnel need to be approved by the head of the institution.

- Confidentiality Agreement / Non-disclosure Agreement
- Consultation Agreement
- Evaluation Agreement
- Research and Development Agreement (R&DA / MOU)
- License Agreement
- Technology Transfer Agreement
- Alternative Dispute Resolution Agreement
- Collaborative MOU with University / Organization

The head of the institution acts as the final signing authority in all categories of agreements listed above. The head facilitates the process of framing such agreements by way of providing templates and services.

#### **Kongu Engineering College**

IP Filing Procedure Flow for KEC Personnel

[IP Policy is applicable to all the KEC Personnel - students, faculty, staff, researchers and others related] In the case of Submission of Invention Disclosure Form (IDF) by Inventor(s) patentable IP, it is (Download from IPR Page of KEC Website) essential that patent protection is filed before publication or disclosure in any Prior Art Search Report other form in (Free / Paid Search by IPR Cell and reply by Inventor(s) to search report) public domain. If it is Novel, Non Obivous and has Industrial application Inventor(s) are encouraged to file No PP as soon as Yes possible in order to protect their No further process Submitted to IPR rights to IP. No Committee and if Committee approves Still Yes If Inventor(s) wants to Drafting and Preparation of Forms & Documents proceed to patent by related to Patent by IPR Cell funding the costs themselves, they may do so, but they have name KEC as a joint applicant\* Provisional Patent (PP)Filing Filing of Complete Application for Patent/ Trademark/ Copyright/ Design by IPR Cell If the patent has not been KEC will renew IP for period of five commercially exploited within the years. If the patent has been first five years, the creator(s) shall commercially exploited, then renewal pay the subsequent installments will be based on the mutual of renewal fees. agreements between the parties. Revenue sharing ratio between the inventor(s) and KEC will be 70:30