

K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM.

(An Autonomous Institution, Affiliated to Anna University in Chennai)

APPROVAL REQUEST FORM

Format No.: F133
Issue No. : 04
Revision No : 04
Date : 22.06.2022

Ref : KLNCE/Approval/

Date: 01.08.2022

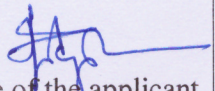
From Dr.D.Pradeepkannan , IQAC coordinator& MR-ISO, KLNCE.	To The Principal K.L.N. College of Engineering Pottapalayam
---	---

Sir,

Sub: Requesting approval to implement National Innovation Startup Policy at our campus reg.

This is to bring to your kind information that as per guidelines of AICTE, MHRD's, MoE's all HEI's are supposed to National Innovation Startup Policy. In this regard we have formulated 14 expert member committee to narrate, the policy frame work of implementing NISP at our college. I here with enclosed list of expert committee members to formulate the policy document for NISP implementation for your kind perusal. I kindly request you to approve the above proposal and to suggest valuable inputs towards implementing the same

Thanking you,


Signature of the applicant

HODs Remarks :As per
NAAC/NBA criteria

C1	C2	C3	C4	C5	C6	C7	-
C1	C2	C3	C4	C5	C6	C7	C8

Recommended / Not Recommended

MR/ISO HODs Signature with Date

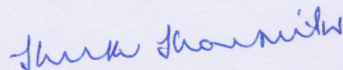
Principal Remarks

Submitted to president for kind approval please

Approved / Submitted for Approval / Information

Principal Signature with Date

Management Approval



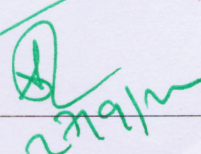
PRESIDENT

SECRETARY

Follow up Action

HOD / OFFICE MANAGER

Signature of Principal

Dr DPK

27/9/22

K.L.N.C.E

Innovation & startup Policy

Document



K.L.N.College of Engineering (An autonomous Institution)

Pottapalayam, Sivagangai District.630612

Contact us

Students those have any innovative idea and want to establish a successful startup are advised to contact the following faculty of their branch. The nominated faculties will help them to show direction to avail pre-incubation and incubation facility at KLNCE. Students must not directly approach KLNCE -TBI

Sl. No.	Branch	Faculty
1	Mechanical	Dr.D.Satheesh pandian satheesh.klnce@gmail.com ,9566401137
2	Electrical &Electronics	Dr.S.Parthasarathy sarathy_sps@yahoo.co.in , 9629725901
3	ECE	Dr.N.Janakiraman janakiramanforu@yahoo.com , 9080738698
4	CSE	Dr.T.Miruna Joe Amali fausta_miruna@rediffmail.com , 9894528156
5	IT	Dr.P.Ganeshkumar ganesh_me@yahoo.com , 9842961436
6	AUTOMOBILE	Dr.R.M.Satheeskumar rm_satkumar@yahoo.co.in ,9443855343
7	EIE	Dr.S.Nagammai snagammai731@gmail.com ,8610924136
8	AIDS	Dr.S.Sureshraj sujaisuresh@gmail.com , 9894546647
9	MCA	Dr.M.R.Illango mrilango@yahoo.co.in , 9944248415
10	MBA	Dr.T.Jothimurugan jothimurugan.t@gmail.com , 6382825275

Contact KLNCE-TBI:
Dr.D.Pradeepkannan,
Manager TBI
Ph. No. +91 9894770741|
Email: pradeepkannand@gmail.com

Contents

Sl. No.	Title	Page
	Preamble	1
	Mission	1
	Vision	2
1.	Overall Procedure for Students and faculty governance	3
2.	Eligibility	4
3.	Admission Procedure	4
4.	Nurturing Innovation and startups	5
5.	IPR evaluation	12
6.	Organization capacity, HR & Incentives	15
7.	Creating innovation pipeline & pathways	16
8.	Norms for faculty startup	17
9.	Collaboration, Co-creation, Business relation	18
10.	Periodic Assessment	18
11.	Conflict of Interest	19
12.	Agreements	19
13.	Disclaimer	19
14.	Others	20

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 inculcation 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)’.

In context to the NISP & AICTE Guidelines A thirteen membered committee was constituted in KLNCE to formulate detailed guidelines for various aspects related to innovation, Startup and entrepreneurship management. This committee deliberated on various facets for nurturing the innovation and Startup culture in KLNCE, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, KLNCE Innovation and Startup Policy were prepared for students and faculties of KLNCE.

VISION

To identify stake holders as Innovators & to promote and support them to evolve self- sustaining business models. It works to cultivate the innovation ecosystem within the Campus to harness the entrepreneurial potential of the young minds.

To impart a supportive and vibrant environment to stimulate the innovation attitude of the student entrepreneurs, startups / SMEs and enable them to design technology based products and services leading to job creation for strengthening the regional and national economy.

MISSION

To ensure that 'Innovation and Startup' culture is the primary fulcrum of our higher education system. To convert the present demographic dividend into high quality technical human resource capable of doing cutting edge research and innovation and deep-tech entrepreneurship.

The 'National Student and Faculty Startup policy 2019' is a guiding framework to envision an educational system oriented towards startups and entrepreneurship opportunities for student and faculties. The guidelines provide ways to students and faculties of KLNCE for developing entrepreneurial agenda, managing Intellectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises established by faculty and students.

KLNCE actively support their faculty, staff and students to participate in innovation and entrepreneurship (I&E) related activities, thus encouraging students and faculty to consider startups and entrepreneurship as a career option.

1. Overall Procedure for Students and faculty governance

- a. A student/group of students has to find out a problem statement. Problem statement should be realistic one and it should be associated directly with societal issue. The problem statement must be adhered to any of the area given in [annexure 1](#).
- b. At common Venue an IDEA Box are to be kept, where any student can post their ideas to find out a potential solution that can solve the predefined problem. The ideas must be in TRL 3 level. ([Refer annexure 2](#)).
- c. By default these ideas will be considered to be taken part in National Innovation Contest organized by MHRD Innovation Cell, GOI. If anyone want to opt out from the contest may opt out for the same.
- d. Each group will be assigned to a faculty member for mentorship. Each group has to prepare a prototype or design under the mentorship of the faculty. The prototype must adhere to minimum TRL 5 ([Refer annexure 2](#)). University will provide all the lab facility to the groups for preparing prototype.
- e. The prototype will be evaluated by experts and basing on potency, market value etc. Will be decided whether it is eligible for a startup or not.
- f. Once the idea/prototype is eligible for startup as decided by experts, this should be registered as a student startup under a form of business entity like Partnership Firm, LLP, Private Limited Company and One Person Company. Start-ups should be able to provide a copy of the registration certificate/letter to his/ her academic institution.
- g. In next step, the student startup should be admitted to KLNCE-TBI for incubating startup.
- h. KLNCE-TBI will help the startup in every manner to let it be the successful startup in market.
- i. Faculties needn't to undergo ideation stage and take part in competition as stated above. They may directly go for registration of their idea/prototype and follow steps 5-7.
- j. A General circular to be put up to all the state holders 2 times an academic year to invite the innovative ideas from all the students of the campus.

2. Eligibility

The admission to KLNCE Innovation and startup scheme can be in any one of the following categories:

CATEGORY I:

Faculty, academic staff and students of KLNCE having the intent of trying out a novel technological idea for up-gradation to a commercial proposition, scaling up a laboratory proven concept, and setting up a technology business enterprise qualify for a pre-incubation project. This category people must have an idea and they will undergo pre-incubation stage. It is expected that the innovator would like to commercialize the technology and would graduate to Category II within 1 year from beginning the pre-incubation.

CATEGORY II:

Technology based Start-up Company promoted by a first generation entrepreneur desirous of R&D partnership with the institute or a company, with the objective of commercializing a novel technological idea, scaling up a laboratory proven concept and setting up a technology business enterprise. Following are the eligibility criteria for admission to KLNCE Innovation and startup scheme.

- ✓ It is open to the faculty, staff, researchers, alumni and students of KLNCE having Science, Engineering & Technology background preferably
- ✓ KLNCE Innovation and startup policy would also welcome outside promoters.
- ✓ Majority of Founders/ core team should be Indian citizens.
- ✓ A company has to be registered with RoC (Registrar of Companies) to be incubated in KLNCE-TBI (except Category I). A company not registered with RoC (Proprietorship or Partnership) would have to do so within 6 months of admission to KLNCE-TBI or before the disbursal of seed fund, whichever is earlier. A company can exist as a private limited company, proprietorship or partnership before it is admitted.
- ✓ KLNCE Innovation and startup scheme would admit only technology based companies in any engineering discipline. Acceptable business would involve innovative, technology-based product, idea or service.

3. Admission Procedure

Anyone wants to avail KLNCE innovation and startup scheme must register through website www.klnceincubator.in. After registering Category I has to give details of their ideas and category II has to put all the details about ideas, registration certificates etc. In the website itself. The confirmation of admission will be notified in the website.

4. Nurturing Innovation and startups

KLNCE Innovation and startup scheme establish processes and mechanisms for easy creation and nurturing of Startups/enterprises by students (UG, PG, Ph.D.), staff (including temporary or project staff), faculty, alumni and potential start up applicants even from outside the institutions. While defining their processes, KLNCE Innovation and startup scheme will ensure to achieve following:

Incubation support:

Offer access to pre-incubation & Incubation facility to start ups by students, staff and faculty for mutually acceptable time-frame.

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.

Will allow setting up a start up (including social start ups) and working part-time for the start ups while studying / working:

KLNCE will allow its students /staff to work on their innovative projects and setting up start ups (including Social Start ups) or work as intern / part-time in startups (incubated in any recognized HEIs/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models. Student inventors may also be allowed to opt for start up in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a start up may be interdisciplinary or multidisciplinary. The salient features of incubation process is given in the following.

- a. 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.
- b. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying would be allowed to use their address in the institute to register their company with due permission from the institution.
- c. Students entrepreneurs would be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the institute.

KLNCE Innovation & Startup

- d. KLNCE allow their students to take a semester/year break (or even more depending upon the decision of review committee constituted by the institute) to work on their start ups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. Institute would set up a review committee for review of start up by students, and based on the progress made, it may consider giving appropriate credits for academics.
- e. faculty and staffs are allowed 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. KLNCE allows the 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.
- f. KLNCE will provide a full time MCA/ MBA program where one can get degree while incubating and nurturing a startup company. AICTE has already issued guidelines for a similar program.
- g. Institute will facilitate the startup 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:
 - h. Short-term/ six-month/ one-year part-time entrepreneurship training.
 - i. Mentorship support on regular basis.
 - j. 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.
- k. Institute may also link the startups to other seed-fund providers/ angel funds/ venture funds or itself may set up seed-fund once the incubation activities mature.
- l. License institute IPR as discussed in section 5 below.
- m. In return of the services and facilities, institute may take 2% to 9.5% equity/ stake in the startup/company, based on brand used, faculty contribution, support provided and use of institute's IPR (a limit of 9.5% is suggested so that institute has no legal liability arising out of startup. The institute should normally take much lower 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.

KLNCE Innovation & Startup

- n. For staff and faculty, institute 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, listed above.
- o. 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 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 will go on sabbatical/ leave without pay/ earned leave.
- p. In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of services offered by the institute/incubator. In that case, during the cooling period, institute cannot force startup to issue equity on the first day of granting incubation support.
- q. The institute would also provide services based on 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.
- r. Institute would extend this startup facility to alumni of the institute as well as outsiders.
- s. Participation in entrepreneurship related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.
- t. 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.
- u. Institutions might also need to update/change/revise performance evaluation policies for faculty and staff as stated above.
- v. Institute would ensure that at no stage any liability accrue to it because of any activity of any startup.
- w. Where a student/ faculty startup policy is pre-existing in an institute, then the institute may consider modifying their policy in spirit of these guidelines.

Pre incubation facility

It is very important to primarily identify which ideas can successfully go through the incubation process. This phase of pre-incubation can prepare student entrepreneurs for the incubation phase by providing them prerequisite skills and knowledge that will help them validate and assess their ideas as well as define their business models in detail. In the pre-incubation planning phase, the following activities are to be performed:

- a. **Identification of problems:** Students will visit various sectors like villages, hospitals, urban areas etc. and will visualize practical problems that are associated with those sectors. Various other field visits may occur for identification of real life problems.
- b. **Idea generation:** Depending upon the problems students have to come out with a potential solution for a specific problem. That idea should be novel, innovative and can be able to solve a real life problem effectively.
- c. **Collection of Ideas:** Students have to submit the ideas in proper format to the authority in online mode. The ideas may be considered to take part in smart India Hackathon and National Innovation Contest I.e. conducted by MoE.
- d. **Screening of Ideas:** Selected applicant will be invited to give presentation to evaluation committee based on their potency of idea they will be shortlisted.
- e. **Supporting, mentoring and strengthening of ideas:** The shortlisted ideas will go through series of workshops, webinars, lecture series etc. In order to improve their ideas to solve problems and know various aspects of startups. Each idea may be under mentorship of a mentor from KIIT DU. Under his/her provision ideas may go to incubation stage.
- f. **Business plan preparation:** Workshop will be conducted on 'business plan development' for awareness of students by inviting renowned expert from industry or academia. Selected ideas are required to present their business plan with market analysis.
- g. **Prototype development:** Finally students have to prepare a prototype for their ideas. The prototype may be prepared under direct supervision of mentor assigned.
- h. **Basic Idea Testing:** Student idea needs to be tested before applying for incubation. Academic Institutions must ensure pre-incubation qualification of a student's business idea.
- i. **Promoters Details:** Relevant details of promoters are required to be validated before allowing start-ups to enter the incubation process.
- j. **Registration of Start-up:** The Student Start-up needs to be registered under a form of business entity like Partnership Firm, LLP, Private Limited Company and One

KLNCE Innovation & Startup

Person Company. Start-ups should be able to provide a copy of the registration certificate/letter to his/ her academic institution.

- k. ***Admission to Incubator/ Co-working Space:*** Admission into a start-up incubation/co-working space programme of any TBI (approved by GoI) is permissible.

This facility shall be offered to students who are currently enrolled in any degree program at KIIT. This is a support system to help students ‘test’ their ideas. They shall be offered

- ✓ Seed loan on availability
- ✓ The Institute shall offer seed-loan on generous terms to promote start-ups Space in the incubation centre
- ✓ Use of Laboratory and Equipment
- ✓ Deferment of dues: In case the student is offered a pre-incubation and they are using facilities or availing seed loan, then they shall be permitted to defer such dues of the institute or incubation centre, based on a declaration to repay at a later stage.

Incubation facility

After the process of pre-incubation, students have to be admitted in KLNCE-TBI for availing incubation facility. The objective of the incubation facility is to promote the received students ideas into successful startups. For this noble cause a number of facilities and services are provided by KLNCE-TBI to incubatees so that the innovative ideas can be converted to successful startups. The facilities and services provided to incubatees are illustrated below by the help of which KLNCE-TBI will try it's best to turn students and faculties into successful entrepreneurs.

Infrastructure and service provided to incubatees

Infrastructural service

Upon admission to KLNCE-TBI, the following infrastructural facilities will be offered to the incubatee companies on an individual basis, apart from a set of shared/ common infrastructure mentioned hereinafter:

- ✓ Office space: Company specific
- ✓ Internet connection
- ✓ Common use printer and reception service
- ✓ Common Lab services

Besides, KLNCE-TBI will facilitate the incubatee companies to access the laboratories and other resources of KLNCE-TBI for their products development purposes. Access to departmental resources is possible through the request made to officials of KLNCE-TBI and

KLNCE Innovation & Startup

usage of such resources should be with permission of the concerned department to avoid conflict with departmental activities and objectives.

Further usage of such resources shall be on commercial basis and in conformity with the policies of KLNCE-TBI for consultancy/sponsored projects prevailing from time to time. The consideration payable to the KLNCE-TBI for usage of departmental resources will generally be in the form of cash (payable by cheque or demand draft), though KLNCE-TBI may accept the consideration in the form of equity. However, decision as to whether to accept such consideration in form of equity will be solely rest with KLNCE-TBI. Augmentation of resources in the department on account of such usage shall be the properties of the concerned department.

Irrespective of requirements of departmental facilities for usage, all incubatee companies will primarily locate into KLNCE-TBI. Apart from company specific infrastructure as stated above, KLNCE-TBI will provide certain facilities be shared by all incubatee companies which would include:

- ✓ File Server
- ✓ Laser Printer
- ✓ Photocopier
- ✓ Scanner
- ✓ Teleconferencing facilities
- ✓ Meeting/Conference room with projection equipment
- ✓ Pantry facilities
- ✓ Common secretarial pool/staff (depending on availability of such staff with KLNCE-TBI)

Apart from physical infrastructure as stated above, KLNCE-TBI intends to create certain other supports and services which would include:

- a. Pool of mentors, experts in technology, legal, financial and related matters, with or without consideration,
- b. Organising events to help companies in networking and showcasing their technologies
- c. Meetings with visitors of KLNCE-TBI (such as successful entrepreneurs, VCs, industry professionals). Incubatee companies can avail of the above support and services when offered by KLNCE-TBI. In addition, KLNCE-TBI will also build up information and knowledge pool to be useful generically for start-up companies. KLNCE-TBI will coordinate with its allied partners and training providers to train the start-up companies.
 - ✓ Training in business management: structured short courses
 - ✓ Training in business communication: written as well as verbal

KLNCE Innovation & Startup

- ✓ Accounting tools/ software
- ✓ Common secretarial pool/staff
- ✓ Experiences of successful companies – a knowledge/ information site would be created where management concepts, intellectual property evaluations, deal making, negotiations, networking, VC funding, company registrations etc. are provided
- ✓ Networking events/ showcases
- ✓ Tie-ups with chartered accountants and other professional organizations as required

Mentoring and advisory services

Strategic Checkups: The KLNCE-TBI Head will meet with company CEOs at least once per month for strategy reviews and discussion of operational issues.

- ✓ Each incoming company is offered a "Mentor." This is a person with extensive business experience or specific industry insight who will advise the company on a limited basis regarding matters of particular importance to the company.
- ✓ A faculty advisor is also associated with the incubatee as a mentor on technology issues.
- ✓ Specialized mentors will also be available to the companies to assist with particular strategic areas or to provide project-oriented consultation.
- ✓ All companies would be provided access to consulting by professionals.

Market research and counselling

KLNCE partner organizations provide consulting and market research services to incubatees. Services may include:

- ✓ Market research and opportunity identification
- ✓ Valuation of Businesses
- ✓ Competitor Research
- ✓ Market analysis and sizing
- ✓ Customer Search
- ✓ Electronic Research
- ✓ Marketing plan formulation
- ✓ Consulting on strategies at various stages: Launch, Growth and Harvest of businesses.

Any specialized consultancy work for a specific company has to be paid for by the incubatee directly. However, KLNCE may provide certain services to all incubatees, which it may choose to bear the complete cost. However, it would be sole prerogative of KLNCE to choose who would pay for these specialized services.

5. IPR evaluation

Any IPR related activity will be dealt as per IPR policy of KLNCE deemed to be University. This document explains briefly the policy and the procedures for the Intellectual Property filing, evaluation of Intellectual Property, ownership, royalty sharing and is applicable to all the full and part time employees full-as well as students. The document provides some salient features of IPR policy of KLNCE and may be used as guidelines for IPR evaluation.

Evaluation of IP

Evaluation of Intellectual Property will be done by the IPSC (Intellectual Property sub Committee). IPSC will assist various departments/schools of the University in all matters relating to intellectual property. Among other responsibilities, the IPSC will help various departments to secure protection for intellectual property where appropriate and will review infringements, maintain central databases and files of patent applications, issued patents, trademarks and copyrights, licenses and agreements, coordinate with various departments in negotiating and preparing license and other agreements and review and approve as to form all agreements relating to intellectual property.

IPSC shall be a standing committee with a tenure of five years. The Vice-Chancellor shall be the Chairman of this committee. Three member shall be nominated by the Vice-Chancellor from members of the faculty in order to provide broad technical expertise across various disciplines. Head, CIR will also be a member of this committee. The committee will invite subject experts as and when required. Evaluation of IP means

- ✓ Determining the ownership of IP and who made the intellectual contribution.
- ✓ Determining whether an IP is innovative and qualifies the eligibility so given under respective statute in India or foreign countries.
- ✓ Determining whether the IP has a reasonable chance for commercialization.

Royalty Income Sharing

For transfer/ licensing of/ permission to use IP owned by KLNCE in favour of the incubatee companies, the costs of securing the property, licensing, including the costs to operate and support a technology transfer office and IPSC, and the costs of obtaining a patent or other protection for the property on behalf of the University shall first be recaptured from any royalties or other license payments received by KLNCE and the remainder of such income (including, but not limited to, license fees, prepaid royalties, minimum royalties, milestone payments and sublicense payments) shall be divided as per university rule.

Cumulative Net Income	Inventor	Department of the inventor	KLNCE
Rs. 1 to Rs. 1,00,000	50%	20%	30%
Rs. 1,00,001 to Rs. 5,00,000	50%	20%	30%
Above Rs. 5,00,000	40%	20%	40%

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 deem fit.
- c. 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 adviser 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.
- d. 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 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 a say in patenting.
- e. 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 will have no say, including heads of department, heads of institutes, deans or registrars.
- f. Interdisciplinary research and publication on startup and entrepreneurship would be promoted by the institution.

6. Organization capacity, HR & Incentives

- a. KLNCE would recruit staffs that have a strong innovation and entrepreneurial/ industrial experience, behaviour and attitude. This will help in fostering the I&E culture.
 - ✓ Some of the relevant faculty members with prior exposure and interest would be deputed for training to promote I&E.
 - ✓ To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff would be developed with constant upskilling.
- b. Faculty and departments of the KLNCE have to work in coherence and cross-departmental linkages should be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.
- c. Periodically some external subject matter experts such as guest lecturers or alumni will be engaged for strategic advice and bringing in skills which are not available internally.
- d. Faculty and staff are to be encouraged to do courses on innovation, entrepreneurship management and venture development. In order to attract and retain right people, institute would develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
 - ✓ The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.
 - ✓ The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships, etc.
 - ✓ A performance matrix would be developed and used for evaluation of annual performance.

7. Creating innovation pipeline & pathways

- a. To ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market, mechanisms has been devised at KLNCE.
 - ✓ Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability should be a part of the institutional entrepreneurial agenda.
 - ✓ Students/ staff would be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs should innovate with focus on the market niche.
 - ✓ Students would be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, boot camps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.
 - ✓ To prepare the students for creating the start up through the education, integration of education activities with enterprise-related activities would be done.
- b. KLNCE would link its start ups and companies with wider entrepreneurial ecosystem and by providing support to students who show potential, in 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.
- c. KLNCE has established Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocated appropriate budget for its activities. KLNCE IIC would guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts would be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.
- d. For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.
 - ✓ Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.

KLNCE Innovation & Startup

- ✓ Provide business incubation facilities: premises at subsidised cost. Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new start-ups.
 - ✓ A culture needs to be 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.
- e. KLNCE must develop a ready reckoner of Innovation Tool Kit, which must be kept on the homepage on institute's website to answer the doubts and queries of the innovators and enlisting the facilities available at the institute.

8. Norms for faculty startup

- a. For better coordination of the entrepreneurial activities, norms for faculty to do start-ups has been created by the institutes. Only those technologies would be taken for faculty start-ups which originate from within KLNCE.
- ✓ Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
 - ✓ Institutes 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.
- b. In case the faculty/ staff holds the executive or managerial position for more than three months in a start-up, they will go on sabbatical/ leave without pay/ utilize existing leave.
- c. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company.
- d. 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.
- e. Faculty must not accept gifts from the startup.
- f. Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa.
- g. Human subject related research in startup should get clearance from ethics committee of the institution.

9. Collaboration, Co-creation, Business relation

- a. Stakeholder engagement would be given prime importance in the entrepreneurial agenda of the institute. Institutes would find potential partners, resource organizations, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs.
- b. The institute has developed policy and guidelines for forming and managing the relationships with external stakeholders including private industries.
- c. Knowledge exchange through collaboration and partnership would be made a part of institutional policy and institutes must provide support mechanisms and guidance for creating, managing and coordinating these relationships.
- d. Through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc., faculty, staff and students of the institutes would be given the opportunities to connect with their external environment.

10. Periodic Assessment

Impact assessment of entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education would be performed regularly using well defined evaluation parameters such as

- a. Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning would be assessed.
- b. Number of startups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by the institutes would be recorded and used for impact assessment.
- c. Impact would also be measured for the support system provided by the institute to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.
- d. Formulation of strategy and impact assessment would go hand in hand. The information on impact of the activities would be actively used while developing and reviewing the entrepreneurial strategy.
- e. Impact assessment for measuring the success would be in terms of sustainable social, financial and technological impact in the market.

11. Conflict of Interest

The inventor(s) are required to disclose any conflict of interest or potential conflict of interest. If the inventor(s) and/or their immediate family have a stake in a licensee or potential licensee company then they are required to disclose the stake they and/or their immediate family have in the company. Under these circumstances, it must be ensured by the inventor(s) that their entrepreneurial activities do not have an adverse impact on inventor(s) teaching, research and any other institutional responsibilities.

12. Agreements

The following agreements are required to be signed by the companies to the extent applicable:

a. Incubation Agreement:

Between KLNCE and incubatee company for admission of the company in KLNCE.

b. Non-Disclosure agreement (NDA):

Between KLNCE and incubatee company/Client for availing R&D services in KLNCE on a case to case basis.

c. Equity agreement:

Between KLNCE, and incubatee company and its Promoters for KLNCE's equity holding in the incubatee company.

d. Transfer of technology Agreement/ Technology License Agreement:

Between KLNCE and incubatee company/licensee for transfer of technology from KLNCE in the favour of Licensee.

e. Loan Agreement:

Between KLNCE and incubatee company on sanction of the seed loan to the incubatee company in KLNCE.

f. Usage of Lab:

Between KLNCE Departmental lab and an incubatee company for usage of departmental resources of KLNCE by the incubatee company as per the prevailing policy of Departmental lab of KLNCE.

13. Disclaimer

The incubatee company will understand and acknowledge that KLNCE intends to provide supports and services to the Company in good faith to pursue its objective to promote entrepreneurship by converting innovative technologies developed in the Institute to commercialization by incubating and supporting new enterprises. It is

KLNCE Innovation & Startup

understood that by agreeing to provide various supports and services, KLNCE does not undertake responsibility for:

- ✓ Ensuring the success of an incubatee company, its products/ process/ services or marketability.
- ✓ Ensuring quality of support and services provided by KLNCE to the complete satisfaction of the incubatee companies or their promoters/ founders.
- ✓ Ensuring quality of services of the consultants engaged by the incubatee companies through KLNCE network. Incubatee companies will have to apply their judgements before getting in to a relationship with them.
- ✓ The incubatee companies agree that KLNCE or their employees shall not be held liable for any reason on account of the above.

14. Others:

- a. KLNCE does not guarantee success and/or feasibility of the technology transferred from the Institute. KLNCE or any person representing them shall not be liable for any acts or omissions of the incubated company.
- b. The above policy is subject to periodical review and amendment at any time.
- c. Any/all disputed between the parties shall be referred for arbitration to the Vice Chancellor, KLNCE or person so nominated by him/her, whose decision will be final and binding upon the parties. The place of arbitration shall be Bhubaneswar.

Annexure 1

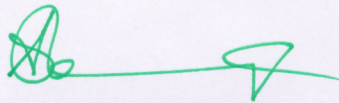
IIC Institutes should scout student innovation on the following themes:

1. Agriculture & Rural Development.
2. Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.
3. Food Processing.
4. Robotics and Drones.
5. Waste management.
6. Clean & Potable water.
7. Renewable Energy.

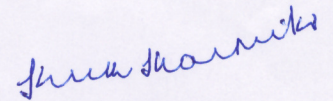
8. IoT based technologies (e.g. Security & Surveillance systems etc.)
9. ICT, cyber-physical systems, Blockchain, Cognitive computing, Cloud computing, AI & ML.

Annexure 2

- TRL 0 : Idea. Unproven concept, no testing has been performed.
- TRL 1 : Basic research. Principles postulated observed but no experimental proof available.
- TRL 2 : Technology formulation. Concept and application have been formulated.
- TRL 3 : Applied research. First laboratory tests completed; proof of concept.
- TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype).
- 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 a kind commercial system. Manufacturing issues solved.
- TRL 9 : Full commercial application, technology available for consumers.
-



Dr. A.V. RAMPRASAD
Principal
K.L.N. COLLEGE OF ENGINEERING (AUTONOMOUS)
Pottapalayam-630 612
Sivagangai Dist., Tamilnadu, INDIA



President
K.L.N. College of Engineering
Pottapalayam-630 611
Sivagangai District