



# CIET- INNOVATION ANDSTART UP POLICY FOR "STUDENTS AND FACULTY MEMBERS" (Aligned with national Innovation andStart-up policy -2019)





#### CHALAPATHI INSTITUTE OF ENGINEERING & TECHNOLOGY (Autonomous) Approved by AICTE, affiliated to Acharya Nagarjuna University,

Accredited By NBA, NAAC with 'A' Grade, ISO 9001:2015 Certified Institution Chalapathi Nagar, Lam, Guntur-522034, A.P.

# ABSTRACT

# **CIET INNOVATION and STARTUP Policy for Students and Facultymembers**

The CIET Innovation and Startup Policy for students and faculty members of Chalapathi Institute of Engineering & Technology, Guntur will enable the institute to actively engage students, faculty members and members of staff in innovation and entrepreneurship related activities. This framework will also facilitate in bringing clarity in CIET Startup policy, involvement of stakeholders, support and performance parameters thus enabling creation of a robust innovation and Startup ecosystem in the institute. This document states Startups Enabling Institutional Infrastructure, practices for nurturing innovations and startups. It also elaborates Innovation Pipeline and Pathways for Entrepreneurs at InstituteLevel, Pedagogy and Learning Interventions for Entrepreneurship DevelopmentCollaboration.

This policy is aligned with IPR policy of CIET, which mentions all the issues related to IP(intellectual property) and Product Ownership Rights for Technologies Developed at Institute Organizational Capacity, and IEC(International Electro technical Commission) policy of CIET which accounts and organize all the efforts being done by the institute for promoting and nurturing innovation and entrepreneurship which was adopted as third vertical of the institute.

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# **About CIET**

#### **CIET-Innovation and Start up Center**

CHALAPATHI INSTITUTE OF ENGINEERING AND TECHNOLOGY always plays pivot role about the welfare and the indispensible requirements of Engineering aspirants with a cutting edge vision. It is strategically situated between Guntur city and Amaravathi. The Campus is situated in 20 acres covered with gorgeous green environment offering pleasant quality education and research. The college is placed in an independent and voluminous buildings constructed as per the norms and specifications of AICTE, New Delhi.

The college is being Autonomous from 2020 and is affiliated to Acharya nagarjuna University ,recognized by AICTE, New Delhi, Accredited by NAAC in 2016 with A Grade & accredited by NBA in 2018,Institute offers four year B.Tech courses in CSE,CSE- AI,CSE-DS,CSIT,ECE,EEE,CE and ME and M.Tech courses in CSE and VLSI & ESD. CIET Started Innovation and Start up Centre for supporting pre-Incubation and Incubation / acceleration by strengthening the Innovation and entrepreneurial ecosystem in campus.

The entrepreneurial ecosystem will play key role in identifying, mentoring, nurturing innovative and entrepreneurial potential of students, faculty and staff and transforming them into start-up entrepreneurs by provided avenues of funding, investment opportunities and networking support to make the innovation and venture successful. CIET offers B. Tech Degree courses in nine disciplines and in addition M. Tech in two disciplines, to meet varied aspirations of the students.

Institute has gained a distinct image as an outstanding educational colossal among technical institutions of Andhra Pradesh, due to its inclination towards innovative and skill-based education.

It's consistent belief in 'Achieving High' is aptly reflected in its academics, extracurricular activities and placements. The success of its belief is clearly brought out in the plethora of Education Excellence Awards bagged by the Institute. CIET organizes several inter and intra-institute fests and runs value-based courses. It's been the Centre of Excellence in various aspects due to its contemporary high-tech labs and development of effectively elevating hobby clubs in various departments. The focus of the institute is to get evolved as an innovative and exclusive Autonomous University with unique global standards of teaching-learning experience, R&D, quality placements and entrepreneurship.

#### Preamble

In 2019, institute management taken an initiative to promote entrepreneurship culture in the institute by launching 'earn while learn' scheme. & Technology, Government of India and Chalapathi Institute of Engineering & Technology, Guntur and started functioning to address the need of inculcation of innovation and entrepreneurial culture in CIET and nearby area in South India. With long felt need for streamlining the growth in innovative ventures of the students and their interest in entrepreneurial endeavors as carrier option, a Innovation and Entrepreneurship council has been established under the chair of Dean, Innovation and Entrepreneurship with a separate IEC policy in 2019. The policy primarily focused on guiding the functioning IEC. With release of national Innovation and Startup Policy for students and faculty (NISP) in 2019, CIET group of Institute has compiled and aligned its own policy which is presented in following lines.

#### Vision:

To achieve the most preferred destination for students to opt entrepreneurship and startup as a carrier option and enabling students for converting their ideas into viable and successful enterprises.

#### **Mission:**

- To orient the educational infrastructure of the institute towards start -ups and entrepreneurship opportunities for student and faculties.
- To strengthen the innovation-based entrepreneurship development infrastructure
- To encourage and to support students, faculty and staff to consider start- ups and entrepreneurship as a career option.
- To provide enabling mechanisms to start-ups, through training and skill development, capacity building, networking, access to knowledge & support services, etc. on continuous basis.
- To provide the guidelines to stakeholders of CIET for developing entrepreneurial agenda, managing Intellectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises established by faculty and students.

#### 1. Strategies and Governance

Based on accumulated experience, institute has initiated the establishment of third vertical of innovation and entrepreneurship along with the traditional verticals of placements and higher studies. A separate Innovation and entrepreneurship policy (IEC Policy) has been framed to support this vertical. This initiative has created a pathway towards development of culture amongstudents and faculties to adopt entrepreneurship as one of the carrier options. Following steps have been taken to implement IEC policy.

A dedicated Innovation and Entrepreneurship Council with defined specific objectives and associated performance indicators for assessment, has been established to facilitate development of an entrepreneurial ecosystem in the organization.

Minimum 1% fund of the total annual budget of the institution is being allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'. However, revenue earning activities will be encouraged to minimize the burden on CIET.

Encouragement shall be given for raising funds from diverse sources to reduce dependency on the public funding. 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, startup in AP as well as non-government sources will also be encouraged. Funding raising through sponsorships and donations engaging alumni network for promoting Innovation & Entrepreneurship (I&E) shall be encouraged.

Entrepreneurship Center under IEC will organize institutional programs such as conferences, convocations, workshops etc. to spread the awareness regarding importance of innovation and entrepreneurial agenda across the institute.

Efforts will be encouraged to make CIET as a driving force in developing entrepreneurship culture in its vicinity (regional, social and community level). These efforts include giving opportunity for regional startups, provision to extend facilities for outsiders and active involvement of CIET in defining strategic direction for local development.

Development of strategic international partnerships using bilateral and multilateral channels with international innovation clusters and other relevant organizations will be encouraged and participation in such international events such as World Innompics shall be encouraged.

## 2. Startups Enabling Institutional Infrastructure

Institute has already developed institutional infrastructure to enable startups and progressed in this direction from ED Cell establishment to its promotion into TBI. This startup enabling infrastructure and its success is acknowledged by various ministries and bodies of Government of India and state government i.e.by approving their flagship program.

As a part of developed infrastructure, a dedicated research labs with each Department of operational area consisting of well-equipped cubicles for startup working, fab lab with all the facilities of prototyping, mentoring for IPR, marketing, business plan development, product development etc.is available in the campus of CIET, Guntur.

Thus, creation of pre-incubation and incubation facilities for nurturing innovations and startups in CIET has already taken place and IEC policy document reflects the roadmap of INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

The list of all the pre-incubation units in the campus i.e., hobby clubs, students' clubs working on various technologies, E-cell, advanced labs and design centers, centers of excellence and innovation center has been disseminated. A functional IIC is managing all the activities regarding innovation, entrepreneurship and startup related activities within the institute.

CIET is executing and administrating the programs related to innovation, IPR and Startups. The details of the programs like Entrepreneurship Development Programs (EDP), Faculty Development Program (FDP), Woman's Entrepreneurship Development Program (WEDP), Technology Entrepreneurship Development Program (TEDP), Entrepreneurship Awareness Camp (EAC) etc.

A separate policy document has been created to offer mentoring and other relevant services through Pre-incubation/Incubation units for nominal charges or zero payment basis. The modalities regarding Equity Sharing in Startups supported through these units will depend upon the nature of services offered by these units and are elaborately explained in the document. Seed support fund to start up for ready to market product or service or soft loan with collateral for specific peri

# **3. Nurturing Innovations and Start ups**

A separate IPR policy is in existence with the objective to facilitate IPR filing by students and faculty members along with one IP expert on retainer basis.

A separate policy document regarding Innovation and Entrepreneurship as a third vertical for the institute, is available stating institute support policy, norms of faculty startup and working regulations regarding startups by faculty and staff.

IEC policy document addresses all the issues of the students who are opting for entrepreneurship as carrier option and are pursuing some entrepreneurial ventures while studying. To recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute, Annual Felicitation Day shall be celebrated in which awards for Best Innovator Award, best IPR awarded (Patent and Copyright), best Start-up award, Proud Parent Award-06 (for parents of winners of all the above award category). The awardees shall be given felicitation, certificate, trophy and cash award tooshall be announced by core team.

CIET will allow setting up a startup (including social startups) and working parttime for the startups while studying / working: HEIs may allow their students / staff to work on their innovative projects and setting up startups (including Social Startups) 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. Institute may need to develop clear guidelines to formalize this mechanism. Student inventors may also be allowed to opt for startup in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a startup may be interdisciplinary or multi-disciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the startup.

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

The institute should explore provision of accommodation to the entrepreneurs within the campus for some period of time.

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:

- i. Mentorship support on regular basis.
- ii. 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.
- iii. Institute may also link the startups too the seed-fund provider/angel funds/venture funds or itself may set up seed-fund once the incubation activities mature.
- iv. License institute IPR as discussed in section 4 below.

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.

- v. 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.
- vi. No restriction on shares that faculty/staff can take, as long as they don't 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.

Institute could extend this startup facility to alumni of the institute as well as outsiders.

Participation in startup 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 courage to mentorat least one startup.

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.

Institutions might also need to update/change/revise performance evaluation policies for faculty and staff as stated above.

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

Innovation Pipeline and Pathways for Entrepreneurs at Institute Level is to implement. The awareness programs conducted by IEC under their structured Entrepreneurship Awareness Camps of 3 - day duration and awareness sessions conducted during induction programs for first year students by Dean, IEC introduce the students to entrepreneurship and innovation.

Specialized workshops and short-term courses in IPR, entrepreneurship development, various technology-based skill development programs etc. help students to develop various skills required in their entrepreneurial journey The institute should establish Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities. IICs should guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts should be under taken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.

For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.

- 1. Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
- 2. Provide business incubation facilities: premises at subsidized cost. Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new startups.

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 entrepreneurto make every effort possible to prove that the funding agency did right in funding him/he

We have specific committees for selection for incubation and project monitoring committee in IIC consisting of experts from incubation and entrepreneurship, prototype development, IPR, marketing, finance and technology experts. Students who have exhibited interest in entrepreneurship and innovation by participating in programs mentioned in are mentored for business plan development and idea pitching for incubation in IIC-CIET.

The students incubated in IIC or have applied for, shall be presenting their proposal in front of Project Selection Committee for funding through various government schemes and agencies. The schemes presently being hosted by IIC-CIET.

When incubated student registers his/her company, he/she is mentored and introduced to angel investors, venture capitalists and investors for scaling up his/ her business.

### **5. Norms for Faculty Startups**

For better coordination of the entrepreneurial activities, norms for faculty to do startups should be created by the institutes. Only those technologies should be taken for faculty startups which originate from within the same institute.

- i. Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
- ii. Institutes should work on developing a policy on 'conflict of interests to ensure that the regular duties of the faculty don'tsuffer owing to his/her involvement in the startup activities.
- iii. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or withother entrepreneurs.

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

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

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

Faculty must not accept gifts from the startup.

Faculty must not involve research staff or other staff of Institute in activities at the Startup and vice- versa.

Human subject related research in Startup should get clearance from ethics committee of this Institution.

# 6. Pedagogy and Learning Interventions for Entrepreneurship Development

CIET initiated according to IIC formulations with diversified approach in teaching and learning pedagogy including cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery. Experts from industry, mentors from different areas of business and enterprise will be the part of resource person team of this micro degree certification program. This program has adopted blended learning mode of pedagogy which consists of project and problem-based learning, online learning with MOOC platform and courses from course era. The learning journey of aspirant entrepreneur.

A dedicated innovation center is responsible to co-ordinate all student clubs, whereas individual departments are responsible for running technical hobby clubs, project workshops/labs.

Entrepreneurship Center is responsible for organizing competitions, boot- camps, workshops, awards, etc. A separate E-cell run and administered by students is totally involved in strategic planning and implementation of these activities.

As a part of awareness program about entrepreneurial ecosystem present in the institute, introductory sessions will be organized for all the students of all the programs in CIET. Required slots will be allocated in the timetable of every department in coordination with Dean, IEC.

A dedicated Industry Institute Interaction Cell with well drafted policy is responsible for conducting research and survey on trends in technology, research, innovation, and market intelligence. Industrial consultancy, industrial visits and student internship related activities will be coordinated by this cell.

To promote student ideas, projects and innovations based around real life challenges, boot-camps, visits to rural and underprivileged areas in nearby region and hackathons will be organized by IIC-CIET on regular basis. These activities and other IIC calendar activities will be displayed in the institute's activity calendar.

Innovation champions should be nominated from within the students/faculty/ staff for each department/stream of study.

Institute should start annual 'INNOVATION & ENTREPRENEURSHIP AWARD'to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute.

#### 7. Entrepreneurial Impact Assessment

The various parameters to be considered for Entrepreneurial Impact Assessmentare

- a. Participation in awareness programs
- b. Utilization of pre-incubation facilities by students
- c. Number of curriculum projects addressing real life problems
- d. Participation in various idea, PoC, Prototype, b-plan competitions and hackathons
- e. Participation in pitching for fund raising and grants/support from government and non-government agencies
- f. Contribution in industrial projects and consultancy projects
- g. Idea to PoC projects
- h. PoC to Prototype/MVP projects
- i. Product development and its launching in the market
- j. Fund raising
- k. Startup registrations and company incorporation
- l. Annual Turn over
- m. IPR application filing, grant and commercialization

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

#### 8. Review of the Policy:

Considering the feedback from assessment team which is the reflection of impact of the existing policy, Dean IEC shall organize the review committee meeting and finalize the recommendations of the review committee.

#### Way Forward

Successful implementation of the 'CIET Innovation and Startup Policy' for students and faculty is the main objective. In order to achieve this, full-fledged support of all the academic, non -academic and supporting departments will be important. The roadmap suggested through this document is 'broad guidelines and this policy document is supported by previously existing policy documents on innovation and entrepreneurship council, IPR, Industry-Institute interaction and research and development.

This policy is prepared by NISP committee under the supervision of **Dr. K.V.Rama Rao** NISP Co-ordinator