

Nagarjuna College of Engineering and Technology

(An Autonomous College under VTU)

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R&D VISION, MISSION AND OBJECTIVES of Nagarjuna College of Engineering and Technology (NCET)

1. VISION, MISSION AND OBJECTIVES

1.1 Vision

- a) To sensitize faculty members, students & researchers about R&D initiatives of the NCET.
- b) To initiate activities for setting-up of Patent Facilitation Centers, Technology Transfer Cells and to recognize and encourage original and novel research contributions, both from within the NCET and outside, which is expected to add thrust to the Institution's R&Defforts.
- c) To initiate Mentoring Programmes, Internships and Incubation at NCET.

1.2 Mission

To produce high quality Under-Graduates & Post-Graduates in Engineering, Technology, Science, Humanities, Management and Allied Science with a sound theoretical and practical knowledge and civic responsibility, who can contribute effectively to the progress of the country and society in the years to come through their chosen profession.

To establish and develop research and extension activity in Engineering and Technology courses.

Goals and Objectives:

The Goals and Objectives include

- a) To make the NCET a worthy knowledge centre by developing research and extension activities in association with professional bodies/industries/ research establishments;
- b) To create awareness among faculty members and students about the availability and access to research grants, funding formats etc and appropriately handhold them to get such funds/grants;
- c) To development close collaboration with industry through exchange of personnel and undertaking consultancy projects;
- d) To improve a strong collaboration links with other academic and research institutions in the country and abroad;
- e) To sensitize/motivate the faculty members and students through structured training and inculcating the knowledge of theory of inventive problem solving in such way to adopt creative process of problem solving;
- f) To provide an education and learning experience of the highest quality and value to its students in the chosen disciplines;

- g) To prepare the students in attaining a comprehensive knowledge In order to face the global competition;
- h) To ensure the participation of students in various R&D or Design Competitions/Awards within India and Abroad

1.3 Objectives

- To create an environment for effective teaching- learning by encouraging the students and faculty to nurture the curiosity and scientific and research temper.
- To assist the process of Induction of highly qualified, talented, competent & motivated faculty and training & dedicated supporting the administrative staff
- Establishment of excellent academic research support facilities (laboratory, library, Internet, etc.)
- Provide opportunities for continuous updating the knowledge of faculty through faculty interventions/exchanges from premier institutions and industries/R&D Labs
- Establishment of procedures and methodologies forregular monitoring and control of quality of all academic programmes
- Reforms in regulations and curriculum with greater flexibility to students
- Have strong linkage with industries/Professional Bodies
- Technology up-gradation, development and transfer
- Active participation of alumni in resource generation and planning and development
- Organising and participation of staff and students in in-house and outside training programs, seminars, conferences, workshops on continuous basis.
- Increase research and consultancy activity with options for incentives and encouragement to motivate staff and students to actively involve in research activities incollaboration with industry and R&D Centres
- Increase the number of continuing education programmes/MDPs for Industries
- Exchange of faculty and working personnel fromindustry
- Increase Institute-Industry interaction/Collaboration
- Entrepreneurship Development/Technology BusinessIncubation/startups
- Increased interaction with educational and otherresearch establishments/ institutes.

1.4 Methodologies:

- Identify the particular areas of emergingtechnology/Interdisciplinary/Multi-disciplinary Approach
- Identify the problems of particular industry/cluster/region
- SWOT Analysis (Examining of the existing facultymembers/facilities) for R&D activities
- Sensible Motivation Programmes to distinguish performers and non-performers among faculty members through financial/Non-financial Incentives
- Submit concrete proposals to funding agencies for necessary grant
- Establish/strengthen R&D facilities/Culture at the NCET in collaboration with industries/professional bodies
- Develop more research-oriented labs and centres in association/support of Industries/Professional Bodies
- Involve students in innovative technologyprojects/Awards/Competitions

- Research & Development oriented interventions/ programmes/education Leading to Startups and IPR
- Create national/international collaborativeprogrammes
- Networking among Institutions/Universities for resource and expertise sharing
- Improving in service conditions of faculty members and technical staff commensurate to that of the industry to attract best faculty & staff
- Introduction of award of merit, recognition and sabbatical leave to performing faculty and staff.

1.5 Output Indicators:

- Increase in research publication, patents and technology transfer to industry
- Increase in sponsored research projects and consultancy
- Increase at Ph.D. and post-doctoral research
- Increase in the network of eminent Scientists/Think Tanks to strengthen the R&D activities of NCET
- Increase in state of art laboratories in cutting edge technologies with the support of industries/funding agencies
- Increase in national and international conferences of our own/in association with others
- Increase in qualified (minimum Ph.D.) and talented faculty.
- Substantial increase in the intake quality of students at UG/PG Programmes
- Class rooms and laboratories equipped with latest toolsbeing used meaningfully
- Adjunct / Visiting faculty from the industry/R&D Labs/Professional Bodies
- Faculty Visit/training collaborative ventures with industry, research organizations and other academic institutions in India and aboard
- Increase in intake quality of students at M.Tech. and Ph.D. level (restructuring the existing programmes & introducing new programmes)
- Increase in the departments and Centre of Excellence
- Increase in resource generation through alumni, consultancy fee, etc.
- Increase in community services to payback to the society
- Increase in non-formal training to industry and other educational institute (Executive / Staff DevelopmentProgramme)
- Lectures by distinguished professionals from industry and academic institute
- National and Global accreditation certification
- Establishment of industry sponsored Chairs
- Nurturing entrepreneurs by creating TechnologyBusiness incubators
- Exchange programmes at national and international level.





Inauguration of NCET-KSCST IP Cell





SCOPE OF THE MOU:

Karnataka State Council for Science and Technology (KSCST) and Nagarjuna College of Engineering and Technology (NCET) may take relevant steps and measures to protect, promote and enhance research and development, which shall create scope for development of Intellectual Property (IP) and take appropriate decisions and measure in furtherance of the same.

- a) KSCST shall provide technical assistance in filing the registration of IPRs and prior art searches.
- b) KSCST shall associate with NCET in identifying the potential IP innovations in the host institute.
- c) KSCST shall associate with NCET in organizing IPR programmes
- d) There shall be no financial responsibility from the side of KSCST.

Nagarjuna College of Engineering and Technology (NCET):

NCET is an Autonomous Institution under Visvesvaraya Technological University (VTU), Belagavi, recognized by Government of Karnataka, Approved by UGC, AICTE, New Delhi, and accredited with 'A' Grade by NAAC. **NCET** is accredited by NBA for Civil, Mechanical, Information Science and Electronics and Communication Engineering valid up to 2021-2022. NCET is offering **Five BE** Programmes and **Two MTech and MBA** Programmes. NCET is a self-financing engineering college, established in the year 2001 under the aegis of **Nagarjuna Education Society (NES)**, Bengaluru. NES was founded in the year 1995 under the able guidance of **Sri. J.V. Rangaraju**, leading industrialist and philanthropist. **NES** enjoys the patronage of **Nagarjuna Construction Company (NCC Limited)**, which is India's fast-growing Construction Company, and second largest in terms of turnover, according to *Construction World-NICMAR*. It's also the only construction company from India that found its place in the *Forbes Asia* list of "Best under a Billion" in **Asia Pacific.**

NCET has 7 Approved Research Centers of VTU with 54+ Research Scholars are pursuing their Ph.D. under the guidance of NCET faculty members and R&D Projects were funded by the various funding agencies like ISRO, DRDO, VTU, VGST, Institution of Engineers, KSCST, AICTE, ISHRAE, etc. Project Grant from GTRE and ISRO for Mars Rover Project. NCET has been at the vanguard in enabling creativity, developing entrepreneurial competencies and incubating technology business ideas in order to provide a dynamic support system to foster entrepreneurship environment. The start-up ecosystem has also brought together faculty members and students to think out of box and accelerate creativity.

NCET strives to provide all needed support in order to make the business ideas into practical ventures by not only inculcating and refining complex skill but all assistance needed to start, support and flourish. To strengthening the innovation and start-up ecosystem in NCET we have collaboration with National Entrepreneurship Network (NEN), MTC Global, Entrepreneurship Grid and Learning and Development Global. Faculty members are sent for training conducted by eminent entrepreneurship organizations and MHRD on Innovation, IPR, Entrepreneurship and start up. NCET has also established Institution's Innovation Council (IIC) as per the guidelines of "MoE's Innovation Cell (MIC)" in the year 2018. The initiative was to create a vibrant local innovation ecosystem, start-up supporting mechanism, establish function ecosystem for scouting ideas and preincubation of ideas and to develop better cognitive ability for technology students. NCET IIC is actively involved in organizing and conducting seminars, workshops, field trips, project exhibitions, entrepreneurship bootcamps, Idea competitions etc. for its students and faculty members.

The institution is a recognized as Nodal Center for Virtual Labs sponsored by MHRD and Associated with IITB, Mumbai for e-Yantra Project. NCET has Signed MOU with ISRO and was part of Student Satellite **"STUDSAT"** Launched by ISRO-PSLV C15 on Jul 12, 2010 and also now building its own **"Nagarjuna UNITY Satellite"** as part of 75 Students' Satellites Programme initiated to Celebrate India's Freedom 75 (1947-2022) of ITCA fraternity as announced by our Hon'ble Prime Minister of India at UN General Assembly recently. NCET has vibrant Industry-Institute Collaboration with various MNCs including Texas Instruments Innovation Lab is equipped with 20 TIVA boards with ARM CORTXEX Microcontroller. For more details, kindly visit: <u>https://ncet.co.in/</u>

Karnataka State Council for Science and Technology (KSCST):

KSCST is one of the first State S&T Councils to be set up in the country established in the year 1975 at Indian Institute of Science Campus. It is an autonomous S&T organization under Department of Science & Technology, Government of Karnataka. From the several decades KSCST has been pro-actively engaging itself to identify, propose and implement S&T based solutions to locale specific needs/ problems in the broad areas of Water, Education, Energy, Housing, Geospatial technologies and Infrastructure etc in the State.

In co-operation with the Indian Institute of Science and several other premier R&D institutions, KSCST executes many projects and programmes aimed at improving socio-economic conditions of the people of the state. The Department of Science and Technology, Government of India advocated as model to all the states.

The Council through its Patent Information Centre (PIC) tirelessly conducting awareness, capacity building, basic and advance training programmes on Intellectual Property Rights (IPRs). KSCST has established many IP cells across Karnataka in Science and Engineering Colleges, Technical Institutions and Universities. Further by providing IP assistance in filing and Commercialisation, KSCST has creating IP ecosystem in the State.

Dr. S.G. Gopalakrishna, Director, NCET and **The Executive Secretary, representing KSCST, Bengaluru** have arrived at this Memorandum of Understanding for mutual co-operation and collaboration on matters of mutual interest. Hence, this Memorandum of Understanding (MOU).

Mr. H. Hemanth Kumar, Executive Secretary, Karnataka State Council for Science and Technology (KSCST), Bengaluru has inaugurated on 17 Dec 2021 at 11:00 hrs "NCET-KSCST IP Cell" as Chief Guest, Ms. Bhanu Chaitanya, COO, Nagarjuna Group of Institutions (NGI) has graced occasion as Guest of Honour and Dr. S.G. Gopalakrishna, Director, Nagarjuna College of Engineering and Technology (NCET) presided the event in the presence of Dr. Jitendranath Mungara, Principal, NCET, Dr. K. Gopalakrishnan, Advisor, NGI/NCET, Mr. Ranjan Manish, Dean I4 & Alumni Relations and HoDs-Professors of NCET.



Inauguration of "NCET-KSCST IP Cell" by Mr. H. Hemanth Kumar, Executive Secretary, KSCST and Lighting of the Lamp by Dignitaries





NCET-KSCST IP Cell MoU Signed



Exchange of MoU between KSCST and NCET



For the purpose of this MOU, KSCST, Bengaluru to provide the technical assistance in matters relating to Intellectual Property Rights on need basis as mutually agreed upon. KSCST and **NCET** may in joint collaboration organize conduct workshops, training programmes, research activities, and assist in further development of IPR ecosystem in the host institute. This MOU shall be in effect initially for a period of **FIVE years** from the date on which this MOU is signed by both the parties and may be renewed thereafter, by mutual consent.

Release of First Publication of NCET-KSCST IP Cell: "100 FAQs On PATENTS"





https://links.tsctech.in/NCET-KSCST-IP-Cell

NCET-KSCST IP Cell Flip Book has been released on 17 Dec 2021 during the Inauguration of Patent Cell. To read the Flip Book, kindly click the above link! For better viewing experience, open it in full screen or view it in Desktop Systems or Laptop with Auto Flip and Audio On! 100 FAQs on Patents!

SI No.	IPR	Maximum Protection	Renewal	Act/Rule
1	Patent	20 Years	*Every year (mandatory)	The Patents Act, 1970 Amended in 2005
2	Trade Mark	Life Long	After 10 Years	The Trade Marks Act, 1999 Amended in 2010
3	Design	15 Years	After 10 Years for next 5 Years	The Designs Act, 2000 & Designs (Amendment) Rules, 2014
4	Copyright	60 Years	Not require	The Copyright Act, 1957 Amendedin 2012
5	Geographical Indication (GI)	Life long	After 10 Yrs	The Geographical Indications ofGoods (Registration and Protection) Act, 1999





NCET-KSCST IP Cell

Filing Patent Application



Institution's innovation council (IIC)

The First Council Meeting of the Institution's innovation council (IIC), Nagarjuna College of Engineering and Technology was called by Dr. Jithendranath Mungara, Principal- NCET on 14-12-2020. Dr. D. G. Kantharaj was nominated as the new president for IIC-NCET.

