Strategic Plan Document (2022-26)

ABOUT THE INSTITUTION

VISION: Leadership and Excellence in Education.

MISSION: To fulfill the vision by imparting total quality education replete with the philosophy of blending human values and Academic professionalism.

QUALITY POLICY: NCET shall be maintained as an "Institution of Excellence" in the domains of Engineering Technology & Management studies through continual improvement of system, processes and academic professionalism.

Nagarjuna College of Engineering and Technology (NCET) Bengaluru was started in the year 2001. The institution owes its existence to the vision of its beloved founders, Sri. J V Ranga Raju, Director, NCC Limited and Smt Sridevi Ranga Raju. The institution is managed by Nagarjuna Education Society, Yelahanka, Bengaluru.

The College is accredited by NAAC with the highest grade of A+ in the Second Cycle and a CGPA of 3.38 on a scale of four. The College became autonomous, UGC approved, in 2015 and has been effectively practicing Outcomes-based Education. In the ARIIA (ATAL Rankings) 2021, the college was ranked in band-Best Performing. The College offers 06 Undergraduate & 02 Postgraduate courses both in conventional and emerging areas. More than 48 research scholars are pursuing their PhD Degree in the 07 research centres of the college. Qualified and experienced faculty members & staff members serve the institution. The Institution has MOUs with various organizations. The learning experiences and quality educational practices created at the institute supplemented with academic ambience, state of the art infrastructure, pedagogy, academic innovations, research, incubation, training opportunities and entrepreneurship provided to diverse student population is enabling the institute to produce graduates who are industry ready. NCET not only accentuates the curriculum-based education but also develops the internal qualities, character, as well as the attitude of students. The mission of our institution is to educate our students to be a better and responsible citizens as well as people of Ethics, Humanity, and Compassion with concern for the needs of the nation and society.

STRATEGIC PLAN 2022-2026

1. IMPLEMENTATION OF NEW EDUCATION POLICY 2020

The National Education Policy 2020 (NEP 2020) outlines the vision of India's new education system and the policy aims to transform India's education system. The college shall chalk out the modalities of its implementation with specific reference to engineering education through:

a) Broad based multi-disciplinary, holistic Under Graduate education with flexible curricula, creative combinations of subjects, integration of vocational education.
b) Provide importance to students' practical knowledge
c) Experiential learning including arts-integrated and sports-integrated education as well as case based pedagogy and others.
d) With the mode of delivery being in both English and regional language, the power of online pedagogy shall be utilized for effective learning.
e) To constitute a committee comprising of senior professors to discuss regarding the New Education Policy 2020 and chalk out the modalities of its implementation in the perspective of engineering institution.

2. Research & Development – Roadmap – 2022-2026

NCET acknowledges innovations and research as a key focus area. The institution has developed necessary infrastructure for quality Research and Development. The institution encourages the faculty and students to take up research endeavours through number of initiatives in sensitizing/promoting research climate. The R&D Centre of the college works in three distinct aspects viz., advanced research, innovation and imparting standards among all the research scholars. To promote research and innovation, many new centres of excellence and innovative labs are to be established. The facilities are regularly updated to stay advanced. To further enhance the institutional achievement in R&D,

➜ Promotion of research culture among faculty members through exclusive Research Promotion Policy
➜ Encouraging students to undertake research through the policy on student enrichment activities.
➜ Facilitating multidisciplinary research
➜ Non-government grants (Foundation, Industry, etc)
➜ Specific Faculty interaction meeting (with PhD, Pursuing PhD, about to register)
➜ Faculty internship in Industry / institutes of repute

➔ To organize various workshops/ seminar/ trainings related to promotion of research
➔ Enhanced research outcomes leading to patents and Commercialization
➔ Display of models/Posters in the departments

3. Developing complete digital infrastructure in NCET

The college feels that a strong connection between digital engagement and student experience is pivotal for any institution. The WiFi and internet connectivity are indispensable tools to support the student learning and wellbeing. Over the years, the institution has stressed upon development of digital infrastructure throughout the campus. However, complete digitalization of the campus has always been on the major goals. Presently, the college has in place, well-developed software that is being used by students and faculty. Customized dashboards are provided to specific stakeholder to access data and update profile.

In the proposed initiative, it is planned to develop various access points to stakeholders regarding information dissemination, rules and regulations, events and progression details of students. It is proposed to conduct study to map the various stakeholder necessities and prepare necessary applications in phased manner for the usage of stakeholders like industry, parents, alumni and other universities.

The pre requisites for developing a complete digital infrastructure in the campus have been developed and some more plans are as follows:

1. Procurement of Servers on Cloud and Physical space
2. Comprehensive ERP System for managing Examination Section and Student Information Management.
3. Connecting all the modules through ERP systems to create student-services ecosystem to support the entire student life cycle
4. To create an information tool to integrate data as per the format of assessing agencies like NAAC/NIRF/AICTE/VTU/UGC etc.
5. Recruitment of staff to manage all the systems and server configurations
6. Testing and analysing critical elements and customizations for changes

4. To Promote Consultancy services in all Departments

The institute encourages its faculty to undertake consultancy work through NCET Consultancy Centre. The centre is presently headed by a faculty from Department of Civil Engineering. The institution has also developed a consultancy and revenue Sharing policy.

The Revenue Generation through consultancy projects is one of the standard parameters and metrics prescribed by NIRF/NAAC/NBA/VTU and all other assessing agencies.

It has been observed that consultancy is primarily active in few engineering domains. The Institute needs to extend it to every domain namely Engineering, Management and Science. In order to harness the consultancy potential across departments, a suitable framework to support consultancy activities need to be established. This will help the Institute to enhance the outcomes/ revenue generation through consultancy. To provide an inclusive environment for promotion and support of Consultancy Activities

- To Liaise between the institute and industry/ government / non-government agencies to undertake projects with specific problem of short and long term duration. To enter into necessary MOU and agreements.
- To create and maintain database for expertise of the College faculty and facility by getting inputs from respective faculty/departments.
- A consultancy Brochure (both Institution level and Department level) should be created and published. The Brochure shall contain Testing facilities, core service areas, expertise available in carrying out necessary testing and consultancy services etc.
- To Propose dedicated exclusive laboratories for testing and associated services
- Any other related activities.

5. Introduce New UG Programmes

To be in the forefront of global technological advancements and to meet the current and future industry requirements, the institution continuously needs to offer diverse courses. This will provide the student community opportunity to fulfill their education needs. The institute shall introduce new programmes of study in UG with a design to meet the ever changing industry demand.

6. NBA Accreditation of all eligible programmes

The institution aims to get all its eligible programmes accredited by National Board of Accreditation (NBA) within 2026.

7. Enhance Placement by Core Sector Companies

The Training and Placement Cell handles all aspects of campus placements for the graduating students at NCET. The department is well equipped with excellent infra-structure to support every stage of the placement process. Arrangement for Pre-Placement Talks, interviews, Group Discussions etc. are well handled. The cell has emerged as a favoured destination for many National and Multinational companies who regularly recruit fresh talent nurtured from our Institute. More than 70% of the eligible Students get placed. However, it is observed that only fewer students get placed in core areas/domains.

- There is a need to focus on core sector industries and refrain from overreliance of IT. The assessing agencies (NBA/NAAC Etc) have observed that placement scenario in core domains is very limited in non IT programmes. Necessary measures to improve output in terms of placements in core domains may be pursued.
- To organize a "Start-up day" with an aim to sensitize the student's about the opportunities in start-ups. The cell needs to invite successful start-ups for campus placement.
- A Skill development unit may be added to the cell with an objective to provide training to the students to enhance their Employment/ Self-Employment opportunities. The unit will also try to implement various government and non-government

8. Foreign Language Programme

As the world comes to India and Indians are making a global impact, the knowledge of foreign languages provides our graduates a definite edge over their technical counterparts.

- The knowledge of foreign languages will be an asset for those who intend to join multinational companies and also those looking for opportunities abroad.

- The advantages of learning foreign language also include confidence, creativity, new career prospects and improved relationships.

- The language laboratory can also facilitate foreign language learning where students have access audio or audio-visual materials.

The Institute may propose to establish a Centre for Foreign languages for the said purpose. The centre will facilitate customized courses in French, Japanese, German, Mandarin, Spanish and others. It will also facilitate the short term certificate courses for students across domains.

9. Technology and Innovation Club

To infuse thinking in the minds of students and polarizing thoughts into the process and thereby into a product, it is proposed to establish a Technology and Innovation Club.

- The Club shall aim to inculcate the culture of innovation amongst students (irrespective of their discipline/year of study) and encourage them to generate new ideas.
- The club shall create a vibrant knowledge Network of students across departments/disciplines.
- Coordinate all the activities related to innovation with the departments.

- Help the students in bringing up their innovative side and come up with great ideas, discuss with others and plan its execution.
- The students shall get an active platform where they could display their ideas.
- To conduct regular events, discussions and competitions etc.
- To spread the concept of innovation among students within the campus.
- To motivate, support and mentor the innovative ideas of the students.
- Other related activities
- A Club Mentor will be identified for the said purpose.

10. 50% of faculty with PhD Qualification

The Institute has always focused on quality of teachers that lead to quality of education and hence the graduating students. The institute has progressed in having faculty achieving the highest qualification from 2015. Presently out of 165 faculty, 38 (23%) are PhDs.   The institute aims to have/achieve 50% of faculty with PhD Qualification in the next five Years (2026).   The institute proposes to continue its endeavor to recruit faculty with PhD from premier institution in specialized area/industry expertise. Further, the institute shall also extend the required support to the registered faculty to complete the PhD.

11. Accreditation of Laboratories

Engineering education is incomplete without modern laboratory practices. The laboratory practice has been an integral part of engineering education. Most engineering instruction take place in the laboratory and it demands the active use of knowledge and skill. The emphasis on laboratories has increased many folds over the years. It is aimed to get formal recognition of competence of laboratories (few selected laboratories to start with) by an Accreditation body such as NABL to ensure a sound Quality Assurance System.

12. Societal and Green Initiatives

As an institute of repute NCET should be looked upon as a model institute in helping the local community by addressing the issues that needs solution. It also should take the lead and sensitize the local community and the larger society in creating awareness about the need for caring about environment. The major activities planned hereunder are

1. To Adopt a village
2. To encourage students take up community based projects to help finding remedies to plaguing issues
3. To create an eco-friendly environment by reducing / banning plastic usage
4. To take up projects related to renewable sources of energy (solar power), Alternate sources of energy
5. To involve students creating awareness about Road safety, health and hygiene, and pollution

6. To produce bio-gas out of large amount of kitchen waste generated every day in the College Hostels.
7. To conduct Green and Energy audit on a regular basis

13. Strategic Plan Progress Committee

It is proposed to have a Strategic Plan Progress Committee (Planning and Evaluation Committee) with an aim to monitor and communicating progress on the plan.

- To place responsibility, timelines, and specific work with an aim to ensure that the plans are implemented
- To maintain documents related to the strategic plan, goals, initiatives, and accomplishments.
- To review the progress and challenges in implementing the strategic plan
- To prepare the compliance report on the extent of compliance for the strategic plan once in a year.