

### YEARLY STATUS REPORT - 2022-2023

Part A		
Data of the Institution		
1.Name of the Institution	Nagarjuna College of Engineering and Technology	
• Name of the Head of the institution	Dr. B V Ravishankar	
• Designation	Principal	
• Does the institution function from its own campus?	Yes	
• Phone No. of the Principal	08067462700	
• Alternate phone No.	08067462701	
Mobile No. (Principal)	9945517699	
• Registered e-mail ID (Principal)	principal@ncetmail.com	
• Address	Venkatagirikote Post, Devanahalli Taluk	
City/Town	Bengaluru	
• State/UT	Karnataka	
• Pin Code	562164	
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)	01/08/2015	
• Type of Institution	Co-education	
• Location	Rural	

Financial Status	Self-financing
• Name of the IQAC Co-ordinator/Director	Dr. Yogeesha H C
• Phone No.	08067462700
• Mobile No:	9448737620
• IQAC e-mail ID	iqac@ncetmail.com
3.Website address (Web link of the AQAR (Previous Academic Year)	https://ncet.co.in/wp-content/upl oads/agar/AQAR%202021-22.pdf
4.Was the Academic Calendar prepared for that year?	No
• if yes, whether it is uploaded in the Institutional website Web link:	
5.Accreditation Details	

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	А	3.11	2016	30/07/2016	31/12/2021
Cycle 2	A+	3.38	2022	01/07/2022	27/06/2027

### 6.Date of Establishment of IQAC

26/05/2016

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding Agency	Year of Award with Duration	Amount
Nil	Nil	Nil	Nil	Nil

### 8. Provide details regarding the composition of the IQAC:

<u>View File</u>	
2	

• Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes
• If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded
10.Did IQAC receive funding from any funding agency to support its activities during the year?	No
• If yes, mention the amount	

**11.Significant contributions made by IQAC during the current year (maximum five bullets)** 

\* IQAC has initiated reforms in the teaching-learning process to achieve Outcome Based Education (OBE) in the institution. \* IQAC has successfully guided the departments to conduct the Workshops /FDPs /Seminars/Webinars /Conferences in the emerging areas technologies. \* IQAC has created a frame work and extended complete support to departments in preparing the SSR for the 2nd cycle of NAAC accreditation. \* IQAC has created the process for Academic and Administrative audits and helped the students to participate in various competitions and Hackthons. \* IQAC has helped the stakeholders and conducted orientation for implementing NEP-2021.

12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
Conduction of Knowledge Sharing Session for the benefit of faculty members	14 Knowledge Sharing Sessions were organized
Collection of Student Feedback on the Teaching-Learning Process	Students Feedback were collected, analyzed
Preparation of Monthly Activity Report	Monthly Activity reports are prepared and published in the college website
13.Was the AQAR placed before the statutory body?	Yes

• Name of the statutory body

Name of the statutory body	Date of meeting(s)
Governing Body	20/12/2023
14.Was the institutional data submitted to AISHE ?	Yes

• Year

Year	Date of Submission
2022-23	03/01/2023

### **15.Multidisciplinary** / interdisciplinary

Interdisciplinary/Multidisciplinary open electives courses such as Income Tax & Taxation, Air Pollution and its control, IPR policies, Research methodology, etc are offered in all UG programmes. The concept of interdisciplinary electives were introduced from the 2015-16.

### 16.Academic bank of credits (ABC):

The institution is interacting with the affiliating university towards the implementation of Academic Bank of Credits. Once the university implements ABC, the college is ready to upload the student academic data to the portal as the result data is in digital format and hosted in the website.

### **17.Skill development:**

Skill development courses such as STAADPRO, MATLAB, LABVIEW, Python, AWS, Salesforce are being offered. Many skill development courses in Computer Science and Engineering discipline are introduced using E- Box platform. PMKVY programme from the ministry of education was successful implemented for training the rural unemployed youth in various skill development programmes such as welding, fitting, electronic repair, electrical wiring, etc.

**18.**Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

Students are encouraged to learn Dance, Music, Sports, Yoga, etc as open electives and credits are offered. Online Courses are made part of the Credit based Open electives from the year 2015-16.

### **19.**Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):

OBE is implemented from the academic year 2015-16. All question papers are printed with Course Outcomes(CO) and Revised Blooms Levels. All assessments are mapped to corresponding COs and further Programmes Outcomes(PO) and Programme Specific Outcomes(PSO) are computed based on the attainment of COs. Four UG Programmes of NCET are accredited by NBA during 2018-19.

#### **20.Distance education/online education:**

Students are encouraged to take up Online Courses from SWAYAM/NPTEL, IIRS, etc and they are offered as credit courses. During the pandemic period, online classes were engaged using Google Classroom, Google Meet, Zoom, Webex, etc.Learning Management System using Moodle is implemented and mobile app for the same is being used by the students.

**Extended Profile** 

#### 1.Programme

1.1		09
Number of programmes offered during the year:		
File Description	Documents	
Institutional Data in Prescribed Format		<u>View File</u>
2.Student		
2.1		1928
Total number of students during the year:		
File Description     Documents		
File Description	Documents	
File Description Institutional data in Prescribed format	Documents	<u>View File</u>
-	Documents	View File 328
Institutional data in Prescribed format		
Institutional data in Prescribed format 2.2		
Institutional data in Prescribed format 2.2 Number of outgoing / final year students during the	year:	

Number of students who appeared for the examinations conducted by the institution during the year:		
File Description	Documents	
Institutional Data in Prescribed Format		<u>View File</u>
3.Academic		
3.1		302
Number of courses in all programmes during the ye	ear:	
File Description	Documents	
Institutional Data in Prescribed Format		<u>View File</u>
3.2		133
Number of full-time teachers during the year:		
File Description	Documents	
Institutional Data in Prescribed Format		<u>View File</u>
3.3		147
Number of sanctioned posts for the year:		
4.Institution	Ļ	
4.1		321
Number of seats earmarked for reserved categories as per GOI/State Government during the year:		
4.2		48
Total number of Classrooms and Seminar halls		
4.3		52
Total number of computers on campus for academic purposes		
4.4		1108
Total expenditure, excluding salary, during the year Lakhs):	r (INR in	

Part B

### **CURRICULAR ASPECTS**

#### **1.1 - Curriculum Design and Development**

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

The curricula for the undergraduate and post-graduate programs have been formulated in accordance with the guidelines of AICTE, affiliating university VTU, suggestions by Members of Professional Bodies, Industry experts and Alumni. In this regard, curriculum of various Indian universities, Foreign Universities and other Sources are hereby referred to. IQAC is involved with stakeholders from time to time to collect feedback to meet the societal needs to enhance the quality of education to be imparted. The curriculum is designed such that students have the required domain knowledge and skill sets to enter an industry.

The Graduate attributes are adopted as Program Outcomes (POs), Program Specific Outcomes (PSOs) for each program. They have been formulated to ensure the attainment of domain-specific knowledge and skills in relation with Course Outcomes (COs). The curriculum is formulated in tune with the POs and PSOs and is modified at regular intervals, presented and discussed in the Board of Studies (BoS). BoS includes Industry Experts, Senior Academicians from reputed Institutions, Faculty members and Alumni, whose suggestions are considered for incorporation in the revised curriculum before submitting to the Academic Council. Finally, the Academic Council approves the curriculum. The Governing Body ratifies the decision of the Academic Council.

The curriculum also offers courses in Universal Human Values, Basic Sciences, Professional Core Courses, Open and Professional Electives, Skill Development Courses, Project Based Learning (PBL), Laboratory and Project Work. Technical report writing and language laboratory enhance written and verbal communication skills.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	https://assessmentonline.naac.gov.in/storage /app/public/agar/24411/24411 192 461.pdf

#### 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

9

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	No File Uploaded

# **1.1.3** - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

#### **254**

File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	<u>View File</u>
Any additional information	No File Uploaded

### **1.2 - Academic Flexibility**

### 1.2.1 - Number of new courses introduced across all programmes offered during the year

### 254

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	<u>View File</u>

### **1.2.2** - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

9

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	<u>View File</u>

### **1.3 - Curriculum Enrichment**

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

Various courses are introduced in the curriculum related to Gender Equality, Sustainability, Human Values and Professional Ethics.

Gender Equality, Human Values and Professional Ethics: To inculcate Moral, Social and Ethical values, the college has introduced courses on Human values and Professional Ethics as credit course during 2nd and 3rd year for all undergraduate programs. The Universal Human Values course integrates various human values to be learnt by the students as per the curricula suggested by AICTE. Faculty members are trained by AICTE approved resource persons for teaching this course. The course on Constitution of India offered, Professional Ethics & Human Values offered during second year also enables the students to understand duties and responsibilities of a citizen, professional ethics to be followed and human values to be imbibed. Women Cell and Anti[1]sexual harassment committees continuously organize various programs like debate, seminars, panel discussions and awareness programmes to supplement the courses on gender sensitization.

Environment and Sustainability: Environmental Science is an interdisciplinary mandatory course is offered as part of the curriculum. Many courses on environment protection such as Environmental Pollution, Air Pollution and Solid Waste Management, Ecology & Environmental Impact Assessment, Industrial Waste Water treatment, Design of Energy Efficient Buildings, Green Buildings, Water Resource Engineering, Sustainable Constructions, Rural Water Supply & Sanitation, Construction & Demolition Waste Management, Rain Water Harvesting, etc are part of the curriculum.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	<u>View File</u>

## **1.3.2** - Number of value-added courses for imparting transferable and life skills offered during the year

#### 16

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	<u>View File</u>

### **1.3.3** - Number of students enrolled in the courses under 1.3.2 above

### 1164

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

### **1.3.4** - Number of students undertaking field work/projects/ internships / student projects

### 638

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	No File Uploaded

### 1.4 - Feedback System

1.4.1 - Structured feedback and review of the A. All 4 of the above syllabus (semester-wise / year-wise) is obtained

# from 1) Students 2) Teachers 3) Employers and 4) Alumni

File Description	Documents
Provide the URL for stakeholders' feedback report	<u>https://www.aicte-</u> india.org/feedback/index.php
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
Any additional information	No File Uploaded

### **1.4.2** - The feedback system of the Institution comprises the following

A. Feedback collected, analysed and action taken made available on the website

File Description	Documents
Provide URL for stakeholders' feedback report	https://ncet.co.in/wp-content/uploads/2023/1 2/Student-Satisdfaction-Survey- for-2022-23.pdf
Any additional information	No File Uploaded

### **TEACHING-LEARNING AND EVALUATION**

### 2.1 - Student Enrollment and Profile

### 2.1.1 - Enrolment of Students

### 2.1.1.1 - Number of students admitted (year-wise) during the year

### 619

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

321

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The institution assesses the learning levels of the students based on the performance of the students in class tests, assignments, and semester end examinations. First year students are identified as slow and advanced learners based on their PUC or plus two marks. The college conducts Student Induction/Orientation Programmes as per guidelines from AICTE and VTU during the commencement of every academic year for the newly admitted students. The facilities in the college and the scope of the different courses being learnt are introduced in these sessions. Faculty members are interacting with the students to identify their potential during induction programme.

For slow learners, the institute provides special guidance, tutorial classes, remedial coaching classes, personal counseling, question paper solving and home assignments. On the other hand, advanced learners are encouraged to participate in SWAYAM/NPTEL online courses and also provided with the opportunity to participate in many of the conferences, seminars, exhibitions, Hackthons, coding contests, etc. College also provides VTU Consortium membership to the advanced learners. The college has introduced merit prizes, ranks and gold medals for each programme of study.

The advanced learners are also provided with the facility of peer tutoring of the slow learners which will be beneficial for both advanced as well as slow learners. The tutors will be rewarded with cash incentives, if the tutees mapped to the tutor, improves performance. This peer tutoring has proved that it is a very effective method of collaborative learning.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://assessmentonline.naac.gov.in/storage /app/public/agar/24411/24411_213_490.pdf

### 2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
31/07/2023	1928	177
File Description	Documents	
Upload any additional information	View	<u>File</u>

### 2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problemsolving methodologies are used for enhancing learning experiences:

The College prepares the academic plan during the beginning of every semester. Various methods of experiential and participatory learning as well as problem-solving methodologies are also considered in the preparation of the academic plan. Usage of the modern teaching tools such as PowerPoint presentations, YouTube videos, Interactive Smart Boards, Lecture Capturing tools, Google Classroom, Learning Management System using Moodle, NPTEL & other MOOCS are considered in the preparation of the academic calendar.

Experiential learning: Students take up mini projects and major projects as part of the curriculum. Selected projects are guided by industry experts to get the exposure to the real time industry problems. Students also choose some of the local problems as references while identifying the projects. Departments plan and organize the industrial visits for students to provide exposure to industrial work culture.

Participative Learning: Courses in Skill Enhancement, MOOCs from NPTEL/SWAYAM, sports, co-curricular activities and NSS have been introduced to encourage the students to participate and learn. The students are participating in various events at state and national level.

Problem Solving Methodologies: Alternate Assessment Tools are introduced which encourage the students to involve themselves in problem solving activities and work independently. Individual assignments are required to be submitted by students. Case study method is adopted in the teaching learning process to enable the students to have logical thinking and practical knowledge.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	
	https://assessmentonline.naac.gov.in/storage
	/app/public/agar/24411/24411_215_493.pdf?167
	<u>4107900</u>

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

In NCET, the classrooms and labs are ICT enabled with projectors installed and the campus is enabling with high speed Wi-Fi connection. The faculty at NCET use various ICT enabled tools to enhance the quality of teaching-learning.

1. Google classroom is used to manage and post course related information- learning material quizzes, lab submissions and evaluations, assignments, etc.

2. Virtual labs are used to conduct labs through simulations.

3. The PPTs are enabled with animations and simulations to improve the Effectiveness of the teaching- learning process.

4. The online learning environments are designed to train students in open problem solving activity.

5. Lab manuals are mailed to students well in advance the experiment is performed

6. Online quizzes and polls are regularly conducted to record the feedback of the students

7. To teach mathematical subjects in online mode, teachers have used various online tools whiteboard in Microsoft teams, Jamboard in Google meet, etc. as well tablet pen for better writing experience during online classes.

8. VTU E-learning materials, MOOCs from SWAYAM, NPTEL, EDx, Coursera are being used by the faculty and motivating the students to take up online courses and use online resources.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://assessmentonline.naac.gov.in/storage /app/hei/SSR/104098/2.3.2_1640849567_6737.pd <u>f</u>
Upload any additional information	<u>View File</u>

### 2.3.3 - Ratio of students to mentor for academic and other related issues

### 2.3.3.1 - Number of mentors

#### 77

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<u>View File</u>
Circulars with regard to assigning mentors to mentees	<u>View File</u>

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

The institute prepares its academic calendar prior to the commencement of the semester. This calendar is prepared in conformity with university academic calendar with the input from all stakeholders. The Academic calendar is published to all the

Stakeholders. The total number of days for the semester from the commencement of the day, working days, holidays, and last working day will be mentioned. Induction Program details are also mentioned in the calendar of events. Academic Calendar will consist of details such as the conduction of Internals like CIE-1, CIE-2, Make-up CIE, Lab CIE, etc. Commencement of Semester End Examination details are also be incorporated in the Calendar of Events. Parent-Teacher Meetings, Placement training sessions, finalization and submission of student attendance data & CIE marks are indicated. Major institute level activities such as conferences, workshops, college fests, sports events, etc are also indicated in the academic calendar.

Course wise Curricular Plans and Unit wise Teaching Plans are prepared in alignment with the objectives of Outcome-Based Education. The Teaching Plan comprises the Course Learning Objectives and Course Outcomes, Learning Resources, Teaching Methods, Evaluation techniques, Remedial measures, etc. While preparing the teaching plans, suggestions of the respective subject experts of the Board of Studies (BOS) are taken into consideration. The individual departments then prepare the departmental and individual lesson plans adhering to the institutional academic and teaching plans.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Number of full-time teachers against sanctioned posts during the year

#### 177

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
Any additional information	No File Uploaded

### 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

#### 25

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full- time teachers for 5 years	<u>View File</u>
Any additional information	<u>View File</u>

### **2.4.3** - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

736

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

### 2.5 - Evaluation Process and Reforms

### 2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

#### 15-30 Days

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	<u>View File</u>

### **2.5.2** - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

### 339

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	<u>View File</u>

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

The examination is conducted by the Institute in two stages emphasizing Continuous Internal Evaluation [CIE] throughout the semester and Semester End Examination [SEE] at the end of the semester. Complete examination process is executed by the Office of the Controller of Examinations in coordination with all departments. Meeting of Board of Examiners are convened prior to the commencement of the examination to select the panel of examiners, question paper setters, moderators and deputy chief coordinators for the examination. Examination section invests every effort to maintain confidentiality of the question papers received from both internal and external examiners. The question papers to be distributed to the students are selected and printed just 60 minutes before the commencement of the examination to maintain confidentiality.

The Examination Section carries out reforms in its examination process with the aid of sophisticated IT tools. The examination procedure is automated with InstantK Examination System and Contineo Software to improve the examination management system of the institution. Contineo is a pioneering software platform for implementation and administration of academic autonomy. Contineo executes full academic autonomy culminating in secure, confidential, accurate, efficient and auditable examinations of both the digitized answer script and conventional paper and pen variety. The Contineo software helps the institution to quickly have the autonomous processes under control and provides insightful analytics so that we can focus on academic innovation and research.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.contineo.in

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

Program Outcomes (PO), Program Specific Outcomes (PSO) and Course Outcomes(CO) for all programs offered by the institution are stated, printed in the syllabus copies and displayed in website of the institution for easy access by all stakeholders. Outcome Based Education (OBE) is a student-centric learning approach and is made mandatory to Higher educational institutes by regulatory & accreditation bodies like UGC, NBA, NAAC etc. It helps the students to achieve the predetermined set of expected knowledge, skills, and values or attributes that a student should acquire upon completion of a program. Programme Outcomes, Programme Specific Outcomes and Course outcomes are necessary for the flexibility and innovation in programme design, syllabi development, teaching-learning process and assessment of student learning levels.

NCET adopted OBE from the academic year 2015-16. The programmes offered by college cater to multiple interests of the student

community and to build the human capital needed by the society and nation. The POs and COs primarily aim at imparting knowledge and skills which are critical for building students' competence and personality. There is also an emphasis on holistic development of students as the learning outcomes focus on imparting values & ethics and enhancing their interpersonal and communication skills. Further, the display boards containing Vision, Mission, Quality Policy, POs and PSOs are displayed in corridors, notice boards, class rooms and laboratories of various departments across the campus.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	https://ncet.co.in/assets/naac/Criteria 2/C2 <u>61.pdf</u>

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

The PO and CO attainment is evaluated in the following way:

- 1. Direct Method: First learning levels of students like remember, understand, apply, analyze, evaluate, create etc are defined based on Revised Bloom's Taxonomy. The learning levels of students are assessed by conducting standardized examinations like Continuous Internal Evaluation (CIE), Semester End Examinations (SEE), AAT, Assignments, Quizzes, Lab performance etc. The performance in seminars, project presentations, case study presentations, field visit reports, internship reports, project reports, etc are also used for the computation of attainment levels of COs and in turn to the attainment levels of POs and PSOs.
- 2. Indirect Method: Feedbacks of Students like Course Exit Survey, Programme Exit Survey, Alumni feedback, employers feedback, industry feedbacks etc are considered under Indirect Tools for computing the attainment of POs, PSOs & COs. Course Exit Survey on Curriculum is obtained and the same is shared with the departments, so that their feedback is discussed and relevant changes, if any, in the curriculum are suggested to BOS. Attainment of POs is evaluated based on the performance of the students in terms of their progression to higher studies, success in competitive examinations and placements.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/programs-offered/ug- courses/

### 2.6.3 - Pass Percentage of students

### **2.6.3.1** - Total number of final year students who passed in the examinations conducted by Institution

379

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://ncet.co.in/examination-department/

### 2.7 - Student Satisfaction Survey

### **2.7.1** - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

https://ncet.co.in/wp-content/uploads/2023/12/Student-Satisdfaction-Survey-for-2022-23.pdf

### **RESEARCH, INNOVATIONS AND EXTENSION**

### **3.1 - Promotion of Research and Facilities**

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

NCET has 7 Approved Research Centers of VTU with 55 Research Scholars pursuing their Ph.D. under the guidance of NCET faculty members. R&D Projects are funded by various funding agencies like AICTE, ISRO, DRDO, VTU, VGST, Institution of Engineers, KSCST, ISHRAE, ASHRAE, etc. NCET has generated income from Consultancy Projects, Sponsored R&D Grants, Seed Money Provided to Faculty. NCET has been enabling creativity, developing entrepreneurial competencies and incubating 96 Start-ups and foster entrepreneurship. 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 project "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 75 years of Freedom namely "Azadika Amrut Mahotsava" (1947-2022) of ITCA fraternity as announced by our Hon'ble Prime Minister of India at UN General Assembly recently. NCET has created conducive R&D ecosystem with both physical and intellectual infrastructure along with structured policy documents for the successful implementation of the following:

- 1. Sponsored Research Projects with Grant-in-Aid from Funding Agencies.
- 2. Consultancy Projects from Industries
- 3. Industry Sponsored Equipment/Lab
- 4. Free/Online/Advanced Labs: Established (Students/Faculty Activities)
- 5. Emerging Trends Watch: Alternative Teaching & Learning
- 6. Innovations/Patents/Video Watch etc
- 7. Industry Collaborations.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://ncet.co.in/research/
Any additional information	No File Uploaded

### 3.1.2 - The institution provides seed money to its teachers for research

### **3.1.2.1** - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

3.06

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<u>View File</u>
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View File</u>
List of teachers receiving grant and details of grant received	<u>View File</u>
Any additional information	No File Uploaded

# **3.1.3** - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

1		

File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	No File Uploaded

### **3.2 - Resource Mobilization for Research**

### **3.2.1** - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

### 16.44

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<u>View File</u>
List of projects and grant details	<u>View File</u>
Any additional information	No File Uploaded

### 3.2.2 - Number of teachers having research projects during the year

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/ncet-research/
List of research projects during the year	<u>View File</u>

### 3.2.3 - Number of teachers recognised as research guides

#### 25

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

### **3.2.4** - Number of departments having research projects funded by Government and Non-Government agencies during the year

### 14

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://ncet.co.in/research/
Any additional information	<u>View File</u>

### **3.3 - Innovation Ecosystem**

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

NCET possesses a well-balanced ecosystem to foster student talents through qualified and experienced faculty duly supported with excellent infrastructure facilities. The below-mentioned Innovation ecosystem facilities are available in the campus:

- Centre for Motion Capture Systems Design Studio
- Desktop Manufacturing/3D Printing System SatNOGS: Satellite Network of Ground Stations

- SatNAV: MobileApp Satellite Navigation Software for Android Nano Satellite Centre
- CanSat Design Centre
- University Space Engineering Consortium (UNISEC) India Chapter
- World CanSat/Rocketry Consortium/Championship (WCRC) India Chapter.

NCET has 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, startup supporting mechanism, establish function ecosystem for scouting ideas and pre incubation 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 boot camps, Idea competitions etc. for its students and faculty members. NCET has well structured R&D Policy, IPR Policy and Startup Policy to encourage innovations among Students/Faculty Members. Guest lectures and expert talk by eminent people from reputed institutions like IIT's, IISc, NIT, s and Industries. This helps students to improve their learning in a more interactive, topic Specific way. Guest lecturers can be used to make classes more approachable and appealing to students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/iic/

**3.3.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

29

File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
Any additional information	No File Uploaded

#### **3.4 - Research Publications and Awards**

3.4.1 - The Institution ensures implementation A. All of the above of its Code of Ethics for Research uploaded in

the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<u>View File</u>
Any additional information	No File Uploaded

**3.4.2** - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

### 3.4.2.1 - Number of PhD students registered during the year

#### 28

File Description	Documents
URL to the research page on HEI website	https://ncet.co.in/research/
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

### **3.4.3** - Number of research papers per teacher in CARE Journals notified on UGC website during the year

### 92

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	<u>View File</u>

# **3.4.4** - Number of books and chapters in edited volumes / books published per teacher during the year

22

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/ncet-research/

### **3.4.5** - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

### 3.4.5.1 - Total number of Citations in Scopus during the year

85

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

### 3.4.6.1 - h-index of Scopus during the year

4

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

### 3.5 - Consultancy

**3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)** 

2.47

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<u>View File</u>
List of consultants and revenue generated by them	<u>View File</u>
Any additional information	No File Uploaded

### **3.5.2** - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

0

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View File</u>
List of training programmes, teachers and staff trained for undertaking consultancy	<u>View File</u>
List of facilities and staff available for undertaking consultancy	<u>View File</u>
Any additional information	No File Uploaded

### **3.6 - Extension Activities**

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

NCET endeavors to be involved in societal and environmental awareness programmes in the surrounding villages. These Programs are undertaken through our National Service Scheme (NSS). We have two units of NSS, one started in the year 2012 with the assistance of VTU and another Self financed unit started in the year 2017.

These NSS Units undertake various Government initiatives like Swachh Bharat Abhiyan, Voter Awareness campaign, Swachh Bharat Summer Internships, Chhatra Vishwakarma award scheme, Unnat Bharat Abhiyan (UBA), creating awareness about fire crackers, Jal Samrakshana Yojana, Suvarna Mahotsava Yojana, Painting of Schools, School Bell Programme, PMKVY, BMVNTFSA and Saansad Adarsh GramYojana (SAGY) to improve the quality of life in villages.

The institution is associating with NGO's and Trusts like Sri Sathya Sai Seva trust and Annapoorna trust for Midday Meal programme, Bangalore Medical Service Trust (BMST), TTK, Rashtrothana Blood Bank, Stem Cell Registry of India (SCRI),Lions Club Blood bank etc.

With the help of service minded NSS volunteers having technical knowledge, we try to enhance the capabilities of rural people with the technological solutions to their problems. Integrated Rural Development Programme (IRDP) is a unique program which helps to upgrade school students, teachers and villagers by providing training on computer operation, digital transactions and ICT tools. Outcome of implemented programmes were remarkable. Extension activities of the NSS/YRC/RRB along with Governmental/NGO's are benefiting the villagers and students. Extension activity creates a healthy bond between college and the outside world.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/newsletters/

### **3.6.2** - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

### 1

File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

20

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

### 1602

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

### 3.7 - Collaboration

### **3.7.1** - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

#### 10

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

# 3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

#### 18

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	No File Uploaded

### INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

The college has very good infrastructural facilities exceeding the AICTE and VTU norms to facilitate effective teaching and learning process. The total built up area is 50,113 sq. metres. Spacious WiFi enabled class-rooms with ICT facilities are available. The college has spacious, well equipped laboratories having instruments, equipments, computers and related software as per the requirement of the curriculum and upgraded based on the changing curriculum and intake. The specific location of the college provides a pollution free and natural environment.

NCET Campus comprises different blocks for different departments. Main block of the college consists of Administrative Office, Principal's Office, Management Office, Basic Science Department, Department of Electronics and Communication Engineering, Various laboratories of Electronics and Communication Engineering comprising of Microwave test bench, PCB Printing Machine, Digital Oscilloscopes, etc. Seminar Halls, Classrooms, Staff rooms, Common Girls room, IQAC Office, Language lab, Studio with Video Recording facilities and Server room are housed in the same block.

Centralized Computer laboratory block consists of 551 computers with LAN connection and internet connectivity which caters to the needs of all departments. 600 MBPS Wi-Fi facilities is provided in the campus for both day scholars and hostilities with 176 access points. Underground Optical Fiber Cable (OFC) of about 1000m is laid to act as backbone to the internet facility. ICT facilities such as LCD projectors, Smart Boards, Smart TV, Lecture Capturing System, Media Centre etc are available.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/C4 11.pdf

4.1.2 - The institution has adequate facilities for cultural activities, yoga, sports and games (indoor and outdoor) including gymnasium, yoga centre, auditorium etc.)

Sports and Games: The institution has spacious outdoor game field of 10400 Sq.Mts, indoor sports space of 7000 Sq.Mts, Gymnasium of 3000 Sq.Mts. Five table tennis, 9 carom boards along with chess and other

indoor sports facilities are provided. Facilities for outdoor and indoor sports include cricket, football, volley ball, Hand ball, ball badminton, throw ball, table tennis, carom and chess.

Gymnasium: A spacious gymnasium of 3000 sq.metres with modern gym equipments such as Tread Mill, Commercial Cross Trainer, Commercial Group Bike, Latpull seated row, Leg Extension leg curl, Multipress, Pecfly Rear Delt, Power Tower, Olympic Plate Tree & bar, Flat Incline Decline Bench Press, Dumbells, etc. An exclusive gymnasium for girls is also available.

Yoga and Meditation: To encourage and give awareness about the Indian culture, Yoga is included in the time table as club activities. External trainers are invited to teach yoga.International Yoga day is celebrated every year on 21st June. Auditorium: A spacious Air conditioned auditorium with audio visual facilities is available to cater to the needs of the students to involve in various cultural activities. The Auditorium is also used to screen selected inspirational and motivational movies. Four AC Seminar halls equipped with modern audio-visual facilities are also available.

Cultural Facilities: Students are encouraged to participate in Technical fests, Technotsav, Robofest and Project Exhibitions. Independence Day and Republic Day are celebrated in the institute. The college organizes Cultural fest, Holi celebration, National Girl Child day, Engineers Day, Ethnic Day, Women's day, Environmental day, etc.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria 4/C4 12.pdf

### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

44

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

### **4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)**

#### 743.02

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	No File Uploaded

### 4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS)

### 1. Name of the ILMS Software: LIBSOFT

2. Nature of automation: The Central Library is fully automated with Integrated Library Management Software, LIBSOFT Version 9.8.5 which is used for Circulation, Procurement, Online Public Access Catalogue (OPAC) and Project Reports. All the library documents are bar-coded and books are issued trousers by scanning the barcode of the book. The holdings include books and journals, question papers and project reports. The users of the library can access publications of all major publishers like Elsevier, Springer, Taylor and Francis, ICE, Emerald etc. The users can access around 24,000 E-books and 1700 International journals.

3. Version: 9.8.5

4. Year of automation: 2006. The Institute has an up-to-date library, which is completely automated. The area of Central Library is 2000 Sq.m with a seating capacity of 400. It has a collection of more than 42,500 volumes of books. Library has a spacious Stock section, Reference section, Journals section, Personal study area and Periodical Section. The Central Library has a Digital Library and VTU E-Learning Center. Students can access On-line Journals, E-Books, Project Reports (Soft Copies), DVD's of Technical magazines & Books and live classes from VTU E-Learning center through EDUSAT. It is sponsored by Visvesvaraya Technical University (VTU), Belagavi, which enables a two way communication between the learners and resource person. Library has more than 135 NPTEL Video course learning materials and 125 Web courses which are developed by IITs & IISc. Our College Library is a member of the DELNET, Computer Society of India(CSI) & Central Manufacturing Technology Institute (CMTI).

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://assessmentonline.naac.gov.in/storage /app/public/agar/24411/24411_256_588.pdf?167 

### 4.2.2 - Institution has access to the following: e- A. Any 4 or more of the above journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access

#### to e-resources

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

### **4.2.3** - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

22.39

File Description	Documents
Audited statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

### 4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

### 4.2.4.1 - Number of teachers and students using the library per day during the year

558

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	<u>View File</u>

### 4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

NCET has a very good IT Infrastructure with Computers having network connectivity, Broadband Facility and supporting accessories. The campus and Hostels are Wi-Fi enabled with 24x7 internet connectivity. The students and faculty members can access Wi-Fi enabled internet connection, from any place in the campus, which is protected by SOPHOS Firewall. The institute have recently upgraded the internet connectivity from 150 MBPS to 600 MBPS by the service provider namely HCIN Networks Pvt Ltd at a cost of Rs. 10.00 lakhs per annum.

Computers in labs are connected with LAN, facilitating for sharing of data and resources, conduction of online exams and placement activities.176 access points, with Digisol 24-Port POE Swithes, 500 metreethernet cable and 1000 metre Optical Fibre Cable are available in the campus.All Computer Labs are equipped with UPS Facility and are under CCTV surveillance. The Institution has provided a Digital library. College central library provides Turnitin Software for Plagiarism check and Knimbus software to access e-resources through remote access.

Computer systems are provided in the Laboratories, Administrative

Section, Accounts Section, Examination Section and all the Departments for their academic and administrative use. Hostels are also equipped with computer systems and internet facilities. The institute has provided ICT facilities in auditorium, classrooms and seminar halls. The Budget for updating IT facilities is prepared by IT team headed by a professor and submitted to the principal.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria 4/C4 31.pdf

#### 4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
1928	541

File Description	Documents
Upload any additional information	<u>View File</u>

### 4.3.3 - Bandwidth of internet connection in the A. ?50 Mbps Institution and the number of students on campus

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content A. All four of the above development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/C4 34.pdf
List of facilities for e-content development (Data Template)	<u>View File</u>

### 4.4 - Maintenance of Campus Infrastructure

### **4.4.1** - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

#### 365.88

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.

NCET has established systems and procedures for maintaining and utilizing physical, academic and support facilities with a total built up area of 50,113 Sqm. All buildings and equipments are covered with insurance for fire, burglety, theft, natural calamities and accidental damages.

Utilization and Maintenance of Laboratories: Laboratories are regularly maintained by the qualified Laboratory Instructors. In Laboratories the stock registers are maintained. Equipment is maintained properly, calibrated and serviced periodically.

Maintenance of Classrooms and Seminar Halls: Cleanliness of the classrooms and furniture is maintained by the housekeeping department daily. Seminar Halls and Classrooms with suitable ICT facilities such as Smart Boards, Digital TVs & LCDProjectors, audio systems are monitored on a regular basis by the IT Team.

Utilization and Maintenance of Library Facilities: The Institute has an up-to-date library, which is completely automated with Integrated Library Management Software, LIBSOFT. The area of Central Library is about 2000 sqm with a seating capacity of 400. It has a collection of more than 42,500 volumes of books.

Utilization and Maintenance of Computers: Computer systems, UPS, Software, Servers, Hardware and Networking are maintained by qualified technicians, Lab Assistants and Lab-Instructors. IT infrastructure is maintained by the IT Head, System Admin, and Network Admin along with the Departmental coordinators.

Maintenance of other support systems: Institution has well furnished hostels for boys and girls with Wi-Fi and automated laundry facilities. Hostels are equipped with CCTVs and security staff for safety. Regular sanitization and good hygiene is maintained by the housekeeping staff in the hostels

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/C4 42.pdf

### STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

# **5.1.1** - Number of students benefitted by scholarships and freeships provided by the Government during the year

### 857

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	<u>View File</u>

# 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

0

File Description	Documents
Upload any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

5.1.3 - The following Capacity Development A. All of the above and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology

File Description	Documents
Link to Institutional website	
	<u>https://ncet.co.in/blogs/</u>
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

# **5.1.4** - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

### 355

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>

5.1.5 - The institution adopts the following A. All of the above mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti- ragging committee	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	No File Uploaded

### **5.2 - Student Progression**

### 5.2.1 - Number of outgoing students who got placement during the year

### 310

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.2.2 - Number of outgoing students progressing to higher education

### 0

File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	<u>View File</u>
Any additional information	No File Uploaded

**5.2.3** - Number of students qualifying in state/ national/ international level examinations during the year

5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

2

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	No File Uploaded

### 5.3 - Student Participation and Activities

**5.3.1** - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

11

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

NCET offers opportunities for students to participate in various academic, co-curricular and administrative activities. The college has numerous student clubs which provide them to participate in various activities. The clubs like dance club, coding club, music club, sports club, etc to encourage the students to pursue their hobbies. Students are also given opportunities to be involved in social and community development activities. The students provide feedback on various facilities in the campus such as canteen, hostel facilities and transportation system. The students are also encouraged to get involved in the design and development of the curriculum.

Cultural activities such as dance competitions, singing competitions, fashion shows, debates, collage making & sketching help the students in showcasing their talents. Intercollegiate cultural fest IKYA is conducted in which the students play a major role in organizing the event. Students organize and celebrate Ganesh Chaturthi, Onam, Kannada Rajyotsava, Navratri and other festivals. The other activities include Cultural, Ethnic and Women's Days. Students are encouraged to take up social responsibilities by organizing blood donation camps to help the needy.

The Class committee is constituted for every semester of the department which consists of student representatives and faculty

representatives. The students are given due representations in various decision making bodies of the college such as IQAC, Board of Studies, Grievance Redressal Cell, Discipline Monitoring Committee, College Internal Complaints Committee(CICC), Anti Ragging Committee, Alumni Association, etc.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

#### 16

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	No File Uploaded

### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

Nagarjuna College of Engineering & Technology Alumni Association established during 2006 and registered under the Societies Registration Act 17 of 1960 during May 2016 with an aim to build an actively engaged alumni network. The Association connects with alumni through a diverse set of events and services. Since its inception the association has been active in ensuring that its esteemed alumni continue to be a part of the institutional ecosystem. The Alumni Association ensures active alumni participation in various institutional initiatives in the form of Distinguished alumni talks, Tech Talks, Webinars, alumni advisory boards, Student mentoring, Career guidance, Placement & internships, etc. Alumni community is regularly being greeted with wishes for Festival and College activities are informed from alumni@ncetmail.com. NCET alumni LinkedIn account was created and updated regularly. We currently have 1000+ active members on the page. The details of alumni members and activities of the alumni are regularly updated in the college website at

### https://ncet.co.in/alumni-relations/

Alumni are a part of IQAC, Departmental Board of Studies and Alumni Association. Continuous interactions between the past and present students are established by the alumni association with the help of publication of newsletter, holding periodical Alumni day celebrations and by other activities as decided by the association. Alumni members are generous in providing financial support to the institution. They are volunteering themselves in helping the students in industry readiness, project works, internships and placements.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	<u>https://ncet.co.in/alumni/</u>

## 5.4.2 - Alumni's financial contribution during A. ? 15 Lakhs the year

File Description	Documents
Upload any additional information	No File Uploaded

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Vision: Leadership and Excellence in education.

Mission: To fulfill the vision by imparting total quality educations replete with the Philosophy of blend the values and academic professionalism.

Setting values and a collaborative decision-making process are key to effective leadership. It is essential not only for the institution's vision, mission, and goals to be realized, but also for the organization's growth. Four UG programmes of the college are accredited by NBA and the college is certified by ISO with QMS, EMS and FSMS Certifications. Nagarjuna College of Engineering and Technology was founded with the goal of delivering a qualified and competent workforce to society via quality education and training. The Governing Body (GB) will approve the policy decisions to be implemented by the college. The Governing Body is set up in accordance with UGC/AICTE regulations. The Governing body has representatives from different levels of faculty.

The meeting of GB is held twice in a year or as per the need in a transparent manner. The GB reviews and approves the institution's strategic plan, vision and mission, as well as budgetary allocations to various departments based on the institution's strategic plan. All stakeholders are actively involved in the implementation various decisions of the GB. The GB ensures that all decisions regarding admission, new programmes, infrastructure, teaching & learning process, and placements are executed in accordance with the Institution's core values. Senior faculty members serve on the board of appointments.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/assets/naac/Criteria_6/C6 11.pdf

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The participative and decentralization is being practiced through the following:

- Departments are given full academic autonomy and administrative autonomy.
- Departments are provided with full autonomy to plan and organize Short Term Training Programs, conferences, seminars, industrial visits, institute-industry interaction etc.
- Departments prepare the estimates for future expansion which includes infrastructure, laboratory equipment's, computers, furniture, man power requirements etc.
- Academic related matters such as attendance of students, setting of question papers, conduction and evaluation of exams, design and development of question banks, identification of eligible external examiners etc. are performed independently by the departments.
- Staff increments, leave related matters, allocation of subjects, preparation of course materials, monitoring of syllabus coverage, counseling, arranging special classes for

slow learners etc. are planned and implemented by the departments.

- Senior professors of the department are given a role in Governing Body Academic Council, Internal Quality Assurance Cell, Program Assessment Committee and Board of Studies.
- Faculty members are nominated to various committees and decision making bodies.
- Staff members are involved in regular internal academic audits and document verification processes.
- Parent teacher meetings are regularly conducted to inform the parents about the progress of their wards, counsel the students and elicit their opinion about the functioning of the college.
- Minutes of Meetings of Academic Council, BOS, etc and audit statements are published in college website for transparency in governance.
- Major decision related to academics is taken in HODs committee in consultation with the Principal.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/assets/naac/Criteria_6/C6 12.pdf

### 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The strategic plan of the college has been well designed by considering the inputs from stakeholders through focused discussions, feedbacks, conferences and workshops by adopting participatory techniques, at department and institutional levels. The strategic plan is formulated with a clear focus towards the accomplishment of excellence by using the resources efficiently. The strategic plan serves as a guiding document for setting the short term and long term goals for the departments. The management conducts regular review of the processes involved in the strategic plan.

The objectives of the strategic plan are:

1. Autonomy in curriculum design, delivery and evaluation.

2. Achieving academic excellence through skill development for students.

3. Building intellectual ability and technical competency among the students.

4. Up-skilling of Faculty Members.

- 5. Implementation of administrative and examination reforms.
- 6. Promoting Research & Consultancy.
- 7. Creating an cordial environment for holistic development

Following major areas are covered in the strategic plan:

- Academics
- Co-curricular activities
- Administration & Examination
- Financial planning and support
- Research & consultancy
- Accreditation and rankings
- Funding from external agencies
- Faculty publications, patents, workshops and conferences
- Infrastructure / Hostels, Staff Quarters
- Industry interactions, internships and placement activities
- Incubation / startups
- Social Responsibility
- Feedback from stakeholders

The successful organizing and conduction of IEEE International Conference is described as an example

Title of the activity: IEEE International Conference for Innovation in Technology (IEEE INOCON-2020).

Objectives:

1. Enhance research culture among the faculty members and students.

2. Create a platform to share new ideas in multidisciplinary research.

3. Expose the innovations in new technology.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_6/C6 21a.pdf
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

NCET has many statutory and non-statutory bodies to carry out specific functions and responsibilities in pursuit of the Institution's vision, mission and core values.

Governing Body (GB) : The administration of the institution is overseen by the Governing Body(GB). Governing body meetings have been conducted in a transparent manner. Minimum two meeting will be scheduled in a year to discuss various matters pertaining to the administration of the institution.

Academic Council (AC) : The Academic Council is the highest academic body which decides and advises on all academic matters. Academic proposals of BoS from each department are scrutinized and approved with or without modifications by the academic council and also recommends/advises the GB on various proposals for starting new programmes of study and other academic matters.

Board of Appointments (BoA) and Services Rules : The staff selection for the vacancies are conducted by Board of Appointments constituted as per the guidelines from UGC & VTU. The nominees of the University, management, subject experts, HODs and Principal are the members of the BoA.

Service Manual: NCET has a well established service rules. These service rules are made available for all the staff members and other stake holders in the form of service manual through the website. Faculty members are encouraged to take up research activities thereby empowering them to excel.

Academic & Administrative Committees: The institution has in place several committees in addition to statutory committees to A. All of the above

continuously monitor the academic and administrative activities. The committees comprises of key stakeholders.

File Description	Documents
Paste link to Organogram on the institution webpage	https://ncet.co.in/assets/naac/Criteria_6/C6 22.pdf
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/wp-content/uploads/2023/0 9/Minutes-of-11th-ACM-held-on-09.09.2023.pdf

## 6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	No File Uploaded

### **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

The Institution has welfare mechanisms in place for both teaching and non-teaching staff. The various welfare schemes are:

- Service benefits like contributory PF, ESI, Gratuity, Study leave, Maternity leave, Casual leave, Special Casual leave, Compensatory offs, Earned Leave, Restricted holiday and Medical leave to employees.
- Salary Increments based on Performance appraisal for both teaching & non-teaching staff.
- Encouragement is given for research and development activities.
- Financial support to participate in national and international

conferences to present research papers. Faculty development programs (FDP), workshops and guest lectures are organized on a regular basis.

- Teaching and non-teaching staff members get fee concession for their ward to pursue education in the group of institutions.
- Vacations at the end of every semester is given to both teaching and non-teaching staff.
- If any individual faculty is in need of accommodation, the same will be provided in the college hostel.
- Wi-Fi facility is made available in the faculty quarters and hostel. Web based leave management system.
- Refreshments are offered for both teaching and nonteaching faculty every day. Free Covid testing & vaccinations for all employees and their family members.
- In case of any medical emergency, a vehicle is kept reserved in the college campus to reach the nearest medical facility.
- Common room facility for female staff members and girl students.
- Day care center is made available in the college premises for both teaching & non-teaching staff children.
- Sanitary napkin vending machine and disposal machine is available for the benefit of female staff and girl students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://assessmentonline.naac.gov.in/storage /app/public/agar/24411/24411_284_649.pdf?167 3341602

# **6.3.2** - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

2

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

### 6.3.3 - Number of professional development / administrative training programmes organized by

### the Institution for its teaching and non-teaching staff during the year

#### 20

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

### 207

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	No File Uploaded

### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Internal Audit: The internal audit is conducted annually by an approved auditor appointed by the Management who checks each bill and payments vouchers of all accounts. They submit an audited statement of income and expenditure to the management for consideration and approval.

The audit is conducted in accordance with auditing standards generally accepted in India. The audit includes the following:

- 1. Checks for compliance with policies, laws, and regulations
- 2. Comparing previous financial statements to the present ones
- 3. Reviewing reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
- 4. Review the means of safeguarding assets and as appropriate,

verifying the existence of such assets

5. Reviewing and appraising the economy and efficiency with which resources are employed.

External Audit: The duly audited reports are submitted to the external audit team. The External Audit Team regularly audits the college financial report. The external audit is carried out in an elaborate manner on a yearly-basis. In case of any objections, the institution will deal with it promptly and take necessary corrective measures in a completely transparent manner.

Criteria for settlement of objections of External Audit:

- 1. Examining the procedures and policies and regulations vouching.
- 2. Verify the salary payment, TDS, Income Tax, EPF, ESI, Professional Tax, Gratuity, etc.
- 3. Examining the property titles, approvals, fee payments to regulatory bodies, Evaluating fee receipts, Certify the audit report, Filing the Income Tax returns regularly.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/audit-reports/

# 6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

0

File Description	Documents
Annual statements of accounts	<u>View File</u>
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	No File Uploaded

6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Proper collection and utilization of financial resources is planned at the beginning of every financial year. The budget details are collected before the start of every academic year. The utilization of the current year expenses and the budget for the next year is approved by the Governing Body.

Research proposals are prepared and sent to different funding agencies like Vision Group on Science and Technology (VGST), All India Council for Technical Education (AICTE), University Grants Commission (UGC), Department of Science & Technology (DST), Visvesvaraya Technological University (VTU), DRDO, ISRO, Karnataka State Council for Science and Technology (KSCST), Industries etc,. The grant received from such organizations is used in procuring special equipments needed for research activities thereby strengthening the infrastructural facilities in the laboratories.

Different financial sources available are:

- Fee collected from students is the major resource for the institution.
- Funding from different funding agencies such as VTU, AICTE, VGST, KSCST, Institute of Engineers and other R&D centers.
- The management is spending budgeted amount to develop the required infrastructural facilities such as buildings for various departments, administrative blocks, laboratory equipments, Boys and girls hostel buildings, library building, canteen, auditorium, staff quarters, exam section buildings. These buildings are constructed by the management by their own sources of funds.

NCET is a self financed institution. The institution is dependent on the fee collected from students for its routine recurring expenses such as salary of teaching and non-teaching staff, maintenance of building and equipment and other facilities.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://assessmentonline.naac.gov.in/storage /app/public/agar/24411/24411_290_662.pdf?167 3254197

### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during

the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

The IQAC has contributed significantly towards improving curriculum enrichment, academic excellence, teaching and learning process, evaluation methods and research atmosphere in the institution.

Two of the practices of IQAC are as follows:

1. Academic Audits: The academic audit provides an opportunity for a regular strategic overview of teaching-learning process. The audit is conducted at faculty level, department level and at the institute level.

- The first level is the self-analysis by faculty handling the respective course. The audit comprises of parameters such as course outcomes, CO-PO mapping, Assessment tools, assessment analysis, CIE- SEE correlation factor and CO attainment.
- The second level of audit is conducted by the respective department academic audit committee comprising auditing parameters such as the best academic practices of the department, redefining of COs, courses where CIE-SEE correlation is of concern and any other aspect of the department.
- The third level audit is conducted at the institute level where in a team comprising of senior professors is formed to audit the various departmental academic activities.

External Audits: Further to strengthen the quality system, since 2013 Academic Audits by external agencies have also been initiated.

2. Pedagogy and Skill Up gradation Trainings: Pedagogy training is initiated by IQAC and all the faculty are trained in Outcome Based Education and assessment. From time to time, newly recruited faculty members are trained in Pedagogical methods. For skill up gradation of the faculty, Workshops, FDPs, Seminars, etc are initiated by the IQAC.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/igac/

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

The Internal Quality Assurance Cell (IQAC) is established as per the guidelines from UGC to maintain and enhance quality of education. The prime goal is to develop a system for consistent and catalytic improvement in the performance of institution.

Programme Assessment Committee Review: Programme Assessment Committee (PAC) review is essential to understand the attainment levels of the students in terms of knowledge and skill component. The attainment of COs and POs are calculated based on the guidelines defined by IQAC, which contains both Direct and Indirect Assessment Methods.

Industry Participation: Enhancement of industry interaction in teaching learning is essential to improve the outcomes of the students and to enhance the knowledge and skill of the faculty. Industry Institute Interaction & Innovation (I4) cell was established to have better interaction between industry and academia.

Internships: As per the IQAC guidelines, industry internship for the students has been made mandatory. UG and PG students undergo internships in reputed industries related to their field of study. Many students from IT branches are selected for internships with stipend.

Curriculum Design: As per IQAC guidelines, curriculum is designed by taking the feedback from the industry, alumni, employers, parents, faculty and students. Academic Council, Board of Studies and Department Advisory Boards have participation of experts from the industry, and have helped in revising the curriculum to industrial requirements.

Teaching and Learning by Industry experts: IQAC encourages the departments to involve industry personnel in partial delivery of the courses, Faculty development Programmes, Workshops, Seminars and Technical Talks.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/iqac/

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://ncet.co.in/wp-content/uploads/agar/I QAC%20Annual%20Report%202022-2023.pdf
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

### INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Safety and Security: NCET considers safety and security of the girl students as paramount and has initiated many fool-proof measures. The campus is under CCTV surveillance. The hostels are fenced and gated properly. The sanitary napkin incinerators as well as sanitary napkin vending machines are installed for the health and hygiene of the girls. Ladies common room facilities are made available. Further, the inward and outward movement of outsiders are recorded and monitored by professional security personnel at the college main gate. Apart from this, students are mandated to wear their ID cards and monitored by the full time vigilant security personnel guarding the gates.

Counseling: The Women cell holds several interactions with the students during curricular and co- curricular activities of the college. A counselor conducts joint sessions with students and parents whenever it is necessary. The issues addressed are maladjustment, academic performance, anxiety, peer pressure, relationship handling, absenteeism, malpractice, low self-esteem, emotional instability etc. Students who attended the counseling sessions felt comfortable and emotionally secured at the end of the session.

Day Care centre: NCET is providing a day care centre to take care of the young children of the employees of the institute. The main objective of the centre is to provide day care facilities to the children of the age group of six months to six years. The Day Care Centre is provided with toys and equipment for cognitive and physical development of the children. A Woman caretaker is appointed to look after the children.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/wp-content/uploads/2023/1 2/IQAC-Annual-Reports-for-the- year-2022-23.pdf

7.1.2 - The Institution has facilities for B. Any 3 of the above alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ powerefficient equipment

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Solid Waste Management:Solid Waste generated from our institute is segregated into organic waste and inorganic waste which is collected and processed separately. The organic waste is composted within the campus area and converted into manure which is used for gardening.

E-Waste Management: E-waste such as computers and its peripherals are upgraded regularly to continue usage and to minimize its wastage. The electronic equipment such as computers and its accessories, lighting systems, cords & cables, fans, TV's, Projector's etc. are collected and stored in a designated E-Waste store room. The stored E- Waste is later handed over to E-Waste recycling plant for disposal as per KSPCB norms.

Hazardous waste Management: As per the hazardous waste and other waste (management and trans boundary movement) Rules 2016, the waste oil generated from servicing of three diesel generator sets of capacity 125 KVA, 100 KVA and 250 KVA is collected in a barrel and stored separately till it is handed over to the pollution control board authorized recycler.

Bio-medical Waste Management: As per the bio medical waste management rules 2016, The only Biomedical waste from the campus are the sanitary napkins. The institute has provided incinerators to dispose of sanitary napkins.

Liquid Waste Management & Waste Water Recycling: As per the Water act 1974, the college has provided the required STP using Sequential Batch Reactor Technology. The treated water is meeting all the KSPCB standards before the recycled water is reused. The treated water is used for the maintenance of greenery in the campus.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>
Geotagged photographs of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.4 - Water conservation facilities available A. Any 4 or all of the above in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

File Description	Documents
Geotagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

### 7.1.5 - Green campus initiatives include

# 7.1.5.1 - The institutional initiatives for greening the campus are as follows:

A. Any 4 or All of the above

- **1. Restricted entry of automobiles**
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Geotagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

7.1.6 - Quality audits on environment and energy undertaken by the institution

7.1.6.1 - The institution's initiatives to A. Any 4 or all of the above preserve and improve the environment and harness energy are confirmed through the following:

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions/awards
- 5. Beyond the campus environmental
  - promotional activities

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

A. Any 4 or all of the above

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabledfriendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screenreading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

rooms Signage including tactile splay boards and signposts nology and facilities for persons es: accessible website, screenare, mechanized equipment, etc. enquiry and information:

File Description	Documents
Geotagged photographs / videos of facilities	<u>View File</u>
Policy documents and brochures on the support to be provided	<u>View File</u>
Details of the software procured for providing assistance	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

Our institute is undertaking several efforts and initiatives for providing an inclusive environment for students, teaching and non teaching staff. Several activities are conducted towards achieving tolerance and harmony in cultural, regional, linguistic, communal, socioeconomic and other diversities. Swachh Bharat Abhiyan and Unnat Bharat Abhiyan are some of the initiatives taken up by the college.

Awareness about problems and consequences faced by students involved in gambling, IPL betting was organized by National Service Scheme (NSS), Youth Red Cross (YRC) and Red Ribbon Club (RRC) teams. Our college also took initiative towards workshops such as Master Trainers Workshop on Saansad Adarsh Gram Yojana (SAGY) an initiative of MHRD, Government of India. Our Students also participated in Digital India Awareness program on "Vittiya Saksharata Abhiyan" organized by MHRD. Students participated in the state level NSS camp on the theme "Healthy Youth for Healthy India" which was conducted to create awareness on health, safety & technological advancements.

Our students participated in Rajatha Yana event conducted by

Ramakrishna Vivekananda Ashram which helped the students in inculcating human values. NSS Volunteers took part in the Youth for Society event held at BMSCE & were awarded prizes for the role play on "Women Safety" and poster presentation on "Rural development using GIS". Institution celebrates national festivals such as Independence Day, Republic Day & Gandhi Jayanthi, where students and staff are encouraged to deliver talks and speeches on national unity, communal harmony.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

To make the students to be responsible citizens, a course titled "Constitution of India, Professional Ethics and Human Values" was introduced as a mandatory course to all the UG students. The institute also motivates students and staff to donate blood by organizing blood donation camps every year. Two courses namely "Universal Human Values- I" and " Universal Human Values- II" are offered as per the AICTE model curriculam. Programmes on Teachings of Swamy Vivekananda were also conducted.Our college celebrates International Women's Day. Women's welfare association namely "Samanvitha" is actively conducting different programs such as, donation of essential items to Orphanage as part of their "Social Connect Programe", Eye Check-up camp, Blood donation campfor all staff members etc. Our college also celebrate festivals such as Kannada Rajyotsava & Anti-terrorism day which help them to implement the social and religious harmony.

International yoga day is also organized in the college to promote harmony towards each other. Our college also took initiative towards the Tree planting campaign. Our college also motivates students by celebrating Engineer's day and Constitution Day. Every year Republic day is celebrated on 26th Jan by highlighting the importance of Indian Constitutional values. Independence Day is also celebrated each year to highlight the struggle of freedom. A. All of the above

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

File Description	Documents
Code of Ethics - policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The academic calendar is brimming with important events which show the enthusiasm of this institution in celebrating many national as well as international days and commemorative events and festivals. Republic day is celebrated every year on 26th January in the college with great enthusiasm and pride. A function is organized in college campus where all staff members and students share their thoughts about the importance of this day in the history of our nation and pay tribute to all freedom fighters. Independence Day and Republic Day is also celebrated in the college with great enthusiasm. It is a day when all staff members and students pay homage to their leaders and those who fought for India's freedom in the past. International Women's Day, National Girl Child Day and National Yoga Day is celebrated every year, Teachers Day is celebrated every year in the remembrance of Dr. Radhakrishnan, a great teacher and a great leader to inspire all of us. Floral tributes will be paid to Sir M Visvesvaraya on Engineers day. The institute organizes Constitution Day in remembrance of the Contributions of Dr. B.R Ambedkar, Gandhi Jayanthi is celebrated and Swatch Bharath activities are also organized. Anti-Terrorism day is observed on 21st May and pledge is taken. Mathru Bhasha Divas is celebrated in the institute. To ensure and encourage oneness among the students and faculty community, the Institute celebrates regional festivals like Navatri, Onam, Holi, Vinayaka Chathurthi, Kannada Rajyothsava, Deepavali, Sankranthi etc.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<u>View File</u>
Geotagged photographs of some of the events	<u>View File</u>
Any other relevant information	No File Uploaded

### 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Best Practice: 1

#### 1. Title: STUDENT SUPPORT SYSTEM

2. Objectives: To map the student interest and capabilities with the skill development to be provided, continuously monitor the student's progress in terms of academic performance, learning capabilities, attendance and general behavior. This system also helps to identify and understand the students requirements such as financial assistance in

the form of freeships and scholarships, communication skill development through language laboratories, counselling for higher education and overall mentoring support.

3. Goal: To provide support with regard to the overall development of the students and to Involve students to contribute their quality learning experience and academic success. Reduce dropout rate, increase student life diversity and encourage rational thinking.

#### Best Practice: 2

#### 1. Title of the Practice: CAREER SUPPORT SYSTEM

2. Objective: To utilize benefits from MOOCs and NPTEL certification to eliminate technological obsolescence. To make the faculty and the student equipped with knowledge and make them industry ready. To see faculty gain benefits through initiatives planned for individual research and research through the students. To foster inquisitiveness among students.

3. Goal: The students and faculty can practice different solutions to the problems at hand by the use of virtual labs. They can learn the procedure to conduct the experiments in different ways without damaging the physical equipments and instruments. They can also try alternate methodologies to solve the same problem in variety of ways. The broad aim is to make students and faculty get a pragmatic understanding of the various labs that are used frequently in the institute.

File Description	Documents
Best practices in the Institutional website	https://ncet.co.in/assets/naac/Criteria_7/C7 21.pdf
Any other relevant information	https://ncet.co.in/newsletters/

### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

With technology changing at a rapid pace, it is eminent that academia needs to keep up the pace with technological advancements. Hence I4 cell at NCET ensures to effectively and adequately bridge the gap between the Industry and the Academia by working on 4 exclusive I's which are as under:

Industry Engagements & Tie-Ups: The college has collaboration with a number of industries for training the students through industrial visits, internships and projects. The experts from industries are invited to give expert talks on latest technological developments.

Innovation & Entrepreneurship: The students are encouraged to take up mini projects, participate in hackathons, codethons, project exhibitions, etc. thereby get exposed to innovation at a very early age. The college encourages the interested students to take up entrepreneurship.

Incubation & Start-Ups: The college encourages and guides the students to start their own ventures and also provides technical advice as well as sources of finance. The institution provides facilities such as office space, power, water, internet, etc for incubating the start-ups.

Internships: To expose the students towards the latest technological developments, internship plays a vital role. Hence, internship is made compulsory as part of the curriculum. Credits are awarded for student internships based on the duration.

Last few years, the institution has seen some very unique and distinct activities being carried out which are briefly listed below:

- 1. Go Green Initiative
- 2. CSR Exclusivity
- 3. Industry Lab and Centre of Excellence
- 4. Higher Education and International Internships
- 5. Alumni Relations

# Part B

## CURRICULAR ASPECTS

## **1.1 - Curriculum Design and Development**

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

The curricula for the undergraduate and post-graduate programs have been formulated in accordance with the guidelines of AICTE, affiliating university VTU, suggestions by Members of Professional Bodies, Industry experts and Alumni. In this regard, curriculum of various Indian universities, Foreign Universities and other Sources are hereby referred to. IQAC is involved with stakeholders from time to time to collect feedback to meet the societal needs to enhance the quality of education to be imparted. The curriculum is designed such that students have the required domain knowledge and skill sets to enter an industry.

The Graduate attributes are adopted as Program Outcomes (POs), Program Specific Outcomes (PSOs) for each program. They have been formulated to ensure the attainment of domain-specific knowledge and skills in relation with Course Outcomes (COs). The curriculum is formulated in tune with the POs and PSOs and is modified at regular intervals, presented and discussed in the Board of Studies (BoS). BoS includes Industry Experts, Senior Academicians from reputed Institutions, Faculty members and Alumni, whose suggestions are considered for incorporation in the revised curriculum before submitting to the Academic Council. Finally, the Academic Council approves the curriculum. The Governing Body ratifies the decision of the Academic Council.

The curriculum also offers courses in Universal Human Values, Basic Sciences, Professional Core Courses, Open and Professional Electives, Skill Development Courses, Project Based Learning (PBL), Laboratory and Project Work. Technical report writing and language laboratory enhance written and verbal communication skills.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	https://assessmentonline.naac.gov.in/stora ge/app/public/agar/24411/24411_192_461.pdf

## 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

9

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	No File Uploaded

# **1.1.3** - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

### 254

File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	<u>View File</u>
Any additional information	No File Uploaded

## **1.2 - Academic Flexibility**

## 1.2.1 - Number of new courses introduced across all programmes offered during the year

254

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	<u>View File</u>

## **1.2.2 - Number of Programmes offered through Choice Based Credit System** (CBCS)/Elective Course System

9

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	<u>View File</u>

## **1.3 - Curriculum Enrichment**

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

Various courses are introduced in the curriculum related to Gender Equality, Sustainability, Human Values and Professional Ethics.

Gender Equality, Human Values and Professional Ethics: To inculcate Moral, Social and Ethical values, the college has introduced courses on Human values and Professional Ethics as credit course during 2nd and 3rd year for all undergraduate programs. The Universal Human Values course integrates various human values to be learnt by the students as per the curricula suggested by AICTE. Faculty members are trained by AICTE approved resource persons for teaching this course. The course on Constitution of India offered, Professional Ethics & Human Values offered during second year also enables the students to understand duties and responsibilities of a citizen, professional ethics to be followed and human values to be imbibed. Women Cell and Anti[1]sexual harassment committees continuously organize various programs like debate, seminars, panel discussions and awareness programmes to supplement the courses on gender sensitization.

Environment and Sustainability: Environmental Science is an interdisciplinary mandatory course is offered as part of the curriculum. Many courses on environment protection such as Environmental Pollution, Air Pollution and Solid Waste Management, Ecology & Environmental Impact Assessment, Industrial Waste Water treatment, Design of Energy Efficient Buildings, Green Buildings, Water Resource Engineering, Sustainable Constructions, Rural Water Supply & Sanitation, Construction & Demolition Waste Management, Rain Water Harvesting, etc are part of the curriculum.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	<u>View File</u>

**1.3.2** - Number of value-added courses for imparting transferable and life skills offered during the year

#### 16

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value- added courses	<u>View File</u>
Any additional information	<u>View File</u>

### **1.3.3** - Number of students enrolled in the courses under 1.3.2 above

1164

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

### 1.3.4 - Number of students undertaking field work/projects/ internships / student projects

638

File Description	Dogumants	
File Description	Documents	
List of programmes and number of students undertaking field projects / internships / student projects		<u>View File</u>
Any additional information		No File Uploaded
1.4 - Feedback System		
1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3)A. All 4 of the aboveEmployers and 4) AlumniEmployers and 4) Alumni		
File Description	Documents	
Provide the URL for stakeholders' feedback report	<u>ind</u>	<u>https://www.aicte-</u> ia.org/feedback/index.php
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management		<u>View File</u>
Any additional information		No File Uploaded
1.4.2 - The feedback system of the Institution comprises the following		A. Feedback collected, analysed and action taken made available on the website
File Description	Documents	
Provide URL for stakeholders' feedback report	https://ncet.co.in/wp-content/uploads/2023 /12/Student-Satisdfaction-Survey- for-2022-23.pdf	
Any additional information	No File Uploaded	
TEACHING-LEARNING AND EVALUATION		
2.1 - Student Enrollment and Profile		
2.1.1 - Enrolment of Students		
2.1.1.1 - Number of students admitted (year-wise) during the year		

## 619

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

# 2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

### 321

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

## 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The institution assesses the learning levels of the students based on the performance of the students in class tests, assignments, and semester end examinations. First year students are identified as slow and advanced learners based on their PUC or plus two marks. The college conducts Student Induction/Orientation Programmes as per guidelines from AICTE and VTU during the commencement of every academic year for the newly admitted students. The facilities in the college and the scope of the different courses being learnt are introduced in these sessions. Faculty members are interacting with the students to identify their potential during induction programme.

For slow learners, the institute provides special guidance, tutorial classes, remedial coaching classes, personal counseling, question paper solving and home assignments. On the other hand, advanced learners are encouraged to participate in SWAYAM/NPTEL online courses and also provided with the opportunity to participate in many of the conferences, seminars, exhibitions, Hackthons, coding contests, etc. College also provides VTU Consortium membership to the advanced learners. The college has introduced merit prizes, ranks and gold medals for each programme of study. The advanced learners are also provided with the facility of peer tutoring of the slow learners which will be beneficial for both advanced as well as slow learners. The tutors will be rewarded with cash incentives, if the tutees mapped to the tutor, improves performance. This peer tutoring has proved that it is a very effective method of collaborative learning.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://assessmentonline.naac.gov.in/stora ge/app/public/agar/24411/24411_213_490.pdf

### 2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
31/07/2023	1928	177

File Description	Documents
Upload any additional information	<u>View File</u>

### 2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problemsolving methodologies are used for enhancing learning experiences:

The College prepares the academic plan during the beginning of every semester. Various methods of experiential and participatory learning as well as problem-solving methodologies are also considered in the preparation of the academic plan. Usage of the modern teaching tools such as PowerPoint presentations, YouTube videos, Interactive Smart Boards, Lecture Capturing tools, Google Classroom, Learning Management System using Moodle, NPTEL & other MOOCS are considered in the preparation of the academic calendar.

Experiential learning: Students take up mini projects and major projects as part of the curriculum. Selected projects are guided by industry experts to get the exposure to the real time industry problems. Students also choose some of the local problems as references while identifying the projects. Departments plan and organize the industrial visits for students to provide exposure to industrial work culture. Participative Learning: Courses in Skill Enhancement, MOOCs from NPTEL/SWAYAM, sports, co-curricular activities and NSS have been introduced to encourage the students to participate and learn. The students are participating in various events at state and national level.

Problem Solving Methodologies: Alternate Assessment Tools are introduced which encourage the students to involve themselves in problem solving activities and work independently. Individual assignments are required to be submitted by students. Case study method is adopted in the teaching learning process to enable the students to have logical thinking and practical knowledge.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	https://assessmentonline.naac.gov.in/stora ge/app/public/aqar/24411/24411_215_493.pdf <u>?1674107900</u>

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

In NCET, the classrooms and labs are ICT enabled with projectors installed and the campus is enabling with high speed Wi-Fi connection. The faculty at NCET use various ICT enabled tools to enhance the quality of teaching-learning.

1. Google classroom is used to manage and post course related information-learning material quizzes, lab submissions and evaluations, assignments, etc.

2. Virtual labs are used to conduct labs through simulations.

3. The PPTs are enabled with animations and simulations to improve the Effectiveness of the teaching- learning process.

4. The online learning environments are designed to train students in open problem solving activity.

5. Lab manuals are mailed to students well in advance the experiment is performed

6. Online quizzes and polls are regularly conducted to record the

### feedback of the students

7. To teach mathematical subjects in online mode, teachers have used various online tools whiteboard in Microsoft teams, Jamboard in Google meet, etc. as well tablet pen for better writing experience during online classes.

8. VTU E-learning materials, MOOCs from SWAYAM, NPTEL, EDx, Coursera are being used by the faculty and motivating the students to take up online courses and use online resources.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://assessmentonline.naac.gov.in/stora ge/app/hei/SSR/104098/2.3.2_1640849567_673 7.pdf
Upload any additional information	<u>View File</u>

### 2.3.3 - Ratio of students to mentor for academic and other related issues

### **2.3.3.1 - Number of mentors**

77

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<u>View File</u>
Circulars with regard to assigning mentors to mentees	<u>View File</u>

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

The institute prepares its academic calendar prior to the commencement of the semester. This calendar is prepared in conformity with university academic calendar with the input from all stakeholders. The Academic calendar is published to all the

Stakeholders. The total number of days for the semester from the commencement of the day, working days, holidays, and last working day will be mentioned. Induction Program details are also mentioned in the calendar of events. Academic Calendar will consist of details such as the conduction of Internals like CIE-1, CIE-2, Make-up CIE, Lab CIE, etc. Commencement of Semester

End Examination details are also be incorporated in the Calendar of Events. Parent-Teacher Meetings, Placement training sessions, finalization and submission of student attendance data & CIE marks are indicated. Major institute level activities such as conferences, workshops, college fests, sports events, etc are also indicated in the academic calendar.

Course wise Curricular Plans and Unit wise Teaching Plans are prepared in alignment with the objectives of Outcome-Based Education. The Teaching Plan comprises the Course Learning Objectives and Course Outcomes, Learning Resources, Teaching Methods, Evaluation techniques, Remedial measures, etc. While preparing the teaching plans, suggestions of the respective subject experts of the Board of Studies (BOS) are taken into consideration. The individual departments then prepare the departmental and individual lesson plans adhering to the institutional academic and teaching plans.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

### 2.4 - Teacher Profile and Quality

### 2.4.1 - Number of full-time teachers against sanctioned posts during the year

### 177

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
Any additional information	No File Uploaded

## 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<u>View File</u>
Any additional information	<u>View File</u>

## **2.4.3** - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

### 736

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

### 2.5 - Evaluation Process and Reforms

## 2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

### 15-30 Days

File Description	Documents
List of Programmes and the date of last semester-end / year- end examinations and the date of declaration of result	<u>View File</u>
Any additional information	<u>View File</u>

## 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	<u>View File</u>

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

The examination is conducted by the Institute in two stages emphasizing Continuous Internal Evaluation [CIE] throughout the semester and Semester End Examination [SEE] at the end of the semester. Complete examination process is executed by the Office of the Controller of Examinations in coordination with all departments. Meeting of Board of Examiners are convened prior to the commencement of the examination to select the panel of examiners, question paper setters, moderators and deputy chief coordinators for the examination. Examination section invests every effort to maintain confidentiality of the question papers received from both internal and external examiners. The question papers to be distributed to the students are selected and printed just 60 minutes before the commencement of the examination to maintain confidentiality.

The Examination Section carries out reforms in its examination process with the aid of sophisticated IT tools. The examination procedure is automated with InstantK Examination System and Contineo Software to improve the examination management system of the institution. Contineo is a pioneering software platform for implementation and administration of academic autonomy. Contineo executes full academic autonomy culminating in secure, confidential, accurate, efficient and auditable examinations of both the digitized answer script and conventional paper and pen variety. The Contineo software helps the institution to quickly have the autonomous processes under control and provides insightful analytics so that we can focus on academic innovation and research.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.contineo.in

### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

Program Outcomes (PO), Program Specific Outcomes (PSO) and Course Outcomes(CO) for all programs offered by the institution are stated, printed in the syllabus copies and displayed in website of the institution for easy access by all stakeholders. Outcome Based Education (OBE) is a student-centric learning approach and is made mandatory to Higher educational institutes by regulatory & accreditation bodies like UGC, NBA, NAAC etc. It helps the students to achieve the predetermined set of expected knowledge, skills, and values or attributes that a student should acquire upon completion of a program. Programme Outcomes, Programme Specific Outcomes and Course outcomes are necessary for the flexibility and innovation in programme design, syllabi development, teaching-learning process and assessment of student learning levels.

NCET adopted OBE from the academic year 2015-16. The programmes offered by college cater to multiple interests of the student community and to build the human capital needed by the society and nation. The POs and COs primarily aim at imparting knowledge and skills which are critical for building students' competence and personality. There is also an emphasis on holistic development of students as the learning outcomes focus on imparting values & ethics and enhancing their interpersonal and communication skills. Further, the display boards containing Vision, Mission, Quality Policy, POs and PSOs are displayed in corridors, notice boards, class rooms and laboratories of various departments across the campus.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	https://ncet.co.in/assets/naac/Criteria 2/ C261.pdf

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

The PO and CO attainment is evaluated in the following way:

- 1. Direct Method: First learning levels of students like remember, understand, apply, analyze, evaluate, create etc are defined based on Revised Bloom's Taxonomy. The learning levels of students are assessed by conducting standardized examinations like Continuous Internal Evaluation (CIE), Semester End Examinations (SEE), AAT, Assignments, Quizzes, Lab performance etc. The performance in seminars, project presentations, case study presentations, field visit reports, internship reports, project reports, etc are also used for the computation of attainment levels of COs and in turn to the attainment levels of POs and PSOs.
- 2. Indirect Method: Feedbacks of Students like Course Exit Survey, Programme Exit Survey, Alumni feedback, employers feedback, industry feedbacks etc are considered under Indirect Tools for computing the attainment of POs, PSOs & COs. Course Exit Survey on Curriculum is obtained and the same is shared with the departments, so that their feedback is discussed and relevant changes, if any, in the curriculum are suggested to BOS. Attainment of POs is evaluated based on the performance of the students in terms of their progression to higher studies, success in competitive examinations and placements.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/programs-offered/ug- courses/

### 2.6.3 - Pass Percentage of students

## **2.6.3.1** - Total number of final year students who passed in the examinations conducted by Institution

### 379

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://ncet.co.in/examination-department/

### 2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

https://ncet.co.in/wp-content/uploads/2023/12/Student-Satisdfaction-Survey-for-2022-23.pdf

### **RESEARCH, INNOVATIONS AND EXTENSION**

### **3.1 - Promotion of Research and Facilities**

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

NCET has 7 Approved Research Centers of VTU with 55 Research Scholars pursuing their Ph.D. under the guidance of NCET faculty members. R&D Projects are funded by various funding agencies like AICTE, ISRO, DRDO, VTU, VGST, Institution of Engineers, KSCST, ISHRAE, ASHRAE, etc. NCET has generated income from Consultancy Projects, Sponsored R&D Grants, Seed Money Provided to Faculty.

NCET has been enabling creativity, developing entrepreneurial competencies and incubating 96 Start-ups and foster entrepreneurship. 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 project "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 75 years of Freedom namely "Azadika Amrut Mahotsava" (1947-2022) of ITCA fraternity as announced by our Hon'ble Prime Minister of India at UN General Assembly recently. NCET has created conducive R&D ecosystem with both physical and intellectual infrastructure along with structured policy documents for the successful implementation of the following:

- 1. Sponsored Research Projects with Grant-in-Aid from Funding Agencies.
- 2. Consultancy Projects from Industries
- 3. Industry Sponsored Equipment/Lab
- 4. Free/Online/Advanced Labs: Established (Students/Faculty Activities)
- 5. Emerging Trends Watch: Alternative Teaching & Learning
- 6. Innovations/Patents/Video Watch etc
- 7. Industry Collaborations.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://ncet.co.in/research/
Any additional information	No File Uploaded

### 3.1.2 - The institution provides seed money to its teachers for research

**3.1.2.1** - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

### 3.06

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<u>View File</u>
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View File</u>
List of teachers receiving grant and details of grant received	<u>View File</u>
Any additional information	No File Uploaded

## 3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

1	
File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	No File Uploaded

### **3.2 - Resource Mobilization for Research**

## **3.2.1** - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

### 16.44

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<u>View File</u>
List of projects and grant details	<u>View File</u>
Any additional information	No File Uploaded

### **3.2.2** - Number of teachers having research projects during the year

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/ncet-research/
List of research projects during the year	<u>View File</u>

### 3.2.3 - Number of teachers recognised as research guides

25	
File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

## **3.2.4** - Number of departments having research projects funded by Government and Non-Government agencies during the year

### 14

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://ncet.co.in/research/
Any additional information	<u>View File</u>

### **3.3 - Innovation Ecosystem**

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

NCET possesses a well-balanced ecosystem to foster student talents through qualified and experienced faculty duly supported with excellent infrastructure facilities. The below-mentioned Innovation ecosystem facilities are available in the campus:

- Centre for Motion Capture Systems Design Studio
- Desktop Manufacturing/3D Printing System SatNOGS: Satellite

Network of Ground Stations

- SatNAV: MobileApp Satellite Navigation Software for Android Nano Satellite Centre
- CanSat Design Centre
- University Space Engineering Consortium (UNISEC) India Chapter
- World CanSat/Rocketry Consortium/Championship (WCRC) India Chapter.

NCET has 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 pre incubation 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 boot camps, Idea competitions etc. for its students and faculty members. NCET has well structured R&D Policy, IPR Policy and Startup Policy to encourage innovations among Students/Faculty Members. Guest lectures and expert talk by eminent people from reputed institutions like IIT's, IISc, NIT, s and Industries. This helps students to improve their learning in a more interactive, topic Specific way. Guest lecturers can be used to make classes more approachable and appealing to students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/iic/

## **3.3.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

29	
File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
Any additional information	No File Uploaded

**3.4 - Research Publications and Awards** 

3.4.1 - The Institution ensures	Α.	A11	of	the	above
implementation of its Code of Ethics for					
Research uploaded in the website through					
the following: Research Advisory Committee					
Ethics Committee Inclusion of Research					
Ethics in the research methodology course					
work Plagiarism check through					
authenticated software					

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<u>View File</u>
Any additional information	No File Uploaded

**3.4.2** - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

### 3.4.2.1 - Number of PhD students registered during the year

### 28

File Description	Documents
URL to the research page on HEI website	https://ncet.co.in/research/
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

## **3.4.3** - Number of research papers per teacher in CARE Journals notified on UGC website during the year

92		
File Description	Documents	
List of research papers by title, author, department, and year of publication	<u>View File</u>	
Any additional information	<u>View File</u>	

## **3.4.4** - Number of books and chapters in edited volumes / books published per teacher during the year

### 22

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/ncet-research/

## **3.4.5** - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

### 3.4.5.1 - Total number of Citations in Scopus during the year

### 85

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

## **3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University**

### 3.4.6.1 - h-index of Scopus during the year

### 4

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

### **3.5 - Consultancy**

**3.5.1** - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

### 2.47

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<u>View File</u>
List of consultants and revenue generated by them	<u>View File</u>
Any additional information	No File Uploaded

## **3.5.2** - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View File</u>
List of training programmes, teachers and staff trained for undertaking consultancy	<u>View File</u>
List of facilities and staff available for undertaking consultancy	<u>View File</u>
Any additional information	No File Uploaded

### **3.6 - Extension Activities**

Ο

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

NCET endeavors to be involved in societal and environmental awareness programmes in the surrounding villages. These Programs are undertaken through our National Service Scheme (NSS). We have two units of NSS, one started in the year 2012 with the assistance of VTU and another Self financed unit started in the year 2017.

These NSS Units undertake various Government initiatives like Swachh Bharat Abhiyan, Voter Awareness campaign, Swachh Bharat Summer Internships, Chhatra Vishwakarma award scheme, Unnat Bharat Abhiyan (UBA), creating awareness about fire crackers, Jal Samrakshana Yojana, Suvarna Mahotsava Yojana, Painting of Schools, School Bell Programme, PMKVY, BMVNTFSA and Saansad Adarsh GramYojana (SAGY) to improve the quality of life in villages.

The institution is associating with NGO's and Trusts like Sri Sathya Sai Seva trust and Annapoorna trust for Midday Meal programme, Bangalore Medical Service Trust (BMST), TTK, Rashtrothana Blood Bank, Stem Cell Registry of India ( SCRI),Lions Club Blood bank etc.

With the help of service minded NSS volunteers having technical knowledge, we try to enhance the capabilities of rural people with the technological solutions to their problems. Integrated Rural Development Programme (IRDP) is a unique program which helps to upgrade school students, teachers and villagers by providing training on computer operation, digital transactions and ICT tools. Outcome of implemented programmes were remarkable. Extension activities of the NSS/YRC/RRB along with Governmental/NGO's are benefiting the villagers and students. Extension activity creates a healthy bond between college and the outside world.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/newsletters/

**3.6.2** - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

1

±	
File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those

### organised in collaboration with industry, community and NGOs)

# Z0 File Description Documents Reports of the events organized View File Any additional information View File

### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

### 1602

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

### 3.7 - Collaboration

**3.7.1** - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

10

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

**3.7.2** - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	No File Uploaded

### INFRASTRUCTURE AND LEARNING RESOURCES

### **4.1 - Physical Facilities**

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

The college has very good infrastructural facilities exceeding the AICTE and VTU norms to facilitate effective teaching and learning process. The total built up area is 50,113 sq. metres. Spacious WiFi enabled class-rooms with ICT facilities are available. The college has spacious, well equipped laboratories having instruments, equipments, computers and related software as per the requirement of the curriculum and upgraded based on the changing curriculum and intake. The specific location of the college provides a pollution free and natural environment.

NCET Campus comprises different blocks for different departments. Main block of the college consists of Administrative Office, Principal's Office, Management Office, Basic Science Department, Department of Electronics and Communication Engineering, Various laboratories of Electronics and Communication Engineering comprising of Microwave test bench, PCB Printing Machine, Digital Oscilloscopes, etc. Seminar Halls, Classrooms, Staff rooms, Common Girls room, IQAC Office, Language lab, Studio with Video Recording facilities and Server room are housed in the same block.

Centralized Computer laboratory block consists of 551 computers with LAN connection and internet connectivity which caters to the needs of all departments. 600 MBPS Wi-Fi facilities is provided in the campus for both day scholars and hostilities with 176 access points. Underground Optical Fiber Cable (OFC) of about 1000m is laid to act as backbone to the internet facility. ICT facilities such as LCD projectors, Smart Boards, Smart TV, Lecture Capturing System, Media Centre etc are available.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/ C411.pdf

4.1.2 - The institution has adequate facilities for cultural activities, yoga, sports and games (indoor and outdoor) including gymnasium, yoga centre, auditorium etc.)

Sports and Games: The institution has spacious outdoor game field of 10400 Sq.Mts, indoor sports space of 7000 Sq.Mts, Gymnasium of 3000 Sq.Mts. Five table tennis, 9 carom boards along with chess and other indoor sports facilities are provided. Facilities for outdoor and indoor sports include cricket, football, volley ball, Hand ball, ball badminton, throw ball, table tennis, carom and chess.

Gymnasium: A spacious gymnasium of 3000 sq.metres with modern gym equipments such as Tread Mill, Commercial Cross Trainer, Commercial Group Bike, Latpull seated row, Leg Extension leg curl, Multipress, Pecfly Rear Delt, Power Tower, Olympic Plate Tree & bar, Flat Incline Decline Bench Press, Dumbells, etc. An exclusive gymnasium for girls is also available.

Yoga and Meditation: To encourage and give awareness about the Indian culture, Yoga is included in the time table as club activities. External trainers are invited to teach yoga.International Yoga day is celebrated every year on 21st June. Auditorium: A spacious Air conditioned auditorium with audio visual facilities is available to cater to the needs of the students to involve in various cultural activities. The Auditorium is also used to screen selected inspirational and motivational movies. Four AC Seminar halls equipped with modern audio-visual facilities are also available.

Cultural Facilities: Students are encouraged to participate in Technical fests, Technotsav, Robofest and Project Exhibitions. Independence Day and Republic Day are celebrated in the institute. The college organizes Cultural fest, Holi celebration, National Girl Child day, Engineers Day, Ethnic Day, Women's day, Environmental day, etc.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/ C412.pdf

### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

## **4.1.4** - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

### 743.02

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	No File Uploaded

### 4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS)

### 1. Name of the ILMS Software: LIBSOFT

2. Nature of automation: The Central Library is fully automated with Integrated Library Management Software, LIBSOFT Version 9.8.5 which is used for Circulation, Procurement, Online Public Access Catalogue (OPAC) and Project Reports. All the library documents are bar-coded and books are issued trousers by scanning the barcode of the book. The holdings include books and journals, question papers and project reports. The users of the library can access publications of all major publishers like Elsevier, Springer, Taylor and Francis, ICE, Emerald etc. The users can access around 24,000 E-books and 1700 International journals.

### 3. Version: 9.8.5

4. Year of automation: 2006. The Institute has an up-to-date library, which is completely automated. The area of Central Library is 2000 Sq.m with a seating capacity of 400. It has a collection of more than 42,500 volumes of books. Library has a

spacious Stock section, Reference section, Journals section, Personal study area and Periodical Section.

The Central Library has a Digital Library and VTU E-Learning Center. Students can access On-line Journals, E-Books, Project Reports (Soft Copies), DVD's of Technical magazines & Books and live classes from VTU E-Learning center through EDUSAT. It is sponsored by Visvesvaraya Technical University (VTU), Belagavi, which enables a two way communication between the learners and resource person. Library has more than 135 NPTEL Video course learning materials and 125 Web courses which are developed by IITs & IISc. Our College Library is a member of the DELNET, Computer Society of India(CSI) & Central Manufacturing Technology Institute (CMTI).

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://assessmentonline.naac.gov.in/stora ge/app/public/agar/24411/24411_256_588.pdf <u>?1672892000</u>

4.2.2 - Institution has access to the following:	Α.	Any	4	or	more	of	the	above
e-journals e-ShodhSindhu Shodhganga								
Membership e-books Databases Remote								
access to e-resources								

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

### **4.2.3** - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

22.39

File Description	Documents
Audited statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

### 4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

### 4.2.4.1 - Number of teachers and students using the library per day during the year

558

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	<u>View File</u>

### 4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

NCET has a very good IT Infrastructure with Computers having network connectivity, Broadband Facility and supporting accessories. The campus and Hostels are Wi-Fi enabled with 24x7 internet connectivity. The students and faculty members can access Wi-Fi enabled internet connection, from any place in the campus, which is protected by SOPHOS Firewall. The institute have recently upgraded the internet connectivity from 150 MBPS to 600 MBPS by the service provider namely HCIN Networks Pvt Ltd at a cost of Rs. 10.00 lakhs per annum.

Computers in labs are connected with LAN, facilitating for sharing of data and resources, conduction of online exams and placement activities.176 access points, with Digisol 24-Port POE Swithes, 500 metreethernet cable and 1000 metre Optical Fibre Cable are available in the campus.All Computer Labs are equipped with UPS Facility and are under CCTV surveillance. The Institution has provided a Digital library. College central library provides Turnitin Software for Plagiarism check and Knimbus software to access e-resources through remote access.

Computer systems are provided in the Laboratories, Administrative

Section, Accounts Section, Examination Section and all the Departments for their academic and administrative use. Hostels are also equipped with computer systems and internet facilities. The institute has provided ICT facilities in auditorium, classrooms and seminar halls. The Budget for updating IT facilities is prepared by IT team headed by a professor and submitted to the principal.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/ C431.pdf

### 4.3.2 - Student - Computer ratio

Number of Students		Number of Computers
1928		541
File Description	Documents	
Upload any additional information	<u>View File</u>	
4.3.3 - Bandwidth of internet connection in the Institution and the number of students		

on campus	
File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	No File Uploaded
4.3.4 - Institution has facilities development: Fact available for e-content develop Centre Audio-Visual Centre Lo Capturing System (LCS) Mixin and software for editing	cilities oment Media ecture

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/ C434.pdf
List of facilities for e-content development (Data Template)	<u>View File</u>

### 4.4 - Maintenance of Campus Infrastructure

**4.4.1** - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

### 365.88

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.

NCET has established systems and procedures for maintaining and utilizing physical, academic and support facilities with a total built up area of 50,113 Sqm. All buildings and equipments are covered with insurance for fire, burglety, theft, natural calamities and accidental damages.

Utilization and Maintenance of Laboratories: Laboratories are regularly maintained by the qualified Laboratory Instructors. In Laboratories the stock registers are maintained. Equipment is maintained properly, calibrated and serviced periodically.

Maintenance of Classrooms and Seminar Halls: Cleanliness of the classrooms and furniture is maintained by the housekeeping department daily. Seminar Halls and Classrooms with suitable ICT facilities such as Smart Boards, Digital TVs & LCDProjectors, audio systems are monitored on a regular basis by the IT Team.

Utilization and Maintenance of Library Facilities: The Institute has an up-to-date library, which is completely automated with Integrated Library Management Software, LIBSOFT. The area of Central Library is about 2000 sqm with a seating capacity of 400. It has a collection of more than 42,500 volumes of books.

Utilization and Maintenance of Computers: Computer systems, UPS, Software, Servers, Hardware and Networking are maintained by qualified technicians, Lab Assistants and Lab-Instructors. IT infrastructure is maintained by the IT Head, System Admin, and Network Admin along with the Departmental coordinators.

Maintenance of other support systems: Institution has well furnished hostels for boys and girls with Wi-Fi and automated laundry facilities. Hostels are equipped with CCTVs and security staff for safety. Regular sanitization and good hygiene is maintained by the housekeeping staff in the hostels

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_4/ C442.pdf

### STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

**5.1.1** - Number of students benefitted by scholarships and freeships provided by the Government during the year

8	5	7
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File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	<u>View File</u>

## **5.1.2** - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

File Description	Documents	
Upload any additional information	No File Uploaded	
Institutional data in prescribed format	<u>View File</u>	
5.1.3 - The following Capacity and Skill Enhancement activiti organised for improving studer capabilities Soft Skills Languag Communication Skills Life Ski Physical fitness, Health and Hy Awareness of Trends in Techno	es are nts' ge and lls (Yoga, /giene)	
File Description	Documents	

File Description	Documents
Link to Institutional website	
	https://ncet.co.in/blogs/
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

## **5.1.4** - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

355
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File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>
5.1.5 - The institution adopts the mechanism for redressal of stu- grievances, including sexual has ragging: Implementation of gu- statutory/regulatory bodies Cr awareness and implementation with zero tolerance Mechanism submission of online/offline stu- grievances Timely redressal of	idents' arassment and idelines of eating a of policies a for idents'

through appropriate committees		
File Description	Documents	
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti- ragging committee	<u>View File</u>	
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>	
Upload any additional information	No File Uploaded	
5.2 - Student Progression		
5.2.1 - Number of outgoing students who got placement during the year		
310		
File Description	Documents	
Self-attested list of students placed	<u>View File</u>	
Upload any additional information	<u>View File</u>	
5.2.2 - Number of outgoing students progressing to higher education		
0		
0		
0 File Description	Documents	
	Documents No File Uploaded	
File Description Upload supporting data for		

## **5.2.3** - Number of students qualifying in state/ national/ international level examinations during the year

## 5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	No File Uploaded

### 5.3 - Student Participation and Activities

**5.3.1** - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

11

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

NCET offers opportunities for students to participate in various academic, co-curricular and administrative activities. The college has numerous student clubs which provide them to participate in various activities. The clubs like dance club, coding club, music club, sports club, etc to encourage the students to pursue their hobbies. Students are also given opportunities to be involved in social and community development activities. The students provide feedback on various facilities in the campus such as canteen, hostel facilities and transportation system. The students are also encouraged to get involved in the design and development of the curriculum.

Cultural activities such as dance competitions, singing competitions, fashion shows, debates, collage making & sketching help the students in showcasing their talents. Intercollegiate cultural fest IKYA is conducted in which the students play a major role in organizing the event. Students organize and celebrate Ganesh Chaturthi, Onam, Kannada Rajyotsava, Navratri and other festivals. The other activities include Cultural, Ethnic and Women's Days. Students are encouraged to take up social responsibilities by organizing blood donation camps to help the needy. The Class committee is constituted for every semester of the department which consists of student representatives and faculty representatives. The students are given due representations in various decision making bodies of the college such as IQAC, Board of Studies, Grievance Redressal Cell, Discipline Monitoring Committee, College Internal Complaints Committee(CICC), Anti Ragging Committee, Alumni Association, etc.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

16

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	No File Uploaded

### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

Nagarjuna College of Engineering & Technology Alumni Association established during 2006 and registered under the Societies Registration Act 17 of 1960 during May 2016 with an aim to build an actively engaged alumni network. The Association connects with alumni through a diverse set of events and services. Since its inception the association has been active in ensuring that its esteemed alumni continue to be a part of the institutional ecosystem. The Alumni Association ensures active alumni participation in various institutional initiatives in the form of Distinguished alumni talks, Tech Talks, Webinars, alumni advisory boards, Student mentoring, Career guidance, Placement & internships, etc. Alumni community is regularly being greeted with wishes for Festival and College activities are informed from alumni@ncetmail.com. NCET alumni LinkedIn account was created and updated regularly. We currently have 1000+ active members on the page. The details of alumni members and activities of the alumni are regularly updated in the college website at https://ncet.co.in/alumni-relations/

Alumni are a part of IQAC, Departmental Board of Studies and Alumni Association. Continuous interactions between the past and present students are established by the alumni association with the help of publication of newsletter, holding periodical Alumni day celebrations and by other activities as decided by the association. Alumni members are generous in providing financial support to the institution. They are volunteering themselves in helping the students in industry readiness, project works, internships and placements.

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional Information	https://ncet.co.in/alumni/	
5.4.2 - Alumni's financial contr during the year	ribution A. ? 15 Lakhs	

File Description	Documents
Upload any additional information	No File Uploaded

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

### Vision: Leadership and Excellence in education.

Mission: To fulfill the vision by imparting total quality educations replete with the Philosophy of blend the values and academic professionalism.

Setting values and a collaborative decision-making process are key to effective leadership. It is essential not only for the institution's vision, mission, and goals to be realized, but also for the organization's growth. Four UG programmes of the college are accredited by NBA and the college is certified by ISO with QMS, EMS and FSMS Certifications. Nagarjuna College of Engineering and Technology was founded with the goal of delivering a qualified and competent workforce to society via quality education and training. The Governing Body (GB) will approve the policy decisions to be implemented by the college. The Governing Body is set up in accordance with UGC/AICTE regulations. The Governing body has representatives from different levels of faculty.

The meeting of GB is held twice in a year or as per the need in a transparent manner. The GB reviews and approves the institution's strategic plan, vision and mission, as well as budgetary allocations to various departments based on the institution's strategic plan. All stakeholders are actively involved in the implementation various decisions of the GB. The GB ensures that all decisions regarding admission, new programmes, infrastructure, teaching & learning process, and placements are executed in accordance with the Institution's core values. Senior faculty members serve on the board of appointments.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/assets/naac/Criteria_6/ <u>C611.pdf</u>

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The participative and decentralization is being practiced through the following:

- Departments are given full academic autonomy and administrative autonomy.
- Departments are provided with full autonomy to plan and organize Short Term Training Programs, conferences, seminars, industrial visits, institute-industry interaction etc.
- Departments prepare the estimates for future expansion which includes infrastructure, laboratory equipment's, computers, furniture, man power requirements etc.
- Academic related matters such as attendance of students, setting of question papers, conduction and evaluation of exams, design and development of question banks,

identification of eligible external examiners etc. are performed independently by the departments.

- Staff increments, leave related matters, allocation of subjects, preparation of course materials, monitoring of syllabus coverage, counseling, arranging special classes for slow learners etc. are planned and implemented by the departments.
- Senior professors of the department are given a role in Governing Body Academic Council, Internal Quality Assurance Cell, Program Assessment Committee and Board of Studies.
- Faculty members are nominated to various committees and decision making bodies.
- Staff members are involved in regular internal academic audits and document verification processes.
- Parent teacher meetings are regularly conducted to inform the parents about the progress of their wards, counsel the students and elicit their opinion about the functioning of the college.
- Minutes of Meetings of Academic Council, BOS, etc and audit statements are published in college website for transparency in governance.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://ncet.co.in/assets/naac/Criteria_6/ <u>C612.pdf</u>

• Major decision related to academics is taken in HODs committee in consultation with the Principal.

### 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The strategic plan of the college has been well designed by considering the inputs from stakeholders through focused discussions, feedbacks, conferences and workshops by adopting participatory techniques, at department and institutional levels. The strategic plan is formulated with a clear focus towards the accomplishment of excellence by using the resources efficiently. The strategic plan serves as a guiding document for setting the

short term and long term goals for the departments. The management conducts regular review of the processes involved in the strategic plan. The objectives of the strategic plan are: 1. Autonomy in curriculum design, delivery and evaluation. 2. Achieving academic excellence through skill development for students. 3. Building intellectual ability and technical competency among the students. 4. Up-skilling of Faculty Members. 5. Implementation of administrative and examination reforms. 6. Promoting Research & Consultancy. 7. Creating an cordial environment for holistic development Following major areas are covered in the strategic plan: • Academics Co-curricular activities Administration & Examination • Financial planning and support Research & consultancy Accreditation and rankings Funding from external agencies Faculty publications, patents, workshops and conferences Infrastructure / Hostels, Staff Quarters Industry interactions, internships and placement activities Incubation / startups • Social Responsibility • Feedback from stakeholders The successful organizing and conduction of IEEE International Conference is described as an example Title of the activity: IEEE International Conference for Innovation in Technology (IEEE INOCON-2020). **Objectives:** 

1. Enhance research culture among the faculty members and students.

2. Create a platform to share new ideas in multidisciplinary research.

### 3. Expose the innovations in new technology.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://ncet.co.in/assets/naac/Criteria_6/ <u>C621a.pdf</u>
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

NCET has many statutory and non-statutory bodies to carry out specific functions and responsibilities in pursuit of the Institution's vision, mission and core values.

Governing Body (GB) : The administration of the institution is overseen by the Governing Body(GB). Governing body meetings have been conducted in a transparent manner. Minimum two meeting will be scheduled in a year to discuss various matters pertaining to the administration of the institution.

Academic Council (AC) : The Academic Council is the highest academic body which decides and advises on all academic matters. Academic proposals of BoS from each department are scrutinized and approved with or without modifications by the academic council and also recommends/advises the GB on various proposals for starting new programmes of study and other academic matters.

Board of Appointments (BoA) and Services Rules : The staff selection for the vacancies are conducted by Board of Appointments constituted as per the guidelines from UGC & VTU. The nominees of the University, management, subject experts, HODs and Principal are the members of the BoA.

Service Manual: NCET has a well established service rules. These

service rules are made available for all the staff members and other stake holders in the form of service manual through the website. Faculty members are encouraged to take up research activities thereby empowering them to excel.

Academic & Administrative Committees: The institution has in place several committees in addition to statutory committees to continuously monitor the academic and administrative activities. The committees comprises of key stakeholders.

File Description	Documents		
Paste link to Organogram on the institution webpage	https://ncet.co.in/assets/naac/Criteria_6/ <u>C622.pdf</u>		
Upload any additional information	<u>View File</u>		
Paste link for additional Information	https://ncet.co.in/wp-content/uploads/2023 /09/Minutes-of-11th-ACM-held- on-09.09.2023.pdf		

6.2.3 - Implementation of e-governance in	A.	<b>All</b>	of	the	above
areas of operation: Administration Finance					
and Accounts Student Admission and					
Support Examination					

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	No File Uploaded

### **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

The Institution has welfare mechanisms in place for both teaching and non-teaching staff. The various welfare schemes are:

- Service benefits like contributory PF, ESI, Gratuity, Study leave, Maternity leave, Casual leave, Special Casual leave, Compensatory offs, Earned Leave, Restricted holiday and Medical leave to employees.
- Salary Increments based on Performance appraisal for both teaching & non-teaching staff.
- Encouragement is given for research and development activities.
- Financial support to participate in national and international conferences to present research papers.
   Faculty development programs (FDP), workshops and guest lectures are organized on a regular basis.
- Teaching and non-teaching staff members get fee concession for their ward to pursue education in the group of institutions.
- Vacations at the end of every semester is given to both teaching and non-teaching staff.
- If any individual faculty is in need of accommodation, the same will be provided in the college hostel.
- Wi-Fi facility is made available in the faculty quarters and hostel. Web based leave management system.
- Refreshments are offered for both teaching and nonteaching faculty every day. Free Covid testing & vaccinations for all employees and their family members.
- In case of any medical emergency, a vehicle is kept reserved in the college campus to reach the nearest medical facility.
- Common room facility for female staff members and girl students.
- Day care center is made available in the college premises for both teaching & non-teaching staff children.
- Sanitary napkin vending machine and disposal machine is available for the benefit of female staff and girl students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://assessmentonline.naac.gov.in/stora ge/app/public/agar/24411/24411_284_649.pdf <u>?1673341602</u>

**6.3.2** - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

2			
File Description	Documents		
Upload any additional information	<u>View File</u>		
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>		

## **6.3.3** - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

20	

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

### 6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

2	n	7
4	U	1

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	No File Uploaded

### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Internal Audit: The internal audit is conducted annually by an approved auditor appointed by the Management who checks each bill and payments vouchers of all accounts. They submit an audited statement of income and expenditure to the management for consideration and approval.

The audit is conducted in accordance with auditing standards generally accepted in India. The audit includes the following:

- 1. Checks for compliance with policies, laws, and regulations
- 2. Comparing previous financial statements to the present ones
- 3. Reviewing reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
- 4. Review the means of safeguarding assets and as appropriate, verifying the existence of such assets
- 5. Reviewing and appraising the economy and efficiency with which resources are employed.

External Audit: The duly audited reports are submitted to the external audit team. The External Audit Team regularly audits the college financial report. The external audit is carried out in an elaborate manner on a yearly-basis. In case of any objections, the institution will deal with it promptly and take necessary corrective measures in a completely transparent manner.

Criteria for settlement of objections of External Audit:

- 1. Examining the procedures and policies and regulations vouching.
- 2. Verify the salary payment, TDS, Income Tax, EPF, ESI, Professional Tax, Gratuity, etc.
- 3. Examining the property titles, approvals, fee payments to regulatory bodies, Evaluating fee receipts, Certify the audit report, Filing the Income Tax returns regularly.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/audit-reports/

6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

File Description	Documents
Annual statements of accounts	<u>View File</u>
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	No File Uploaded

6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Proper collection and utilization of financial resources is planned at the beginning of every financial year. The budget details are collected before the start of every academic year. The utilization of the current year expenses and the budget for the next year is approved by the Governing Body.

Research proposals are prepared and sent to different funding agencies like Vision Group on Science and Technology (VGST), All India Council for Technical Education (AICTE), University Grants Commission (UGC), Department of Science & Technology (DST), Visvesvaraya Technological University (VTU), DRDO, ISRO, Karnataka State Council for Science and Technology (KSCST), Industries etc,. The grant received from such organizations is used in procuring special equipments needed for research activities thereby strengthening the infrastructural facilities in the laboratories.

Different financial sources available are:

- Fee collected from students is the major resource for the institution.
- Funding from different funding agencies such as VTU, AICTE, VGST, KSCST, Institute of Engineers and other R&D centers.
- The management is spending budgeted amount to develop the required infrastructural facilities such as buildings for various departments, administrative blocks, laboratory equipments, Boys and girls hostel buildings, library building, canteen, auditorium, staff quarters, exam section buildings. These buildings are constructed by the management by their own sources of funds.

NCET is a self financed institution. The institution is dependent on the fee collected from students for its routine recurring expenses such as salary of teaching and non-teaching staff, maintenance of building and equipment and other facilities.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://assessmentonline.naac.gov.in/stora ge/app/public/agar/24411/24411_290_662.pdf <u>?1673254197</u>

## 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

The IQAC has contributed significantly towards improving curriculum enrichment, academic excellence, teaching and learning process, evaluation methods and research atmosphere in the institution.

Two of the practices of IQAC are as follows:

1. Academic Audits: The academic audit provides an opportunity for a regular strategic overview of teaching-learning process. The audit is conducted at faculty level, department level and at the institute level.

- The first level is the self-analysis by faculty handling the respective course. The audit comprises of parameters such as course outcomes, CO-PO mapping, Assessment tools, assessment analysis, CIE- SEE correlation factor and CO attainment.
- The second level of audit is conducted by the respective department academic audit committee comprising auditing parameters such as the best academic practices of the department, redefining of COs, courses where CIE-SEE correlation is of concern and any other aspect of the department.
- The third level audit is conducted at the institute level where in a team comprising of senior professors is formed to audit the various departmental academic activities.

External Audits: Further to strengthen the quality system, since 2013 Academic Audits by external agencies have also been

# 2. Pedagogy and Skill Up gradation Trainings: Pedagogy training is initiated by IQAC and all the faculty are trained in Outcome Based Education and assessment. From time to time, newly recruited faculty members are trained in Pedagogical methods. For skill up gradation of the faculty, Workshops, FDPs, Seminars, etc are initiated by the IQAC.

initiated.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://ncet.co.in/iqac/

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

The Internal Quality Assurance Cell (IQAC) is established as per the guidelines from UGC to maintain and enhance quality of education. The prime goal is to develop a system for consistent and catalytic improvement in the performance of institution.

Programme Assessment Committee Review: Programme Assessment Committee (PAC) review is essential to understand the attainment levels of the students in terms of knowledge and skill component. The attainment of COs and POs are calculated based on the guidelines defined by IQAC, which contains both Direct and Indirect Assessment Methods.

Industry Participation: Enhancement of industry interaction in teaching learning is essential to improve the outcomes of the students and to enhance the knowledge and skill of the faculty. Industry Institute Interaction & Innovation (I4) cell was established to have better interaction between industry and academia.

Internships: As per the IQAC guidelines, industry internship for the students has been made mandatory. UG and PG students undergo internships in reputed industries related to their field of study. Many students from IT branches are selected for internships with stipend.

Curriculum Design: As per IQAC guidelines, curriculum is designed by taking the feedback from the industry, alumni, employers, parents, faculty and students. Academic Council, Board of Studies and Department Advisory Boards have participation of experts from the industry, and have helped in revising the curriculum to industrial requirements.

Teaching and Learning by Industry experts: IQAC encourages the departments to involve industry personnel in partial delivery of the courses, Faculty development Programmes, Workshops, Seminars and Technical Talks.

File Description	Documents					
Upload any additional information	<u>View File</u>					
Paste link for additional information	https://ncet.co.in/iqac/					
6.5.3 - Quality assurance initiat institution include Regular med IQAC Feedback collected, and for improvement of the institut Collaborative quality initiative institution(s) Participation in N other quality audit recognized national or international agence ISO Certification)	ting of the ysed and used on with other IRF Any by state,	4 or all of the above				

File Description	Documents
Paste the web link of annual reports of the Institution	https://ncet.co.in/wp-content/uploads/agar /IQAC%20Annual%20Report%202022-2023.pdf
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Safety and Security: NCET considers safety and security of the girl students as paramount and has initiated many fool-proof measures. The campus is under CCTV surveillance. The hostels are fenced and gated properly. The sanitary napkin incinerators as well as sanitary napkin vending machines are installed for the health and hygiene of the girls. Ladies common room facilities are made available. Further, the inward and outward movement of outsiders are recorded and monitored by professional security personnel at the college main gate. Apart from this, students are mandated to wear their ID cards and monitored by the full time vigilant security personnel guarding the gates.

Counseling: The Women cell holds several interactions with the students during curricular and co- curricular activities of the college. A counselor conducts joint sessions with students and parents whenever it is necessary. The issues addressed are maladjustment, academic performance, anxiety, peer pressure, relationship handling, absenteeism, malpractice, low self-esteem, emotional instability etc. Students who attended the counseling sessions felt comfortable and emotionally secured at the end of the session.

Day Care centre: NCET is providing a day care centre to take care of the young children of the employees of the institute. The main objective of the centre is to provide day care facilities to the children of the age group of six months to six years. The Day Care Centre is provided with toys and equipment for cognitive and physical development of the children. A Woman caretaker is appointed to look after the children.

File Description	Documents				
Upload any additional information	<u>View File</u>				
Paste link for additional Information	https://ncet.co.in/wp-content/uploads/2023 /12/IQAC-Annual-Reports-for-the- year-2022-23.pdf				
7.1.2 - The Institution has facil alternate sources of energy and conservation: Solar energy plant Wheeling to the Grid So energy conservation Use of LE power-efficient equipment	energy Biogas nsor-based	e above			

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Solid Waste Management:Solid Waste generated from our institute is segregated into organic waste and inorganic waste which is collected and processed separately. The organic waste is composted within the campus area and converted into manure which is used for gardening.

E-Waste Management: E-waste such as computers and its peripherals are upgraded regularly to continue usage and to minimize its wastage. The electronic equipment such as computers and its accessories, lighting systems, cords & cables, fans, TV's, Projector's etc. are collected and stored in a designated E-Waste store room. The stored E- Waste is later handed over to E-Waste recycling plant for disposal as per KSPCB norms.

Hazardous waste Management: As per the hazardous waste and other waste (management and trans boundary movement) Rules 2016, the waste oil generated from servicing of three diesel generator sets of capacity 125 KVA, 100 KVA and 250 KVA is collected in a barrel and stored separately till it is handed over to the pollution control board authorized recycler.

Bio-medical Waste Management: As per the bio medical waste management rules 2016, The only Biomedical waste from the campus are the sanitary napkins. The institute has provided incinerators to dispose of sanitary napkins.

Liquid Waste Management & Waste Water Recycling: As per the Water act 1974, the college has provided the required STP using Sequential Batch Reactor Technology. The treated water is meeting all the KSPCB standards before the recycled water is reused. The treated water is used for the maintenance of greenery in the campus.

File Description	Documents					
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>					
Geotagged photographs of the facilities		<u>View File</u>				
Any other relevant information		<u>View File</u>				
7.1.4 - Water conservation facil in the Institution: Rain water h Bore well /Open well recharge of tanks and bunds Waste water Maintenance of water bodies an distribution system in the camp	narvesting Construction er recycling nd					
File Description	Documents					
Geotagged photographs / videos of the facilities		<u>View File</u>				
Any other relevant information	<u>View File</u>					
7.1.5 - Green campus initiatives 7.1.5.1 - The institutional initia	atives for llows: omobiles y-powered					
greening the campus are as foll 1. Restricted entry of auto 2. Use of bicycles/ Battery- vehicles 3. Pedestrian-friendly path 4. Ban on use of plastic 5. Landscaping	ows: mobiles ·powered	A. Any 4 or All	of the above			
<ol> <li>Restricted entry of auto</li> <li>Use of bicycles/ Battery- vehicles</li> <li>Pedestrian-friendly path</li> <li>Ban on use of plastic</li> </ol>	ows: mobiles ·powered	A. Any 4 or All	of the above			
<ol> <li>Restricted entry of auto</li> <li>Use of bicycles/ Battery- vehicles</li> <li>Pedestrian-friendly path</li> <li>Ban on use of plastic</li> <li>Landscaping</li> </ol>	ows: mobiles ·powered 1ways	A. Any 4 or All	of the above			
<ol> <li>Restricted entry of auto</li> <li>Use of bicycles/ Battery- vehicles</li> <li>Pedestrian-friendly path</li> <li>Ban on use of plastic</li> <li>Landscaping</li> </ol> File Description Geotagged photos / videos of	ows: mobiles ·powered 1ways		of the above			

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:	Α.	Any	4	or	all	of	the	above	
<ol> <li>Green audit</li> <li>Energy audit</li> <li>Environment audit</li> <li>Clean and green campus recognitions/awards</li> <li>Beyond the campus environmental promotional activities</li> </ol>									

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly	Α.	Any	4	or	all	of	the	above	
and barrier-free environment: Ramps/lifts									
for easy access to classrooms and centres									
Disabled-friendly washrooms Signage									
including tactile path lights, display boards									
and signposts Assistive technology and									
facilities for persons with disabilities:									
accessible website, screen-reading software,									
mechanized equipment, etc. Provision for									
enquiry and information: Human assistance,									
reader, scribe, soft copies of reading									
materials, screen reading, etc.									

File Description	Documents
Geotagged photographs / videos of facilities	<u>View File</u>
Policy documents and brochures on the support to be provided	<u>View File</u>
Details of the software procured for providing assistance	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

Our institute is undertaking several efforts and initiatives for providing an inclusive environment for students, teaching and non teaching staff. Several activities are conducted towards achieving tolerance and harmony in cultural, regional, linguistic, communal, socioeconomic and other diversities. Swachh Bharat Abhiyan and Unnat Bharat Abhiyan are some of the initiatives taken up by the college.

Awareness about problems and consequences faced by students involved in gambling, IPL betting was organized by National Service Scheme (NSS), Youth Red Cross (YRC) and Red Ribbon Club (RRC) teams. Our college also took initiative towards workshops such as Master Trainers Workshop on Saansad Adarsh Gram Yojana (SAGY) an initiative of MHRD, Government of India. Our Students also participated in Digital India Awareness program on "Vittiya Saksharata Abhiyan" organized by MHRD. Students participated in the state level NSS camp on the theme "Healthy Youth for Healthy India" which was conducted to create awareness on health, safety & technological advancements.

Our students participated in Rajatha Yana event conducted by Ramakrishna Vivekananda Ashram which helped the students in inculcating human values. NSS Volunteers took part in the Youth for Society event held at BMSCE & were awarded prizes for the role play on "Women Safety" and poster presentation on "Rural development using GIS". Institution celebrates national festivals such as Independence Day, Republic Day & Gandhi Jayanthi, where students and staff are encouraged to deliver talks and speeches on national unity, communal harmony.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

To make the students to be responsible citizens, a course titled "Constitution of India, Professional Ethics and Human Values" was introduced as a mandatory course to all the UG students. The institute also motivates students and staff to donate blood by organizing blood donation camps every year. Two courses namely "Universal Human Values- I" and " Universal Human Values- II" are offered as per the AICTE model curriculam. Programmes on Teachings of Swamy Vivekananda were also conducted.Our college celebrates International Women's Day. Women's welfare association namely "Samanvitha" is actively conducting different programs such as, donation of essential items to Orphanage as part of their "Social Connect Programe", Eye Check-up camp, Blood donation campfor all staff members etc. Our college also celebrate festivals such as Kannada Rajyotsava & Anti-terrorism day which help them to implement the social and religious harmony.

International yoga day is also organized in the college to promote harmony towards each other. Our college also took initiative towards the Tree planting campaign. Our college also motivates students by celebrating Engineer's day and Constitution Day. Every year Republic day is celebrated on 26th Jan by highlighting the importance of Indian Constitutional values. Independence Day is also celebrated each year to highlight the struggle of freedom.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>
Any other relevant information	No File Uploaded
7.1.10 - The institution has a prescribed code A. All of the above of conduct for students, teachers,	

administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

File Description	Documents
Code of Ethics - policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The academic calendar is brimming with important events which show the enthusiasm of this institution in celebrating many national as well as international days and commemorative events and festivals. Republic day is celebrated every year on 26th January in the college with great enthusiasm and pride. A function is organized in college campus where all staff members and students share their thoughts about the importance of this day in the history of our nation and pay tribute to all freedom fighters. Independence Day and Republic Day is also celebrated in the college with great enthusiasm. It is a day when all staff members and students pay homage to their leaders and those who fought for India's freedom in the past.

International Women's Day, National Girl Child Day and National Yoga Day is celebrated every year, Teachers Day is celebrated every year in the remembrance of Dr. Radhakrishnan, a great teacher and a great leader to inspire all of us. Floral tributes will be paid to Sir M Visvesvaraya on Engineers day. The institute organizes Constitution Day in remembrance of the Contributions of Dr. B.R Ambedkar, Gandhi Jayanthi is celebrated and Swatch Bharath activities are also organized. Anti-Terrorism day is observed on 21st May and pledge is taken.Mathru Bhasha Divas is celebrated in the institute. To ensure and encourage oneness among the students and faculty community, the Institute celebrates regional festivals like Navatri, Onam, Holi, Vinayaka Chathurthi, Kannada Rajyothsava, Deepavali, Sankranthi etc.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<u>View File</u>
Geotagged photographs of some of the events	<u>View File</u>
Any other relevant information	No File Uploaded

## 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Best Practice: 1

1. Title: STUDENT SUPPORT SYSTEM

2. Objectives: To map the student interest and capabilities with the skill development to be provided, continuously monitor the student's progress in terms of academic performance, learning capabilities, attendance and general behavior. This system also helps to identify and understand the students requirements such as financial assistance in

the form of freeships and scholarships, communication skill development through language laboratories, counselling for higher education and overall mentoring support.

3. Goal: To provide support with regard to the overall development of the students and to Involve students to contribute their quality learning experience and academic success. Reduce dropout rate, increase student life diversity and encourage rational thinking.

Best Practice: 2

1. Title of the Practice: CAREER SUPPORT SYSTEM

2. Objective: To utilize benefits from MOOCs and NPTEL certification to eliminate technological obsolescence. To make the faculty and the student equipped with knowledge and make them industry ready. To see faculty gain benefits through initiatives planned for individual research and research through the students. To foster inquisitiveness among students.

3. Goal: The students and faculty can practice different solutions to the problems at hand by the use of virtual labs. They can learn the procedure to conduct the experiments in different ways without damaging the physical equipments and instruments. They can also try alternate methodologies to solve the same problem in variety of ways. The broad aim is to make students and faculty get a pragmatic understanding of the various labs that are used frequently in the institute.

File Description	Documents
Best practices in the Institutional website	https://ncet.co.in/assets/naac/Criteria_7/ C721.pdf
Any other relevant information	https://ncet.co.in/newsletters/

#### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

With technology changing at a rapid pace, it is eminent that academia needs to keep up the pace with technological advancements. Hence I4 cell at NCET ensures to effectively and adequately bridge the gap between the Industry and the Academia by working on 4 exclusive I's which are as under:

Industry Engagements & Tie-Ups: The college has collaboration with a number of industries for training the students through industrial visits, internships and projects. The experts from industries are invited to give expert talks on latest technological developments.

Innovation & Entrepreneurship: The students are encouraged to take up mini projects, participate in hackathons, codethons, project exhibitions, etc. thereby get exposed to innovation at a very early age. The college encourages the interested students to take up entrepreneurship. Incubation & Start-Ups: The college encourages and guides the students to start their own ventures and also provides technical advice as well as sources of finance. The institution provides facilities such as office space, power, water, internet, etc for incubating the start-ups.

Internships: To expose the students towards the latest technological developments, internship plays a vital role. Hence, internship is made compulsory as part of the curriculum. Credits are awarded for student internships based on the duration.

Last few years, the institution has seen some very unique and distinct activities being carried out which are briefly listed below:

- 1. Go Green Initiative
- 2. CSR Exclusivity
- 3. Industry Lab and Centre of Excellence
- 4. Higher Education and International Internships
- 5. Alumni Relations

File Description	Documents
Appropriate link in the institutional website	https://ncet.co.in/assets/naac/Criteria_7/ C731.pdf
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

- 1. To further Strengthen the ICT
- 2. To create an Incubation Centre & more number of Centre of Excellences
- 3. To have more industry academic interface so that there is more corporate participation in academy
- 4. To implant Lecture captivating system in the institution for the purpose of blended learning
- 5. Conducting programmes to encourage and support students to become entrepreneurs.
- 6. Conducting activities to hone the creative skills of students and provide a platform to dispose Creativity
- 7. Initiatives for an eco friendly learning space

- 8. Conducting student focused academic and skills development activities.
- 9. To conduct International Conferences in the next Academic year.
- 10. The institution plans to focus more on Research and Development in the next Academic year by increasing the publications of faculty and also motivating students' community to write research journals.
- 11. To extend the NEP 2020 implementation to Second year.
- 12. Academic Audit of all departments at end of the Academic year.
- 13. Preparing Annual Report of the college.
- 14. Preparing and Submitting NAAC AQAR at the end of AY.
- 15. Collecting and furnishing data for NIRF, ARIIA, NBA, UGC, AICTE & VTU.
- 16. Collecting Feedback from all the stakeholders. Implementing 360 degree feedback.
- 17. Encouraging faculty members to involve in active research with funding.
- 18. Facilitating/Organizing awareness program/seminars/workshops for teaching and non-teaching staff members on emerging technologies, human values, professionalism and student engagements.
- 19. Facilitating green audit, environmental audit and SWOC analysis of the institution.