

# FOR

# **1<sup>st</sup> CYCLE OF ACCREDITATION**

# NADAR SARASWATHI COLLEGE OF ENGINEERING AND TECHNOLOGY

NADAR SARASWATHI COLLEGE OF ENGINEERING AND TECHNOLOGY, POST BOX NO-60, ANNANJI(P.O), VADAPUDUPATTI,THENI. 625531 https://www.nscet.org

Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

# BANGALORE

January 2024

# **1. EXECUTIVE SUMMARY**

# **1.1 INTRODUCTION**

NSCET has made big inroads into the realms of engineering marvels, since the day of its birth in the year 2010. NSCET is governed and guided by the TMHNU Management, pioneers in the field of education over a period of one hundred years.

Our contribution and service are rendered to cater to the demands of students hailing from the rural areas. We have made great impact and constructive changes in the life of people living in and around Theni District. We offer 7 UG Courses, 2 PG Courses. In addition to that, we also have a Reach Center in the Mechanical Department.

NSCET is located in Theni, surrounded by the Western Ghats mountains. Year after year, we are establishing ourselves as a driving force and steadily marching towards achieving perfection and greater heights in all aspects. Approved by the AICTE and affiliated to the Anna University, NSCET continuously aims at improving standards of its students. Our main objective is to produce high caliber students equipped with updated technological skills, efficiency and creativity who could constructively contribute to the development of the society and our county in the future.

#### Vision

To establish ourselves as a leading technological institution

#### Mission

- 1. To provide professional, constructive and learner centered education.
- 2. To make learners contribute to the development of the nation through academic and industrial excellence.
- 3. To encourage learners involve in innovative researches with ethics.
- 4. To produce competitive and confident graduates to face the ever growing challenges of the labour market.

# 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

#### **Institutional Strength**

- Our college has diverse goals and values.
- We have modern and efficient facilities.
- Our staff team is skilled and effective.
- We maintain high academic standards for our students.
- Our environment encourages both learning and cultural enrichment.

- Our leadership supports faculty development.
- Our policies and principles are effective and organized.
- We follow established guidelines in our procedures, policies, and practices.
- Our mentoring programs are effective.
- We provide strong support for career guidance and job placements.
- We appropriately recognize outstanding students.
- We make efficient use of sustainable energy sources.

#### **Institutional Weakness**

- We haven't established any links with foreign universities
- We need to get recognition from Accredited bodies.
- We have to improve the communication skills of our students

## **Institutional Opportunity**

- We have the foundation for making use of our Alumni to create placement opportunities for our students
- Autonomy can help the institute overcome its affiliation system limitations.
- The Institute can connect with universities, for upgrading and exposure in all aspects.

## **Institutional Challenge**

- Immediate threats come from the educational institutes in urban cities and towns with regard to maintaining the intake of students.
- There is strong competition for opportunities to fund research.
- Resource base influenced by the regulation of tuition fees.

# **1.3 CRITERIA WISE SUMMARY**

## **Curricular Aspects**

Nadar Saraswathi College of Engineering and Technology (NSCET) is very particular in giving students the best learning opportunities and prepare them for careers in engineering. NSCET which is connected to Anna University in Chennai, adheres to the curricula and syllabus that the university specifies. The Institute's academic calendar, which covers extracurricular, co-curricular, and curricular events, is a reflection of the University's academic calendar. Teaching plans and the academic calendar are closely adhered to and often audited. Clearly defined processes for developing, implementing, and overseeing curriculum and value-added courses that prepare students for competitive exams and industry standards.

The curriculum imparts transferable and life skills through subjects like Professional Ethics and Human Values, Co-curricular Activities that train students in all areas while aiming for excellence in both technology and humanities, and Value-added courses that focus on Soft, Technical, and Communication skills.

The curriculum also covers technical report writing, laboratory and project work, mini-projects, and instruction in the newest software and technologies under the technical skills section. Technical information for the selected program is provided via the curriculum's core subjects. Students must finish a minimum of one online certification course from a variety of online sources, including NPTEL, SWAYAM, Udemy, and others, in order to encourage self-learning.

All of the programs offered by Anna University Chennai incorporate a choice-based credit system. The effectiveness of a curriculum in terms of employability can be determined by a number of factors, including an increase in net selections in placements, a continuous improvement in the average pay package.

Many stakeholders, including students, teachers, employers, alumni, and others, provide feedback to NSCET regarding the academic performance and atmosphere. Based on the feedback, decisions are made. The forms are easily accessible on the website of the institution.

# **Teaching-learning and Evaluation**

Adhering to AICTE norms, the institution follows a recruitment policy that ensures the hiring of well-qualified and experienced faculty, contributing to the enhancement of the Teaching-Learning process. The institution maintains the required teacher-student ratio and assigns courses based on faculty competencies and specializations. Faculty members diligently prepare comprehensive course plans, lesson plans, and handouts as part of the academic schedule.

The caliber of applicants seeking admission has consistently improved year by year, as evidenced by the ranks achieved upon joining. Given their diverse backgrounds, the institution provides both academic and other forms of support. For students who may need additional assistance, remedial classes are offered, and bridge courses are organized for those entering laterally. Advanced learners are actively encouraged to participate in activities such as Hackathons and Design contests. The institution operates a mentoring system, where each faculty member serves as a local guardian for approximately twenty students.

Innovative Teaching and Learning processes, including the adoption of ICT tools and modern pedagogical techniques, are embraced. To bridge the gap between academic curriculum and industry requirements, the institution organizes discipline-specific technical training programs and industrial visits. Further fortifying students' domain knowledge involves hosting guest lectures, workshops, and conferences. The examination and evaluation system, in accordance with university regulations, undergoes periodic revisions to enhance efficiency.

For each program, Program Educational Objectives (PEOs), Program Outcomes (POs), and Program Specific Outcomes (PSOs) are formulated based on an outcome-based education approach. Course objectives and outcomes, categorized according to Bloom's taxonomy levels, are established. Both Continuous Internal Evaluation and Semester End Examinations align with Bloom's taxonomy levels, ensuring the creation of high-quality questions that discourage rote learning.

Systematic procedures are in place to assess the attainment of COs, POs, PEOs and PSOs with corrective measures implemented based on annual attainment levels.

#### **Research, Innovations and Extension**

The Institute possesses a dynamic research environment that is connected to research and development institutes, industry, and consultancy firms. The Institute possesses an authorised R&D policy document that disseminates crucial information to the faculty and staff regarding R&D goals, programmes, accessible resources, and financial incentives. The Institute has established a Research Coordinators Committee and an Industry Institute Interaction committee to facilitate and guide research and consultancy activities. Original research work is guaranteed through a well publicized policy document on plagiarism.

The Institute received Research Projects from the Tamil Nadu State Council for Science and Technology. The Institute now has 27 functional Memoranda of Understanding (MoU), which are both everlasting and time constrained. The Institute promotes faculty research by offering funding, laboratory access, and research facilities. The Institute offers academic sabbaticals for doctoral research, grants permission and financial assistance to attend conferences for presenting papers, and supports participation in Faculty Development Programmes (FDP). The faculty of NSCET has authored and published 120 papers in publications that are recognized by UGC.

Over the past five years, a grand total of more than 55 extension activities were carried out for the community, in addition to the organization of numerous blood donation camps. Over 80% of students, on average, participated in these events through the NSS unit. NSCET consistently receives honors and recognition from a variety of governmental and non-governmental organizations on an annual basis.

## Infrastructure and Learning Resources

NSCET boasts state-of-the-art facilities, including ICT-enabled classrooms, well-equipped laboratories, and expansive sports facilities, all housed in a sprawling 2.5 lakh sq.ft campus with lush lawns, picturesque landscapes, aesthetic architecture, and an eco-friendly atmosphere. The classrooms are meticulously furnished, spacious, well-ventilated, and adequately illuminated, adhering to standards for optimal visibility and audibility. Complementing the educational infrastructure are two seminar halls and an open auditorium, each equipped with varying seating capacities and modern ICT facilities. Faculty members share technological updates through blogs on the website, especially during emergency situations. The teaching-learning process is facilitated through Google Classroom and Canvas, with emergency class notes and assignments uploaded on these platforms.

The institute utilizes the NSCET app facility for effective communication to disseminate important messages to both students and faculty. Acknowledging the significance of the library as a vital learning resource, NSCET library houses an extensive collection of 20,433 books, including 108 Indian and foreign periodicals. Online services ensure easy access to these resources, with a spacious and well-furnished environment featuring chairs and tables. The central library is equipped with Library Management Software (Dolphin Lib), reading spaces, reprographic facilities, and a digital library. Membership with DELNET and the National Digital Library of India (NDLI) allows students to access e-resources remotely, including DELNET e-journals.

Strategically placed CCTVs monitor campus activities for enhanced security. A dedicated power management department ensures uninterrupted power supply and maintenance of electrical assets. The institution's power house has one Diesel Generator (125 KVA). Authorized vendors under annual maintenance contracts (AMC) handle the upkeep of equipment such as Diesel Generator Sets, Power Distribution Systems, Air-conditioners, Fire-Fighting Equipment, Drinking water Facilities, Water-coolers, and Solar Panels. Additionally, the institution provides cafeteria services, books and stationary facilities, and a transport system with 15 buses catering to the needs of both students and staff.

#### Student Support and Progression

The essential elements listed below outline the actions the Institution has made to give students the support they need in their academic endeavors. These include offering worthwhile educational opportunities on campus that promote students' overall growth and advancement. Additionally, it focuses on student achievement, alumni involvement, and the advancement of students towards pursuing postsecondary education and/or employment. Based on certain economic criteria, State Government Agencies and our NSCET management give financial help to students who are socially and economically challenged.

The programmes for capability enhancement and development include organized TPP (Training and Placement program) and skill development courses in communication skills, soft skills, and technical abilities. Extracurricular and co-curricular activities are also included into the system to support a student's overall growth.

Students who struggle academically might receive remedial tutoring to help them become better. The institute uses a Mentor system, with each faculty having around twenty students allocated to it. In addition, a professional student counsellor provides individual therapy to students. The regular provision of academic and other assistance has led to a rise in net placement selections and a progressive enhancement of the average compensation package. Increased performance in competitive exams has led to admittance to higher education institutions in India. Every year, our Institution host sports and cultural events, with a significant student planning and organizing component.

Additionally, the institution has an open system in place for promptly handling complaints from students. Our institution has student representation on a number of academic and administrative boards and committees. The committees include the Women Development Cell, Grievance Cell, Class Committee Meeting, IQAC, Anti-Ragging Committee, Canteen Monitoring Committee, and so on.

The NSCET Alumni Association makes a substantial financial and non-financial contribution to the growth of the institution.

## Governance, Leadership and Management

The institute boasts a robust organizational framework where the directives from the Management committee and Governing Council are efficiently executed by the College Secretary, Principal, in collaboration with Heads of Departments and specialized committees. Ensuring a participative management approach, faculty representation is integral across decision-making bodies such as the Governing council committee, Department Advisory Committee, and Programme Assessment Committee. In a commendable move towards decentralization, faculty, non-teaching staff, and students actively contribute to various committees, fostering a collaborative governance model.

The seamless integration of e-governance for admissions, finance, and examinations, facilitated by in-house developed software, reflects the institution's commitment to technological advancements. To address the holistic well-being of its faculty and staff, the institute has implemented a comprehensive set of welfare measures, encompassing medical leave, ON duty, maternity leave, provident fund, and financial support for higher education.

Recognizing the importance of continuous professional development, faculty members are encouraged to participate in programs such as workshops, conferences, and refresher courses. Financial support is extended through provisions like on-duty support, traveling and daily allowances, and registration fee coverage. Both teaching and non-teaching staff benefit from tailored professional development initiatives, including administrative and technical training programs.

The institution places a premium on academic excellence by incentivizing faculty to enhance their educational qualifications through workload adjustments, flexible timetables, and paid academic leave. A well-structured performance appraisal system underscores the commitment to maintaining high standards among faculty and staff.

In terms of financial oversight, the institute follows a well-defined policy for budgeting and auditing, encompassing both internal and external assessments. The Internal Quality Assurance Cell (IQAC) plays a pivotal role in upholding quality standards, regularly evaluating the teaching-learning process, assessments, and overall structural aspects. As a result, the institute continually evolves, introducing new courses aligned with industry needs, thereby enhancing the quality of placements and fostering the multifaceted development of students' knowledge, skill sets, and personalities. The strategic plan in place further underscores the institution's forward-looking approach, ensuring continued growth and excellence in its overall development.

# **Institutional Values and Best Practices**

Regarding academics, finances, and administration, the university abides by all legal standards and upholds complete transparency in all of its operations. Because of its longevity, an institutional value or trait is seen as a significant and characteristic aspect of a given society or organization. The institute has provided the necessary facilities in accordance with its understanding of and commitment to meeting the safety, security, and counseling needs of female employees and students.

To shape students into deserving citizens who uphold moral and ethical principles and are steadfastly committed to carrying out their civic responsibilities towards the country as a whole. to encourage the development of the most recent skills while providing solid practical experience in the field of engineering and technology.

The functions of social, political, and economic systems in which businesses function and acquire legitimacy are the main topics of institutional theory. According to Scott's explanation, institutions define the possible strategies and set the laws of the game by supporting, restricting, or discouraging specific behavioral tendencies.

In order to maintain an environmentally friendly campus, the college has planted trees, used water harvesting techniques, processed wastewater recycle, used recycled water, and generated power using renewable energy sources.

Ramps and other amenities have been made available for students with disabilities. In order to help individuals impacted by natural catastrophes, the students organize blood donation drives, participate in Street Cause events, and promote NSS extension activities. Two regular courses with credit weighting on professional ethics and human values are used to instruct the students.

The student handbook contains the code of conduct, even though the Administrative Manual outlines the duties

and obligations of the various administrative offices. Improving employability through a range of training programmes in domain-specific skills, logical thinking, group discussions, interview techniques, communication skills, and IT-related skills (Fundamental and Advanced Programming Skills).

Through the annual event of Project expo NSCET incorporates technical skills by providing hands-on learning opportunities and excels in the area of Projects development and Participation in National and International competitions like Hackathons.

# **2. PROFILE**

# **2.1 BASIC INFORMATION**

Name and Address of the College	
Name	NADAR SARASWATHI COLLEGE OF ENGINEERING AND TECHNOLOGY
Address	Nadar Saraswathi College of Engineering and Technology, Post Box No-60, Annanji(P.O), Vadapudupatti,Theni.
City	THENI
State	Tamil Nadu
Pin	625531
Website	https://www.nscet.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	C. MathalaiSu ndaram	04546-263904	9443488999	04546-26390 2	principal@nscet.or g
IQAC / CIQA coordinator	R.Udhaya Kumar	04546-263918	8870534091	-	iqac@nscet.org

Status of the Institution		
Institution Status	Self Financing	

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution		
If it is a recognized minroity institution	No	

# Establishment Details

State	University name	Document
Tamil Nadu	Anna University	View Document

Details of UGC recognition			
Under Section	Date	View Document	
2f of UGC			
12B of UGC			

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory AuthorityRecognition/Appr oval details Instit 				
AICTE	View Document	15-05-2023	12	

Recognitions		
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No	
Is the College recognized for its performance by any other governmental agency?	No	

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	Nadar Saraswathi College of Engineering and Technology, Post Box No-60, Annanji(P.O), Vadapudupatti,Theni.	Rural	63616.58	23134	

# **2.2 ACADEMIC INFORMATION**

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Eng ineering,Civi l Engineering	48	HSC	English	60	19
UG	BE,Mechanic al Engineerin g,Mechanical Engineering	48	HSC	English	60	9
UG	BE,Compute r Science And Enginee ring,Comput er Science and Engineering	48	HSC	English	60	48
UG	BE,Electrical And Electronics E ngineering,El ectrical and Electronics Engineering	48	HSC	English	60	37
UG	BE,Electroni cs And Com munication E ngineering,El ectronics and Communicati on Engineering	48	HSC	English	60	50
UG	BTech,Artifi cial Intelligence And Data Sci ence,Artificia I Intelligence and Data Science	48	HSC	English	30	27
UG	BTech,Infor	48	HSC	English	30	27

	mation Tech nology,Infor mation Technology					
PG	ME,Manufac turing Engine ering,Manufa cturing Engineering	24	BE	English	9	2
PG	ME,Structura l Engineering ,Structural Engineering	24	BE	English	18	5

# Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Associate Professor			Assistant Professor				
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0			0			0					
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0			0			0					
Sanctioned by the Management/Soci ety or Other Authorized Bodies	4				9				73			
Recruited	3	1	0	4	8	1	0	9	41	32	0	73
Yet to Recruit	0				0				0			

Non-Teaching Staff					
	Male	Female	Others	Total	
Sanctioned by the UGC /University State Government				0	
Recruited	0	0	0	0	
Yet to Recruit				0	
Sanctioned by the Management/Society or Other Authorized Bodies				19	
Recruited	10	9	0	19	
Yet to Recruit				0	

Technical Staff					
	Male	Female	Others	Total	
Sanctioned by the UGC /University State Government				0	
Recruited	0	0	0	0	
Yet to Recruit				0	
Sanctioned by the Management/Society or Other Authorized Bodies				12	
Recruited	10	2	0	12	
Yet to Recruit				0	

# **Qualification Details of the Teaching Staff**

Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	3	1	0	7	1	0	0	0	0	12
M.Phil.	0	0	0	1	0	0	0	0	0	1
PG	0	0	0	0	0	0	41	32	0	73
UG	0	0	0	0	0	0	0	0	0	0

<b>Temporary Teachers</b>										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

# Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	80	0	0	0	80
	Female	137	0	0	0	137
	Others	0	0	0	0	0
PG	Male	5	0	0	0	5
	Female	2	0	0	0	2
	Others	0	0	0	0	0

Y ears					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	6	11	7	4
	Female	6	11	8	1
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	67	63	54	59
	Female	94	78	62	63
	Others	0	0	0	0
General	Male	42	38	18	39
	Female	40	20	22	12
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total	· · · ·	255	221	171	178

Provide the Following Details of Students admitted to the College During the last four Academic Years

# Institutional preparedness for NEP

Elective, Open Elective, Skill-Based, or each assigned specific credits. The uphasizes hands-on learning through l trips, study tours, and internships o undergraduate and postgraduate mandatory environmental studies course
ess of ecological issues, and a value urse is specifically designed. The college

	follows university-set standards for program duration and minimum education levels. Research programs encourage interdisciplinary research, fostering optimal solutions. Non-major elective courses promote integrative learning.
2. Academic bank of credits (ABC):	ABC provides students flexibility to temporarily withdraw and rejoin degree programs within a specified time frame. As an affiliated institution, the college aligns with the guidelines of the affiliating university for ABC implementation. Initial measures have been taken for registration processes, with faculty encouraged to contribute to curriculum enhancement. Distinguished academics provide recommendations for course improvements. ABC aims to facilitate blended learning by allowing credit accumulation from various Higher Education Institutions (HEIs) and online repositories like SWAYAM and NPTEL. Pedagogy encourages innovative, student-centered approaches, and instructors have flexibility in choosing relevant resources. Assessments must strictly adhere to university-defined criteria.
3. Skill development:	Soft skills are enhanced through specialized programs led by experts, supplementing the standard curriculum. The institution emphasizes values-based education through life skills programs and commemorates national events to instill virtues. Participation in clubs or cells is mandatory for undergraduates. Professional guidance is sought to design life skills programs, ensuring practical instruction in areas like yoga, meditation, women's safety, health, and hygiene.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The college upholds India's cultural richness through mandatory elective courses focusing on tradition, culture, philosophy, and knowledge systems. English is the primary medium of instruction, but a multilingual pedagogical approach is adopted to accommodate diverse linguistic backgrounds. Bilingual delivery is recommended for better comprehension, especially for students from rural backgrounds. The curriculum emphasizes Indian culture to preserve customs and traditions.
5. Focus on Outcome based education (OBE):	Outcome-Based Education centers on course goals, allowing students flexibility in learning methods. Faculty guides students based on intended outcomes,

	with specific program and course outcomes defined for each syllabus. The curriculum includes experiential learning through projects, job-seeking courses, and skill-based courses. Continuous internal assessments, including quizzes, group discussions, seminars, peer team teaching, and assignments, drive the evaluation process.
6. Distance education/online education:	The college, as an affiliated institution, does not offer distance or online programs. The university encourages ICT in teaching and learning, expanding infrastructure to meet evolving needs. The post- COVID situation prompted increased use of virtual platforms, combining physical and online elements. Blended learning, online tests, quizzes, webinars, and exercises have become integral components of the educational approach.

# Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, NSCET has established an Electoral Literacy Club (ELC). Students will acquaint themselves with the election process, including voter registration and voting, through a variety of activities.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	The ELC is coordinated by professors and students chosen by the NSCET. The group fulfills its mission by recruiting students for various promotional activities. The ELC members include: 1. Chairman 2. Coordinators from the Faculty 3. Department Employees 4. Student delegates holding positions such as president, vice president, secretary, and joint secretary.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	• The ELC undertakes various projects, including student contributions to the election process. These activities encompass participating in student and community voter registration, assisting local election administrations, conducting voter awareness programs, promoting ethical voting, and enhancing the participation of marginalized populations such as transgender individuals, gender trade workers, people with disabilities, and elderly citizens. • Annually, ELC organizes talks for first-year students to educate them about their rights and encourage voting. The club also promotes participation in the Systematic

	Electoral Education and Participation Program (SVEEP) to enhance knowledge and confidence. ELC competitions are organized on campus, supported by Thasildhar/Collectorate officers, where students receive prizes, certificates, and medals. The Faculty Coordinator collaborates with ELC members for outreach activities, empowering rural communities and emphasizing the importance of voting.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	NSCET focuses on election-related subjects through research projects, awareness campaigns, and the creation of papers and publications supporting democratic principles and voter engagement. Students use visual cues to design events that cater to rural areas. For instance, students constructed a working prototype of an Electronic Voting Machine (EVM) and showcased it publicly. Students actively participate in awareness exhibition programs guided by the District Collector.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	Through initiatives like conferences, research, and events, the ELC collaborates with the District Collector's office, serving as the District Election Officer (DEO). Club members participate in and are assigned to events promoting voting, contest administration, etc. First-year students express enthusiasm in adding their names to the electoral roll, particularly with the assistance of the ELC.

# **Extended Profile**

# 1 Students

# 1.1

## Number of students year wise during the last five years

2022-23	2021-22	2020-21		2019-20	2018-19
791	697	705		743	762
File Description		Document			
Upload Supporting Document		View Document			
Institutional data in prescribed format		View D	ocument		

# **2** Teachers

# 2.1

# Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 158	File Description	Document
	Upload Supporting Document	View Document
	Institutional data in prescribed format	View Document

# 2.2

# Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
86	81	81	88	81

# **3** Institution

3.1

# Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
361.86	215.81	59.74	202.04	276.10

File Description	Document
Upload Supporting Document	View Document

# 4. Quality Indicator Framework(QIF)

# **Criterion 1 - Curricular Aspects**

# **1.1 Curricular Planning and Implementation**

# 1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

**Response:** 

# Curriculum

Every four years, Anna University develops and modifies the curriculum. The Anna University-affiliated Nadar Saraswathi College of Engineering and Technology adheres to the curriculum and carries it out according to a predetermined schedule. Anna University schedules the academic calendar for all of the associated engineering colleges for each year (semester).

# Academic Calendar

The Principal and all Department Heads create the Academic Calendar, which includes Internal Assessments, Department-specific events (Guest Lectures, Industrial Visits, Government Holidays, etc.), and a variety of extracurricular and co-curricular activities, based on the Anna University Academic Schedule (Semester wise). The heads of each department provide the academic calendar to the faculty and students. It supports the faculty's careful planning of their scholastic activities.

## **Conduction of Internal Assessments**

## **Subject Allocation:**

The faculty members will be asked to select the subjects they are willing to teach, and the information will be sent to the heads of their respective departments in order to improve student academic performance. Every HOD assigns subjects depending on faculty specialization and willingness.

## Time Table:

The Timetable Coordinator of each department prepares the schedule, which is distributed to the faculty and students and posted on the notice boards of the respective departments. The schedule is based on the number of credits assigned to the subjects in the Anna University Prescribed Syllabus for affiliated colleges as well as the Academic Calendar.

## Lesson Plan

With the aid of the academic calendar and timetable, the faculty members carefully prepare their lesson plan. The Head of the relevant department will approve the lesson plan, which contains the suggested dates for the syllabus coverage and the assignment schedule.

Faculty members provide lab manuals for laboratory sessions based on the curriculum developed by Anna University.

#### **Internal Assessments**

Every department has an official schedule for internal assessments as well as a model exam, which is shared beforehand by the relevant HODs and the Principal. The Academic Calendar serves as the basis for creating the Schedule. The Principal, along with the department faculty and heads of department, will check the combined grade sheet once the faculty members have evaluated the papers.

#### **Answer Scripts Evaluation Process**

Answer scripts for the tests will be sent to the relevant faculty for evaluation within three days of the test's completion. Following evaluation, the students must be given the answer scripts for explanation. Then, they must turn them in to the department exam cell, where the marks will be entered into the exam cells' system.

#### **Class Committee Meeting**

A committee is appointed by the Heads of each department to oversee and assess the facilities in the classroom and check whether the curriculum is being taught as per the plan. Following a discussion of the committee report in a department meeting, the Head of Department takes the necessary action.

File Description	Document
Upload Additional information	View Document

## **1.2 Academic Flexibility**

1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

**Response:** 49

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document

Other Upload Files	
1	View Document

# 1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

## Response: 92.73

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
773	664	675	667	650

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

# **1.3 Curriculum Enrichment**

# 1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

**Response:** 

# **Professional Ethics and Human Values**

A few courses were offered as elective papers in the engineering curriculum by Anna University in order to foster human values and professional ethics among the students. Through their careful performances, these soft-skills-focused courses assist the students in understanding and developing human and ethical values to be an asset to society and a vital organ in the workplace. Even though it is required, colleges go above and beyond to incorporate morality and human values into their curricula. They also run placement cell-based skill development programs that help students develop their unique personalities.

These professional courses will equip students to be role models for engineering graduates, comprehend the pulse of society, and contribute by identifying solutions to societal problems. In addition to the curriculum, all departments are scheduled for Industrial Visits to guarantee that industry techniques and work culture are incorporated. In order to get exposure to a professional setting, internships are encouraged during breaks and working days (if necessary).

## **Gender Equality**

The Women's Grievance Committee was established by Nadar Saraswathi College of Engineering and Technology in order to support a positive work environment for all of our female faculties, staff, and students. This committee arranged a number of awareness campaigns and fosters a gender-sensitive atmosphere on campus. Every year, the college actively participates in faculty and student activities to honor International Women's Day.

## **Environment and Sustainability**

An interdisciplinary course in environmental studies is required for all undergraduate programs at Anna University. Students who take this course will learn about the physical environment and how to address environmental issues that negatively impact the ecosystem. There aren't many elective courses offered to help students understand the value of renewable energy sources and the function of geographic information systems.

The college's NSS Committee plans a number of events to help students learn about many living styles, foster their leadership potential, and become more socially conscious.

Our university hosts a tree planting day to raise student awareness of the value of planting trees for the sustainability of the environment.

File Description	Document
Upload Additional information	View Document

# 1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

## Response: 74.34

# 1.3.2.1 Number of students undertaking project work/field work / internships

Response: 588

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

# 1.4 Feedback System

#### 1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document	
Feedback analysis report submitted to appropriate bodies	View Document	
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	<u>View Document</u>	
Action taken report on the feedback analysis	View Document	
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document	

# **Criterion 2 - Teaching-learning and Evaluation**

# 2.1 Student Enrollment and Profile

# 2.1.1

# **Enrolment percentage**

# Response: 51.15

# 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
255	221	170	178	175

# 2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
387	387	387	396	396

File Description	Document
Institutional data in the prescribed format	View Document
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	View Document

# 2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

## **Response:** 49.66

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

	2022-23	2021-22	2020-21		2019-20	2018-19
	162	156	117		109	118
					1	
2	.1.2.2 Number of	seats earmarke	ed for reserved c	ategory	as per GOI/ Sta	ate Govt rule year wise
d	uring the last five	e years		0 .		·
	2022-23	2021-22	2020-21		2019-20	2018-19
	265	264	264		270	270
File Description			Docum	ent		
Institutional data in the prescribed format		View Document				
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.		View D	ocument			
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)			View D	ocument		

# **2.2 Student Teacher Ratio**

2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 9.2

# **2.3 Teaching- Learning Process**

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

**Response:** 

The institution is student-centric, and all activities are focused on the academic and social welfare of the students. The methodology of the teaching-learning process is based on outcome-based education. Extra care is taken for co-curricular and extracurricular activities apart from the regular curriculum. Tutorial/remedial classes are conducted for courses and for slow learners.

# **METHODOLOGY OF STUDENT-CENTRIC TEACHING-LEARNING:**

# **Experiential Learning**

- Supported to enrich their practical exposure by providing laboratory experiments.
- Motivated to perform mini projects and to attend an internship training program during semester vacation.
- Taken for industrial visit/field visit.
- At the end of the program, students are assigned a project work on a topic of their interest.

## **Participative Learning**

- Apart from regular classes, special Guest/ Expert lectures on the course topics are organized for in-depth knowledge of specialized subjects.
- Encouraged to attend workshops related to their field of study, which may help to understand how the theoretical knowledge is applied in the industrial processes.
- For interactive/ communication skills, given a topic to take seminars in the regular classes; encouraged to present papers in the conference and symposium. To perform role play as a part of activity-based learning.

## **Problem-Solving Methodologies**

- Various competitions with problem-solving methodologies, such as quizzes, coding competitions, etc., are organized. Also, motivated to participate.
- The case studies are discussed to share real-life experiences related to the field of study.

The college has a significant number of ICT-enabled tools for effective teaching-learning processes, which are listed below:

# ICT TOOLS

## Smart Class Room & Computer Assisted Learning

All the departments are sufficiently equipped with computers, printers, LCD projectors, and software. In classrooms, tools such as digital displays, whiteboards, assistive listening devices, and other audio/visual components are used for interactive learning.

## **Canvas Classroom**

An open-source collaborative learning tool has been implemented. Faculty members can create an online

classroom and invite students to join the class, and then create and distribute the assignments, PPTs, video lectures and lecture notes.

#### **Google Meet Online Classroom**

Google Meet facilitates enterprise-level video conferencing, empowering faculty to create seamless online classes for immersive student collaboration and interaction.

#### Lab experiments through Video Lecturing

The relevant academic members develop the lab materials, which are then made available to the students through the website and Google Classroom.

#### Course PPT and materials are available on the college website

Course materials and Power Points prepared by the faculty involved are available. The students can pierce the material at any time.

#### E-book and E-Journal facilities available in the Library

The library committee, chaired by the Principal, ensures that all requirements are met, including such as the acquisition of books, technical journals, Membership of NDLI, DELNET and JGATE.

#### NPTEL, Infosys Springboard and Spoken Tutorial Online Classes

Students motivated to register their names in NPTEL, Infosys Springboard and Spoken Tutorial on online and encouraged to indulge online certificate examinations.

File Description	Document
· · · · · · · · · · · · · · · · · · ·	
Upload Additional information	View Document

## **2.4 Teacher Profile and Quality**

# 2.4.1

#### Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

#### 2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
86	81	81	88	81

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document

# 2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 12.71

# 2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
14	11	10	9	9

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	<u>View Document</u>
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document

# **2.5 Evaluation Process and Reforms**

# 2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

## **Response:**

## **Examination Grievance Redressal Mechanism**

A committee has been established to address examination-related complaints raised by the stakeholders of the university. The primary responsibilities of the Grievance Redressal Committee include:

- 1. Receiving complaints and issues raised by students
- 2. evaluating grievances
- 3. holding meetings with relevant officers to make fair decisions, and
- 4. communicating the decisions to the individuals who filed the complaints.

## **Objective:**

The objective of the Grievance Committee is to foster a responsive and accountable approach among all stakeholders, aiming to uphold a harmonious educational environment with the following goals:

- Fostering a cordial and respectful rapport between students and teachers is a priority, contributing to the overall dignity of the University.
- Establishing a fair and consistent mechanism for addressing various concerns related to examinations and their outcomes is essential to ensure impartial resolution.
- Cultivating an environment where students feel comfortable openly expressing grievances or problems, free from fear of reprisal or victimization, is crucial for maintaining a supportive and constructive learning atmosphere. Guarantee the prompt, objective, and confidential resolution of grievances.
- Faculty members provide guidance to students regarding the rechecking and reevaluation processes.
- Thoroughly examine revaluation forms and address examination-related grievances transparently and efficiently.
- Ensure that the resolution process is completed promptly following the required reviews.

## **Process for Submitting a Complaint:**

#### **Official Submission:**

For a valid grievance, students must submit their concerns using the provided format to the Heads of Department. This formal process ensures an organized and fair re-evaluation of the issues raised. The university is committed to addressing grievances promptly and transparently.

## **Forwarding:**

The Heads of Departments transmit revaluation forms to the Grievance Redressal Cell, where they are categorized and the merits of the grievance are analyzed. Subsequently, the revaluation forms are sent to the Controller of Examinations for necessary action.

#### **Review:**

The Grievance Redressal Committee plays a crucial role in conducting a thorough review of the redressal process. Specifically, in cases of revaluation, the committee guarantees the expedited release of results, striving to provide outcomes within 15 days of receiving the respective application. This commitment reflects the committee's dedication to ensuring a swift and efficient resolution to address student concerns.

## **Revaluation/Re-totaling/Challenge Process:**

The Controller of Examinations oversees the valuation process within the specified timeframe and announces the results.

## **Resolution of Complaint:**

A complaint is deemed closed and resolved under the following conditions:

a) The complainant has acknowledged acceptance of the published results.

(or)

b) The complainant has not responded within four weeks from the date of receiving information on resolution.

#### **Documentation:**

The conclusive decisions of the Grievance Redressal Committee are recorded in the Minutes of Meeting for future reference.

File Description	Document
Upload Additional information	View Document

# 2.6 Student Performance and Learning Outcomes

# 2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

#### **Response:**

Our institution diligently adheres to a comprehensive approach to defining and assessing learning outcomes across its diverse programs, following the guidelines set forth by Anna University. The foundation of this approach lies in the careful consideration of program objectives (POs), program-specific outcomes (PSOs), and course outcomes (COs) during the development of the curriculum.

Within this framework, each course is equipped with precisely defined COs intricately aligned with specific competencies. These competencies are further mapped to POs, creating a nuanced correlation that varies in intensity. The overarching objectives revolve around assessing knowledge, skills, and competencies through continuous assessment processes. Notably, more than 70% of the courses place a significant emphasis on hands-on skills, reflecting a commitment to practical application and experiential learning.

The transparency of our educational framework is evident through the accessibility of the syllabus on the college website. This detailed document includes course titles, credits, COs, and the mapping of COs

with POs. Furthermore, faculty members actively engage students by sharing digital content on platforms like Canvas Instructure. This content comprehensively outlines course objectives, outcomes, CO-PO mappings, and session plans. It also includes detailed information on learning materials, practice components, and projects, providing students with a roadmap for their academic journey.

Our assessment practices align with the standards set by the All India Council for Technical Education (AICTE), encompassing internal and external assessments for theory, practice, and project components. Assessment attributes span a spectrum, evaluating knowledge, analytical skills, problem-solving, tool and computational skills, research skills, environmental awareness, and ethical considerations. The evidence of assessments is diverse, ranging from project work and internships to domain skills assessments for hands-on skills and comprehensive learning records that showcase both knowledge acquisition and practical skills.

Learning outcomes undergo meticulous measurement through continuous internal assessments conducted by course faculty, complemented by end-semester written examinations managed by the examination cell. Internal assessments feature online multiple-choice question (MCQ) tests, seminar presentations, and written assignments. The college's Quality Assurance (QA) cell diligently verifies question banks prepared by faculty, ensuring their regular updates and reviews. Student final grades serve as valuable data points in assessing COs for each course.

This systematic and holistic approach extends beyond individual courses, with the attainment levels of all courses within a program being used to assess POs and PSOs. The rigorous analysis of COs, POs, and PSOs for each batch enables the identification of gaps, leading to targeted actions and the establishment of new targets for subsequent batches. This iterative process ensures a continuous enhancement of the educational experience, aligning courses with broader program objectives and cultivating specific competencies required across various disciplines.

File Description	Document
Upload Additional information	View Document

# 2.6.2

Attainment of POs and COs are evaluated.

## Explain with evidence in a maximum of 500 words

## **Response:**

To assess the effectiveness of teaching and learning methods in theological subjects and laboratories, it is crucial to evaluate students performance and learning outcomes. The university typically outlines program outcomes (POs) and course outcomes (COs) for theological programs. In instances where the university doesn't fully specify COs, faculty members teaching the subject collaborate with the department head to define them.

Program outcomes (POs) are comprehensive statements outlining the knowledge, skills, and attitudes students are expected to acquire upon completion of a theological program. These outcomes align with the overall objectives of the university and provide a framework for course design. Course outcomes (COs) are more specific, breaking down the broader program outcomes into measurable objectives for individual courses.

In the context of Computer Science and Engineering, the subsequent paragraphs delve into a detailed discussion of course and program outcomes. This includes an exploration of their interrelation, the methodologies employed for assessment, and the overall conclusions drawn from this evaluative process.

The mapping of outcomes, methods of assessment, and thoughtful analysis contribute to refining teaching methodologies and ensuring continual enhancement in the educational efficacy of the program. The engineering program comprises five units, each centred around distinct concepts. The course's overarching goals and outcomes stem from the unique content of each unit.

A total of five-course outcomes are established for each subject within the program, outlining specific achievements expected of students. The ultimate proficiency levels of students and their interest in particular topics are directly influenced by the successful attainment of these courses and program outcomes.

To gauge the effectiveness of teaching and learning procedures and identify areas for improvement, a comprehensive review of both course and program outcomes is imperative. The success of the program is intricately tied to the realization of course outcomes, as the program, such as Computer Science and Engineering, encompasses numerous courses each semester. Consequently, program results are determined by evaluating the individual course outcomes.

# **Programme Educational Objective:**

The Bachelor of Computer Science and Engineering curriculum is designed to impart knowledge, skill and attitude to the graduates to pursue higher education and research or have a successful career in industries associated with Computer Science and Engineering or as entrepreneurs.

To ensure that graduates will have the ability and attitude to adapt to emerging technological changes.

This educational objective emphasizes a holistic approach to education, preparing graduates not only with technical knowledge and skills but also fostering the right attitude for lifelong learning and adaptability to the dynamic technological landscape. The curriculum aims to empower graduates to excel in further education, research, industry roles, or entrepreneurial ventures, reflecting the diverse and evolving nature of the field.

File Description	Document
Upload Additional information	View Document

# Pass percentage of Students during last five years (excluding backlog students)

## Response: 94.32

2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
161	155	230	195	155

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
174	160	230	201	185

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

# 2.7 Student Satisfaction Survey

2.7.1			
Online student satisfaction survey regarding teaching learning process			
Response: 3.99			
File Description	Document		
Upload database of all students on roll as per data template	View Document		
# **Criterion 3 - Research, Innovations and Extension**

# **3.1 Resource Mobilization for Research**

# 3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

# **Response:** 2.3

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

	2022-23	2021-22	2020-21		2019-20	2018-19
	0	0	0		0	2.30
File Description			Document			
Upload supporting document		View Document				
Institutional data in the prescribed format						

# **3.2 Innovation Ecosystem**

# 3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

# **Response:**

Nadar Saraswathi College of Engineering has created an ecosystem for bringing and strengthening research, innovation and entrepreneurship-related activities among students and faculty members. The academic and research capabilities of NSCET continuously inspire the students to solve vital issues through various research and skill development programs to make the students innovators and entrepreneurs.

## **Research and Innovation Committee**

The Research and Innovation Committee thoroughly oversees campus research to investigate research and entrepreneurial concepts. Conferences, seminars, webinars, workshops, concept competitions, and scientific discussions are often organized by the committee. They emphasize the annual Product Expo to encourage product and idea innovation. NSCET hosts the International conference annually and invites distinguished speakers like Dr. Sajal Chandra Banik, a professor at Chittagong University of Engineering & Technology, Bangladesh, and Dr. B. Chitti Babu, an Associate Professor in the Department of Electronics & Communication Engineering at the Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram. Faculty are encouraged to publish technical articles in top national and international publications and earn patents. NSCET funds patent filings and recognizes academic authors in Scopus-indexed journals. Received Rs 21,15,0000 from Tamilnadu Science and Technology and R.N. Builders. In the previous five years, our academics have published 120 research articles in national and international publications and conferences. Additionally, they have written 70 books and chapters.

# **Institution Innovation Council (IIC):**

The Ministry of Human Resource Development's Innovation Cell (MIC) supported the Institute's Institution Innovation Council in 2018. Its goal is to involve teachers and students in innovative research and entrepreneurship. The Institution Innovation Council organizes Leadership Talk Series, success stories, ideation workshops, and the Smart India Hackathon to engage staff and students. Organised solely by IIC

Innovation Ambassador Training Programs for Faculty Members.

SCE-IIC achievements for promoting Entrepreneurship, Innovation and Start-ups in campus:

- During 2019-20, NSCET-IIC was awarded with a **4 STAR** rating by MoE-MIC
- MoE-MIC awarded NSCET-IIC a 3.5-star rating during the 2020-2021 academic year.
- In the Year 2021-22, NSCET-IIC was awarded a 3 STARS rating by MoE-MIC
- In the Year 2022-23, NSCET-IIC was awarded a 3 STARS rating by MoE-MIC
- Smart India Hackathon: Nscet won the winner position with a cash award of Rs 1,00,000 in 2022 and 2023. In 2023, NSCET will be the only College in South Tamilnadu to select five teams for the Smart India Hackathon. Among five teams, two got the winning position, and Each got a Rs 1,00,000 grant.

## **Entrepreneur Development Cell (EDC)**

To accomplish the objective of entrepreneurship, NSCET consistently arranges guest lectures, seminars, workshops, and motivational talks for students, faculty, and alumni to foster an entrepreneurial culture. It offers a forum for students to motivate and cultivate the minds of younger individuals towards creativity and entrepreneurship, resulting in the creation of technology-driven start-ups. EDII-Tamilnadu awarded NSCET students a grant of Rs 1,00,000 in 2021 and 2022 for their innovative goods.

## **Intellectual Property Rights** (IPR)

NSCET conducts various seminars and workshops to improve professors' and students' intellectual property rights (IPR) proficiency. Four patents were filed within the past five years.

File Description	Document
Upload Additional information	View Document

# 3.2.2

# Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

# **Response:** 45

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

	2022-23	2021-22	2020-21		2019-20	2018-19
	13	6	21		4	1
F	ile Description			Docum	ent	
F U	<b>ile Description</b>	locument		Docum	ent ocument	

# **3.3 Research Publications and Awards**

# 3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.69

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

	2019-20	2018-19
13 38 14	22	22

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document

# 3.3.2

# Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

### **Response:** 0.44

# 3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
25	31	10	0	4

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	<u>View Document</u>

# **3.4 Extension Activities**

3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

**Response:** 

Nadar Saraswathi College of Engineering (NSCET) actively engages in organising many comprehensive outreach initiatives for the local community through our students. NSCET offers several active clubs, including NSS, Green Environment Cell which aim to foster and promote social and holistic development among individuals.

NSCET- NSS has organised a variety of health camps and awareness programmes in Madurai, focusing on the importance of avoiding the use of plastic. In addition, NSCET has organised blood donation camps, AIDS awareness programmes, and dengue and coronavirus awareness programmes with the aim of promoting awareness and concern for the well-being of society. A significant number of individuals willingly offered their services and assisted those in need.

In addition, NSCET organised tree plantation camps at Ammapuram village to raise awareness about the eradication of Prosopis Juliflora and enhance the groundwater level in adjacent villages. During this event, we emphasised the significance of planting trees to the villagers.

In addition, in order to emphasise the significance of human well-being in terms of physical and mental fitness, NSS organised awareness programmes on International Yoga Day, focusing on Yoga as a holistic lifestyle. This programme aims to cultivate awareness of maintaining optimal health in the contemporary day.

## NSCET initiative, three villages were selected for adoption:

Ammapuram, Chathrapatti, and Kullapuram. Beneficial activities such as survey camps, tree plantations, and medical camps were organised in the adopted villages to aid the residents.

NSCET has organised several social wellness programmes to inspire the residents of Ammapuram. These programmes include a road safety rally and the distribution of saplings throughout the villages. Most women from Ammapuram village have actively engaged in women empowerment awareness camps, expressing their concerns to foster their personal development and reap the benefits.

A tree plantation awareness programme has been organised for kids in a government school. The majority of the audience has benefited from these programmes and enhanced their knowledge. NSCET has organised many initiatives such as medical camps, mask distribution, kabasurakudineer, nilavembu kasayam, and health promotion during quarantine. These interactive sessions have underscored the significance of maintaining good health during pandemics or epidemics.

NSCET places utmost importance on neighbourhood community development as its highest priority domain.

File Description	Document
Upload Additional information	View Document

## 3.4.2

Awards and recognitions received for extension activities from government / government

### recognised bodies

### **Response:**

The Nadar Saraswathi College of Engineering and Technology (NSCET) organises a range of social awareness programmes as part of its extension efforts, aiming to create a comprehensive environment beyond academic recognition and appreciation.

The extension programmes foster self-confidence, cultivate leadership skills, and promote understanding of others among the students. Students also acquire supplementary skills that empower them to lead enhanced lives in any situation. The NSS volunteers from NSCET actively engage in all the blood donation camps organised by Theni Medical College to inspire and motivate young students. The intrinsic worth of human blood is unparalleled. NSCET was awarded a certificate of appreciation for its consistent support of the Blood Donation camp from 2019 to 2022. Additionally, NSCET annually hosts a Blood donation camp on July 17th to commemorate Kamarajar's Birthday.

NSCET has been awarded the "National Institutional Ranking Framework " participation certificate by the Ministry of Education, Government of India, in 2022, in recognition of its commitment to addressing societal concerns via innovation.

NSCET is actively engaged in the restoration of temples. Annually, NSCET-NSS organises a dedicated camp at the Temple campus to clean, remove plastic waste, and plant trees. In 2022, NSCET NSS effectively organised a specialised camp at Veerappa Ayyanar Temple, Theni. In 2023, the NSCET NSS organisation effectively carried out a camp focused on removing and cleaning plastic waste at Veera Thirumarammal Temple, situated in Chinnamanur, which is within a forested area.

Amidst the COVID-19 pandemic, NSCET-NSS collaborated with the Theni District health department to develop an awareness street play programme. The event took place at Colonel John Pennycuick Bus Stand in Theni.

The Swachh Bharat Abhiyan is an exemplary campaign that places great significance on every individual's equal and significant contributions. In order to foster this, a sanitation drive was conducted in rural areas such as Ammapuram and Veerapandi Temples as part of the Swachh Bharat Abhiyan initiative. NSCET was awarded a certificate of commendation.

### **Benefits of Awards and Recognitions:**

Best College Award – World Youth Federation

Show Gratitude to the Society

Establish a favorable atmosphere

File Description	Document	
Upload Additional information	View Document	

# 3.4.3

# Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

# **Response:** 55

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

	2022-23	2021-22	2020-21		2019-20	2018-19	
	13	12	2		10	18	
			1				
F	File Description				ent		
Photographs and any other supporting document of relevance should have proper captions and dates.			View D	ocument			
I	Institutional data in the prescribed format			View D	ocument		
I p n d	Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency			<u>View D</u>	ocument		

# 3.5 Collaboration

3.5.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

**Response:** 43

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	<u>View Document</u>
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity- wise and year-wise	View Document
Institutional data in the prescribed format	View Document

# **Criterion 4 - Infrastructure and Learning Resources**

# 4.1 Physical Facilities

# 4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

## **Response:**

## **INFRASTRUCTURE:**

Nadar Saraswathi College of Engineering and Technology is situated in the tranquil town of Theni, Tamilnadu. The campus spreads over 2.5 lakhs sq.ft in a beautiful and serene atmosphere ideally suited for technical education. The college infrastructure provides all the required items needed for engineering students' in depth education. All the laboratories are well equipped and well maintained. All the 7 departments are housed in individual floors and individual set of classrooms. All the classrooms are properly furnished and each department has been provided with ICT facility. The college's main objective is to raise students' level of competitiveness to face the global challenges.

# **ICT FACILITIES:**

The institution has 358 desktop PCs exclusively for students and faculties hailing from all departments. All the PCs are connected to internet with restricted access. The institution also has 17 normal printers and 3 Multifunction Printers. The availability of desktop PCs for students stands at 1.48:1 A lot of leased software packages are available in each department to meet the specific requirements. The college has a Hi-Fi internet facility with the speed of 144 Mbps, a leased line from BSNA that provides 24-hour internet facility is available for both the students and staff supported by 9 transmitter distributor.

## **LIBRARY FACILITIES:**

Situated in the second floor of our college, the library provides opportunities for students, to quench their intellectual thirst for knowledge. The library is equipped with surplus curriculum related books, general knowledge books, reference books for research scholars, journals, magazines and other publications to help students to enrich their knowledge and reading habits. The NSCET Library has a huge collection of 20433 books that includes 108 Indian and Foreign periodicals. Our library also provides online service and students get easy access to all the available resources. In addition to this, the NSCET library is very spacious and well furnished with chairs and tables.

## **SPORTS FACILITIES:**

We provide equal importance to both academic and sports & games activities. The purpose is to create

awareness about the importance health and to develop the spirit of healthy competition. Our college has a spacious and well- maintained sports ground suitable for various outdoor games. It also has a modern indoor sports complex equipped with the required infrastructure and facilities for many indoor games like Badminton, Chess etc. Periodical coaching and training are given by experts to help students actively take part in the inter collegiate, university and state level competitions.

# **CULTURAL ACTIVITIES:**

The cultural events focus on developing and enriching the holistic spirit and to create awareness about social issues. The college gives ample opportunities to students to develop their skills in fine arts through various cultural activities and events. NSCET is the home for various clubs under the banner of Fine Arts Association. This conducts programs related to music, dance, drama, literature, etc., To sum up, the fine arts association's mission is to cater to the demands of our students' interest and activities outside the curriculum based tasks.

File Description	Document
Upload Additional information	View Document

# 4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

## Response: 25.03

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
30.88	16.38	37.18	54.77	140.00

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	<u>View Document</u>

# 4.2 Library as a Learning Resource

# 4.2.1

# Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

# **Response:**

The Library, in today's context is a modern Learning Resource Centre with a dynamic learning space where students undertake a journey of knowledge acquisition and intellectual enrichment.Our Library is a well-equipped Learning Resource Centre. We have a strong collection of about 20433 books and 120 Indian and foreign journals.

The NSCET library is a store house of knowledge and it comprises books, journals, e-resources, other learning materials and technology-aided learning mechanisms which enable students to acquire information, knowledge and skills required for their study programmes.

# **Bar Coding Based Library**

In an automated environment every document should be unique and searchable and it is done through bar coding. Bar coding facilitates aspects like searching for a particular book or document, and circulating and systematic shelving of the concerned book or document.

# About ILMS – Library Management Software

The library is automated with Dolphin Lips I Net library management system supported by version 5.0. It has the bar- coding system and multiuser library management system that support the automated system of the library. The main objective of our library automation is to provide quality service to readers and maintain an efficient book storage system.

A library management system is a software that is designed to manage all the functions of a library. It helps the librarian to maintain the database of all the books and the books that are borrowed by members along with their due dates either for returning or renewal.

The library available for the students and faculties from 8.30 A.M to 6.00 P.M during working days and from 9.30 A.M to 1.00 P.M during holidays. The institute strives to provide the best and latest collection of books, journals and other online resources to the students and faculties.

## **Circulation:**

Students can check the availability of books by searching through the title or author's name of the book. They can also access through the physical stack area. The entry of selected books is made using the library software and issued to the staff and students. As per the regulation, text books and reference books are available in the library.

Integrated Library Management software (ILMS) WEB OPAC LINK:

# http://10.10.2.30/nscetopac/

# **Report Generation:**

Generating and printing reports like day-to-day issues, renewals and return of books, monthly and yearly reports are also available and done using the latest technology.

# **Subscription to e- resources:**

The college library has various institutional memberships for e- resources and e- journals. The institute holds the subscription J-GATE Science and Technology, membership for National Digital Library of India (NDLI), DELNET, Digital Library in online paid and un paid journals and e- books. The publications of faculties and students are kept and made available in the library for all.

File Description	Document
Upload Additional information	View Document

# **4.3 IT Infrastructure**

# 4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

## **Response:**

## System Resources

Nadar Saraswathi College of Engineering and Technology provides commendable IT facilities for both students and faculty. The available computer systems with LAN connection include the highly configured Lenovo Think Center with an i9 processor, 16GB RAM, and a 500GB SSD.

The college has employed a full-time IT consultant dedicated to the maintenance and support of the ICT infrastructure. Desktop systems are accessible to both faculty and students, allowing them to utilize computer aid for academic projects, practical sessions, and learning.

## Wi-Fi and Internet

Internet facilities are provided through Bharat Sanchar Nigam Limited, offering a speed of 144Mbps. Computers from different blocks are interconnected via LAN through switches, covering the entire campus with Wi-Fi.

# **E-Services**

The college effectively uses ERP as a College Management System to maintain attendance and other student details. Each faculty member is assigned a unique email ID in the college domain. The college website offers essential information for stakeholders.

For emergency purposes, the online platform Canvas is utilized to conduct online classes, share notes, and assign tasks to students. SMS facilities are available for communication with students and faculty. Periodic training programs are conducted to upgrade the knowledge of both students and faculty.

## **Software Tools**

The desktops run on Windows 10 operating systems. Office automation packages like MS Office and antivirus software are purchased and regularly updated. The college uses all the required software mentioned by AICTE. Surveillance cameras are installed for effective monitoring and security purposes.

## **Updating IT Facilities**

With a gradual increase in student intake, the number of systems in all laboratories is updated to maintain the student-to-computer ratio as per AICTE norms. Necessary software and hardware devices are purchased based on requirements for computer systems and peripheral devices.

File Description	Document
Upload Additional information	View Document

## 4.3.2

## **Student – Computer ratio (Data for the latest completed academic year)**

### **Response:** 2.2

# 4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 359

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document

# 4.4 Maintenance of Campus Infrastructure

# 4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

### Response: 50.95

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
158.28	137.37	20.52	116.2	136.05

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	<u>View Document</u>

# **Criterion 5 - Student Support and Progression**

# 5.1 Student Support

# 5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

# Response: 92.64

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
714	646	657	695	714

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	View Document

# 5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

Soft skills
 Language and communication skills
 Life skills (Yoga, physical fitness, health and hygiene)
 ICT/computing skills

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self- employment and entrepreneurial skills)	<u>View Document</u>
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document

# 5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

# Response: 75.45

5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
539	504	550	593	604

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

# 5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- **1.Implementation of guidelines of statutory/regulatory bodies**
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

**Response:** B. 3 of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document

# **5.2 Student Progression**

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

**Response:** 63.62

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
103	113	131	116	107

# 5.2.1.2 Number of outgoing students year wise during the last five years

2022-23 2	2021-22	2020-21	2019-20	2018-19
161 1	155	230	195	155

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	<u>View Document</u>
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	<u>View Document</u>
Institutional data in the prescribed format	View Document

# 5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

# Response: 2.76

# 5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

2022-23	2021-22	2020-21	2019-20	2018-19
2	1	0	3	3

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	<u>View Document</u>
Institutional data in the prescribed format	View Document

# **5.3 Student Participation and Activities**

# 5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

# **Response:** 37

# 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

Upload supporting d	locument		View D	ocument	
File Description			Docum	ent	
	I			1	
11	10	6		1	9
2022-23	2021-22	2020-21		2019-20	2018-19

list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	View Document

# 5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

## Response: 5.4

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
5	7	4	8	3

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

# 5.4 Alumni Engagement

# 5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

# **Response:**

College alumni activities play a crucial role in fostering a sense of community, supporting current students and maintaining a strong connection between the institution and its graduates. These activities encompass a wide range of initiatives that contribute to the overall growth and success of both alumni and the college itself.

One primary aspect of alumni activities involves the establishment and management of alumni associations. These associations serve as organized bodies that facilitate communication and interaction among former students. They often host reunions, networking events, and professional development opportunities. Alumni associations act as a bridge between the past and present, fostering a shared identity and a sense of pride among graduates.

Networking events are a cornerstone of alumni activities. These gatherings provide a platform for graduates to reconnect with classmates, make new connections, and expand their professional networks. Networking not only enhances career opportunities for alumni but also creates a supportive community where individuals can share experiences and insights. Workshops, seminars, and panel discussions hosted by alumni associations further contribute to the exchange of knowledge and expertise.

Mentorship programs are another vital component of alumni activities. Experienced graduates can offer valuable guidance to current students, helping them navigate academic challenges and career decisions. Mentorship fosters a sense of continuity, where the wisdom and experience of alumni contribute to the personal and professional development of the next generation. It establishes a symbiotic relationship, as mentors also benefit from the satisfaction of giving back to their alma mater.

Financial support from alumni plays a pivotal role in sustaining and enhancing college programs. Fundraising initiatives, alumni donations, and endowments contribute to scholarships, infrastructure development, and research opportunities. The financial contributions of alumni often play a critical role in enabling the college to offer a high-quality education and maintain a competitive edge in an everevolving academic landscape.

Alumni activities extend beyond professional and financial realms to include social and cultural dimensions. Cultural events, art exhibitions, and alumni-led projects enrich the college community by promoting diversity and creativity. These activities contribute to a vibrant campus life and ensure that the institution remains a hub for intellectual and artistic pursuits.

In addition to formal events, social media platforms and online communities have become instrumental in alumni engagement. Alumni associations leverage digital tools to keep graduates informed about college news, events, and achievements. Online platforms also provide a space for alumni to share their success stories, collaborate on projects, and stay connected regardless of geographical distances.

The impact of alumni activities goes beyond the college gates. A strong and engaged alumni network enhances the reputation of the institution, attracting prospective students and potential collaborators. Alumni success stories serve as testimonials to the quality of education and the positive impact of the college on individuals' lives.

File Description	Document
Upload Additional information	View Document

# **Criterion 6 - Governance, Leadership and Management**

# 6.1 Institutional Vision and Leadership

# 6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

# **Response:**

The College strives to deliver excellent education intertwined with ethical principles, mirroring the essence of the nation's progress. Its vision is to cultivate top-tier Engineers equipped with academic prowess and a research-focused environment, ready to address global demands.

# Mission:

The college aims to offer a professional, constructive, and learner-centered education, fostering contributions from students towards the nation's development through academic and industrial excellence. Encouraging innovative research endeavors guided by ethical principles, the institution aims to nurture graduates equipped with competitiveness and confidence, poised to confront the dynamic challenges of the ever-evolving labor market.

The college's core objective lies in providing an education that is not only professional but also constructive and centered around the needs and growth of its learners. This educational approach is designed to equip students with the necessary skills, knowledge, and critical thinking abilities essential for their success in their respective fields. Central to this mission is the fostering of active participation from students in contributing to the nation's development. By emphasizing academic and industrial excellence, the college encourages students to engage in activities and initiatives that have a tangible impact on societal progress. This focuses on excellence in both academic pursuits and practical applications aims to prepare students to become contributors to the advancement of their communities and the nation as a whole.

In essence, the college's multifaceted approach to education encompasses a commitment to fostering a supportive and conducive learning environment that prioritizes both academic excellence and the holistic development of students. By emphasizing contributions to national development, ethical research, and preparing graduates for the challenges of the professional world, the college aims to produce individuals who are not just skilled professionals but also responsible, ethical, and adaptable contributors to society.

## **Perspective Plans:**

The Principal of the institute discusses the broad contours/ components of the perspective plan with the Managing Committee of the institution and it is then finalized in consultation with the governing body of Nadar Saraswathi College of Engineering and Technology.

## Participation of the teachers in the Decision-making bodies:

Faculty members actively participate in key decision-making bodies within the institute, including the Academic Council and IQAC. Additionally, a senior faculty member represents them in the Governing Council, while two professors and an associate professor serve as council members. Involvement extends to various committees such as Anti-Ragging, Grievances Redressal, and Anti-Sexual Harassment, where Head of Departments and many faculty members contribute with specific roles. Furthermore, faculty members actively participate in the Program Assessment Committee and Department Advisory Committee, meetings ensuring their engagement in academic and departmental evaluations.

File Description	Document
Upload Additional information	View Document

# 6.2 Strategy Development and Deployment

# 6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

# **Response:**

Nadar Saraswathi College of Engineering and Technology was established in the year 2010 with the motto of uplifting rural students cadre and to nurture them with excellence. It is exclusively constructed for moulding up outstanding engineers as responsible citizens and dynamic professionals. The Academic Council, led by a chairman and comprising management nominees, academia, industry representatives, faculty members, and the institution's Principal, oversees academic policies and procedures. This council, involving the Principal, Head of the Departments, senior faculty, experts from renowned institutions, industry representatives, and university nominees, convenes regularly to monitor and implement academic policies, admissions, placement, training, and examination protocols.

Reporting directly to the Principal, functional heads in finance, administration, learning resources, computer services, physical education, and maintenance departments play integral roles. Additionally, 15 committees, including Anti-Ragging, Finance, and Women Empowerment Cell, handle specific aspects crucial to the institution's functioning.

The Administrative Manual delineates employee responsibilities, leave policies, conduct regulations, recruitment protocols, among other operational guidelines. Stakeholders have avenues to provide feedback and suggestions via online platforms and suggestion boxes, ensuring their voices contribute to the institution's evolution.

## Strategic/ Perspectives plan

The institutional strategic/ perspectives plan has been clearly articulated and implemented.

The following goals of the strategic plans 2021-2025 are being implemented.

1. Implement enhanced academic practices and protocols.

2. Become a preferred destination for high-calibre students and proficient faculty.

3. Foster the creation of technically proficient and ethically grounded individuals.

4. Promote and support research initiatives and consultancy services.

- 5. Create and evolve towards a smarter campus infrastructure.
- 6. Enhance the quality and quantity of noteworthy publications.

Tasks include developing a Comprehensive Academic CMS system, expanding Wi-Fi Hotspots, broadening campus surveillance, and enhancing energy conservation systems. The CMS software manages day-to-day academic and administrative activities, while Wi-Fi access points aim to bolster the teaching-learning process. Surveillance cameras prioritize student and faculty safety and aiding examination monitoring.

A strategic planning document functions as a self-assessment and management-to-staff guidance tool. Regular reviews gauge achievements, enabling corrective measures. Dedicated efforts, involvement, monitoring, and support facilitated the realization of set goals.

# **Institutional Bodies**

The various institutional bodies for efficient and effective functioning of the institutes are

- College Governing Council
- Students Grievance and Redressal Committee
- Industry Institute Interaction Committee
- Anti-Ragging Committee SC/ST Welfare Cell IQAC
- Exam Cell
- Training and Placement Cell
- Entrepreneurship Development Committee
- Disciplinary and Welfare Committee
- Alumni Interaction Committee
- R&D Committee,
- Women Grievances Committee

The establishment above institutional bodies is to accomplish better academic practices and procedures.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document

# 6.2.2

### Institution implements e-governance in its operations

- Administration
  Finance and Accounts
  Student Admission and Support
- 4. Examination

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	<u>View Document</u>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	<u>View Document</u>

# 6.3 Faculty Empowerment Strategies

### 6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

### **Response:**

NSCET provides proper care for all of its employees, teaching and non-teaching alike. The college guarantees that its employees will contribute to the growth and development of the organization.

## For Professional growth:

Financial support is offered for staff workshops, conference attendance expenses, and registration fees in order to foster professional growth.

## **Incentives for publications and Research Projects**

It is permissible for faculty members to give guest lectures at other institutions in order to support their research and knowledge acquisition. Professors are urged to enrol in PhD programs in order to advance their careers and advance their institutions' research and development.

## Welfare Measures:

Both teaching and non-teaching staff have access to medical and casual leave. Female employees are entitled to maternity leave. The management contributes to the Provident Fund for non-teaching employees. Emergency medical assistance, including a medical officer and an ambulance, is available within the campus.

## **Performance Appraisal system:**

As the faculty's major responsibility is teaching, performance evaluation is carried out using a variety of techniques. The following method is used to gather data about the calibre of their instruction, how the courses are delivered, etc..

### Results

Student's feedback in semester end

# LOP

Aspects of appraisal analysis include work completion, teamwork, department contribution, punctuality, dress code, and classroom management.

Evaluation criteria for non-teaching staff members include lab maintenance, departmental contribution, punctuality, appropriate attire, LOP, and teamwork.

### **Feedback Evaluation:**

Each year, students participate in structured, automated evaluations assessing their instructors on various aspects of teaching. This online assessment covers areas like instructors' punctuality, engagement with class material, handling of assignments, tutorials, and exams, as well as their syllabus.

Additionally, the evaluation extends to the college environment, facilities, and management responsiveness. It considers factors like sports facilities, transportation, library resources, canteen quality, cleanliness, the Head of Department's approach to problem-solving, the principal's handling of grievances, and overall management support.

Confidentiality is strictly maintained to protect the identity of the student assessors. If any faculty members require improvement based on the evaluation, an advisory committee comprising of relevant heads and professors provides guidance and training.

### Student's feedback in semester end:

Students are instructed to submit the feedback link in Google form on following basis: Coverage of syllabus, ability to explain the concepts in clear and simple language, creating interest through examples, audibility while giving the lecture, voice modulation and mannerisms, interaction in the class, overall class control, discipline and punctuality.

### **Effectiveness and follow-up action:**

If any faculty member is found to be deficient, he/she is counselled, advised and trained to improve

through an advisory committee consisting of Professors and Head concerned.

File Description	Document
Upload Additional information	View Document

# 6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

### **Response:** 64.27

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
61	50	44	56	57

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document

## 6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

### **Response:** 80.91

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development

# **Programmes (FDP)**, *Management Development Programmes (MDPs)* professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19	
94	106	88	96	78	

# 6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
33	34	34	27	26

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	<u>View Document</u>
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 6.4 Financial Management and Resource Mobilization

# 6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

## **Response:**

The Nadar Saraswathi College of Engineering and Technology was founded in 2010 with a vision to offer high-quality technical education to students hailing from rural backgrounds. Understanding the financial constraints many students face, the institution has initiated a scholarship program to support economically disadvantaged students in pursuing their academic aspirations.

# The management has outlined specific policies to facilitate this:

1. Students scoring above 170 in their higher secondary exams are eligible for a full tuition fee waiver, while those with scores above 150 can receive a 50% waiver.

2. The school's top seven rankers are granted a two-year tuition fee waiver.

3. Exceptional students scoring more than 1,000 marks are eligible for a special scholarship.

4. Recognized state or central government-awarded sportspersons receive special fee concessions.

5. Non-local students scoring above 75% are eligible for a merit scholarship.

Budget proposals are drafted by the Principal, considering departmental recommendations, and submitted to the management. The accounts department scrutinizes the allocated budget to ensure adherence to the approved financial plan. This includes recurring expenses like maintenance, utilities, salaries, and non-recurring expenses such as equipment and development costs.

### **Internal Auditing**

Internal auditing involves regular reviews of invoices and vouchers, meticulously maintained by the accounts department. Accurate record-keeping of expenses is a top priority. At the end of each fiscal year, a legal audit is conducted, and the report is thoroughly examined by management.

Efficient financial resource utilization is planned annually. The accounts department handles purchase orders for equipment, maintenance bills, fee collection, salary distribution, tax payments, and loans.

## **External Auditing**

External auditing, mandated by government regulations, occurs annually. Transactions are verified, authorized, and presented for additional scrutiny by management. Any discrepancies are promptly investigated, accompanied by necessary documentation within stipulated timeframes. Management acknowledges the audited reports' validity.

File Description	Document
Upload Additional information	View Document

## 6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

# **Response:**

The Internal Quality Assurance Cell (IQAC) of the Institution was founded in the academic year 2017-2018 as a means to enhance the quality of various activities. The primary objective of this cell is to ensure the effective and progressive execution of academic, administrative, and financial tasks. Additionally, it aims to ensure fair access to and affordability of academic programs for diverse segments of society.

Some of the best practices which were followed in Institution before the formation of IQAC

- 1.Student Attendance monitoring
- 2. Orientation program for Staff and Students

3.Encouragement towards research and publications

4.Regular auditing of accounts

The NAAC has implemented comprehensive guidelines and established the IQAC in accredited institutions to uphold educational quality. The IQAC assumes responsibility for all matters related to quality and leads efforts to enhance the standard of education provided. This entails organizing seminars, workshops, symposia, conferences, and other programs for stakeholders.

The IQAC plays a crucial role in maintaining quality standards in teaching, learning, and evaluation. This research aims to assess the status and effectiveness of IQAC in maintaining quality standards, albeit on a smaller scale.

Since the formation of IQAC, the following initiatives have been undertaken:

- Enhancing the quality of the teaching-learning process.
- Conducting academic and administrative audits..
- Implementing a feedback mechanism.
- Introducing E-Governance for documentation.
- Participating in the All India Survey on Higher Education (AISHE).
- Organizing faculty development programs.
- Arranging professional development programs.
- Implementing outcome-based education with a focus on refining course outcomes.
- Establishing collaborations with industries and institutes.
- Establishing IIC to foster innovation and entrepreneurship.
- Conducting feedback collection from stakeholders and preparing analysis and action-taken reports annual
- The IQAC guarantees the effectiveness of the teaching-learning process and its outcomes through the following methods:

Regular IQAC meetings

- Class Committee meetings
- Meetings with Heads of Departments

• Result Analysis meetings

Example 1: Feedback Mechanism

To ensure the effectiveness of the teaching, learning, and evaluation processes, a feedback system has been implemented. This system involves various hierarchies overseeing the teaching-learning process, including the principal, head of the department, and class advisor.

Feedback plays a crucial role in enhancing quality as it provides valuable insights into others' perspectives. At our institution, we conduct regular structured feedback activities involving internal and external stakeholders, such as students, parents, faculty, alumni, and employers. The feedback received is carefully analyzed, and relevant departments take appropriate measures based on the feedback to drive improvements.

Example 2: Collaborative activities

The mission of the College is to foster strong connections between education and employment opportunities by collaborating with industry partners. This collaborative approach yields enhanced outcomes for students. Given the continuous knowledge creation and technological advancements, young engineers require substantial training to stay abreast of developments. To facilitate this, the College establishes Memorandums of Understanding (MoUs) with prominent industries and institutes, enabling collaborative training programs tailored to students' specific fields. With each passing year, SMCET strengthens its industry collaborations, further bolstering student placement opportunities through industry training support.

File Description	Document
Upload Additional information	View Document

# 6.5.2

Quality assurance initiatives of the institution include:

- **1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.

Response: B. Any 3 of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

# **Criterion 7 - Institutional Values and Best Practices**

# 7.1 Institutional Values and Social Responsibilities

# 7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

# **Response:**

Our institution is committed to fostering gender equity through the establishment of a dedicated Women Empowerment Cell. The Women Empowerment Cell strives to enhance the understanding of womencentric issues among female students and faculty while creating a secure environment for girls and women on the college campus

# Gender Equity:

Our institution is deeply committed to advancing gender equity, a commitment that drives our various initiatives. Aligned with the principles of the Universal Declaration of Human Rights, which underscores the fundamental right to equality and dignity for all, we take pride in our college's exceptional achievement of a balanced representation of women across both teaching and non-teaching roles. Notably, women hold pivotal leadership positions such as Vice Principal, coordinator and Heads of Departments in all fields Their exceptional contributions greatly enhance the success and vibrancy of our institution

# **Gender Sensitization Programs:**

To cultivate a gender-sensitive atmosphere, our college implements an annual, extensive gender sensitization agenda encompassing workshops and seminars. These programs cover a wide spectrum of subjects, including gender equity, sexual harassment prevention, women's empowerment, hygiene, International Women's Day celebrations, and safety protocols. Additionally, we frequently invite experts from diverse fields to deliver impactful guest lectures, highlighting and emphasizing the invaluable contributions of women in society.

# Security and Counseling:

Ensuring the safety and well-being of our female students and faculty is our utmost concern. We've implemented a comprehensive set of measures, including continuous 24/7 monitoring of the campus and girls' hostel using Wi-Fi-enabled CCTV cameras. Our initiatives extend to awareness programs covering women's safety, hygiene, sexual harassment prevention, and anti-ragging measures.

Furthermore, we prioritize support services for our students by providing counseling opportunities. Each batch of 15-20 students is assigned a mentor who engages with them twice a month, offering guidance and assistance in addressing academic challenges or any other concerns they might have. This proactive

approach aims to create a supportive and secure environment for everyone in our college community

## **Exclusive Amenities for Girl Students:**

In our institution, we are dedicated to ensuring the comfort and privacy of our female students. We provide the sufficient common rooms, waiting halls, and restrooms tailored specifically for their needs, furnished with all necessary facilities to provide a sense of personal space.

Hygiene is a top priority, and we've taken significant steps to support the welfare of our female students. Facilities in the girls' hostel include the provision of sanitary napkins and an incinerator, ensuring access to essential resources for their well-being. These initiatives reflect our commitment to fostering a supportive and inclusive environment for all students.

## **Engaging Activities:**

To facilitate cultural exchange, nurture patriotism, raise environmental awareness, and instill humanitarian values, our institution orchestrates a diverse array of engaging activities. These encompass drawing competitions, mehendi contests, and dance Competitions. These initiatives serve as platforms for the college community to actively participate, fostering meaningful engagement and valuable learning experiences for all involved.

File Description	Document
Upload Additional information	View Document

## 7.1.2

The Institution has facilities and initiatives for

**1.** Alternate sources of energy and energy conservation measures

2. Management of the various types of degradable and nondegradable waste

3. Water conservation

4. Green campus initiatives

5. Disabled-friendly, barrier free environment

**Response:** A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document

# 7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

1. Green audit / Environment audit

2. Energy audit

3. Clean and green campus initiatives

4. Beyond the campus environmental promotion activities

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document

# 7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

**Response:** 

India is fortunate to be home to individuals blessed with kind hearts, serving as exemplary symbols of tolerance and flexibility. The nation's diverse population resides together as one, without discrimination, offering a guiding light to the world on how to coexist harmoniously with fellow humans and other living organisms. A well-known reality is that students comprehend and internalize the essence of various events and functions through college programs. The celebration of events and festivals in our college is a crucial aspect of learning and nurturing a robust cultural belief. These festivities bring students closer to each other's traditions and cultural beliefs, fostering mutual respect and understanding for diverse customs. The three main categories of celebrations—seasonal, national, and religious—contribute to a comprehensive cultural experience, enriching students' awareness of the intricate tapestry of Indian traditions.

## The objectives of celebrating these festivals are:

- National festivals such as Independence Day play a pivotal role in fostering a unifying bond among students, instilling a sense of patriotism that aids in their growth and maturation as responsible citizens.
- Seasonal festivals such as Waves, when celebrated, prompt a positive shift in students' attitudes, encouraging an appreciation for the sensibilities of each individual despite their differences.
- Religious festivals like Pongal and Onam serve as platforms for imparting values and ethics, guiding students on the path to peaceful coexistence.
- International festivals, on the other hand, offer students a broader perspective, promoting the practice of brotherhood among people from diverse parts of the world and contributing to a vision of a conflict-free, harmonious global community.
- To fulfill the aforementioned objectives, Nadar Saraswathi College of Engineering and Technology is committed to fostering an inclusive environment characterized by openmindedness and harmony across cultural, regional, linguistic, communal, socio-economic, and other diversities. Throughout the year, the institution witnesses a plethora of festivals and occasions that reflect the rich tapestry of Indian traditions. Some noteworthy celebrations include
- Pongal celebration holds significant cultural and agricultural importance in India, particularly among the people of Tamil Nadu. As an agricultural country, many festivals in India are closely tied to nature, and Pongal stands out as one of the most prominent harvest festivals. More than just a traditional event, Pongal can be likened to a "thanksgiving festival" where gratitude is expressed, particularly towards the Sun God.
- Independence Day Celebration: The celebration of Independence Day in colleges serves as a means to educate, inspire, and unite students in the spirit of patriotism, fostering a deeper understanding of India's history and the values associated with its independence.
- Drug awareness programs: The Drug awareness programs conducted in colleges serve as proactive measures to educate, prevent, and intervene in issues related to substance abuse, promoting a culture of well-being and responsible decision-making among the student population.

File Description	Document
Upload Additional information	View Document

# 7.2 Best Practices
## 7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

#### **Response:**

## **BEST PRACTICE-I**

#### YOUTH FOR SOCIAL CHANGE : NSS LEADERSHIP WORKSHOP

#### **Objectives:**

- The Youth for Social Change: NSS Leadership Workshop is a transformative initiative aimed at enabling students to comprehend, engage with, and contribute positively to their working community.
- The comprehensive set of objectives includes fostering self-awareness, identifying community needs, cultivating social and civic responsibility, applying knowledge for practical solutions, developing competence for collaborative living, acquiring community mobilization skills, building leadership qualities, enhancing capacity for emergency response, and promoting national integration and social harmony.

#### **Context:**

- The practice thrives on the belief that community exposure provides NSS volunteers with invaluable insights into mass living conditions, fostering mutual learning. The interaction with the community is a reciprocal process, enriching both student volunteers and improving overall community living conditions.
- NSS, with its overarching goal of molding better citizens through "Personality Development via Community Service," conducts various activities such as cleanliness drives, special camps, surveys, observance of significant days, and awareness campaigns. The NSS program acts as a bridge, enhancing university/college education by exposing students to rural realities, making education more relevant to current societal needs.

#### The Practices:

#### **Community Engagement and Social Welfare:**

- The practices under this category include the Swachh Bharath Summer Internship, Child Care and Protection Awareness Program, Electoral Awareness Singing Competition, and a range of community activities at Veerappa Ayyanar temple.
- These activities involve addressing community needs, from cleanliness and hygiene initiatives to child welfare awareness and civic engagement.

#### Health and Well-Being:

- Efforts toward community health include the distribution of Nilavembu Kasayam, educational support for children, and sessions on yoga, meditation, and storytelling.
- These initiatives contribute to physical and mental well-being, ensuring a holistic approach to community development.

#### Social Awareness and Civic Responsibility:

• Organizing a Drug Awareness Rally, fostering voter awareness, and conducting the 'Siddha Awareness Programme' in Madurapuri Village are among the initiatives focusing on creating awareness and promoting civic responsibility within the community.

#### **Evidence of Success:**

- The success of the Youth for Social Change initiative is evident in the adoption of the Villages program, emphasizing continuity and sustained action. Collaborations with village leaders for follow-up actions, evaluations, and projects formulated based on need assessments showcase the program's effectiveness.
- NSS volunteers, acting as liaisons between government agencies and communities, provide crucial developmental information.

#### **Problem Encountered:**

• Challenges faced, including high expectations, deeply ingrained social beliefs, and limitations in reaching all audiences, are acknowledged and actively addressed.

## **BEST PRACTICE-II**

## TALENT SCULPTURE: THE PRE-QUEST FOR SUCCESS

#### **Objectives:**

- The Talent Sculpture initiative, focusing on Placement Training, aims to train and expertise students to meet industry requirements and develop into complete professionals.
- The objectives include personality development, communication skills enhancement, resume preparation, aptitude test training, interview skills, and group discussion activities.
- These goals collectively prepare students for the competitive demands of the professional world.

#### **Context:**

- In today's landscape dominated by privatization and globalization, there's an increasing industry demand for professionals with a strong employability profile.
- The Talent Sculpture initiative recognizes the need for students to possess vital skills such as attentiveness, adaptability, rapid learning, and effective communication.
- The placement cell, well-versed in industry dynamics, plays a crucial role in bridging the gap between students and potential employers, facilitating seamless training and placement.

#### **The Practice:**

- The Placement Training Cell at NSCET adopts a unique approach, emphasizing both technical and non-technical aspects. The program equips students to excel in interviews and various recruitment procedures.
- Continuous counseling motivates students, highlighting the importance of maintaining stellar academic performance for successful recruitment outcomes. The comprehensive approach involves training modules covering technical prowess, logical reasoning, analytical abilities, behavioral acumen, and managerial skills.
- Students are actively encouraged to explore industry-specific domains, ensuring exposure and readiness for diverse career paths.

## Soft Skill Training Programme:

• Interactive activities focus on real-life situations, enhancing skills such as presentation, group discussion, resume preparation, interview preparation, leadership qualities, goal setting, time management, and assertiveness.

## **Aptitude Skill Trainings:**

• Designed to increase reasoning, data interpretation, logical, and analytical abilities among students.

## **Technical Skill Trainings:**

• Focused on training students in advanced techniques and programming languages such as C/C++, Java, SQL, HTML, CSS, JavaScript, AJAX, PHP, etc.

#### **Evidence of Success:**

- The success of the Talent Sculpture initiative is evident in the substantial improvements observed in students' personal and technical proficiencies. The transformation in communication finesse, approach to interviews, and a surge in self-assuredness are noteworthy.
- Distinguishing qualities of students, such as out-of-the-box thinking, leadership aptitude, effective team collaboration, robust technical competence, high intellectual capacity, work-life equilibrium, and versatility in diverse roles, are acknowledged by employers.
- The consistent enhancement in placement quality year after year speaks to the caliber and preparedness of NSCET graduates.

#### **Problem Encountered:**

- Challenges encountered, including securing faculty with updated skills and addressing student commitment issues, are recognized.
- Proactive measures, including a robust mentoring and counseling framework, specialized classes for students from rural backgrounds, and faculty development programs, are implemented to ensure both faculty and students receive necessary support and resources.
- In conclusion, both the Youth for Social Change and Talent Sculpture initiatives exemplify NSCET's commitment to holistic education, community development, and preparing students for successful professional endeavors.
- These practices serve as benchmarks for fostering a supportive environment that nurtures the

intellectual, social, and professional growth of students.

File Description	Document
Best practices as hosted on the Institutional website	View Document

## 7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

**Response:** 

#### PROJECT EXPO WITH SCIENCE DAY

#### **Overview:**

Nadar Saraswathi College of Engineering and Technology is proud to host "Project Expo with Science Day," in every year an exhilarating event that brings together innovation, scientific curiosity, and academic excellence under one roof. An engineering college is the place where students are molded for future life. Engineers are the promises of tomorrow. So they should be made aware of the importance of Science. Project Exhibition in colleges plays a pivotal role in this regard. These exhibitions create a scientific spirit among the students, increasing their thinking and reasoning power. These can make the students creative and inquisitive. This event serves as a platform for students, faculty, and industry experts to showcase their cutting-edge projects, share scientific insights, and foster a spirit of inquiry.

Project exhibition in colleges play a pivotal role in this regard.Connect with professionals, researchers, and like-minded enthusiasts in the field of science and engineering. The event aimed to foster a love for Science, Technology, Engineering and Mathematics(STEM) among students and the community. Build valuable networks that extend beyond the event and lay the foundation for future collaborations. These can make the students creative and inquisitive.In this effort of project Expo and Science Day is a platform to upgrade our student skills to SIH and PLI Blockathon.

## **Key Features:**

- 1. **Project Showcase:** Witness a display of ingenuity as students unveil their innovative projects spanning over various disciplines. From advanced technology solutions to sustainable engineering marvels, explore the forefront of academic research and practical applications.
- 2. **Interactive Exhibits:** Engage with interactive exhibits that demonstrate the real-world impact of science and technology. From robotics demonstrations to virtual reality experiences, attendees will have the opportunity to immerse themselves in the latest advancements.
- 3. Science Talks and Workshops: Immerse yourself in a series of enlightening talks and workshops conducted by esteemed faculty members and industry experts. Gain insights into the latest trends, breakthroughs, and challenges in the fields of science and engineering.
- 4. **Student Competitions:** Encourage friendly competition among students through science-related contests and challenges. From quiz competitions to coding contests, participants will have the chance to showcase their skills and knowledge.
- 5. **Networking Opportunities:** Connect with professionals, researchers, and like-minded enthusiasts in the field of science and engineering. Build valuable networks that extend beyond the event and lay the foundation for future collaborations.

## Awards and Recognition:

Participants and winners were awarded certificates, medals and Prixes in recognition of their outstanding contributions to the scientific community.

## **Future Implications:**

The success of the Project Expo and Science Day underscores the importance of promoting STEM education. The event served as a platform for students to showcase their talents, fostering a spirit of inquiry and scientific exploration.

## **Objective:**

The primary objective of the Project Expo with Science Day is to foster a culture of innovation, inspire scientific inquiry, and provide a platform for students to showcase their talents to Smart India Hackathon and PLI Blockathon. Students learn through hands-on, experimental and problem based approaches. Skills development includes research methodologies, design of experiments, data collection, evaluation and analysis, critical thinking, problem solving, communications, innovation and entrepreneurship. By bringing together academia and industry, the event aims to bridge the gap between theory and practice, promoting a holistic understanding of the applications of science and technology in the real world.

## **Result:**

This foundation act of Our Project Expo and Science Day helps Students to participate in various activities like Smart India Hackathon, PLI Blockathon and INTER College Competitions held in various departments, Zone and States. Department of Computer Science and Engineering Students Won PLI Blockathon Competition 2.5 lakhs cash award held at Sathyabama Institution on 22 Sep 2022.Students also won one lakhcash award in Smart India Hackathon held on 26-08-2022. Department of Mechanical engineering Student won EDII-TN around One Lakh cash price on 1 Nov 2023 and some students projects were used for industrial purpose. The Project Expo and Science Day were a resounding success, bringing together the scientific community and inspiring the next generation of Innovators. The event highlighted the importance of science, education and the potential for positive change through scientific discovery.

## One lakh SIH Details:

## TITLE: Education Content Translator using Natural Language Processing

#### Abstract:

A lot of challenges are faced by vernacular-medium students compared to English medium students in terms of learning and opportunities. To overcome these problems, we created an application that translates video, audio, and text into our local languages video, audio, and text. It will help students understand the concepts easily. By leveraging advanced technologies such as Deep Learning and NLP in the backend, the application ensures accurate and contextually relevant translations. The user-friendly frontend, built with HTML, CSS, JS, and Bootstrap, provides an intuitive interface for students to access and interact with the translated content, fostering a more inclusive learning environment. This comprehensive solution aims to bridge the educational gap and empower vernacular-medium students with a tool that facilitates a deeper understanding of academic concepts.

## 2.5 lakhs PLI Blockathon:

## **TITLE:AGRO TECH HUB**

#### Abstract:

This hub includes a marketplace where farmers can directly connect with buyers and consumers. There will be a minimum number of intermediates. This will helps the farmers to gain more profit. It provides farmers with a secure and transparent ecosystem for managing various aspects of their farming operations. This hub offers features like farmer registration, crop management, supply chain tracking, and the use of smart contracts to automate processes. The hub includes a marketplace where farmers can directly connect with buyers and consumers. There will be a minimum number of intermediators. This will help the farmers to gain more profit. The core of the system is built on a block-chain network, providing decentralization, security, and transparency. Multiple consensus mechanisms ensure data integrity and immutability. Every stage of the supply chain, from harvesting to distribution, is tracked and recorded on the block-chain. Consumers and stakeholders can trace the origin and journey of agricultural products, ensuring transparency and quality assurance.

File Description	Document
Appropriate web in the Institutional website	View Document

# **5. CONCLUSION**

## **Additional Information :**

- NSCET participates in NIRF every year.
- NSCET has its own Institution Innovation Cell.(IIC)
- The Credit weightage for professional and Open Elective Courses are practiced to promote and encourage interdisciplinary participation.
- NSCET is striving to get NAAC and the Departments of EEE, CSE and ECE are moving towards getting the NBA accreditation.
- The Institution having a valid ISO 9001-2015 certificate for quality system.
- Our students gets appreciable ranks at the district and state level every year.
- Maximum number of students are placed in reputable core companies every year.
- NSCET has proved its mettle in national events like Hackathon by finishing as toppers on many occasions.
- NSCET has been holding the first place among the Engineering colleges in Theni District.

## **Concluding Remarks :**

Governed and guided by the TMHNU Management, NSCET has been rendering service to the students hailing from the rural areas in and around Theni District relentlessly over a decade now. NSCET, having realized the importance and the role of education, provides many opportunities to students from all sects and communities. Its premium objective is to provide quality and constructive education to students, make them responsible citizens and contribute for the growth and development of the country. NSCET focuses on giving its students quality education characterized by creativity, analytical capacity, in depth knowledge of syllabus oriented and other relevant out of syllabus topics, innovative ideas and confidence. We also equip our students with all the skills required for research analysis and placement requirements. In all, NSCET produces students having a thorough knowledge and awareness on latest developments in the field of technology, communication and information.

# **6.ANNEXURE**

## **1.Metrics Level Deviations**

0

Metric ID Sub Questions and Answers before and after DVV Verification

2.1.2 Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years 2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats) Answer before DVV Verification: 2022-23 2021-22 2020-21 2019-20 2018-19 173 163 130 127 132 Answer After DVV Verification : 2022-23 2021-22 2020-21 2019-20 2018-19 162 156 117 109 118 2.1.2.2. Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years Answer before DVV Verification: 2022-23 2021-22 2020-21 2019-20 2018-19 265 264 264 270 270 Answer After DVV Verification : 2022-23 2021-22 2020-21 2019-20 2018-19 265 264 264 270 270 Remark : DVV has made changes as per the report shared by HEI. 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs) 3.1.1.1. Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs) Answer before DVV Verification: 2022-23 2021-22 2020-21 2019-20 2018-19 5.50 7.65 2.57 3.10 2.30 Answer After DVV Verification : 2022-23 2021-22 2020-21 2019-20 2018-19 0 0

0

2.30

	Remark : DV	V has made	changes as	per the repo	ort shared by	y HEI.		
3.3.1	Number of rese during the last f	Number of research papers published per teacher in the Journals notified on UGC care list during the last five years						
	3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years Answer before DVV Verification:							
	2022-23	2021-22	2020-21	2019-20	2018-19			
	20	38	14	22	26			
	Answer After DVV Verification :							
	2022-23	2021-22	2020-21	2019-20	2018-19			
	13	38	14	22	22			
	Remark : DV	V has made	changes as	per the repo	ort shared b	y HEI.		
4.1.2	Percentage of ex during the last f	xpenditure f ïve years	for infrastru	icture devel	opment and	l augmentation excluding salary		
	4.1.2.1. Expe year wise durin Answer be	nditure for g last five y	<b>infrastruc</b> <b>ears (INR</b> i Verification	ture develo in lakhs) :	pment and	augmentation, excluding salary		
	2022-23	2021-22	2020-21	2019-20	2018-19	-		
	30.88	16.38	37.18	54.77	146.63	]		
	Answer After DVV Verification :							
	2022-23	2021-22	2020-21	2019-20	2018-19			
	30.88	16.38	37.18	54.77	140.00			
	Remark : DV	V has made	changes as	per the repo	ort shared by	y HEI.		
5.1.4	The institution a harassment and	dopts the fo ragging cas	ollowing for ses	r redressal a	of student g	rievances including sexual		
	<ol> <li>Impleme</li> <li>Organisa</li> <li>Mechani</li> <li>Timely r</li> </ol>	entation of g ation wide a isms for sub redressal of	guidelines o awareness a omission of the grievar	of statutory and underta online/offli nces throug	/regulatory akings on p ine student h appropri	<sup>7</sup> bodies olicies with zero tolerance s' grievances ate committees		
	Answer be Answer A	efore DVV V fter DVV V	Verification erification:	: A. All of B. 3 of the a	the above above			

	Rema	rk : DVV	has made	changes as	per the repo	ort shared by	y HEI.	
5.3.1	Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years							
	5.3.1.1 national/ the last fi An	1. Numb (internati ive years iswer bef	er of award ional level ( fore DVV V	ls/medals fo (award for d Verification:	or outstandi a team even	ing perform at should be	aance in sports/cultural activities at c counted as one) year wise during	
	20	)22-23	2021-22	2020-21	2019-20	2018-19		
	11	1	10	6	1	14		
	An	Answer After DVV Verification ·						
	20	)22-23	2021-22	2020-21	2019-20	2018-19		
	11	1	10	6	1	9		
	Remai	rk : DVV	has made	changes as	per the repo	ort shared b	y HEI.	
5.3.2	Average	number	of sports a	and cultura	l program	s in which	students of the Institution	
	5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years Answer before DVV Verification:							
	20	)22-23	2021-22	2020-21	2019-20	2018-19		
	38	8	40	10	42	32		
	An	swer Aft	er DVV Ve	erification :	1	1	-	
	20	022-23	2021-22	2020-21	2019-20	2018-19	_	
	5		7	4	8	3		
	Remai	Remark : DVV has made changes as per the report shared by HEI.						
6.5.2	Quality assurance initiatives of the institution include:							
	<ol> <li>Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented</li> <li>Academic and Administrative Audit (AAA) and follow-up action taken</li> <li>Collaborative quality initiatives with other institution(s)</li> <li>Participation in NIRF and other recognized rankings</li> <li>Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.</li> </ol>							

Answer before DVV Verification : A. Any 4 or more of the above Answer After DVV Verification: B. Any 3 of the above Remark : DVV has made changes as per the report shared by HEI.

## 2.Extended Profile Deviations

Extended Profile Deviations	
No Deviations	