

YEARLY STATUS REPORT - 2023-2024

Part A		
Data of the Institution		
1.Name of the Institution	Narasaraopeta Engineering College	
Name of the Head of the institution	Dr. M. Sreenivasa Kumar	
Designation	Principal	
Does the institution function from its own campus?	Yes	
Phone No. of the Principal	08647239903	
Alternate phone No.	08647239907	
Mobile No. (Principal)	9154686206	
Registered e-mail ID (Principal)	principal@nrtec.in	
• Address	kotappakonda road, yallamnda post	
• City/Town	Narasaraopet	
• State/UT	Andhra Pradesh	
• Pin Code	522601	
2.Institutional status		
Autonomous Status (Provide the date of conferment of Autonomy)	19/04/2016	
Type of Institution	Co-education	
• Location	Rural	

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• Financial Status			Self-f	inand	ing			
Name of the IQAC Co-ordinator/Director			Dr. B Venkata Siva					
• Phone No).			086472	39923	3		
• Mobile N	o:			969246	4540			
• IQAC e-r	nail ID			iqac@nrtec.in				
3.Website addre (Previous Acade	,	the AC)AR	https://www.nrtec.in/wp-content/uploads/2024/10/AQAR-2022-23.pdf				
4.Was the Acad that year?	emic Calendar p	repare	ed for	Yes				
•	nether it is upload nal website Web		ne	https://www.nrtec.in/academic- calendar/				
5.Accreditation	Details							
Cycle	Grade	CGPA	A	Year of Accredita	ation	Validity f	rom	Validity to
Cycle 1	A	3	.05	201!	5	03/03/2	2015	31/12/2021
Cycle 2	A+	3.29		2022	2	12/07/2	2022	11/07/2027
6.Date of Establishment of IQAC				20/12/2012				
7.Provide the list Institution/Department of UGC, etc.)?	-		•					
Institution/ Depo ment/Faculty/Scool			Funding	Agency Year of Award with Duration		A	mount	
NIL	NIL		NI	L	Nil			NIL
8.Provide detail	s regarding the	compos	sition of tl	he IQAC:				
 Upload the latest notification regarding the composition of the IQAC by the HEI 		View File	<u>2</u>					
9.No. of IQAC meetings held during the year		4						

Were the minutes of IQAC meeting(s) and	Yes		
compliance to the decisions taken uploaded on the institutional website?			
If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded		
10.Did IQAC receive funding from any funding agency to support its activities during the year?	No		
• If yes, mention the amount			
11.Significant contributions made by IQAC dur	ing the current year (max	ximum five bullets)	
Programs/Seminars conducted on OBE improvement in academics and admin		quality	
Focused on improving the quality i periodical Academic Audit by inter	_	_	
Conducted 120+ seminars / workshops, FDPs, Guest Lectures, training / certification programs			
_	NEC has been placed 201-300 rank band in NIRF2024, Department of CSE and ECE has received Research Centre Status from JNTUK Kakinada		
College received best rankings from 360 and the week survey	College received best rankings from Times Now, India Today, Career 360 and the week survey		
12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:			

Plan of Action	Achievements/Outcomes
It is proposed to apply for various project funding agencies.	Faculty from different departments sent 06 project proposals to DST-SERB under various schemes
It is proposed to have technical enhancement programs for students and faculty.	FDP/Workshop/Seminar programs on latest technologies conducted by departments to enhance the skills of the students and faculty
It is proposed to apply different agencies to get rankings and recognitions	College has secured 178th rank in Best Engineering College category across India for 2023 by India Today survey on 03-07-2023. 2.College has got 4th rank in top private engineering Institutions for the year 2023 by Times Engineering survey on 30-06-2023. 3. College has secured 3rd rank in placement category and 5th ranking in Research Capabilities across India in top private Engineering Institutions for the year 2023 by Times Engineering survey on 30-06-2023. 4. College has received 14th rank in private Engineering College across India for the year 2023 by Week Ranking on 18-06-2023.
It is proposed to conduct Academic and Administrative Audit for the academic year 2022-23.	Academic and Administrative Audit both internal and external for the year 2022-2023 was successfully completed during the month August and September 2023.
It is proposed to conduct graduation day and orientation day during September month	Graduation day and Orientation Day were celebrated with Chief- Guest: Prof. K. Hemachandra Reddy, Chairman, APSCHE and Guest of honor Dr.G.V.R.Prasad Raju, VC-JNTUK, on 30-09-2023.

It is proposed to have MOUs with reputed organizations and industries	1. NEC has done MoU with Elewayte, Bangalore on 28-11-2023. 2. NEC has done MoU with HIEE, Hyderabad on 14-12-2023. 3. NEC has done MoU with SRC e-solutions, Vijayawada on 15-12-2023. 4. NEC has done MOU with MCore Tech Academy Pvt. Ltd (MCoreata), Bangalore on 07-10-2023 for 3 years.
Civil, EEE and Mechanical department to be ready for NBA inspection.	Mechanical Engineering department has received NBA Accreditation for Three Years i.e from 2023 to 2026.
It is proposed to have 10th CAC meeting in the month of December 2023.	10th CAC meeting was successfully conducted on 02-12-2023
It is proposed to have 19th GOB meeting in the month of December 2023.	19th GOB meeting was successfully conducted on 28-12-2023
It is proposed to have ISO inspection in the month of December 2023	ISO inspection was successfully completed on 12th December 2023 and college was ISO certified till 28th September 2024.
It is proposed to apply for rankings to different agencies	The College has awarded as India's Best Engineering Institutions' 2023 with rating AAA+ by Career 360 on 18-10-2023.
ECE & CSE departments to be ready for research centre inspection	Department of ECE has successfully completed Research Centre Inspection on 15-11-23 and Department of CSE has received Research Centre Status from JNTU Kakinada, on 03-11-2023.
It is proposed to conduct National Level Ideathon-2024.	The Institution's Innovation Council (IIC) successfully conducted a National Level Ideathon-2024 on February 27, 2024

It is proposed to apply various projects funding agencies.	Faculty from different departments applied 05 project proposals to DST-SERB.
It is proposed to apply MoU with various reputed industries.	1.An MoU with Connecting Dream Foundation, Arya Nagar Apartments, Delhi, will be effective from January 25, 2024 to January 24, 2025. 2. MoU with RWTH International Academy, RWTH Aachen University, Germany, will be effective from February 14, 2024, to February 13, 2027. 3. The MoU with THEFACTOR-Y LTD, Covent Garden, London, UK, will be effective from February 20, 2024 to February 19, 2026.
It is proposed to plan industry visits for students.	1. Mechanical students visited Mahanandi Pipes, Shanti Nagar, Palnadu district, on February 5, 2024. 2. Mechanical students are visited Central Institute of Petrochemicals Engineering & Technology (CIPET), Vijayawada, on March 15, 2023. 3. EEE students are visited the 765/400 KV Substation Power Grid Corporation of India Ltd., Annavaram Village, Rompicharla, Narasaraopet, on February 23, 2024. 4. MBA students are visited Sangam Dairy at Vadlamudi, Guntur, on 04/01/2024. 5. The Department of ECE and IEEE NEC Student Branch organized a one-day visit for "Electronics Industrial Visit" on 10-02-2024.
It is proposed to apply projects to various funding agencies	Faculty from different departments sent 04 project proposals to DST-SERB.
It is proposed to have 20th GOB meeting in the month of March-2024.	The 20th GOB meeting was successfully conducted on 30-03-2024.

It is proposed to apply different agencies to get rankings and recognitions	1. The NEC college has achieved 3rd rank among the top 12 private engineering institutes in Andhra Pradesh according to the Times Engineering Institutes Ranking Survey 2024 on 30-06-2024. 2. The college has secured 5th rank in the Placement category and 3rd rank in Research Capabilities among private engineering institutions across India for 2024, according to the Times Engineering Survey on June 30, 2024. 3. The college has secured 2nd rank in Infrastructure among the top 5 private engineering institutions in India for 2024, according to the Times Engineering Survey on June 30, 2024. 4. The NEC college has secured 149 rank in India best college according to the Week-HANSA Research survey on June 30, 2024.
It is proposed to conduct international conference for all departments.	1.The Departments of CSE & Allied Branches in association with CSI, organized an international conference on
13.Was the AQAR placed before the statutory body?	Yes
Name of the statutory body	
Name of the statutory body	Date of meeting(s)
Governing Body	30/11/2024
14. Was the institutional data submitted to AISHE ?	Yes
• Year	

Year	Date of Submission
2023-24	31/01/2025

15. Multidisciplinary / interdisciplinary

The Vision of National Education Policy, to provide high quality education to develop human resources in our nation as global citizens, is well taken by Narasaraopeta Engineering College (NEC). A discussion among the faculty members were initiated on the key principles of NEP such as diversity for all curriculum and pedagogywith technological innovations in teaching and learning, encouraging logical decision making and innovation, critical thinking and creativity. In view of the NEP, NEC has initiated new interdisciplinary centres integrating different departments in addition to the existing inter/multidisciplinary research and academics. Academic programmes are redesigned to include Multidisciplinary /Interdisciplinary courses as electives. All programmes are designed in such a way that students get maximum flexibility to choose elective courses offered by other Departments. It can be said that the NEC is proactively working towards implementation of the suggestions given in the NEP. The fundamental aim of the National Educational Policy (NEP-2020) for higher education is to stop higher education fragmentation by transforming these institutions into massive interdisciplinary universities, colleges, and higher education institutions as Knowledge Hubs. The purpose of NEC, according to NEP standards, is to be accredited by the National Assessment Accreditation Board (NAAC) with a satisfactory grade and to strive for autonomy. In addition, the college's curriculum can contain multidisciplinary programmes. Our Institution, as part of its commitment to holistic and multidisciplinary education, has launched a value based course on Ethics for B.Tech, MBA, and MCA students, as well as life-skills and yoga sessions for all students on campus. Additionally, our students participate in community outreach initiatives such as organising health clinics, blood donation camp, and counselling, among other things. Leadership and effective governance and Leadership for Higher Education Institution: A) NEC is a self-finance private HEI affiliated to JNTUK, Kakinada and it aims to become independent self governing Institution pursuing innovation and excellence through accreditation and autonomy. B) NEC has astrategic Institutional development plan which is inalignment with the vision of NEP.

16.Academic bank of credits (ABC):

Academic Bank of Credits (ABC): Transforming Education The Academic Bank of Credits is a ground breaking initiative jointly undertaken

by the Ministry of Electronics and Information Technology and the Ministry of Education, Government of India. This electronic platform meticulously records the academic achievements of each student, benefiting various stakeholders, including: 1. Certificate Issuers (e.g., Colleges) 2. Certificate Receivers (e.g., Students) 3. Certificate Verifiers (e.g., Companies conducting credential checks for employment purposes) As a pivotal component of the National Education Policy (NEP-2020), academic institutions are encouraged to implement the ABC system. This innovative approach not only facilitates the documentation of academic accomplishments butalso supports the broader goals of NEP-2020, such as enabling outstanding students to take a gap year for entrepreneurial pursuits. One of the notable features of the Academic Bank of Credits is its alignment with the multiple entry and multiple exit scheme of NEP-2020. This flexibility allows students to exit a course after the 1st, 2nd, or 3rd year with an Undergraduate Certificate, Diploma, or Bachelor of Science Certificate, respectively. Narasaraopeta Engineering College's Proactive Implementation: Narasaraopeta Engineering College has taken a pioneering step by initiating the implementation of the Academic Bank of Credits. The system, represented by ABC, serves as a centralized repository where students' earned academic credits are securely stored. This repository empowers students to accumulate credits from diverse courses and programs, facilitating their transfer or utilization towards various degrees or educational pathways. In line with this initiative, Narasaraopeta Engineering College has successfully registered on the official platforms, https://nad.digilocker.gov.in/ and https://www.abc.gov.in/, obtaining the necessary credentials. As a follow-up step, the college has efficiently uploaded student data for the bulk creation of ABC IDs. Currently, the college is in the process of uploading result data in CSV format, a crucial step that enables students to receive digitally signed electronic certificates. This proactive approach by Narasaraopeta Engineering College underscores its commitment to embracing cutting-edge solutions in education and empowering students with secure and accessible records of their academic journey. The implementation of the Academic Bank of Credits marks a significant stride towards a more flexible and studentcentric education system. We have also implemented online courses through National schemes like SWAYAM, NPTEL, Coursera, Udemy etc, and is considered for credits earned against elective courses.

17.Skill development:

In comparison to other nations, the outcome of the 12th five-year plan predicted that just 5% of Indian workers in the 19-24 age bracket got formal vocational education. The extension of vocational

education in India is critical for hastening skill development. The NEP 2020 foreshadows a possibly explosive increase in skill development in the country through vocational education. All Higher Educational / Educational Institutions were expected to provide vocational education as part of their curriculum. Over the next few years, vocational education will be gradually integrated into schools and universities. NEC would walk on with an aim to ensure young students empowerment and cater to the engineering demands, NEC has a specific plan to follow: 1. In R20 regulation five skillcourses are introduced in all branches of engineering, with focus on social inclusion and inclusive education 2. In R19 regulation also skill course is introduced in all branches of engineering 3. To develop workplacerelated skills and attitudes through internship and on-the job training 4. To focus on inclusion of good practices and innovations in teaching-learning 5. Facilitating horizontal mobility of vocational students 6. To collaborate with industries for imparting practical skills and handson experience and design industry-relevant courses 7. To introduce new learning methods and digital tools, like Massive Open Online Courses (MOOC) and flipped classroom for training and empowering teachers 8. Developing and implementing a holistic assessment and evaluation system. 9. To measure the achievements of learning outcomes through various tools and methods as defined by outcomebased education system for 360-degree assessment and evaluation of students. NEC believes in giving equal dignity of people pursuing vocational courses and contribute in developing the workforce of a country.

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

The promotion of Indian arts and culture is beneficial not only to the country but also to individuals. Because engineering is a professional course, using English as a medium of communication and conducting course work in all engineering programmes is required. The institution, on the other hand, commemorates significant dates and hosts activities in regional languages to instil a sense of regional pride. Republic Day and Independence Day are two examples of celebrations where students are addressed in their native languages. Engineers' Day and Teacher's Day are two of the most important days of the year. Women's Day is prominent day that are commemorated with cultural events. Sankranthi Sambaralu -Rangoli competition, Vinayaka Chavithi - Vinayaka idols preparation are the festivals that promote awareness of Indian National and Regional languages, as well as the culture associated with them. National commemorative days, such as Constitution Day and Yoga Day are also

observed.

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

Narasaraopeta Engineering College has adopted outcome-based education in accordance with the standards of the National Board of Accreditation with clearly stated Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs). All courses are designed with outcomes centred on cognitive abilities namely Remembering, Understanding, Applying, Analysing, Evaluating and Creating. Apart from the domain specific skills, learningoutcomes at all levels ensure social responsiveness and ethics, as well as entrepreneurial skills so that student contribute proactively to economic, environmental and social wellbeing of the nation. The Course Outcomes (COs) are also aligned to the PO-PSO philosophy. All course syllabus have been designed with due consideration to macro-economic and social needs at large so as to apply the spirit of NEP. B.Tech. programmes of NEC was accredited by NBA in the year 2009, 2013, 2017, 2022, 2023 and is implementing OBE (URL:1.https://www.nrtec.in/outcomebasededucation-obe/ 2.https://www.nrtec.in/department-ofece-co-poattainment/). Students are assessed as per OBE attainment model. Community participation and service, environmental education, and value-based education are all part of an innovative curriculum that includes credit-based courses and projects. Lab exercises and mini projects with a focus on community engagement are included in the curriculum. Professional Ethics & Human Values is a value-based education course that is introduced at the I B. Tech I Semester level. Environmental Sciences is a course that looks at all areas of environmental sustainability. Thus, NEC has various community outreach initiatives such as Student Club, National Service Scheme (NSS) which caters extension activity to community.

20.Distance education/online education:

Due to Covid -19 pandemic, educational institutions in the country has increasingly involved in using the digital platforms for engaging classes, conducting conferences and meetings. Keeping aside the negative impact of lack of face to face learning, online education has broken the geographical barriers creating interaction of experts and students from distant geographies. Opening up of the economy including that of educational institutions has paved the way of adopting hybrid mode of education combining online and offline resources. This can be considered as the new normal, which is envisaged in New Education Policy as well. Due to the experience gained during the closure period of Covid-19, access to online resources by educators and students will not be a constraint

anymore. Students are encouraged to do MOOC courses at NEC which promotes online education. NEC has successfully imparted all its course content delivery in online mode during the Covid-19 pandemic with tools such as Zoom, MS Teams and Google class room etc.

Extended Profile		
1.Programme		
1.1	21	
Number of programmes offered during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.Student		
2.1	4724	
Total number of students during the year:		
File Description	Documents	
Institutional data in Prescribed format	<u>View File</u>	
2.2	1100	
Number of outgoing / final year students during the year:		
File Description Documents		
Institutional Data in Prescribed Format View File		
2.3	9063	
Number of students who appeared for the examinations conducted by the institution during the year:		
File Description Documents		
Institutional Data in Prescribed Format	<u>View File</u>	
3.Academic		
3.1		
Number of courses in all programmes during the year:		

File Description	Documents	
nstitutional Data in Prescribed Format		View File
3.2		401
Number of full-time teachers during the year:		
File Description	Documents	
Institutional Data in Prescribed Format		View File
3.3		401
Number of sanctioned posts for the year:		
4.Institution		
4.1		1748
Number of seats earmarked for reserved categories as per GOI/State Government during the year:		
4.2		78
Total number of Classrooms and Seminar halls		
4.3		1410
Total number of computers on campus for academic purposes		
4.4		1491.33688
Total expenditure, excluding salary, during the year (INR in Lakhs):		
Part B		
CURRICULAR ASPECTS		

1.1 - Curriculum Design and Development

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

Model curriculum prescribed by AICTE and APSCHE Syllabi of various reputed Universities POs and PEOs and PSOs of the concerned departments Suggestions from industry experts and alumni, Syllabi of various competitive exams such as GATE, IES

Implementation of Outcome Based Education (OBE) in the Curriculum:

Course Outcomes (COs) re-written as per the Bloom's Taxonomy and mapped against Program Outcomes (POs) and Program Specific Outcomes (PSOs). Outcome Based Education (OBE) assures that the graduating engineers possess all of the 12 POs, to compete on a worldwide scale and possessing the expected global qualities. Program Educational Objectives (PEOs) for each programme, which are evaluated based on alumni performance. The Institute pays close attention to the attainment of PEO's, PO's, and PSO's for their respective programmes,

Process for Curriculum Design:

The suggested curriculum is then presented to the BOS (Board of Studies), which includes experts from industry, academia, alumni, and senior faculty members. Regulation R20 introduced Minor, and Honors programmes to allow students to become masters in their respective branches. The institute introduced a CBCS and self learning courses using MOOC's platform through SWAYAM NPTEL, etc. Students are participating in an internship and value-added courses, which allows them to broaden their expertise in a variety of sectors.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	Nil

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

21

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

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

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171

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

1.2 - Academic Flexibility

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

173

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

${\bf 1.2.2 - Number\ of\ Programmes\ offered\ through\ Choice\ Based\ Credit\ System\ (CBCS)/Elective\ Course\ System}$

21

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

1.3 - Curriculum Enrichment

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

The Institute follows curriculum prescribed by the University and integrates various socially relevant cross-cutting issues like ethics, human values, environment, etc., across UG programs to sensitize the students

HumanValues and Professional Ethics:

Human values and professional ethics are addressed through the course "Constitution of India, Professional Ethics & human values and Essence of Indian Traditional & Knowledge "offered to engineering programme. The Students of First Year UG will undergo Student Induction Program (SIP) in which cross-cutting issues like Human Values and Professional Ethics are addressed.

Environment and Sustainability:

The issues of Environment and Sustainability are addressed through the course" Environmental Studies" offered to engineering students in the IInd and IIIrd semester. Through this course, students are sensitized to ecological and environmental issues connected with land, air, and water, with awareness on sustainable development.

Gender equity:

NEC, imparting quality education to shape global leaders has firm belief in gender equity which is indispensable to ensure sustainable development of a country. Institute has initiated promising measures to sensitize and promote gender equity amongst the stakeholders through curricular and co-curricular activities. The NCC activities, Foot drill & arms drill, weapon trainining, firing, personality development and voluntary service programs and social service etc.

The NSS activities, Swachh Bharath Abhiyan, Yoga blood donation and health awareness camps conducted by Youth Red Cross Unit play vital role in promoting inclusive environment towards regional and socio economic diversities among students making a Positive difference and shaping them into whole some professionals.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	No File Uploaded

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

23

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	No File Uploaded

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

1716

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

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

4364

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	<u>View File</u>

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained

A. All 4 of the above

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

File Description	Documents
Provide the URL for stakeholders' feedback report	https://www.nrtec.in/student-feedback- analysis-atr/
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	No File Uploaded
Any additional information	No File Uploaded

1.4.2 - The feedback system of the Institution comprises the following

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

File Description	Documents
Provide URL for stakeholders' feedback report	https://www.nrtec.in/student-feedback- analysis-atr/
Any additional information	No File Uploaded

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

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

1748

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

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

1748

File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

2.2 - Catering to Student Diversity

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

Narasaraopeta Engineering College provides a high-quality education through a well-structured curriculum, fostering both intellectual and physical growth to support the holistic development of its students.

Induction/Orientation programme:

To introduce the institution and faculty to incoming first-year engineering students, the management organizes an induction programme. This orientation aims to help students adapt to the academic environment of higher education. Comprehensive orientation sessions are held to bridge the gap between intermediate education and the foundational skills necessary for professional courses.

Slow Learners

Students are divided into two categories: slow learners and advanced learners, based on their intermediate marks and EAMCET ranks. Their learning capabilities are continually evaluated in the following semesters through assessments such as midterm exams, assignments, class participation, and mentoring sessions. Students are categorized as either advanced or slow learners based on their overall performance in these areas.

Advanced Learners

Students who consistently achieve over 70% in academics are recognized as advanced learners. They are encouraged to enroll in additional courses to further enhance their academic and professional skills.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
30/04/2024	4752	401

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

2.3 - Teaching- Learning Process

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

The teaching-learning process is the main objective and strength of the institute. Modern methods of teaching are adopted which ensure student-centric and rewarding experience. Experiential learning, participatory learning and problem-solving methodologies are well adopted to ensure the overall development of students.

1) Pedagogical initiatives

Pedagogical initiates are adopted to improve the quality of the teaching-learning process. The following teaching-learning methods are used in addition to 'CHALK and TALK' and 'PPT' presentations.

- Experiential Learning
- Problem based learning
- Learning Management System (Moodle)
- Project based Learning

2. E-Learning

E-learning is a structured course or learning experience that is delivered electronically and can include performance support content. The purpose of e-learningis to enable people to learn for personal fulfilment or to obtain a professional degree.

Moodle and self-learning

3. Collaborative learning

- The college has several student chapters, including IEEE, IETE Student's Forum (ISF), IE, ISTE, ICT Academyand CSI. All the departments frequently arrange guest lectures by experts from industry, academia, and research institutions.
- Industrial visits are arranged for the students to learn through interaction and observation of working methods and employment practices.
- In every semester workshops/seminars/guest lectures are arranged for the students.
- Programs are conducted in collaboration with reputed organizations.
- in every yearA National Level Student Tech Fest

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	Nil

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

Narasaraopeta Engineering College (NEC) being a technical campus, encourages intensive use of ICT-enabled tools including online resources for effective teaching and learning process.

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The following ICT tools are used by the Institute

- 1. Projectors Projectors are available in Classrooms
- 2. Desktop and Laptops are used for teaching
- 3. The laboratories, Seminar Halls, Auditorium, the conference Room and other rooms are well equipped with ICT facilities
- 4. Virtual labs are also used to conduct labs through simulations.
- 5. Learning abilities of students are enhanced with NPTEL, Guest Lectures, and Webinars.
- 6. Digital library resourcesincludeDELNET, NPTELandIEEE.
- 7. Youtube lectures

Use of ICT by Faculty:

- Online quiz examinations are conducted through Moodle Software.
- Some faculty have developed e-tutorials for specific topics which helped in making the students understand the concepts very clearly. These are YouTube based which enable the students to replay as and when required.
- The blended Teaching Learning Process has enabled students learning effectively beyond class hours facilitating them in the improvement of academic performance and pass percentage.
- The overall use of ICT tools has greatly improved the teaching learning process resulting in improved academic performance of all the students.
- use of faculty blogs for student assignment questions and materials

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	Nil
Upload any additional information	<u>View File</u>

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

2.3.3.1 - Number of mentors

320

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

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

The academic calendar is prepared by the Academic Cell and IQAC in consultation with the Controller of Examinations and in consonance with the norms of JNTUK, Kakinada, Andhra Pradesh State Council of Higher Education (APSCHE), under the close supervision of the Principal

Based on the academic calendar, each department prepares a plan at the department level, which includes the above and co-curricular activities such as workshops, conferences, seminars, online courses, projects, and guest lectures by experts from both industry and academia. Extra-curricular activities such as various literary and cultural clubs are also part of the plan. This academic calendar is strictly adhered to, by the college.

The Calendar contains a number of working days duly considering the national and public holidays, festivals, summer vacations, training, and placement activities. In the calendar, the duration of classwork, mid examinations, and end exam details are included.

Teaching Plan/Course Information Sheet (CIS)

The teaching plan is prepared for each course in consideration with a number of teaching hours keeping view of academic calendars. Heads of the departments conduct meeting with their respective faculty before the commencement of the semester and allocate the subjects. A unit-wise Course Information Sheet (CIS) is prepared by faculty members. The syllabus coverage is monitored by the concerned HODs.

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

2.4 - Teacher Profile and Quality

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

401

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

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

87

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

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

5

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

2.5 - Evaluation Process and Reforms

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

19

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	No File Uploaded

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

61

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	No File Uploaded

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

Examination reforms by the institution keeps its examination system open for modifications to strengthen it from time to time, to make the system fool proof. It also, address the grievances of students, if any. The institutional reforms activities keep the examination system at par with the examination reforms by AICTE. The marks obtained by the students are posted in ERP and it is made visible to both students and parents. All the permissible pre- examination and post-examination tasks have been integrated with Examination

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Management System using BET tool of BEES/CAMU software The college has been involving electronic processes in publishing the examination schedules in the college website, preparing database of eligible candidates, conducting examinations on pre- printed barcoded and OMR answer booklets, and postexamination task- declaration of results, and issue of grade cards. The question paper for the Semester End Examinations (SEE) is also set by external members from premier institution. Enough care is taken to ensure the questions are standard, and from the syllabus with appropriate Bloom's Taxonomy. Special squad team comprises of internal faculty to take prompt actions by against malpractices, if any. Theexamination schedules are determined by following the Institute Academic Calendar.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

2.6 - Student Performance and Learning Outcomes

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

Outcome-Based Education (OBE) is an important demonstration tool for student-centered instruction that focuses on measuring student performance through outcomes. Quality assurance and improvement processes are about determining whether the set educational objectives meet a general standard of quality. Course Outcomes are the statements indicating knowledge and skills that the student is expected to acquire at the end of a course. Program outcomes represent the knowledge, skills, and attitudes the students should have at the end of the program.

In compliance with the objectives of Outcome-Based Education (OBE), the Program Outcomes (POS), Program Specific Outcomes (PSOs), and Course Outcomes (COs) are framed by the department offering the concerned program after consultation with all faculty and the stakeholders. The Course outcomes framed for each course are displayed through various means as given below.

College Website

Syllabus books

Classrooms

Laboratories and laboratory manual

Meetings/ Interactions with employers

Parent meet

Faculty meetings

Alumni meetings

Professional Body meetings

Library

While addressing the student's HODs create awareness on POs, PSOs, and COs. The faculty members also inform the students and create awareness on the attainment of the same. The POs/PSOs and COs of the programme are also published through the college website.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	No File Uploaded
Link for additional Information	Nil

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

The process of attainment of COs, POs, and PSOs starts from writing appropriate COs for each course of the program from the first year to the fourth year in a four-year engineering degree program.

The course outcomes are written by the respective faculty member using action verbs of learning levels suggested by Bloom and Anderson. Then, a correlation is established between COs and Pos on a scale of 1 to 3, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high). A mapping matrix is prepared in this regard for every course in the program including the elective subjects.

The CO statements are defined by considering the course content covered in each module of a course. For every course, there are

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maybe 5 or 6 COs. The keywords used to define COs are based on Bloom's Taxonomy

Direct attainment displays the student's knowledge and skills from their performance. It can be determined from the performance of the students in all the relevant assessment instruments like internal assessments, assignments, quizzes, and final examinations.

Indirect methods access opinions or thoughts about the graduate's knowledge or skills. Indirect measures can provide information about graduates' perception of their learning and how this learning is valued by different stakeholders.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

2.6.3 - Pass Percentage of students

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

1100

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for the annual report	Nil

2.7 - Student Satisfaction Survey

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

https://www.nrtec.in/wp-content/uploads/2024/11/2.7.1.pdf

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

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

NEC aims to create and support a research culture for developing and promoting scientific temper and research aptitudes among its teachers, staff and students. It helps to realize the vision and missions of the institute and for contributing to national development by establishing an institutional fund and plan for facilitating their participation in research and related activities and by providing the required resources and appropriate facilities.

Objectives of the Research Policy

- Creating and administer are search fund for supporting and facilitating research initiatives and projects of faculty members and students
- Developing rules, procedures and guidelines for granting research support, instituting awards, and supporting all other related activities
- Developing rules, procedures and guidelines for granting study leave, sabbatical leave, duty leave, reduction in workload, etc. for faculty members undertaking research activities
- Providing a modality for proper coordination of all research activities of the institute and aligning the vision and missions of the institute and national development goals.
- Identifying and informing researchers about the appropriate research opportunities announced by different academic, research, industry or government organizations
- Promoting interdisciplinary research and establishing modalities for preparing and undertaking joint research projects covering more than one knowledge domain as well as policies for involving external agencies/experts in such projects
- Identifying and establishing linkages including MOUs for longterm relationships with national and international research organizations for widening the scope of research opportunities and funding options available to the teachers and students of the college.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://www.nrtec.in/wp-content/uploads/2025 /01/3.1.1-RESEACH-POLICYpdf
Any additional information	<u>View File</u>

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

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

5.53698

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

${\bf 3.1.3 - Number\ of\ teachers\ who\ were\ awarded\ national\ /\ international\ fellowship(s)\ for\ advanced\ studies/research\ during\ the\ year}$

0

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

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3.2 - Resource Mobilization for Research

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

17.80

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

3.2.2 - Number of teachers having research projects during the year

03

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
List of research projects during the year	<u>View File</u>

3.2.3 - Number of teachers recognised as research guides

8

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

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

2

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	Nil
Any additional information	<u>View File</u>

3.3 - Innovation Ecosystem

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

NEC has an Institution's Innovation Council (IIC) that works under the 'MoE's Innovation Cell (MIC)' to create a vibrant local innovation ecosystem, a start-up supporting mechanism, a function ecosystem for scouting ideas and pre-incubation of ideas, and to improve technology students' cognitive abilities.

The Entrepreneurship Development Cell (EDC) at NEC works to promote entrepreneurship among students by hosting events such as entrepreneurship awareness camps, entrepreneurship development programmes, faculty development programmes, skill development training programmes, and entrepreneurship challenges in starting a social enterprise.

The Innovation and incubation centre provides a platform for business incubation and innovation, including incubation spaces, business management counselling, and technical solutions, interaction with industry and peers, and provision of relevant solutions.

IPR cell established in the college in the year 2018 to provide a platform to share and discuss practical exposure and to assist faculty members for patent filing process.

Two departments at NEC are recognized as research centers and faculty are encouraged to carryout innovative research projects. Further college administration is also providing facility and financial support for select innovative projects proposed by faculty and students. The students are also encouraged to participate project model exhibition, workshops and symposiums to present their

innovative ideas.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

76

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

3.4 - Research Publications and Awards

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

A. All of the above

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

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

3.4.2.1 - Number of PhD students registered during the year

11

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

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

110

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

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

53

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

3.4.5.1 - Total number of Citations in Scopus during the year

108

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

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

3.4.6.1 - h-index of Scopus during the year

6.2

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

3.5 - Consultancy

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

23.8485

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

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

1	۲	٦	
۱	L	J	

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

3.6 - Extension Activities

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

Narasaraopeta Engineering College was allotted a National Service Scheme (NSS) Unit in 2002 by Jawaharlal Nehru Technological University, Kakinada with 100 students enrolled as NSS Volunteers. The motto of NSS is ''Not Me But You'' as stated by Swami Vivekananda. It means service to mankind is service to god. Imparting such values and attitude into the minds of students is the main aim of organisation. Trusting in this, the institute carries out a number of extension activities in the neighbourhood community. Our NSS Unit organized several service oriented activities at university level and state level since its inception.

Extension activities in the neighbourhood community during the accreditation period:

Meri Mati Mera Desh Program, Clean and Green Programs like Swatch Bharath was conducted at Yallamanda and Guravayapalem the nearby villages and our NSS volunteers explained the importance of cleanliness and its impact on health. NSS Unit Implemented several Chlorination Programs in the village and explained the importance of hygiene to protect the health. After conducted a survey in the village, Medical camps were conducted in Yallamanda village to solve their dental, eye, and orthopaedic problems which are identified as major health troubles.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

11

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

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

32

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

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

3403

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

3.7 - Collaboration

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

27

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

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

9

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

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

The institution has a total Built-uparea of 31,362 square meters. There are adequate facilities for teaching and learning. Separate Boys and Girls hostels are maintaining. There are fully equipped seminar halls with a good public address system, Wi-Fi, and different seating capacities for conducting seminars/workshops/FDPs and guest lectures. The institution has research centers to caterthe needs of research scholars.

CAMU software is implemented for student attendance, marks and activities in autonomous exam section Learning management system (MOODLE) software is used for conducting online exams and for uploading teaching learning material. Kohasoftware is used for library automation. Sonic Firewall is using for protection and security of information software.

For academic purpose the institution has provided1410computers

for 4752 students. The campus has free Wi-Fi with bandwidth of 1GBPS. Many of the class rooms and seminar halls have LCDs and Wi-Fi as ICT facilities. For uninterrupted power supply, two generator and 21 UPS are available.

The institute has established several cells to create an eco-system of quality improvement, research, and innovation. The Training & Placement Cell provides students with campus recruitment training as well as soft skills and interview skills, as well as organizing campus drives.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

College has provided a number of facilities to support extracurricular activities related to culture, creativity, arts, and recreation. For conductingliterary and cultural events, one AC seminar hall with a seating capacity of 300 was established. ss

The college organizes events through various clubs. Throughout the year, the team actively organizes various events under various clubs. Every year the institute organizes JUBILATION (National level technical, cultural and sports fest), a Student-Parent meet, Fresher's Day celebrations, and Annual Day celebrations.

NEC has adequate facilities for sports and games (indoor and outdoor), as well as a Gymnasium. To train and monitor all sports and games activities, a well-qualified two Physical Directors were appointed.

Yoga master is available for Yoga training. International Yoga day is celebrated every year with major participation of students and Faculty.

Treadmills, stationary bicycles, dumbbell sets, and Multi station Gym are available in the campus.

Students are encouraged to participate in events at the regional,

university, national, and international levels by the institute

The college teams in cricket, volleyball, kabaddi, khokho, Badminton, Basketball, judo, yoga and other sports won the majority of the tournaments. Many of our students have competed in JNTUK Interuniversity Tournaments and broughthonorsto the Institute.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

57

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

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

264.64929

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

4.2 - Library as a Learning Resource

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

The Central Library meets the needs of the college's faculty and students. The library hasa circulation section, a lending books

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Annual Quality Assurance Report of NARASARAOPETA ENGINEERING COLLEGE section, a reference section, SC/ST book bank section and project discussion rooms. KOHA software is using which includes all aspects of the library management system, with a seating capacity of 200 spread across 1200 square meters. Books search can be done with in the campus through OPAC. The timingsare 8:00 a.m. to 8:00 p.m. on weekdays and 9.00 a.m. to 5:00 p.m. on holidays. The digital library has e-resources like DELNET, N-List, NDLI, NPTEL, e-Shodh Sindhu and collection of e-books. The digital library is also equipped with40computers withmultimediaand Internetfacility with 100 Mbps connectivity LibraryInformation:

Titles

10902

TotalNo. ofVolumes

65,638(IncludingSC/STBookBank& MCA)

BookBankforSC(volumes)

4758

BookBankforSC(Titles)

610

BookBankforST(volumes)

617

BookBankforST(Titles)

224

ReferenceBooks

10902

E-Journals 2(DELNET& NLIST) E-Books 34,38,000 (N-List) DigitalDatabases 1(DELNET) PrintJournals 93 Magazines 03 ProjectReports 1313 CD&Videos 2045 E Learning Material available 16 TBofNPTELVideolectureson502 subjects NPTELWeb Courseson433 subjects

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.nrtec.in/wp- content/uploads/2024/11/4.2.1.pdf

4.2.2 - Institution has access to the following: e- | A. Any 4 or more of the above

journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

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

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

5.60483

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

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

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

377

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	No File Uploaded

4.3 - IT Infrastructure

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

The institute has IT policy with clearly stating the procedures to be adopted for all IT facilities that are made available in the campus. The institution's IT infrastructure, including Wi-Fi, is updated on a regular basis. There are 1410 computers, 80 projectors

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and 44 printers are available. The CAMPUS has Wi-Fi access to meet the needs of academic and research. The campus has a 1.00 Gbps dedicated line internet facility through AIRTEL and a 40 Mbps bundled bandwidth through BSNL, Sonic Fire Wall (SGS600) worth Rs.1200000/- that protect the NEC networks from hackers.

AP CM's Skill Excellence Centre, ARC, DASSAULT 3D was established in the institution association with APSSDC and IoT labs were also established.

The institute has an intranet with a 1Gbps fiber optic backbone network and three DIGISOL manageable switches, as well as Wi-Fi support from 41 access points that is available 24/7. There are 128 surveillance cameras on campus.

The institute has Microsoft Azure campus license. This license facilitates regular updating of 9 system softwareand 27application software including Office365 and MS Teams for all students and faculty.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.nrtec.in/wp- content/uploads/2024/11/4.3.1.pdf

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
4752	1410

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

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

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	<u>View File</u>

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

A. All four of the above

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil
List of facilities for e-content development (Data Template)	<u>View File</u>

4.4 - Maintenance of Campus Infrastructure

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

331.8006

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	No File Uploaded

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

To ensure optimal usage and maintenance of physical, academic and support facilities, the institution has a well-defined maintenance policy.

In Central Library the requirement of booksfor the upcoming academic year is received from the concerned department HODsat the end of every academic year and forwarded to the principal for approval.

The lab in charge of every lab in every department maintains the stock register by physically verifying the items throughout the year and having it signed by the HOD and principal. For the repair of any equipment, a proposal will be sent by the lab in-charge to the Principal through the proper channel.

Regular maintenance of computer laboratory equipment and updating of software is done by laboratory assistants along with laboratory attendants, who are headed by the faculty in-charge.ICT enabled classrooms and seminar halls are maintained under the supervision of the system administrator.

To prevent breakdowns and ensure reliable power supply, all UPS systems on campus are under an Annual Maintenance Contract (AMC).

Thesportscommitteeconductsmeetingstodiscuss about the conduction of collegiate tournaments for each academic year and forwards proposals to the principal for approval.

Regular cleaning and electrification are maintained by the concerned staff of the institute.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

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

2695

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

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

56

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

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

A. All of the above

File Description	Documents
Link to Institutional website	https://www.nrtec.in/career-guidance/
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

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

	_	
—	6	- 2

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

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

A. All of the above

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

5.2 - Student Progression

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

654

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

5.2.2 - Number of outgoing students progressing to higher education

99

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

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

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

66

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	<u>View File</u>

5.3 - Student Participation and Activities

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

12

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

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

NARASARAOPETA ENGINEERING COLLEGE (NEC) provides a platform for students to actively participate in various Committees like:

1. Internal Quality Assurance Cell (IQAC)

- 2. Disciplinary Committee (DC)
- 3. Canteen Committee
- 4. Transport Committee (TC)
- 5. Extracurricular activities Committee (EC)
- 6. library Committee
- 7. Women Empowerment Committee (WEC)
- 8. National Service Scheme(NSS) Committee
- 9. Entrepreneurship and Development Committee (EDC)
- 10. Placement Cell Committee
- 11. Industry Institute Interaction Committee (IIIC)
- 12. Sexual Harassment Prevention Committee (SHPC)
- 13. College hostel Committee
- 14. SC/ST Committee
- 15. Sports Committee

IQAC Committee sets benchmarks for various academic and administrative activities of NEC. The college has an efficient antiragging committee to create awareness in the students on the 'evil effects' of ragging. EDC motivates students to develop their own start-ups. The Library committee considers policy matters regarding Central Library/Departmental libraries including the policy for procurement of books and journals.

NSS Committee makes education more relevant to the present situation by bringing them face to face with rural situation. The SHPC prevents discrimination and sexual harassment against women. Transport Committee provides transport facilities for students and staff.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

18

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

5.4 - Alumni Engagement

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

The Narasaraopeta Engineering College takes immense pride in its distinguished Alumni, who boast an impressive track record of successful placements and have made their mark in various key positions across different fields. The institution's commitment to nurturing this rich network of alumni led to the establishment of the Narasaraopeta Engineering College Alumni Association (NAA) with Ref No. 275 of 2021 in the Office of the Registrar of Societies, Narasaraopet. NAA's objective is to unite all former students with their peers and beloved alma mater. It actively engages alumni in numerous events and initiatives to bolster the institution's progress. The association connects Telegram group also.

The governing body comprises of President, Vice-President, Secretary, Treasurer and Joint Secretary for oversees meetings, financial matters and event coordination etc. Notably, NAA alumni have excelled in prestigious companies like CGI, TCS, Infosys and more, holding roles such as Software Engineers, R&D Engineers, NDT Engineers etc. and other Government organizations. NAA continually encourages alumni to contribute through technical lectures, career guidance sessions and support for student excellence. Awards and prizes are presented to outstanding students. NAA facilitates campus placements, project support, employee referrals, industrial visits,

etc. for institution's ongoing success and development.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

5.4.2 - Alumni's financial contribution during the year

B. 10 Lakhs - 15 Lakhs

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

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

- 6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution
 - The institutional faculty met several times to develop and cultivate a strong and meaningful vision and mission. The following components were also used to finalize the mission.

Creativity

Life- long learning

Our dedication and commitment are to achieve long-term and unrivalled excellence in Technical Education. To that end, we are pursuing continuous infrastructure development and upgrading state-of-the-art equipment in order to provide our students with a technologically advanced and intellectually stimulating environment for learning, research, creativity, innovation, and professional activity, as well as instil ethical and moral values in them.

Vision:

To emerge as a centre of excellence in technical education with a blend of effective student centric teaching learning practices as well as research for the transformation of lives and community.

Mission:

Provide the best class infrastructure to explore the field of engineering and research Build a passionate and a determined team of faculty with student centric teaching imbibing experimental innovative skills. Imbibe lifelong learning skills entrepreneurial skills and ethical values in students for addressing societal problems.

Quality Education

Professional career

Higher Education

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://www.nrtec.in/wp- content/uploads/2024/11/6.1.1-1.pdf

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

- Provides a frame work for effectiveness and sense of direction
- Outlines the goals and measurable targets
- Is useful for guiding day-to-day actions
- Helps in evaluating progress and changing approaches when moving forward

The plan is developed to establish deep roots that provide firm foundation for the constant Up-gradation of the institution, as well as to energize the drive of experimentation and innovation, keeping the focus on Institution vision and mission. The strategic plan sets out a frame work of priorities for the Institution.

Departments play a pivotal for the institution; hence each department worked out on their vision, mission and short, mid & long-term goals. The implementation plan for the departments also reflected all details such as budget, resources needed as well as leader responsible with time lines. HODs form the core team for

implementing departmental goals under the guidance of Deans/Principal.

The final draft document was discussed with GB and after its detailed review; the suggestions were incorporated towards its effective implementation. This comprehensive plan forms the guiding plan for the years 2018-2024.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.nrtec.in/wp- content/uploads/2024/11/6.1.2.pdf

6.2 - Strategy Development and Deployment

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

The institution has a solid strategic plan with well-defined goals.

- 1. Effective teaching and learning process.
- 2. Student and faculty development and participation
- 3. Accreditation from statutory bodies.
- 4. Internal Quality Assurance System
- 5. Research and Development Work.
- 6. Social engagement and Community service.
- 7. Industrial and Alumni Interaction.
- 8. Physical infrastructure and facility.
- 9. Placement and Training.
- 10. Entrepreneurship.
- 11. Incubation Centers and Start-Ups.

The Strategic Plan ensures that the targets are accomplished through an accountability process that includes review, evaluation, reporting, and re-planning.

A strategic plan is an important tool for a college to effectively manage itself because it

- Provides a frame work for effectiveness and sense of direction
- Outlines the goals and measurable targets
- Is useful for guiding day-to-day actions
- Helps in evaluating progress and changing approaches when moving forward

As illustrated in below Figure, it is an iterative process at both stages, namely when framing and when implementing.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://www.nrtec.in/wp- content/uploads/2024/11/6.2.1.pdf
Upload any additional information	No File Uploaded

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

The institute has a clearly defined organizational hierarchy and structure to support clear and consistent decision-making processes that support effective decision making. Through the involvement of stakeholders on various Boards (Governing Body, Academic council, Board of Studies and Finance Committee's), the organizational structure lends itself to the maintenance of institutional capacity and educational effectiveness.

The organization has a well-organized administrative structure, with the Governing Body serving as the highest decision-making body, as well as other functional bodies and committees.

Service rules, Procedures, Recruitment and Promotional Policies:

Narasaraopeta Engineering College has defined policies that were developed with the participation of various stakeholders such as the Principal, members of Management, and members of the Governing Body. The policy has been revised, and new policy amendments have been introduced for the benefit of stakeholders.

To raise awareness among employees and students, the documents are published and made available in the institute library as well as in all departments.

The detailed information on the above policies and procedures is available in the Service Rules and Regulations & Administrative Manual, which is linked to for more information.

File Description	Documents
Paste link to Organogram on the institution webpage	https://www.nrtec.in/wp- content/uploads/2024/11/6.2.2.pdf
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

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

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A. 7	of	the	above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	<u>View File</u>

6.3 - Faculty Empowerment Strategies

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

The Institution provides effective welfare measures to both teaching and non-teaching staff. To the satisfaction of the employees,

various monetary and non-monetary measures toward personal and professional growth are being implemented to fosters a friendly environment and improves work efficiency.

The list of existing welfare measures for teaching and non-teaching staff:

- 1. The 6th Pay Commission recommendations are implemented.
- 2. General Insurance covers all teaching and non-teaching staff.
- 3. Non-teaching employees are covered by EPF & ESI.
- 4. All teaching and non-teaching staff are granted maternity and medical leaves.
- 5. Providing 12 casual, 12 earned leaves and 12 vacation leaves to all teaching and non-teaching staff for one academic year.
- 6. The availability of free transportation for all employees.
- 7. Financial incentives for all employees who publish papers in reputable journals and obtain patents, to attend conferences/workshops and professional body memberships.
- 8. Providing uniforms and Festival bonus for all non-teaching staff in class IV.
- 9. The institute introduces new laboratory equipment and software to improve practical skills and allow students to advance in their professional careers.
- 10. The institution has signed Memorandums of Understanding (MOUs) with a number of organisations to improve staff technical skills.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nrtec.in/wp- content/uploads/2024/11/6.3.1.pdf

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

168			

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

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

19

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

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

165

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

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Finance is the lifeblood of any organization. Regular auditing of financial transactions will ensure effective financial management. Every fiscal year, NEC has a system of both internal and external audits for all financial transactions carried out in the institute. Financial planning and review are done on a regular basis by the Finance Committee, which is chaired by the principal and includes

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members from administration and accounting. The Finance Committee meets twice a year to review the income expenditure statements and make recommendations for future action. Management examines income and expenditure patterns through the Governing Body, and pragmatic recommendations are made.

.Financial rules are in place at the Institute, and the "No-Cash" Transaction System is used to the greatest extent possible. Internal audits are carried out on an annual basis by the internal audit committee, which is chaired by the Principal. Internal audits are performed on a sampling basis to ensure the accuracy of the Institution's financial transactions and statement affairs. Chartered accountants conduct statutory external audits on a yearly basis. External Audit: With all statutory obligations met, there were no major audit objections until the most recent audit.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nrtec.in/wp- content/uploads/2024/11/6.4.1.pdf

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

0

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

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

Mobilization of Funds:

The primary goal of the institution is to improve its quality and reputation. The annual fee collected from students is the college's primary source of revenue. The fee is collected in accordance with the fee and guidelines established by the AP State fee regulatory

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authority. Funds are also mobilized through sponsored projects from National funding Agencies such as UGC, AICTE and DST. Funds are also raised through consulting and philanthropic donations.

RESOURCE MOBILISATION The following are the different ways of mobilizing the funds in the Institution:

Tuition fees: Tuition fees collected from students are the primary source of revenue generation. The Fee Regulatory Authority of the Government determines the appropriate fee in accordance with the rules.

RESOURCE MANAGEMENT

According to the approved budget, the resources are used for the following purposes:

- Employee Salaries and benefits are a major component of expenditure
- Furniture, Laboratory Equipment, Consumables, etc.
- R & D and Incentives
- Training & Placement
- Software procurement, Wi-Fi, Internet & Networking
- Student Services- NCC, NSS, Sports
- Travel and conveyance
- Repair, Replacements, and Maintenance
- Taxes and licenses
- Sanitation-housekeeping
- Gardening and security charges

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://www.nrtec.in/wp- content/uploads/2024/11/6.4.3.pdf

6.5 - Internal Quality Assurance System

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

subsequent cycles)

The IQAC initiated Academic Audit and Administrative Audit (AAA) for the purpose to ensure the implementation of OBE in all programmes of institutions as well as to identify the resources required for effective implementation of OBE. It includes assessment policies, strategies, and functions of various administrative departments.

The action was taken for continuous improvement and examine qualitative report will submit to IQAC cell which in turn provide suggestions to the respective departments. The external audit team conducts a comprehensive audit covering all aspects of the institution. The suggestions given by the external audit team are discussed with the principal and action taken is prepared

Incremental Initiatives

- Conduct of Faculty development programmes
- Promoting research by faculty
- Financial support is extended partially for attending workshops /conferences/ FDPs out side the college.
- Organizing workshops/seminars/conferences/FDPs by the institution.
- Dedicated training programs for improvement in terms of Soft Skills, Programming Skills, and Technical Skills have been arranged for students resulting in better placements.
- Establishment of Industry Institution Interaction Cell and Advanced labs, English Communication Skills lab, Centre for Innovation, Incubation, and Entrepreneurship have been strengthened.
- All classrooms, laboratories, and Seminar halls are ICT enabled.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nrtec.in/wp- content/uploads/2024/11/6.5.1.pdf

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

IQAC deployed standard structures and methodologies for the review of the teaching-learning process and learning outcomes at periodic intervals. Regarding the review of the teaching-learning process, the IQAC has set up the following practices at our institution.

Internal Academic Audit:

In a semester, every department is audited thrice every semester by two auditors from other departments nominated by the Chairperson of IQAC (Principal). The auditors will verify the following parameters and submit the compliance to IQAC.

- Course Objectives and Course Outcomes (COs).
- Course articulation matrix (Mapping of COs, POs, and PSOs).
- Lesson Plan Schedules.
- Syllabus coverage as per the schedule
- I-Mid, II-Mid, and End Semester Question Papers and Scheme of valuation.

Initiatives implemented

- Autonomous -OBE Curriculum for holistic education.
- Effective mentoring system for the all-round development of students.
- Green Campus, Innovative Best Practices like Bodhana, Sadhana, Nipuna, and Ekalavya
- More than 30 MOU's industrial and academic.
- With industry support, AP CM's Excellence Centre, Collaboration with ICT academy, advanced laboratories like Advanced Robot Control lab, Dassault 3D experience lab, and IOT labs are established.
- IPR cell was established and motivated faculty towards IPR activities. As a result, 35 books and more than 25 patents are published.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nrtec.in/wp- content/uploads/2024/11/6.5.2-1.pdf

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used

A. Any 4 or all of the above

for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

File Description	Documents
Paste the web link of annual reports of the Institution	Nil
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

Gender equality is one of key challenges facing in society today. Gender sensitivity is an inherent value in the cultural ethos of the institute, as is evident by the following facilities,

A.Safety & Security:

The Institution has special cell calledStudent Grievances Redressal Cellthrough which addresses student's grievances related to academic and non-academic problems.

B.Hi-Tech Surveillance system:

E- Surveillance with cameras through 24X7 to track activity of every student thus ensuring their safety inside the campus.

C. Hostels:

Students are monitored under well-defined rules and guidelines of wardens. Wi-Fi enabled reading room is available in women's hostel.

D. Medical Facilities:

Health centre with a qualified doctor and nurse is available in campus to provide medical care. Specialists are also invited to visit the campus if necessary.

E. Girls Rest Room:

In each block of the campus, girl's waiting room is available with all facilities.

F. Counselling:

NEC has consistently strived to address contemporary issues like gender sensitization, women concern, teasing, ragging etc. under the anti-ragging committee to counsel them amicably.

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional Information	https://www.nrtec.in/wp-content/uploads/2024 /11/NAAC_7.1.1_Proof_AY-2023-24.pdf	

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

Α.	Any	4	or	All	of	the	above
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File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

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

- Solid waste management
- Liquid waste management
- E-wastemanagement

- Chemical Waste
- The importance of waste management and methods of waste disposal mechanism is taught to students through courses such as Environmental Studies, Solid waste Management etc. in NEC.

Solid Waste Management

Dustbins are positioned in each classroom, laboratory, restroom, canteen, and atdifferent places in the campus. Sweepers are all otted to manage all of the waste generated in the campus. All waste/garbage from college and hostel is segregated at source and disposed of in a proper manner. The collected foodwaste is deposited in the biogas plants.

Liquid waste Management

Thecollegehas aproperdrainage facilityto drainoff theexcessliquid waste and R.O. plant waste water is utilised for gardening purpose.

E-Waste Management

E-waste generated in the campus is collected via the maintenance teamand is appropriately disposed of through vendors.

Chemical Waste

Indiscriminate use ofchemical compounds is discouragedall through practical training and laboratory liquid chemical wastes are effectively disposed of. Inorganic wastes which include concentrated acidic or alkaline solutions are neutralized before disposal.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>
Geotagged photographs of the facilities	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore

A. Any 4 or all of the above

well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

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

7.1.5 - Green campus initiatives include

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

- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Geotagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	No File Uploaded

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

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

A. Any 4 or all of the above

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

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

- 7.1.7 The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.
- B. Any 3 of the above

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

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

arasaraopeta Engineering College remains exemplary in executing cultural and social activities by providing an inclusive environment for the students. Everyone has freedom to express his/her own opinions and is given equal opportunity to participate in teaching, learning, work and social activities.

The Institute affirms pristine transparency by meritorious

admissions indeed unbiased and keeps chances equally open to all students irrespective of the cast, creed, regions, and religion. Anti-ragging cell exerts to keep up harmony, tolerance and ready to take any measures. The renowned institute maintains the sense of respect towards all cultural and technical activities such as jubilation.

Our Institution commemorates World Environment Day, International Yoga Day, Anti-Drugs Trafficking day, Independence Day, World Entrepreneur's day, National Sports day, Engineer's day, Teacher's day, World AIDS day, National Energy Conservation day, Free Heart Check-Up Camp, Blood donation camps, free eye check-up camps, Plantation in nearby villages, National Mathematics Day, World Cancer Day.

Besides curriculum, additional communication and soft skills classes along with team bounding activities are conducted to communicate professionally with technically jargons. Pongal celebrations are celebrated with great ease and enthusiasm.

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

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

Narasaraopeta Engineering College (NEC) Sensitizes students and employees to the Constitutional obligations about Values, rights, duties and responsibilities of citizens. The students at NEC are sheltered under teacher's guidance and motivation. They are nurtured in self-learning and pave way for creative thinking and entrepreneurship.

Students in autonomous community can make aware through curriculum and extra-curricular activities. In this regard, students focus on various concepts related to Artificial Intelligence, Cyber Space, and the Indian IT act serves as the electives. Celebration of National Festivals, the commemoration of Birth and Death Anniversaries of great Indian Personalities takes place every year in the Institute with enthusiasm.

College is conducted different activities like International Women's

Day on 8thMarch is observed every year and a lady Police Officer is invited as Chief Guest to address the female students on self-defense and encouraged how importance the Disha App is and threw light on the installation of the App.

The students are inspired by participating in various programs on culture, traditions, Values, duties and responsibilities by inviting eminent people.

Guest lectures and workshops are arranged by eminent personalities to deliver lectures on ethics, values, duties and responsibilities and on saving the environment.

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

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

A. All of the above

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

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

NEC as an institute of certain pristine principles and objectives guided by the faculty, management and some important wings which are inclined to conduct some national festivals, birth anniversaries of national leaders and create awareness on nationalism, Independence Day and republic day are celebrated every year.

The institution remembers the birth/death anniversaries of great Indian personalities like Mahatma Gandhi, Dr.A.P.JAbdul Kalam, Dr.Babasaheb Ambedkar. etc on these auspicious day eminent guests are invited as spokesperson to share views and throw light on their sacrifices laid for the wellbeing of the nation.

The institute conducts technical fest and engineers day annually where students exhibits their hidden talents by involving in different technical activities such as poster presentation, Group discussion and Seminars.

Women's day is being observed on March 8 as a mark of respect to women owing to their courageous endeavour in personal and professional life.

International Yoga day is observed every year, students and staff participate whole heartedly. India celebrates Teachers' Day on September 5 every year to mark the birth anniversary of Dr. Sarvopalli Radhakrisnan.

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

7.2 - Best Practices

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

BEST PRACTICE - I

Title of the Practice:

Bodana-Sadhana-Nipuna-Programme(BSNP)

The NEC features a robust campus infrastructure focused on nurturing exemplary models through its innovative Bodana-Sadhana-Nipuna Programme. Starting in the second year, students engage in miniprojects to create unique technological marvels, guided by experienced academicians, ensuring a profound educational journey.Our students' innovative spirit is evident in their diverse range of projects. From developing an IoT-based vehicle accident alerting system to designing a 3D-printed prosthetic hand and a multi-mode robotic car, they have demonstrated a remarkable ability to transform theoretical concepts into tangible solutions.

BEST PRACTICE - II

Title of the Practice:

Ekalavya Programme (Encouraging students for self-learning)

NEC, In its commitment to holistic education and cutting-edge learning methodologies, NEC endeavors to transcend traditional academic boundaries. Upholding the core values of "Promoting Self-Learning" and "Collaborative Learning," the institution continuously encourages students to engage in online certification courses from prestigious platforms like NPTEL and MOOCs. The resounding success of these efforts is evident in the profound impact on the knowledge landscape, with over 1,274+ students and faculty benefitting from NPTEL courses and impressive 7015+ students completing certifications from other MOOCsempowering students to embrace a culture of continuous and innovative learning.

File Description	Documents
Best practices in the Institutional website	https://www.nrtec.in/wp-content/uploads/2024 /11/Best-Practice-1-and-2.pdf
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

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

The Institute has a distinction by establishing several Centres of Excellence (CoE), Industry collaborative laboratories and special training centre.

TECH HUB TRAINING CENTRE:

Tech Hub Training centre offers a cutting-edge facility with an immersive environment, useful for special training classes.

CENTERS OF EXCELLENCE (CoE):

Andhra Pradesh State Skill Development Corporation (APSSDC), Government of Andhra Pradesh sanctioned a "CM's Skill Excellence Centre" to bridge the skill gap between the academic and the industry requirement.

Dassault Systems and ARC Labswere established with support of APSSDC for offering a training in various new technologies. An Indo-European skilling Centre for Mechatronics & Industria Robotics lab was also established by APSSDC in collaboration with GC German Centre for Engineering & Mgt. studies, Germany & ECM APS GmBH Aachen to establish a framework for initiating innovation models.

ICT ACADEMY:

ICT Academyis an initiative of the Government of India in collaboration with the state Governments and Industries, which provides a consultancy and training through industry experts.

E-YANTRA / EMBEDDED SYSTEMS AND ROBOTICS LAB:

The college takes relevant measures to improve research culture among the students and faculty in the field of Robotics. This lab is established in association with IIT Bombay.

File Description	Documents
Appropriate link in the institutional website	Nil
Any other relevant information	<u>View File</u>

7.3.2 - Plan of action for the next academic year

To increase external funding from various organizations and industries

To have more functional MOUs with reputed institutions and industries

To increase publications in SCI/Scopus indexed journals

To publish more number of patents

To start new courses in emerging areas

To Enhance employment Potential by introducing innovative courses

To increase the number participation in online certification courses such as SWAYAM NPTEL, MOOCs etc.,

To Organize Campus Recruitment Training with reputed organizations to enhance employability skills of the students

To increase internships and industry related projects

To have industry supported laboratories and centre of excellence on latest technologies to bridge the gap between academia and industry

Strengthening Placement cell through TECH-HUB centre Initiatives to be taken for implementation of NEP 2020

To initiate startups by students and registering them as companies

To make the campus as AI enabled

To become university