SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

NARAYANA ENGINEERING COLLEGE

NARAYANA AVENUE, MUTHUKUR ROAD, NELLORE
524004
www.necn.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Narayana Educational Institutions are one of the best education providers in India from the Pre-primary to professional post graduation. Narayana Educational Group was established by renowned educationalist Dr P Narayana, 40 years ago. Today, the Narayana Educational Institutions stand tall and proud for setting path breaking benchmarks in academic excellence. Four decades of experience in fulfilling the aspirations of India's students has given us conviction and confidence to aim higher and bigger always. In promoting professional colleges from this group, **Narayana Engineering College Nellore (NECN)** was established in 1998. Now, ours is one of the premier Engineering Colleges in the self-financing category in Andhra Pradesh. College is locating in Nellore city, which is famous for Paddy crop and is also called city of Education. Institution has well equipped built up area with impressive infrastructure like state of art Laboratories, class rooms, tutorial rooms, library, drawing halls, seminar halls etc are available to provide conducive environment for academic activities.

College is ranked by Grade 'A' by Government of Andhra Pradesh, permanently affiliated to JNTUA, Ananthapuramu, recognized by UGC 2(f) and 12(B) and certified by ISO 9001:2015. NECN, over the past 20 years has become a shrine of knowledge and shaped thousands of famous and adroit graduates and post graduates, who are successful in their careers, serving all over the world. Since the inception, NECN is intended to provide quality education through value-based teaching-learning process via Outcome Based Education, providing fruitful industry –institute interaction, excelling support in research initiatives among students and faculty members, encouraging to involve in innovation and incubation cell to drive towards entrepreneurship and motivating to participate in community service activities. The institute is always focusing on overall development of the students through participation in co-curricular and extra-curricular activities. NECN is committed to bringing out the best in every student by imparting a strong educational foundation. Given the dynamic and global nature of education in the 21st century, we are constantly working hard and reinventing ourselves with the ultimate goal of creating exceptional and enriching student experiences.

Vision

To be one of the Nation's Premier Institutions for Technical and Management Education and a key contributor for technological and socio-economic development of the nation

Mission

To produce technically competent Engineers and Managers, by maintaining world-class infrastructure, adapting high academic standards and teaching practices to provide unique learning experience, inculcate global perspective in attitude and foster students to face real-world challenges

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

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Faculty& Staff Members

- Well Qualified and experienced faculty
- Expertise in multidisciplinary knowledge areas
- Faculty adopts ICT and blended teaching-learning process
- Delegation of Duties and Responsibilities through well defined organizational chart
- Teaching methodology of faculty is heavily biased towards practical work, active learning methodologies.
- Good number of faculty research publications in National and International journals and Conferences
- Faculty and Staff members are competent and trained in skills enhancement.
- Average working experience of staff is more than 10 years
- Motivation provided to staff members to acquire higher qualifications and to participate in workshops / conferences

Students

- Empowerment of girl students by giving them equal opportunities in every activity
- Student centric functioning including mentoring and counseling
- Promoting students to participate in the co-curricular and extra-curricular activities.
- Branch specific Value Addition Programs to meet the current needs of the industries
- Training and Placement Cell facilitates students through life skill trainings and in preparing for placement opportunities
- Advanced learners have demonstrated their potential through projects and in various other competitive examinations for pursuing higher education and in furthering their professional career

Curriculum & Infrastructure

- Continuous Internal Academic Auditing for quality assurance
- Periodic review and revision of curriculum
- Well defined teaching learning process for betterment of students
- Well-equipped infrastructure and educational learning resources
- Well connected and secured atmosphere for students and staff
- Well-established examination and evaluation processes for both ISE & ESE
- Campus having adequate amenities and Wi-Fi along with ICT Facilities
- Established Skill Development Center of AP State Skill Development Corporation (APSSDC, Hyderabad) to impart skills to enhance employability of the students and unemployed youth in the region.
- Sports and games with all facilities and play ground
- Good library facility with adequate volumes and titles along with number of journals

Institutional Weakness

- Need to enter in to more MOUs with reputed organizations/Industries/institutions
- Number of faculty members need qualification up gradation and to get acquainted with latest technology

- Less Entrepreneurial acumen among students owing to their background
- Need to focus on quality publications, patent filing and to explore commercial potential.
- Consultancy services need to be increased.
- Difficulty in fulfilling the higher cadre ratio of teachers due to less availability of Ph. D. holders
- Student's intake from poor socio-economic background
- Limited scope for research and consultancy activities
- Limited opportunities for students' placements, due to under developed industrial sector, in the nearby region
- Limited scope for altering University curriculum
- Industry-Institute interaction needs further improvement.
- Need for enhancement in number of students opting for higher education through counseling and training
- Need to increase placements in core companies

Institutional Opportunity

- To acquire NBA status of accreditation for all programs.
- To increase fundamental and applied research
- To explore alumni involvement in academic and placement activities
- Training for competitive examination through both in-house & external agencies
- Requirement for value added training programmes for unemployed rural youth of the region
- To develop Center of Excellence in cutting edge technologies, in every branch of engineering for supporting all the stake holders and nearby society
- To start the research centers in each branch of engineering
- To sign MoUs with more industries/ research organizations to facilitate the students and the teachers
- To increase the consultancy
- To conduct more number of National and International conferences in the thrust areas of Engineering.
- To be an autonomous institution for revision of curriculum to suit to the requirements of industry.
- Government initiatives like Make in India, Digital India, Swachh Bharat, Startup India, Skill India.

Institutional Challenge

- Competition with new higher educational institutions like deemed universities, set up in the private for recruitment of faculty members and in student selection.
- Attraction for students to migrate towards metro cities for admissions
- Mushrooming of engineering colleges in the state and in Nellore district.
- Surrounding institutes offers concession in fees to fill their seats at any cost.
- University Affiliated institute, Rigidity in academic structure and curriculum
- Need to enhance the communication and soft skills of the students, as most of them coming from rural and telugu speaking background
- Market conditions and global recession along with poor economic growth.
- Inability to provide cent-percent employment due to insufficient industry position in the region
- Need for improving employability of the students in the current scenario of rapidly changing technology and industrial requirements as well as policies prevailing from time to time in MNCs
- Over - riding short term job seeking goals of parents and students, limitation in the commitment of the students for undertaking rigorous academic and scholarly pursuits.

- Getting funding from funding agencies is becoming difficult day by day

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Narayana Engineering College, Nellore is affiliated with JNT University, Ananthapur and adopts the curriculum provided by the University, which is revised after every three years. The curriculum is revised by affiliating university by involving major stakeholders keeping in view of the changing societal, global needs and employability of students. The curriculum is revised to develop students from every aspect and serve the requirements of the industry. Within the limitations of the prescribed framework, institute collects feedback on curriculum from stake holders and identifies gaps in concurrence with industry needs. The suggestions are forwarded to university for further consideration. Some the requirements will be fulfilled by the institute by conducting various co curricular activities.

Institute follows CBCS system in which students can opt for courses of their choice from the available options provided under elective courses category. The institute has its well-defined process to plan and execute activities for effective implementation of the curriculum delivery. Objectives and outcomes are defined for every course of every program and it is ensured that they are fulfilled at the end of every course.

Institution academic plan is prepared in-line with the academic calendar of the University. Academic, co-curricular and extra-curricular activities are conducted as per the academic planner. The institution provides flexibility by introducing various certificate courses, value added courses, industrial visits, industry oriented elective courses and arranging final year project exhibitions which help to bridge the gap between industry and the institution. The institution integrates cross-cutting issues relevant to gender, environment and sustainability, human values, professional ethics into the curriculum.

The Institute effectively utilizes the services of career guidance cell, training and placement cell in collaboration with few companies in organizing programs such as Campus Recruitment Training (CRT) and Soft skills/Communication skill programs to meet the employment market needs. In addition to these, Departments help students to get industry internships during summer and winter.

Teaching-learning and Evaluation

Teaching-Learning process at the institute helps students and teachers to acquire skills that empower them. The learning environment motivates active engagement of students in the development of personal skills and competencies. Interactive instructional techniques that engage students in innovative thinking and critical assessment, through the use of interviews, debates, application of ICT resources, focused group discussions,

projects, presentations, internship are actively considered. Considering the advancements in technology and need of implementing innovative teaching practices, teachers are encouraged to attend various Professional development programs which adds more value to their technical expertise and teaching methodologies. The institution also conducts remedial classes, bridge courses, communication skills development programs, pre-placement training, group discussions etc., for the holistic development of students.

To assess learning levels of the students Institute takes initiatives through induction program, survey and performance in various examinations. Based on this evaluation special activities are undertaken as per need.

A platform is provided by the faculty to students to explore independently, learn through self study and from their peers, guides them to develop effective and lifelong skills. Provisions like ERP, Moodle and additional library facilities are made available to students. Utilization of resources like Virtual laboratories, NPTEL, YouTube, slide share, etc., enhances effectiveness of teaching learning process. Innovative teaching approaches such as proactive methods, digital social learning platform, etc., are adopted by faculty members.

Students' performance is being assessed by using direct and indirect assessment methods through the attainment of course outcomes and program outcomes by analyzing the year wise results and feedback from stakeholders. It helps to improve the teaching, learning, and assessment strategies adopted by the institution with reference to predefined and intended learning outcomes. Course and programme outcomes for all the subjects are disseminated to all the stake holders including students. Course, faculty and exit surveys are conducted to assess the attainment of POs and COs.

Follows all the examination reforms and the time line set by JNTU. The evaluation process is transparent and efficient. Various innovative formative and summative assessment tools aiming at multidimensional development of student are implemented regularly. Well defined procedure is exercised for addressing grievances.

Research, Innovations and Extension

The Institution encourages the faculty and students to carry out research and to promote innovative practices for serving the community through extension activities. The institute has taken an initiative to create an ecosystem for research by creating research infrastructure, developing industry & research projects and transferring knowledge through tailor made programs. Around 74 workshops are organized in collaboration with industries in the past five years.

Institution has its own code of ethics to ensure quality and legitimate practices in research and has been published on the institute Website. Around 228 research papers are published every year by faculty members in reputed Journals including UGC recognized Journals.

Various Departments of the Institute organize many conferences/ seminars/ workshops/ invited lectures/ gender sensitization programmes with a focus on capacity building in terms of research and imbibing research culture among the faculty staff and students.

The institute regularly conducts workshops and Seminars on Intellectual Property Rights (IPR) and industry academia practices. Institute has also stated code of ethics to check malpractices and plagiarism in research. Institute created ecosystem for innovation with incubation center for transfer of knowledge. Faculty members and students are motivated for research activities and encouraged to file patents.

Institute promotes and supports students to participate various challenging technical and research activity/competitions to inculcate research component amongst them.

Institute has more than 354 linkages for internship, workshops and field works etc. And also institute has 35 functional MOU's with industry for completing projects, acquiring training, educating faculty and offering help for industrial electives & employability skills.

Faculty and students actively participate in the large number of extension activities like awareness for environment issues, blood donations, and social issues through various outreach programs and have won awards.

Infrastructure and Learning Resources

To ensure conducive teaching-learning environment in the institute, institute has adequate infrastructure in terms of academic and physical facilities. Every department of the institute is well equipped with ICT enabled classrooms, laboratories, tutorial rooms, research laboratories, workshop, seminar hall etc. The institute ensures that the infrastructure is comfortable for physically challenged students. In addition to this, other facilities like photocopying, health center, canteen etc. are available on the campus. The hostel facility for girls and boys is available. Institute is having adequate facilities for sports and cultural activities.

Institute has a very strong IT infrastructure and regularly updates, IT facilities in terms of hardware, software and firewall system as per need. The institute has massive network of 574 computers with 90 Mbps internet connectivity to fulfill the academic and research need. The institute has implemented enterprise resource planning (ERP) in order to make the system student centric and enhance learning. Institute has one centralized MOODLE server. The institute has a well defined policy for upgrading and maintenance of IT infrastructure. Campus is Wi-Fi enabled with a dedicated 90Mbps Internet facility.

 Library is well equipped with a huge collection of books and journals. Library is automated with DELNET, INFLIBNET and OPAC systems. National Digital Library membership facility is available under single window search. Access to NPTEL, E-books and E-resources are available in the digital library. Access to Rare books and manuscripts is provided in the digital library. Resource books, journals, references, newspapers, newsletters and magazines are available in the reading hall. Syllabus books, Question papers are also available for reference.

Institute provides all kinds of sports facilities for indoor and outdoor games. The institution has a huge playground with athletic track and equipment for games like Basket Ball, Cricket, Volley Ball, and Hand Ball etc. Indoor sports like Table Tennis, Caroms and Chess offer good recreation activities. Well equipped gymnasium, recreation and Yoga halls, are also available. Separate space for cultural activities is provided with stage and required amenities. There is well-established System and Procedure for maintaining & utilizing physical, academic and support facilities.

Student Support and Progression

Institute is dedicated to support students for their progress and overall development by organizing various activities throughout the year. Students are continuously monitored for academic progress and overall development. Eligible students get scholarship and free-ship from government schemes. Institute provides

scholarship to students who are financially weak and academically strong.

Institute organizes various enhancement and development programs such as Guidance for competitive examinations, Career and personal Counseling, Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga and Meditation. Extra coaching for GATE is provided. Students are made aware of various opportunities after graduation. Various training sessions are conducted for career guidance.

On-campus interviews are arranged by dedicated training & placement cell coordinates with prospective employers. Required Soft-skill/aptitude training is provided to students for improvement of their placement opportunities.

Institute has various committees such as student grievance cell, anti ragging cell to address student grievances. Institute has active student council which helps to coordinate all students' related activities.

There are various clubs functioning on campus to nurture the creativity and talents in students. For eg: technical clubs, Hobby clubs like Photography, Literary, Film, Nature etc. Competitions are conducted regularly to support extracurricular and co-curricular activities within the college and at intercollegiate level.

The Institute organizes various co-curricular and extracurricular activities in cultural and sports events which eventually help the students to showcase their talent. Our students have participated at University and national level.

Institute has Mentoring system, where for each class for every 20 students a faculty acts as a mentor, till the student completes his/her program. Faculty mentor looks after mentees for overall development, academics, personal counseling.

Alumni association of our institute is a registered body. It is active and contributes by constantly supporting and providing help in areas like career mentoring to the students, helping in curriculum development, creating a network with employers, improving student recruitment efforts and in increasing efforts in collecting funds. Alumni portal is available on the college website along with a registration form.

Departments also have professional society chapters like ISTE Chapter, IETE chapter, CII chapter, CSI Chapter and IEI chapters.

Governance, Leadership and Management

The Management has established effective leadership by deploying vision, mission & goals. The institute has formed various committees for managing the day to day activities and the system is fully streamlined. The governance fosters participative management and plays significant role in the evolutionary reforms to elevate the Institute in preference of stakeholders. The culture of decentralized governance with well-defined inter-relationships is a preparation of platform for the development. The management of institute extends their full support in accomplishment of institute's vision and mission. Accordingly strategy for the achievement of institutional objectives, short-term and long-term goals is decided and institute plans its activities, in-line with this strategy.

Principal is head of the institute, who has decentralized his authorities through HoDs, professor incharges, faculty incharges, committee incharges and administrative officer. Different coordinators are appointed for the

smooth conduction of all activities. meetings of all these office-bearers are conducted regularly, to monitor an execution of planned activities.

The institute provides various welfare measure and amenities for teaching and non-teaching staff members. It has set norms for professional development of faculty members and non-teaching staff by motivating to pursue higher studies and attending various development programs. Structured self–appraisal is collected from the faculty comprising of points on teaching capabilities, participation in research and development, administration and extension activities in addition to the student and peer feedback collected online. Institute has well defined strategies for staff recruitment and promotion. Service rules and procedures, recruitment, promotional policies as well as grievance redressal mechanism are mentioned clearly in the HR Book.

The institute has adequate budgetary provisions for academic activities and its mobilization is monitored by the institute to ensure optimum utilization. Regular audits are carried out in this regard.

To assure the overall quality, institute has established IQAC in December 2015. It reviews entire teaching-learning process, structures & methodologies of operation and learning outcomes of the institute, at periodic intervals. External and internal academic and administrative audit is undertaken periodically to improve institutional activities. Suggestions of IQAC are incorporated while defining strategy of the institute.

Institutional Values and Best Practices

Various gender equity programs are organized by the institute. Gender Sensitization, Human values and Professional Ethics courses are part of curriculum.

Throughout the campus Greenery is well maintained which helps to reduce air pollution. The institution aims to become Plastic free and paper free campus. Green landscaping with trees and potted plants is maintained throughout the campus. The college takes conscious efforts to create awareness about energy. Institute executes many environment-friendly policies which includes plantation, waste management, water harvesting and renewable energy sources.

Conservation and renewable energy such as solar panels, rain water harvesting is maintained. All new lightning devices are purchased to conserve energy such as LED bulbs, LCD monitors etc.

As a part of education, institute always focus on technical advancement with safety facilities like CCTV, fire extinguisher etc.

Being a professional programme there are a very few number of students who are physically challenged. The college infrastructure provides lifts and ramps at appropriate locations in all buildings, extra time and writer is given to such students during University examinations according to prevailing University norms.

Institute got locational advantage by which local community is benefitted in terms of techno-social aspects.

As part of social responsibility institute always focused on extension activities such as gender equity, environmental consciousness, sustainability, moral and ethics. To inculcate universal values, among the students institute consistently celebrates national festivals. To inculcate ethical and moral values among the students, institute regularly conducts expert sessions and workshops along with celebration of national festivals

The Institution combines technology and social service education to identify and implement innovations and best practices to differentiate it among the competitors and to add value in its educational services.

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2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	NARAYANA ENGINEERING COLLEGE
Address	Narayana Avenue, Muthukur Road, Nellore
City	Nellore
State	Andhra Pradesh
Pin	524004
Website	www.necn.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	G. Srinivasulu	0861-2313842	9392901051	-	necnellore@necn.ac.in
IQAC / CIQA coordinator	P Penchalaiah	0861-2331440	9392901073	-	principal@necn.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	24-07-1998

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University to which the college is affiliated/ or which governs the college (if it is a constituent college)		
State	**University name**	**Document**
Andhra Pradesh	Jawaharlal Nehru Technological University, Anantpur	View Document

Details of UGC recognition		
Under Section	**Date**	**View Document**
2f of UGC	24-04-2014	View Document
12B of UGC	24-04-2014	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	**Recognition/Approval details Institution/Department programme**	**Day,Month and year(dd-mm-yyyy)**	**Validity in months**	**Remarks**
AICTE	View Document	04-04-2018	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

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

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	Narayana Avenue, Muthukur Road, Nellore	Urban	15.25	23856

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	**Name of Programme/Course**	**Duration in Months**	**Entry Qualification**	**Medium of Instruction**	**Sanctioned Strength**	**No.of Students Admitted**
UG	BTech,Civil Engineering	48	Intermediate	English	60	57
UG	BTech,Electrical And Electronics Engineering	48	Intermediate	English	120	118
UG	BTech,Mechanical Engineering	48	Intermediate	English	60	59
UG	BTech,Electronics And Communication Engineering	48	Intermediate	English	120	120
UG	BTech,Computer Science And Engineering	48	Intermediate	English	120	120
UG	BTech,Electronics And Instrumentation Engineering	48	Intermediate	English	60	52
PG	Mtech,Electrical And Electronics Engineering	24	B.Tech	English	24	13

PG	Mtech,Electronics And Communication Engineering	24	B.Tech	English	18	0
PG	Mtech,Electronics And Communication Engineering	24	B.Tech	English	18	17
PG	Mtech,Computer Science And Engineering	24	B.Tech	English	24	9
PG	MBA,Masters In Business Administration	24	Degree	English	180	180
PG	MCA,Masters In Computer Applications	36	Degree	English	60	59

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Professor				**Associate Professor**				**Assistant Professor**			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Society or Other Authorized Bodies				22				43				129
Recruited	17	5	0	22	35	8	0	43	86	43	0	129
Yet to Recruit				0				0				0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				45
Recruited	6	39	0	45
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				44
Recruited	38	6	0	44
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers									
Highest Qualification	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	17	5	0	3	2	0	0	0	0	27
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	32	6	0	86	43	0	167
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers									
Highest Qualification	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

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

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	**Male**	**Female**	**Others**	**Total**
	8	0	0	8

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	305	2	0	0	307
	Female	218	1	0	0	219
	Others	0	0	0	0	0
PG	Male	128	4	0	0	132
	Female	142	4	0	0	146
	Others	0	0	0	0	0

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

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	33	46	30	43
	Female	20	33	27	25
	Others	0	0	0	0
ST	Male	3	4	6	3
	Female	2	2	2	1
	Others	0	0	0	0
OBC	Male	92	89	103	113
	Female	87	90	76	64
	Others	0	0	0	0
General	Male	283	291	306	284
	Female	160	160	162	202
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		680	715	712	735

Extended Profile

1 Program

1.1

Number of courses offered by the institution across all programs during the last five years

Response: 1116

File Description	Document
Institutional Data in Prescribed Format	[View Document](#)

1.2

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
12	13	13	13	13

2 Students

2.1

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2505	2426	2476	2406	2388

File Description	Document
Institutional Data in Prescribed Format	[View Document](#)

2.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
302	309	309	309	305

File Description	Document
Institutional data in prescribed format	[View Document](#)

2.3

Number of outgoing / final year students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
611	590	627	532	574
File Description			Document	
Institutional Data in Prescribed Format			[View Document](#)	

3 Teachers

3.1

Number of full time teachers year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
194	194	197	191	183
File Description			Document	
Institutional Data in Prescribed Format			[View Document](#)	

3.2

Number of sanctioned posts year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
194	197	197	193	183
File Description			Document	
Institutional data in prescribed format			[View Document](#)	

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 49

4.2

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
694.92	646.32	661.52	591.76	540.31

4.3

Number of computers

Response: 582

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

The curriculum delivery is implemented as per the academic regulations specified by the university. The curriculum delivery is implemented via the following steps designed by College Academic Committee (CAC):

1. **To Convene meeting of CAC:** CAC meeting is conducted by the Principal before commencement of the academic year/semester to plan roadmap for further proceeding of academic activities as per the academic calendar.
2. **Subject allotment:** Subject allotment is made by the HOD's as per the preference given by the faculty, difficulty of the subject and basing on the experience of the faculty.
3. **Preparation of Question Bank and Course notes**: The question bank consisting of MCQ's, 2 Marks questions and essay questions are prepared by each and every faculty and also course notes are prepared prior to commencement of class work.
4. **Preparation of Academic calendar:** Each and every department conducts meeting with department faculty to prepare department academic calendar based on academic calendar issued by university, incorporating bridge courses, remedial classes, Guest lectures, tutorials, seminars, workshops etc. Same will be circulated to faculty and students for effective implementation of academic calendar.
5. **Preparation of Time Table:** Department level time table and College level master time tables are prepared for implementing academic calendar effectively.
6. **Implementation of OBE and preparation of course file:** Faculty members prepare course files, which includes course notes, Question Banks, E-Learning materials etc,. Faculty members prepare and circulates the course plans which include lecture schedules based on working hours, course outcomes, CO-PO mapping, reference books, E-Learning resources etc., in line with the Vision and Mission of the Department to match with the Institutional Vision and Mission. Program Educational Objectives (PEO) and Program Outcomes (PO) are developed for each program. OBE is adapted for the effective delivery of the curriculum.
7. **Uploading E-resources in Moodle server:** For effective curriculum delivery, E-learning resources like question bank, course notes, e-books, NPTEL video lectures, animations etc are uploaded in to Moodle server, immediately after commencement of academic year/semester.
8. **Monitoring of course delivery and syllabus completion:** The Course delivery and syllabus completion status is monitored through formal and informal means.
9. **Feedback Mechanism:** The feedback from Students is taken through teaching learning process for each course. With the help of feedback, ineffectiveness if any, in the curriculum delivery will be rectified.
10. **Identification of slow learners and advanced learners:** Slow learners and advanced learners are identified based on the performance in the examinations. Slow learners are given special attention to improve their academic performance.

11. **Conducting Internal Theory and Practical Examinations:** Internal Theory and Practical Examinations are conducted as per the university calendar and guidelines given by the university. Internal examinations are evaluated in a fair and transparent manner and results are submitted to the university within the stipulated time.

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 87

1.1.2.1 **Number of certificate/diploma programs introduced year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
25	20	17	15	10

File Description	Document
Minutes of relevant Academic Council/BOS meetings	[View Document](#)
Details of the certificate/Diploma programs	[View Document](#)
Any additional information	[View Document](#)

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 90.72

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
46	38	34	29	27

File Description	Document
Details of participation of teachers in various bodies	[View Document](#)
Any additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 27.51

1.2.1.1 How many new courses are introduced within the last five years

Response: 307

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	[View Document](#)
Details of the new courses introduced	[View Document](#)
Any additional information	[View Document](#)

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.

Response: 12

File Description	Document
Name of the programs in which CBCS is implemented	[View Document](#)
Minutes of relevant Academic Council/BOS meetings.	[View Document](#)
Any additional information	[View Document](#)

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years

Response: 54.87

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1864	1687	1229	1120	817

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	[View Document](#)
Any additional information	[View Document](#)

1.3 Curriculum Enrichment

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

Response:

The institution is putting persistent efforts to integrate cross cutting issues into the curriculum. The curriculum designed by the university in itself, has included many of the aspects such as the subjects namely Gender sensitization, Human values and professional Ethics, Social Ethics and Values, Environmental Studies etc.

Gender sensitization is included in social ethics and values courses in the curriculum by the university, which covers Gender inequality, declining Sex ratio, sexual Harassment, domestic violence etc. Though it is in university syllabus, different activities relating to gender issues are conducted by the college through Women's forum. Women's forum consists of one coordinator, Faculty members and students from each department. Awareness programs on gender sensitization, girls health, rights of Women, sexual harassment, women's empowerment, gender equity etc. are organized though this cell.

University has included Environmental Studies in I year I semester and II sem. Students are given inputs for promoting various environmental issues like

(i)Natural resources include Renewable and non-renewable resources, water resources, mineral resources and food resources.

(ii) Eco systems are Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystems.

(iii) Biodiversity and its conservations like Bio-geographical classification of India, wildlife and Endangered and endemic species of India

(iv) Environmental pollutions like Air Pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear hazards etc

(v) Other Social issues like: waste management, social issues in relation to environment, human population related to environment etc.

Field visits as part of students' assignment are conducted to study various environmental issues. College organizes various programs related to environment like ozone day, earth day, environmental day, water conservation day etc.

University has included a course on Human values and Professional Ethics in R13 Curriculum and

Social values and Ethics in R15 Curriculum for all programs of third year B. Tech and M.B.A,, mainly dealing with the ethical aspects for the prosperity of organization and for personal development of the students. Course explains various steps towards holistic and value based living. In this course, students taught concepts like Basic Concepts of Society, Channels of Youth Moments for National Building, Activities of NSS concerning to Citizenship, Youth and Crime, Social Harmony and National Integration, Environment Issues, Health, Hygiene & Sanitation, Disaster Management, Civil/Self Defense, Gender Sensitization and Physical Education. Even though it included in university syllabus different activities like seminars and workshops relating to Human values and professional Ethics/Social values and ethics, are being conducted by the college through HVPE Cell.

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 121

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 121

File Description	Document
Details of the value-added courses imparting transferable and life skills	[View Document](#)
Brochure or any other document relating to value added courses.	[View Document](#)
Any additional information	[View Document](#)

1.3.3 Percentage of students undertaking field projects / internships

Response: 28.78

1.3.3.1 Number of students undertaking field projects or internships

Response: 721

File Description	Document
List of students enrolled	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise

Response: A.Any 4 of the above

File Description	Document
Any additional information	[View Document](#)
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	[View Document](#)
URL for stakeholder feedback report	[View Document](#)

1.4.2 Feedback processes of the institution may be classified as follows:

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Any additional information	[View Document](#)
URL for feedback report	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.34

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
11	14	03	08	05

File Description	Document
List of students (other states and countries)	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 83.29

2.1.2.1 Number of students admitted year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
804	680	715	712	735

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
864	882	882	882	870

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 83.16

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
281	237	264	244	249

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The institution facilitates special learning, based on the academic capabilities of each student by analyzing their learning levels after admission.

Initially, after the admission, prior to the commencement of the course at the beginning of programme, Intermediate marks are taken into consideration to assess the learning levels of the students. The Faculty analyzes the students for their learning levels through a pre-defined procedure based on intermediate marks and classify the students into the slow and advanced learners.

Bridge courses are conducted for the first year students at the beginning to enable smooth transition from intermediate to engineering.

Activities for slow learners –

*Extra classes are taken for the required subjects.

*Question bank with key is provided.

*They are counseled and offered guidance in various academic activities.

*Encouraged to improve their academic performance by paying special attention in class.

*Basic Concepts Program (Concepts, Definitions, Formulae) is conducted for all programs.

*After mid examination, based on the performance, remedial classes are conducted.

*Self learning sessions are arranged.

Activities for advanced learners –

*Special program on C language is conducted.

*Personality Development Classes

*Extra books are provided in the library.

*Additional Assignments.

*They are encouraged to refer NPTEL videos, e-books etc.

Later from second year onwards, classification of Slow learners and Advanced learners is based on their performance in the end examination. The following activities are conducted for slow and advanced learners.

Activities for slow learners –

*Special attention paid in the Tutorial classes conducted in every subject helps to improve their grasping abilities and improve their academic performance.

*After mid examination, based on the performance, remedial classes are conducted.

*Faculty takes extra classes and revises the difficult concepts that are discussed in regular classes.

*More assignments are given for practice.

*Personal counseling is conducted to improve the academic performance.

*Parents of slow learners are given information about their wards performance from time to time.

- eer learning and group interaction is facilitated i.e the meritorious students are asked to help the slow learners by giving guidance throughout the study period.

*The slow learners are encouraged to improve their academic performance through extra attention in class.

*Based on the results of End Examinations, Remedial coaching is conducted during extra hours to help the students to clear their backlogs without any difficulty.

Activities for Advanced learners:

*Additional library facility of issuing extra books.

*Giving specialized training through Certificate courses.

*Coding classes for improving coding skills.

*Award of Cash prizes for achievements towards appreciation.

*They are motivated to get placed in reputed companies by giving them training in soft skills and aptitude

*Participation in exchange programs with other universities.

*Encouraged to write research papers.

*Exhibit projects in hackthon conducted by govt of A.P, other colleges and universities.

*The college allows such students to attend various seminars, conferences, symposia and workshops so that they can gain knowledge beyond curriculum.

*Encouraged to appear in competitive exams like GATE, GRE etc.

*Encouraged to register and participate in events organized by professional bodies.

*Interaction with experts from industry and alumni.

2.2.2 Student - Full time teacher ratio

Response: 297:23

File Description	Document
Any additional information	[View Document](#)

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.04

2.2.3.1 Number of differently abled students on rolls

Response: 01

File Description	Document
List of students(differently abled)	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

07-04-2023 05:23:55

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

Response:

The college emphasizes on student-centric approach in teaching learning process which includes learning experiences.

A. Experiential Learning Methodologies followed in Institution

Lab Experiments:

The students are taught to practically test the concepts that they theoretically learnt in the classroom. The Faculty and Qualified Technical Staff help the students to conduct experiments.

Industrial visits and field trips: Conducted to provide students with hands on experience of the field and to update them with the current trends and technologies. Through these industrial visits, students understand the practicality and implementation of the concepts studied by them.

Internships:

During academic semesters students take up internships which gives students an opportunity to apply the theories and principles, they have learnt in class room courses to the real world problems. This allows them to gain experience of the environment in which they further want to pursue their career. This also allows them update their respective domains.

Project exhibitions:

Conducted through which students make different models and get hands on experience on the respective domains.

B. Participative Learning

 The participatory learning activities adopted by the faculty are Active learning methodologies, Project development, Paper Presentations, poster presentations, Mini Projects, Student clubs, Professional society activities,

Active learning Methods:

The Active Learning Methods are planned prior to the commencement of class work. Course Plans give details of activities so that students have a clear vision of the course outcome. By combining ICT and Active Learning, the teaching aims at achieving student centric. Active learning methods are used in classes for better understanding like brainstorming, Think-pair-share and group discussions.

Conferences and Symposia :

Institute organizes many conferences and symposia, where the students are encouraged to actively

participate and demonstrate what they have learnt during the semester. Students are also encouraged to participate in other activities outside the campus at different levels.

Student clubs:

In order to pursue the interest in their area of specialization, students'clubs are functional. Some of the students Clubs are hobby clubs (Swara, Vacha, Varna etc) and Technical Clubs (coding Club, circuit club etc).

C.Problem solving methodologies

Problem based learning is a student centered pedagogy in which students learn about a subject through the experience of solving an open ended problem given in a class room.

This process involves defining problem, brainstorming and structuring. The role of the teacher is to facilitate learning by supporting, guiding and monitoring the learning process. Teacher helps in building the students' confidence to take on the problem and encourages the students to understand. Problem solving methodologies are used to accelerate the learning process.

Problem based learning is implemented by providing case studies of various courses to students and arriving to workable solutions. Through the assignments, Tutorials and case studies, students are made to grasp concepts better and faster based on intensive interaction and participation. Tutorial hours in curriculum, help to improve the problem solving skills.

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 95.36

2.3.2.1 Number of teachers using ICT

Response: 185

File Description	Document
List of teachers (using ICT for teaching)	[View Document](#)
Any additional information	[View Document](#)
Provide link for webpage describing the " LMS/ Academic management system"	[View Document](#)

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 577:41

2.3.3.1 Number of mentors

Response: 178	
File Description	**Document**
Any additional information	[View Document](#)

2.3.4 Innovation and creativity in teaching-learning

Response:

Yes, the institute has introduced considerable creativity and innovation in teaching-learning by adapting proven teaching practices for enhancing the learning without losing the objectives and achieving optimum coordination between faculty and students. The following efforts were made to meet the challenges of 21st century education:

Practicing Learner-Centered Teaching Methods:

1. At the institute the faculties are motivated to practice Learner-Centered Teaching methods like Active-Learning, Collaborative-Learning and Problem-based learning methods.
2. Students are encouraged to attend variety of co-curricular events and competitions nationally and internationally, enabling them to learn along with others around the world.
3. Initiatives are taken to promote student's involvement and make them responsible for their learning and exhibit lifelong learning abilities through NSS activities, Projects, field visits and internships.
4. Online learning is promoted through MOOCs, NPTEL, etc with good digital infrastructure facilities.
5. In-campus coaching for GATE exams.
6. Content-beyond syllabus is taught to the students on relevant courses.
7. Special communication skill programs are conducted for rural students.

Use of ICT:

1. Conventional chalk and talk teaching method is substituted using ICT facilities.
2. Dynamic learning environment systems like MOODLE and in-house Student management System are used to facilitate the teaching leaning process and make education management more efficient and effective.
3. Most of the classrooms and laboratories are equipped with projectors that allow faculties to teach with ease and effectiveness, interact and engage better with students and introduce excitement in the classroom.
4. ICT facilitates students to learn anywhere and at any time by accessing MOODLE and faculty providing e-learning resources.

Virtual Labs (v-labs): Faculty are practicing teaching through virtual labs for some experiments which are difficult to perform in physical labs and are being shown to the students by an animated version. Virtual Labs are being used to demonstrate a few experiments during the practical sessions.

Expert lectures and workshops are arranged to enhance the practical knowledge and skill sets of students.

Institution provides e-Resources anywhere anytime in the campus with the availability of high broadband

Wi-Fi. The institution has NPTEL chapter and teachers undergo NPTEL certification courses for enhancing their subject knowledge

Design, Planning and Execution:

1. Effective course plans are designed and implemented to deliver the course contents.
2. OBE model is adapted for teaching, learning and evaluating student performance through outcomes.
3. Blooms taxonomy is used for developing assessments and evaluations of student learning and instructional methods such as questioning strategies.
4. Academic activities are well planned prior to commencement of programs.
5. Faculty members are encouraged to attend programs on engineering education.

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 99.49

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 12.3

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
26	25	23	23	21

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document
Any additional information	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 10.64

2.4.3.1 Total experience of full-time teachers

Response: 2065.08

File Description	Document
Any additional information	[View Document](#)

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 50.05

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
21	17	20	19	19

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of award letters (scanned or soft copy)	[View Document](#)

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 22.74

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
50	42	42	41	44

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

Main objective of evaluation process adopted by the institution is on testing skills and knowledge, students have acquired during study in the college. Internal evaluation process practiced is being concentrated on the performance of the students. Internal evaluation is done through MCQs, assignments, unit tests, practicals, Mid – I and Mid – II examinations.

Several reforms are introduced in the evaluation quality. We are strictly adhering to JNTUA's academic regulations and evaluation norms, being an affiliated college. During course of study in each semester, students are evaluated based on Internal Examinations (IE) and End Examinations (EE) which are for 30 and 70 marks, respectively. For theory, IE is for 30 marks including objective paper for 10 marks and subjective paper for 20 marks. Final IE marks shall be arrived by considering marks secured by the student in both mid examinations with 80% weightage to the better mid exams and 20% to the other.

For laboratory courses, each day work in the laboratory shall be evaluated for 30 marks by the laboratory faculty based on the regularity/record/viva. For Project, IE is for 60 marks and is based on assessment of student in different phases of project and 140 marks for EE.

There shall be technical seminar in IV B.Tech II Semester and MBA IV Semester, it is evaluated for internal marks of 50 on submission of technical report with presentation. There shall be audit course in social values and ethics and advanced English language communication skills lab, these two courses are evaluated for internal marks of 30 only. There shall be no EE for these two courses.

The reforms implemented by the institution in Continuous Internal Evaluation (CIE) at institute level in line with academic regulations governed by university are:

1. The question bank consisting of MCQ's, 2 Marks questions and essay questions prepared by each faculty to be submitted to exam section at the commencement of class work in each semester and same will be provided to the students.
2. Mid examination question papers are prepared by faculty based on OBE by considering BT levels and Cos.
3. The answer books are shown to students after evaluation of scripts for avoiding discrepancies in evaluation of answer scripts and partiality or favoritism.
4. IE Results are announced immediately after evaluation of answer scripts through displaying in notice boards and moodle server, and same will be intimated to parents via SMS and same can be viewed on online in Narayana student management system.
5. Day to day work in the laboratory shall be evaluated through continuous evolution by correcting

observations and records, conducting experiments and viva-voce and conducting lab seminars to award Internal Lab marks.

6. Continuous assessment of projects and technical seminars shall be made by appointing a Departmental Project Review Committee (DPRC) consisting of HOD and two senior faculty members of the department. DPRC is regularly conducted through project/seminar reviews via power point presentation to assess progress and quality of the project /seminar and to award internal marks.

.

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

Narayana Engineering College Nellore, maintains transparency and robustness in continuous evaluation of students, in the following manner:

1. The CIE regulations are displayed on notice boards and circulated to students on a regularly basis.
2. CIE norms are explained in the induction programs conducted at the beginning of academic year for newly admitted students and the same will be discussed in the classes and in lab sessions.
3. University regulations pertaining to attendance, IE and EE assessment are discussed during the orientation program.
4. Attendance of students at the end of every 15 days, is displayed on notice boards and also communicated to the parents, along with the marks through SMS/post.
5. Two IEs are conducted in each theory subject in every semester and Final IE marks shall be arrived at by considering marks secured by the student in both the mid examinations with 80% weightage to the better mid exams and 20% to the other. The IEs are conducted as per the university's regulations.
6. Answer books are shown to students after evaluation of scripts for avoiding discrepancies in evaluation of answer scripts and partiality or favoritism.IE Results are announced immediately after evaluation of answer scripts by displaying in notice boards and moodle server, and same will be intimated to parents via SMS and same can be viewed in Narayana Student Management System (NSMS) also.
7. Regular counseling is conducted by the mentors based on IE marks to make them understand the scope for improvement and the same is conveyed to parents.
8. Regular assessments of Practical/Tutorials are carried out on day to day basis to improve academic performance of the students.
9. EE marks are displayed immediacy after announcing the results by university through, in notice boards and through moodle server, and same is intimated to parents via SMS and same can also be viewed in NSMS.
10. Progress report indicating EE marks, IE marks, Unit test marks, ranking in the class and the attendance, are sent to parents.
11. Two unit tests are conducted in each theory subject in every semester to improve academic performance of students.
12. Unit test marks of the students' are displayed on notice boards and the same is conveyed to parent by mentor.

13. Faculty class in-charge compiles marks obtained by students in all courses in each test and analyses of performance with respect to the following:Pass percentage and Number of failures in each subject

- Pass percentage and Number of failures in each subject
- Number of students failed in one/ two/ three subjects
- Overall pass percentage of the class
- Ranking in the Class

14. The exam center ensures the timely submission of results by faculty through reminders and verified results submitted for mistakes.

Frequency of assessment for different examinations

S.No	Type of Examination	Frequency of Assessment
1	Internal Examinations	Twice in a semester
2	Practical Examinations	Weekly
3	Feedback on teaching-learning	Twice in a semester
4	End Examinations	Once in a semester
5	Seminar & Projects	Monthly
6	Comprehensive Online Exam	Once in a year

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

NECN is particular in maintaining transparency in the grievance redressal of examination related issues. Examination Grievance Cell (EGC) is constituted with Principal, Exam In-charge and two senior faculty members to looking into issues related to examinations. EGC has classified grievances concerning to IE and EE. IE related grievances can be addressed to EGC.

Grievances Related to Internal Evaluations:

The activity of showing answer book to the student is in vogue, where the scripts or results are shown to the students after assessment of each IE. Discrepancies if any are raised by the affected student with EGC. Final IE marks are submitted to the exam centre and displayed on the notice board. On issues not redressed by faculty, students have to register their complaint with EGC in grievance form available in the

examination centre. Based on the gravity of the complaint the grievances are resolved on the spot or at a later date. The resolved grievances are communicated to the department and the student. All the internal grievances are addressed within one to three working days.

S.No	List of Internal Grievances
1	Attendance Problem (Detention & Condonation)
2	Examination Time related Issues
3	Distribution & Verification of Answer Scripts
4	Grievance on Question papers
5	Grievance on Evaluation
6	Discrepancy in Internal Marks
7	Lab Internal marks correction
8	Seminar Internal marks correction
9	Project Internal marks correction
10	Internal Marks of Audit courses correction
11	Rejoin students substitute subjects issues
12	Grievances of rejoin students due to lack of credits
13	Grievances of rejoin students due to attendance detention
14	Malpractice cases
15	Mismatch of Electives
16	Credits Problem
17	Name Correction (Student Father & Mother)
18	Mobile number correction/Up to dating
19	Miscellaneous

Grievances Related to External or University Evaluations:

The External Examinations (EE) are conducted by the university. Hence all the grievances of students with regard to EEs are addressed by the Exam section to the University. To raise any grievance related to EE, students have to fill the concerned form and pay the stipulated fee at the college exam section. These grievances are represented to the University. The Rules and Regulations framed by the University are followed to raise the grievances. These are displayed in website and notice boards. A record of the same is maintained with the institute's Exam section.

S.No	List of External Grievances	

1	Exam Registration issues	
2	Issuing of hall tickets	
3	Examination center allotment related issues	
4	Examination Timetable issues	
5	Name correction in hall ticket	
6	Grievance on question paper	
7	Student malpractice	
8	Electives deviation issues	
9	Substitute subjects issues	
10	Discrepancy in results Theory/Practical	
11	Recounting	
12	Challenge Evaluation	
13	Photo copy of answer script	
14	Percentage Changes issues	
15	Issuing of PC/CMM/OD	
16	Name correction in marks memo/PC/CMM/OD	
17	Credits problem	
18	Transcripts related issues	
19	Migration related issues	
20	Miscellaneous	

File Description	Document
Any additional information	View Document

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

Our college has to adhere strictly to the Academic Calendar issued by the JNTUA as, our college is affiliated to JNTUA Ananthapuramu. University at the beginning of each semester releases the academic calendar. It Includes details of different spells of instructions, schedules for mid examinations, preparation and Practicals, End Examinations and they also include commencement date of class work for next semester. Principal convenes CAC meeting with all heads of the departments and prepares an Academic Calendar in line with the university Academic calendar reflecting the activities or events planned by College and Departments. The institute strictly adheres to the academic calendar in conducting the internal examinations in Theory, Labs, audit courses, Technical Seminars, Projects and comprehensive on line examination.

Internal Examinations are scheduled and conducted strictly as per the academic calendar recommended by JNTUA Anantapuramu. Two Internal Theory Examinations and External Practical Examination are conducted in each semester as per the schedule given by the University. The schedule of CIE is announced to the students by each faculty on the first day of semester and is also displayed on the notice boards at the department and at the exam centre.

Details regarding JNTU academic calendar and time table for internal examinations and its adherence are given as an additional attachment.

File Description	Document
Any additional information	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

The institution has stated the Program Outcomes (POs), Program-Specific-Outcomes (PSOs) and Course Outcomes (COs). They are communicated to the teachers and students through the following means:

POs and PSOs along with the vision and mission of the department are made available and communicated to teachers and students via

1. Institution's website under the section of the department
2. Display in the corridors of the department
3. Display in the office of Head of the department, classrooms and laboratories.
4. Moodle server
5. Faculty discussing the POs and PSOs in the class.
6. Faculty discussing Cos and Pos in department events.

COs are made available and communicated to teachers and students via

1. Course Plan
2. Announcements to the students during the beginning of each semester and throughout.
3. Discussions by faculty in the departmental meetings.
4. Moodle server
5. Faculty discussing CO's during department events.
6. Course exit surveys.

Apart from these, the statements are presented to teachers and students during the parent meet, student Induction programs, Industry Interactions, on campus placement drives and in the departmental meetings.

The COs of all the courses are given in additional information as an attachment.

File Description	Document
COs for all courses (exemplars from Glossary)	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

The institute evaluates the attainment of COs, POs and PSOs through its evaluation system and through the process, is mentioned below.

The artifacts that demonstrate the skills, personal characteristics and accomplishments required for measuring the attainment, are collected from:

1. Direct and
2. In-Direct attainment methods.

Attainment of a course:

1. Through Direct method, the artifacts are collected from:

a) Internal Evaluations (IE).

b) External Evaluations (EE) which are conducted at scheduled intervals during the semester.

On completion of Internal Evaluation, CO-wise/Question-wise results are recorded. Results are summed up CO-wise and attainment of a CO is obtained by calculating percentage of students who have achieved a set target of that CO.

Since results of External Evaluations are not available question-wise/CO-wise, total marks are considered for calculating the attainment which is obtained by calculating the percentage of students who have achieved a set target for EE.

Direct attainment of COs in percentages is presented in levels on a scale of 1 to 3.

Direct-CO attainment is computed by summing up IE and EE values of each CO in the proportion of 50:50 defined by the institute.

2. Through In-Direct method, data is collected from:

Course Exit Surveys: During the survey, students provide their responses on a given scale to the questions which are the COs of the respective courses. Procedure to measure the Indirect-CO attainment of a course is same as Direct attainment method, where the results are student's responses.

Final CO Attainment:

Final attainment of a CO of a course is computed by summing up Direct-CO attainment and Indirect-CO attainment values in the proportion of 80:20.

Course attainment is measured by averaging the final attainments of COs of the respective courses.

Attainment of POs and PSOs:

Through Direct method, the data is collected from:

CO-PO correlation matrices, Program level Course-PO matrices and Course attainment. Course Level attainment of $PO(k) = $ (Value of $PO(k)$ in Program level Course-PO matrix * Course attainment) $/3$.

Value of $PO(k)$ is the average of values in column k of CO-PO correlation matrix of a course.

Program Level Direct-PO(k) attainment= Average of $PO(k)$ attainment values of all the courses contributing for $PO(k)$ which are available in Program level Course-PO matrix.

Through In-Direct method, the data is collected from:

- Program Exit Surveys,
- Co-curricular activities,
- Extra-curricular activities,
- Alumni surveys (where the learners themselves evaluate their learning by providing their personal agreements and disagreements).

The procedure to measure the Indirect-PO attainment of a program is same as Direct-PO attainment method where the results are responses from the above mentioned activities and surveys.

Final PO Attainment:

The final attainment of each PO of a program is computed by summing up Direct-PO attainment and Indirect-PO attainment values in the proportion of 80:20.

If the achievement level of a PO reached/completed the PO target then that PO is attained, else PO is considered not attained. The procedure for PSOs is similar to POs.

Detailed procedure is available in a separate document.

File Description	Document
Any additional information	[View Document](#)

2.6.3 Average pass percentage of Students

Response: 91.67

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 616

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 672

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.63

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 0

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
List of project and grant details	[View Document](#)

3.1.2 Percentage of teachers recognised as research guides at present

Response: 5.15

3.1.2.1 Number of teachers recognised as research guides

Response: 10

File Description	Document
Any additional information	[View Document](#)

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 959

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

Narayana Engineering College, Nellore taken steps for developing ecosystem for innovations and various knowledge transfer methods through policies and systems in place. Institute encourages students/staff to work towards developing their own ideas and to share ideas between them and with technological leaders in the field. College educates students and staff through projects in the curriculum and outside curriculum.

- Institution has set up Incubation center under Entrepreneur Development cell to broaden scope of research activities and to promote Entrepreneurship through industry and institute interactions. Incubation cell of institution is well equipped with Computers, Internet , Printers, Projectors and books etc, stake holders for IIC have ample scope for Industry and for product development skills
- Has dedicated high end Spectrum Analyzers, Oscilloscopes, FPGA development boards for designing and developing high performance Circuits and Systems catering to hardware industry
- EDC of NECN provides platform for students to become Entrepreneurs and encourages them to become employers than job seekers. Institution has organized various motivational activities to inculcate Entrepreneurial culture in the institution
- It focuses on awareness on creativity, innovation and nurtures Entrepreneurial ideas in students. Innovative ideas of students are implemented in incubation center to convert ideas into working products for the benefit of students, industry and to the society,. Incubation center provides technical support to incubates and encourages them to become entrepreneurs.
- Innovative ideas are incubated, faculty and experts help is provided in developing prototype working models.
- Innovative projects are developed through the incubation center
- Guest lectures on Entrepreneurship are being organized regularly and entrepreneurship camps arranged.
- NECN E-cell and IIC encourages innovative entrepreneurial ideas and campus start-ups

Broader activities of Innovation and Incubation Cell of NECN

- Time to time Industry leaders and eminent personalities with right expertise are invited from various organizations for conducting seminars, workshops, Brainstorming sessions and symposiums.
- Provide Opportunity for Interaction with Successful student entrepreneurs from other institutions and Alumni entrepreneurs for motivating and inspiring budding entrepreneurs at NECN
- Envisage and adapt methods for taking up Industry-Institute collaborative projects and demonstrate student design up-gradation skills for knowledge transfer to industry
- Establish Industry sponsored Labs and conduct hands on workshops for Students and staff on Development tools by tools experts
- Assistance for students towards designing and developing and testing innovative and socially inclined projects.
- Participate in collaborative research with Health industry for the feasibility of developing affordable medical devices, systems and services at hospitals
- Encourage, assist and sponsor students to participate in National level Design Contests, Design Innovation Quizzes, hackathons etc conducted by industry leaders in IC technology, ICT, State Government Sponsored Innovation demonstration events etc.

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 79

3.2.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
22	18	18	11	10

File Description	Document
Report of the event	[View Document](#)
List of workshops/seminars during the last 5 years	[View Document](#)
Any additional information	[View Document](#)

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
e- copies of the letters of awards	[View Document](#)
Any additional information	[View Document](#)

3.3.3 Number of Ph.D.s awarded per teacher during the last five years

Response: 0

3.3.3.1 How many Ph.Ds awarded within last five years

3.3.3.2 Number of teachers recognized as guides during the last five years

Response: 10

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	[View Document](#)

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 1.17

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
98	58	28	21	20

File Description	Document
List of research papers by title, author, department, name and year of publication	[View Document](#)
Any additional information	[View Document](#)

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

Response: 0.93

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
12	20	101	34	11

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

Our institution provides lot of importance to holistic development of students and organized many community development activities during the last five years. We encourage our students to take part in community service activities which sensitizes towards Social Issues. Institute promotes neighborhood network for enabling students to get involved in extension activities. These activities develop students into ideal citizens bearing high moral values and providing community service. To sensitize students, NSS Plays pivotal role.

Following list of activities were organized in the neighborhood community in the last five years under each support system:

A. Adopted Kotturu and TP Gudur Villages and organized the following Community services:

1. Swachh Bharat Pakhwada
2. Tree Plantation
3. Special Program on Cleanliness
4. Legal Literacy Camp
5. Awareness Program on Child Literacy

B.Environmental Problems

1. Awareness Programs on Diwali Fire Accidents
2. Awareness Programs on Earthing and Electrical Safety
3. Awareness Programs on Clay Ganesha
4. Awareness program on Consequences of E-Waste
5. Awareness Program on Sun Stroke Remedies
6. Awareness Program on Plastic Disposal
7. Special Program on Cleanliness
8. Awareness Program on Energy Conservation
9. Awareness Program on Road Safety.

C.Financial Help

1. Financial Assistance of Rs.76.000/- to Hudh Hud cyclone effected people.
2. Financial assistance to Orphanages.

D.Health Problems

1. Awareness Rally on Dengue Fever
2. Awareness Programs on AIDS
3. Awareness Rally on Breast Cancer
4. Health Wellness Program
5. Anti Drug Traffic
6. Anti Tobacco Rally

E. Medical Camps

1. Dental Check-up camps
2. Eye Camps
3. Blood Donation Camps.

Involvement in such community service activities helps students to attain maturity and socially responsible. Students are motivated to participate in need based extension activities such as Swachh Bharat, Awareness Programs on Road Safety, Sun Stroke Remedies, etc. Participation in such activities imbibes qualities of National integrity, Environmental and Social Responsibility among students. These activities help to sensitize and inculcate ethical behavior among the students.

Our Institute arranged health Check up camps in association with other institutes and recognized bodies like Indian Red Cross Society, Lions Club, Rotary Club, Nellore Municipal Corporation, Fire Service Department, Road Transport Department, Eye Care Mission and Narayana Medical College and Hospital, Nellore. These activities have lead to emotional, Intellectual, social and inter- personal development of students. Students had the opportunity to improve their leadership qualities, interpersonal skills, self confidence levels in organizing the above events.

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 14

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
4	3	2	2	3

File Description	Document
Number of awards for extension activities in last 5 years	[View Document](#)
e-copy of the award letters	[View Document](#)
Any additional information	[View Document](#)

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 68

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

2017-18	2016-17	2015-16	2014-15	2013-14
19	14	13	11	11

File Description	Document
Reports of the event organized	[View Document](#)
Number of extension and outreach programs conducted with industry,community etc for the last five years	[View Document](#)
Any additional information	[View Document](#)

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 54.16

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1634	1502	1380	1066	1041

File Description	Document
Report of the event	[View Document](#)
Average percentage of students participating in extension activities with Govt or NGO etc	[View Document](#)
Any additional information	[View Document](#)

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 354

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
92	71	58	69	64

File Description	Document
Number of Collaborative activities for research, faculty etc	[View Document](#)
Copies of collaboration	[View Document](#)
Any additional information	[View Document](#)

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 93

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2017-18	2016-17	2015-16	2014-15	2013-14
35	25	16	11	06

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	[View Document](#)
Details of functional MoUs with institutions of national, international importance,other universities etc during the last five years	[View Document](#)
Any additional information	[View Document](#)

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

Institution has well equipped built up area of 17900 Sq. mtrs in around 15 acres of land with impressive infrastructure like state of art Laboratories, class rooms, tutorial rooms, library, drawing halls, seminar halls etc are available to provide conducive environment for academic activities. The infrastructure facilities available in the college are explained in detail here in below:

Class Rooms

Institution has well-furnished, spacious classrooms with good ventilation to conduct classes. Classrooms are maintained as per norms for proper visibility of blackboard and audibility. The classrooms are equipped with ICT facilities, public addressing system, fans, lights, and Wi-Fi connectivity and more.

Tutorial class rooms

The institution has separate rooms for conducting tutorials, remedial classes, remedial coaching, peer learning etc to facilitate better learning opportunities.

Laboratories

The Institution has domain centric laboratories as per the regulations of AICTE and JNTUA. The Institution has fully equipped laboratories, with well-maintained instruments, devices, and latest equipment to conduct experiments to provide experiential learning to students. Additional equipment is available to provide students opportunities to work on their projects. Laboratories consist of latest software such as MATLAB, PSPICE, STADPRO, AUTOCAD, MENTOR GRAPHICS, XYLINX TOOLS, MI POWER etc. The institution also has virtual lab facility in association with IIT Mumbai, where the students can carry out experiments virtually. A few of the certificate and value added courses are also being conducted in the labs. **Seminar Halls**

College has seminar halls to organize various participative learning activities like seminars, conferences, guest lectures, workshops etc. for students and faculty. All seminar halls have different seating capacities, which are equipped with LCD Projectors, whiteboards, stage, podium, public addressing system with WI-FI and internet facilities.

Computing equipment

The institution has 631 high end systems exclusively for teaching – learning purpose in various laboratories. A computer centre with accessibility to all students and faculty is provided for various academic activities. All computers are connected in LAN with internet facility. Some computer

laboratories are equipped with high end servers. A bandwidth of 90 Mbps provides adequate internet connectivity. The campus is Wi-Fi enabled.

Drawing Halls

Two drawing halls with a capacity of 80 each are available for teaching graphics and drawing subjects for B. Tech 1st year, B. Tech Civil and Mechanical Engineering students.

Library

Institution has a Central Library equipped with all resources for learning with sufficient seating capacity. Institute has developed library into two domains: the conventional library hosting printed books, reading hall, reference section and repository. The second modern part of the library is the digital library providing access to e-resources. The Library is provided with 45,000 number of books, Magazines, National and International journals etc. Digital Library is an additional advantage through which students will be able to access e – resources like e-books, e-journals, NPTEL videos etc. All the e-resources can be accessed from any point, at any time in the campus. Apart from this, each Department has its own departmental library.

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

Response:

The institute focuses on overall development of the students through participation in co-curricular and extra-curricular activities. Outdoor and indoor sports and games contribute significantly in grooming students. Qualities like leadership, team spirit, and competitive spirit can be inculcated amongst the students through such sports activities. Students are encouraged to participate in different sports/Games and cultural activities. The institution has a well equipped Gym and fitness centre. Yoga classes are being conducted for promoting health in the staff and students. Cultural activities are conducted in the seminar halls, Auditorium and open air theatre of the institution.

Sports and Games

Institute has employed a well-qualified and experienced physical director, who trains and supervises students actively participating in various sports and games activities and competitions. Physical Director trains the students in their chosen games in the time-slot allocated to them. The institute has a spacious and well equipped indoor-sports room, where students can play games like table tennis, chess, caroms etc.

Sufficient area is allocated to outdoor sports and games with adequate facilities. Well laid courts are available for games such as badminton, basketball, volleyball, throw ball, Kho-Kho, kabaddi, cricket net practice, ring tennis etc. Institution encourages students to participate in intra-college, inter-college, university-level, district level, state-level competitions and national level competitions.

Yoga Centre

The institute has dedicated centre for Yoga and meditation to enable the faculty and students to practice

Yoga and meditation for improving their mental and physical health.

Gymnasium

The institute has a dedicated room for Gymnasium with facilities like 8 stationed gym, Treadmill, Cycle, abdominal bench, Twister, bench press, dipping bars, weights, dumbles etc.

Cultural Activities

All the seminar halls and auditorium are provided with adequate facilities to conduct various cultural activities. Cultural activities are conducted in these seminar halls and auditorium on different occasions like fresher's day, farewell day, Anual day and on such other important occasions.

To bring out and to encourage inherent talents of the students, hobby clubs are introduced. Hobby clubs include Ahbinaya Club (Drama), Swara club (Singing), Vacha club (Literary), Chitra Club (Photography), Chalana chitra Club (Flim making) and Varna Club (Painting). Students join in these clubs depending on their interest. Students are encouraged to actively participate and showcase their talent and skills. These activities contribute to bring out latent talent among students, which help to build their overall personality by developing communication skills, leadership qualities and to be a constructive part of a team. Students are encouraged to participate in co-curricular and extra-curricular activities in inter-college, inter-university and in National level competitions.

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 49

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	[View Document](#)
any additional information	[View Document](#)
Link for additional information which is optional	[View Document](#)

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 41.31

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
250	300	325	225	200

File Description	Document
Details of budget allocation, excluding salary during the last five years	[View Document](#)
Audited utilization statements	[View Document](#)

4.2 Library as a Learning Resource

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

Response:

The library of the institution is equipped with Library Management System services; which is automated through a software program, designed and developed by our own team. ILMS Software Package is an Integrated Library management System (ILMS) with Barcode Scanner that supports all in- house operations of the library.

Name of the ILMS Software: Library Management System Software (LMS)

Nature of Automation: Fully Automated

Version: 2.0

Year of automation: 2007

The Central Library of the Institution has an excellent knowledge providing facility for the benefit of students, faculties and researchers. As one of the best established libraries meeting International Standards, the central Library has a large collection of books covering various branches of Engineering and Technology, Management, and Humanities and its related fields. The library is located in the first floor of Faradays 'Block, and is spread over Ground area of 637 sq mts. The library building is fully air-conditioned and well protected with fire alarms and CCTV security systems, equipped with sprawling reading hall, with reference collection of around 35468 text books, 17408 E-books, SC/ST Book Bank with 4689 text Books, 3089 B.Tech/M.Tech Project reports, 78 journals, 20 Magazines and 11178 e-journals.

Library web OPAC link is provided on college website http://45.123.0.154/ltouchnecn to students and faculty for searching library materials.

Institute library is also using institutional repository, where Journals/Articles/Question Papers/Paper presentations/E-Books/Thesis/Dissertations etc are made available.

Library Management system (LMS) software with all the functional modules of library management completely implemented and has the following modules:

1. Cataloging:

- Bibliographic data
- Primary or original cataloging
- Search catalogue

2. Circulations or Transactions:

- Material Transaction (Issues or returns)
- Material Up dating
- Member (student) Registration
- Member (Staff) Registration
- Material / New Books Entry
- Fine Transaction or Up dating
- Material Edit
- Material Binding Transaction
- Toppers category change
- SMS Alerts for Defaulters
- Students data posting for new members
- Extra Books provision for Final Year Students

3. Reports:

- Material Search (Select Columns) Report
- Book Search on Accession Number
- Member (Staff/Student) Report
- Abstract Material Report
- Title Summary for Material
- Transaction (issues/returns) Material Report
- Binders Report
- Material Book Report
- Category wise members (student/Staff)
- Old Transaction Report

4. Masters:

- Holidays Master
- Barcode Generation
- Student barcode generation with Photo
- Binder Master

5. Journals:

- Journals Transaction
- Journals Periodicity Report
- Renewals for journals

6. Graphs:

- Graph for material (Issue/Return) Transaction
- Abstract for material
- Member Transaction

7. Web Online Public Access Catalogue (OPAC):

- Search by Author
- Search by Title
- List of New Arrivals
- List of Journals

8. Institutional repositories:

- Upload for repositories: (Example: Journals/Articles/Question Papers/Paper presentations/E-Books/Thesis/Dissertations)
- Download for repositories:(Example: Journals/Articles/Question Papers/Paper presentations/E-Books/Thesis/Dissertations)

Library Information System is provided on college website http://egateway.necn.ac.in/eresource to students and faculty for searching E- resources like E-books, E-journals, NPTEL videos, animations etc.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

Institute maintains a wide selection of non-academic and rare books to provide faculty and students an enriched knowledge gaining experience. The central library has 1240 no. of rare books in its collection out

of which 940 are available in the form of e-book collection downloaded from RBSI, which provides reference material for enriching their knowledge.

Categories of rare books are on varied subjects like Geographical, Botanical, Literature, Religious, Culture, Empire, War etc.

Some of the rare books include:

1. Magnificent Indians of 25th Century By S.Lal
2. The Problems of work By L.Ronhubaard
3. Morality and the Law- By Richard A.Wasserstrom
4. Britannica-Ready Reference Encyclopedia Vol-1-10
5. The Art of Meditation
6. Principles of Physical Geography
7. Group Discussion: For Admissions & Jobs
8. The World Book Encyclopedia VOL.1-22
9. India in 1880
10. A short guide to the cave temples of Elura

Manuscripts:

The library has 132 manuscript collections in the form of e-collections. Some of the Manuscripts include the following:

1. Andersen, Joachim, 1847-1909. Grosse Etu?den (Album leaf). Etude op. 15 for flute (album leaf) autograph manuscript, 1891 June 1.
2. Brahms, Johannes, 1833-1897. Sonatas, violin, piano, no. 1, op. 78, G major. Vivace ma non troppo (Album leaf). Sonata no. 1 in G major, op. 78, for violin and piano by Brahms (album leaf): manuscript in the hand of David Mannes, 1916 Apr. 30.
3. Chausson, Ernest, 1855-1899. Me?lodies, op. 13. Apaisement . Apaisement : autograph manuscript, 1885 Sept. 8.
4. Adam, Adolphe, 1803-1856. Richard en Palestine. Venez, entourez moi, mes compagnes che?ries . Venez, entourez moi mes compagnes che?ries autograph manuscript, 1844
5. Bach, Johann Sebastian, 1685-1750. Cantatas. Selections. Seven cantatas by Bach, once owned by Mendelssohn copyist's manuscript, [1700-1750]._Part1&2
6. Balfe, M. W. (Michael William), 1808-1870. Piu? ridente, piu? lucente . Piu? ridente, piu? lucente autograph manuscript,between 1842 and 1845.

Special Reports or other knowledge resources:

Library is enriched with some valuable M.Tech / B.Tech Project reports. Some of the additional knowledge resources are:

1. E-books related to Artificial Intelligence
2. E-books related to Neural Networks
3. E-books related to Career Interviews and Personality development
4. E-books of Foreign Languages
5. GATE, CAT, GRE and TOFEL preparation material

6. UPSC Exam Materials
7. Quantitative and Aptitude Books

File Description	Document
Any additional information	[View Document](#)

4.2.3 Does the institution have the following:

1. **e-journals**
2. **e-ShodhSindhu**
3. **Shodhganga Membership**
4. **e-books**
5. **Databases**

Response: A. Any 4 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	[View Document](#)
Any additional information	[View Document](#)

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 17.85

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
17.79	16.58	17.68	18.07	19.12

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	[View Document](#)
Audited statements of accounts	[View Document](#)

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4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Any additional information	[View Document](#)

4.2.6 Percentage per day usage of library by teachers and students

Response: 14.67

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 396

File Description	Document
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Narayana Engineering College, Nellore (**NECN**) has a clear policy to create and enhance IT facilities to promote vertical and horizontal mobility for advancement in teaching learning methods and also in Research. The College updates the IT facilities on a regular basis. The connectivity through a fully network available in campus with updated IT infrastructure, computing and communication resources, offering students facilities of e-mail, netsurfing, up/down loading of web based applications, besides helping them in preparing for projects and seminars. NECN has State-of-the-Art labs with sophisticated servers, providing highly interactive learning environment with full-fledged hardware and software training facilities. All Labs and Central Computing facilities are connected to LAN and Internet is provided to all computer labs. Single network across the campus and access to internet/intranet resources under uniform network policy are also made available. 90 mbps Internet Bandwidth from multiple ISP's arranged to maintain redundancy and hassle free internet connectivity.

Campus is Wi-Fi enabled with high throughput indoor and outdoor Wi-Fi access points and required firewalls. The College has a 24/7 Wi-Fi facility for students and faculty members can avail internet access in the campus. Enterprise level Next Generation firewall appliances in redundant mode with fully integrated intrusion prevention (IPS), application control, antivirus, web filter, email filter and traffic shaper. Protection against hacking and other information security threats is ensured. Students and faculty members are provided access to electronic databases which helps them to use e-learning resources. All Classrooms are equipped with LCD Projectors, Audio Visual equipment and Internet with Wi-Fi facility. Smart closed circuit camera`s surveillance is in place all through the campus. Bio-Metric machines used over the intranet for employees and students attendance recording, connected to server at hub location.

Up gradation arrangements on a regular basis are incorporated into yearly spending plan. Computers are gradually increased with high configurations year after year. Obsolete configurations of systems were replaced with latest configurations as per university syllabus. Majority of Pentium systems were replaced with Core2 Duo in the year 2009-10, during the academic year 2013 -14 systems are upgraded to i3-processor and further again upgraded to i5 processor during the academic year 2017-18. All Labs and Central Computing facilities are connected to LAN. Internet bandwidth gradually increased from 28 mbps to 90 mbps from EXCEL MEDIA ACT and NETTLINX service providers during the last 5 years. Wi-Fi Access Points were installed in various locations with a speed of 25 mbps. Wi-Fi access points are also updated from time to time with regular intervals as and when required. LCD Projectors are provided gradually in all the class rooms as part of ICT Facilities. Sufficient number of Printers and Scanners are available in the campus and the number is increased year after year as per the requirement. Licensed and open source software are available in all departments depending on requirement, which are upgraded to meet the standards as provided in the syllabus.

The details of the above are given as an additional attachment.

File Description	Document
Any additional information	[View Document](#)

4.3.2 Student - Computer ratio

Response: 99:23

File Description	Document
Any additional information	[View Document](#)

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

Response: >=50 MBPS

File Description	Document
Any additional information	[View Document](#)

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: No

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	[View Document](#)

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 20.52

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

2017-18	2016-17	2015-16	2014-15	2013-14
146.78	131.07	128.36	122.55	113.92

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document

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

Response:

The physical, academic and support facilities like classrooms, labs, seminar halls, auditorium, computer centre, gymnasium, buses, boardroom, guest room etc., are well maintained and used based on the requirement as per the standard procedure.

Once the Calendar of Events is prepared in the beginning of the semester, the time-table for each section of every semester is prepared allotting the classrooms and the laboratories. This facilitates the optimum usage of resources.

Certain laboratories and workshops are required to be shared and utilized as common facilities. Such facilities are shared by different departments. At the beginning of the semester the time table in charge will resolve this issue by consulting the HODs and the principal.

Classrooms, seminar halls & laboratories:

Class rooms and seminar halls come under daily maintenance. The administrative staff takes rounds of all the class rooms and seminar halls every day. In case of requirement for maintenance such as lights, fans, benches etc will be attended by maintenance staff.

Laboratory in charge, along with laboratory assistant, ensures proper working of all equipment at the beginning of each semester. Repairs and Maintenance of laboratory equipments are initiated by the

respective Laboratory In charge as and when required. As per the requirement, minor repairs are carried out by lab assistant/s. Faculty In charge and HOD handles the major repair/maintenance by placing order to the concerned equipment experts.

Computers and allied Infrastructure:

Routine computer maintenance, software installations, networking are handled by the CSE Department. Computer, LCD projectors and CC cameras maintenance and checking activity carried out by team of system engineer, hardware engineers and technicians. The equipment with major repair, are being repaired by outside agency. After receiving quotation for maintenance and repair charges necessary approval from college authorities and management is taken. Thereafter equipment is sent for repairing by issuing gate pass and the status of repair work is tracked.

Library, Sports and Games:

The librarian is the in charge for handling all the maintenance works required in the library through maintenance staff. He takes care of utilization of books, computers and other learning materials in the library. The physical director takes responsibility for all repairs pertaining to sports equipment and courts. He has to maintain courts properly on daily basis with the help of the maintenance staff.

Electrical Facilities:

Electricians are available round the clock to address power breakdown. Maintenance Department monitors the services of electricians. They perform regular checks in classrooms and in the campus to ensure that all electrical fittings are in excellent condition.

Buildings and Infrastructure:

Maintenance of buildings and related areas are undertaken by the Maintenance Department.

Maintenance staff consists of Qualified Electricians, Carpenters, Plumbers and other service personnel. Monitoring of the facilities is carried out regularly by the administrative officer. Maintenance and housekeeping of the classrooms, laboratories, library, and the institute as a whole are taken care by the maintenance staff. Minor maintenance of furniture items and metal fixtures is carried out by the workshop.

07-04-2023 05:23:56

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 66.09

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1652	1617	1671	1591	1534

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	[View Document](#)
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	[View Document](#)
Any additional information	[View Document](#)

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 14.7

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
450	403	277	320	345

File Description	Document
Any additional information	[View Document](#)

5.1.3 Number of capability enhancement and development schemes –

1. **For competitive examinations**
2. **Career counselling**
3. **Soft skill development**
4. **Remedial coaching**
5. **Language lab**
6. **Bridge courses**
7. **Yoga and meditation**
8. **Personal Counselling**

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	[View Document](#)
Any additional information	[View Document](#)
Link to Institutional website	[View Document](#)

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 78.48

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

2017-18	2016-17	2015-16	2014-15	2013-14
2483	1774	1879	1830	1629

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	[View Document](#)
Any additional information	[View Document](#)

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 0

5.1.5.1 Number of students attending VET year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
Details of the students benifitted by VET	\text{View Document} [View Document]

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document]
Details of student grievances including sexual harassment and ragging cases	[View Document]
Any additional information	[View Document]

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 46.99

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
339	296	338	225	190

File Description	Document
Self attested list of students placed	[View Document]
Details of student placement during the last five years	[View Document]
Any additional information	[View Document]

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 12.11

5.2.2.1 Number of outgoing students progressing to higher education

Response: 74

File Description	Document
Upload supporting data for student/alumni	[View Document](#)
Details of student progression to higher education	[View Document](#)

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 70.74

5.2.3.1 **Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) year wise during last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
28	34	26	25	31

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
35	41	39	42	48

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years	[View Document](#)
Any additional information	[View Document](#)

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national

/ international level (award for a team event should be counted as one) during the last five years.

Response: 33

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

2017-18	2016-17	2015-16	2014-15	2013-14
08	07	08	06	04

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	[View Document](#)
e-copies of award letters and certificates	[View Document](#)
Any additional information	[View Document](#)

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Narayana Engineering College Nellore (NECN) creates a platform for the active participation of the students in the various academic and administrative bodies including other activities. This empowers the students in gaining leadership qualities, in following rules, regulations and execution of skills. Student Councils are actively participating and organizing various activities related to academics, co- curricular and Extra-curricular activities, with the guidance of faculty. They are providing great support to college related academic / administrative work with the help of other students. They are actively involving in motivating the students to participate in various activities conducted by the college.

Student's council is headed by Principal as the Chairman and remaining positions like President, Vice - President, General Secretary and Joint Secretary, are represented by students. Members of student's council are filled with class representatives of UG and PG programs.

Institute has constituted various other committees to involve in different academic and administrative activities in campus apart from the Student Council. College is very keen in encouraging students to participate in various academic and administrative committees. It improves the academic and administrative capabilities of a student.

The various cells and committees constituted in the campus are:

S.No	Committee

1	Department Student Association Committees
2	Professional Chapter's Committee
3	Industry Institute Interaction Cell
4	Internal Quality Assurance Cell (IQAC)
5	Library Committee
6	Library Advisory Committee
7	Anti – Ragging Committee
8	Canteen Committee
9	Hobby Clubs
10	Placement Cell
11	Human Values and Ethics Cell
12	Sports Committee
13	Women's Forum
14	NSS
15	Innovation and Incubation Cell

Brief description of the above committees and cells is given as an attachment in additional information.

File Description	Document
Any additional information	View Document

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 13.4

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
21	17	12	09	08

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

Institute has a strong belief that alumni are great role models Alumni are often in the position to engage the expertise of the institution in their professional lives. Therefore, institute has established a "Narayana Engineering College Alumni Association" Nellore (NECAA) on 18th December, 2007 under the Society Registration Act, XXXV of 2001 with registration No -461/2007. Every passed out student is eligible for life time membership and can become a member by fulfilling registration process.

NECAA Nellore has organizational structure as President, Vice-President, Secretary, Joint- Secretary, Treasurer and members. It has total 7 members on this committee. To organize and monitor different activities of Alumni Association, College has formed an Alumni Committee, where in one dedicated staff is appointed as Alumni In-charge and faculty in-charges from all departments as members, for the coordination of our alumnus and also for communicating developments and events, taking place in the college. These committee members meet once in a month. Alumni committee organizes the annual alumni meet every year. Alumni meet provides them the platform to share their past and present experiences as well as to recall their memories in the institute with their teachers, juniors and friends.

Alumni committee provides Alumni talks, guest lectures, career development programs, workshops etc by Alumni who are in different cadres in different organizations.

Alumni participate and contribute to the development of the institute in the following ways:

1. They intimate the current scenario reg placements, expectations from industry and potential job opportunities in new emerging areas.
2. Alumni members are invited to deliver guest lectures and also as the resource persons for workshops and seminars conducted on recent trends in technology. They also share their professional experience to motivate the students.
3. Alumni feedback is taken periodically to understand the curricular gaps and recent market trends.
4. They support in conducting industrial visits at their organization.
5. They arrange and support in placement activities for the students of the Institute.
6. Alumni provide sponsorships for different events organized by the institute.
7. Alumni members actively participate as judges in various technical and non-technical competitions organized by the institute.
8. They are providing their valuable feedback on curriculum to suit latest trends in technology.
9. They are playing key role in providing better teaching-learning process in the campus.
10. College gives best project awards for final year students through Alumni association.
11. Alumni plays vital role in framing syllabus for various value added courses and certificate courses.
12. Alumni are playing active role in IIIC.
13. Alumni are providing guidance in improving activities in R&D.

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

Response: ? 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 6

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2	1	1	1	1

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document
Report of the event	View Document

Criterion 6 - 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

Response:

The Vision and Mission of the Institute are:

VISION

To be one of the Nation's Premier Institutions for Technical and Management Education and a key contributor for technological and socio-economic development of the nation.

MISSION

To produce technically competent Engineers and Managers, by maintaining world-class infrastructure, adapting high academic standards and teaching practices to provide unique learning experience, inculcate global perspective in attitude and foster students to face real-world challenges.

The Quality Policies are framed based on the Vision and Mission of the Institution and are driven by the needs of the industry, society and stakeholders. Deployment of the quality policy is done by providing requisite academic infrastructure, learning environment and harmonious work culture. The stakeholders Feedback plays essential role in framing and revising activities.

The mission statement of the institute defines unique features in terms of addressing the technically competent Engineers and Managers. The Vision and Mission of the institute are according to the objectives of the institute. The formal and informal arrangements in the institute co-ordinate the academic and administrative planning and implementation reflects the institutions efforts in achieving its vision.

Reflection of Mission and Vision in the leadership of institute in ensuring:

1. The policy statements and action plans: The management and Principal actively participate in GB for ensuring that the policy statements and action plans are aligned for attaining the mission of institute, disseminates the vision and mission to all stake holders and involve them in forming the policy statements. The Principal and HODs makes action plans in discussion with faculty members to review of outcomes from the implementation of action plans through meetings with functional committees and makes necessary changes in action plans if required. The management takes review of quality policies and makes amendments in quality policies if required.

2. Formulation of action plans: The action plans are formulated in line with quality policy under the leadership of the Principal and the same are incorporated into strategic plans for effective implementation.

3. Interaction with stakeholders for proper support and planning: The requirements of the industry for policy making and planning are collected through interaction with various stakeholders The Principal and HODs ensure that all stakeholders are involved in different activities.

4. Reinforcing the culture of excellence: For the reinforcement of cultural excellence the vision, mission, short term and long term goals, quality policies are kept wide open to all stakeholders for their suggestions, necessary training is provided to its faculty and supporting staff for their development and motivates the team building and team work to create healthy work culture. Through participative management, the faculties are involved in various decision making bodies of the institute to achieve vision of the institute.

File Description	Document
Link for Additional Information	[View Document](#)

6.1.2 The institution practices decentralization and participative management

Response:

Institution practices decentralization and participative management. Decentralization and operational transparency are the features of the institute.

The institute having been a support for participative management achieved it involving faculty and students. Thus it formed policy of participative management as it forms part of democratic governance. The Governing Body considering the same as a quality promotional policy for the improvement of the institution has accorded to its approval.

The college works as per the rules and regulations framed by JNTUA and governing Body in designing and implementation of the quality policy and plans. The Principal is the Head of the institution and is empowered with sufficient authority and power delegated from the management for smooth functioning of day-to-day activities. Under the direct supervision of Principal all the departments of the college function. Day-to-day academic activities of the departments are taken care by the HODs. The Principal, as a representative of the college, leads its faculty members and HODs in all academic matters. He encourages and cooperates the HODs and faculty members in ensuring a proper academic environment in the college which may benefit the students.

The plans and the policies for fulfillment of the mission of the college are executed by the active involvement of the college authorities, along with all the faculty members. For this purpose, different committees have been constituted in the college, who has been entrusted with the responsibility of implementing the programmes and policies. Efforts are regularly being made by the authority to create ample environment and suitable platform for all-round development of the students.

For the proper functioning of the college and promotion of participative management, the college runs on a decentralized management operative process, wherein different committees have been framed by the Principal in the governance of the college. Such decentralized and participative management leads to a situation of harmony and congenial atmosphere in the college for the development of the students.

A number of committees have been constituted by the Principal to run the college properly and smoothly. Senior members of different faculties head the respective committees. Principal, along with the faculty and

the staff are being involved in the process of decision-making and its implementation. Principal and HODs always welcomes the suggestion and proposals of the faulty-members and committees and transforms them to applicative practices in the college. The In-Charges of different committees including extra-curricular student-centered and student-supporting activities as well as co-curricular activities have operational autonomy.

The college has an Internal Quality Assurance Cell, which includes members from other institutes and senior teachers from the college. IQAC meets at regular intervals and plays a important role in the implementation of its plans and policies.

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

SNO	YEAR	INSTITUTIONAL STRATEGIC GOALS	
1	2015-16	1.IQAC 2.Improving industry-Institute Interaction and Innovation and incubation center.	
2	2016-17	1.Permanent Affiliation 2.Infrastructure development	
3	2017-18	1. Promotion of R&D	
4	2018-19	1.NAAC	
5	2019-20	1.NBA 2.Autonomous	

The perspective/strategic plan is made by institution to fulfill requirements of industry and society by providing quality education to produce technically competent Engineers and Managers to serve the nation. Students progression towards technical and social excellence is achieved with well established infrastructure. Institute has developed a strategic plan of establishing IQAC in2015 for ensuring quality in Teaching and learning, enhancing industry institute interaction, innovation and incubation centre, promotion of research in staff and students. getting permanent affiliation for all UG & PG programs by 2016-2017 by developing infrastructure, promotion of R&D, getting NAAC accreditation by 2018 and NBA accreditation and Autonomous status by 2019-20 strengthening the campus facility.

Successfully Implemented:

1. IQAC

According to the strategic plan which is in line with vision of our institution, IQAC was established in the year 2015-16. In our institute all major tasks related to teaching learning, academic and administration planning, implementation is being monitored by Internal quality assurance cell(IQAC).

IQAC has made a constant efforts to shift from the traditional teacher–centric approach to a student-centric approach. Some of the initiatives taken are:

- Periodical review of teaching learning process.
- Monitoring student academic progress
- Adapting to student centric, ICT enabled and interactive teaching learning methods.
- Prominent academicians from reputed institutions were invited for guest lecturers on advanced topics.
- Organizing expert sessions on various teaching-learning and pedagogic methods.
- Organizing faculty enrichment programmes.
- Internal Quality Assurance Cell (IQAC), NECG conducts Academic Administrative Audit (AAA) at regular intervals. Based on AAA report, suggestions are given to concern for improvement based of the discrepancies found during audit
- College has started Moodle-Learning Management System (MLS) to provide online learning platform to the students and for progressive performance of academic curriculum.

2. **Permanent affiliation:** During the academic year 16-17, infrastructure was developed as per the requirements of the JNTUA, and then application was submitted for permanent affiliation with JNTUA Anantapuramu. JNTUA has granted the Permanent affiliation.

3.. **R&D:** Research and Development was institutionalized and 98(ninety eight) research papers were published through peer reviewed journals in the year 2017-18.

File Description	Document
Strategic Plan and deployment documents on the website	[View Document](#)
Link for Additional Information	[View Document](#)

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

Narayana Engineering College in Nellore has a well established organizational structure to execute smooth functioning of administrative and academic areas. Various bodies are formulated which constitute the organizational chart. Governing body is the highest decision making body constituting members from the management, Principal of the college, nominated faculty members, members from AICTE, JNTUA, State Government and other nominees from Educational and Industrial sectors.

The Governing body approves the various academic and administrative activities of the college.

Principal, Heads of the Departments, sectional heads and co-coordinators of various committees have adequate participation in making decisions in academic and administrative functions under their purview.

The organization has various departments based on specializations like Civil, EEE, ECE, administration, Library, Physical education etc which are headed by respective HODs. In addition the organization has various domains common to the whole institution such as R & D, training and placement etc which is headed by professor in-charges. Department wise domains are looked after by the faculty in-charges of the respective departments.

Administrative Officer assists the Principal in the day to day administration of the college and looks after Accounts, purchases, budgeting, stores, personal affairs and admissions.

For the academic and administrative convenience and to assist the Principal, HODs and AO, various cells and committees are constituted. The details of various cells and committees are provided in the attachment. The organogram of the institution is provided as attachment in the additional information.

College has a clearly defined HR policy which includes service rules, procedures, recruitment and promotional policy. This policy applies to all employees working in the institution irrespective of their cadre. This policy is subject to change as when necessary with prior approval of Governing Body.

To maintain the harmony and satisfactory levels of all the stake holders, the institution has an effective Grievance redressal mechanism constituted for students, staff and women. The details of these committees are provided as an attachment in additional information.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.2.3 Implementation of e-governance in areas of operation

    1. Planning and Development
    2. Administration
    3. Finance and Accounts
    4. Student Admission and Support
    5. Examination

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	[View Document](#)
ERP Document	[View Document](#)
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	[View Document](#)
Any additional information	[View Document](#)

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The following are the various committees constituted for effective functioning of the institute:

1. Discipline Committee

2. Anti – Ragging Committee

3. Library Committee

4. Canteen Committee

5. Hobby Club

6. Placement cell

7. Time table committee

8. Career guidance cell

9. Entrepreneurship Development Cell

10. Grievance Redressal Cell – Department Level

11. Grievance Redressal Cell – Institute Level

12. HV & E Cell

13. Industry – Institute Interaction Cell (IIIC)

14. Library Advisory Committee

15. Sports Committee

16. Women's Forum

17. Women's Grievance Redressal Cell

18. Alumni Committee

19. IQAC

20. Department Student Association Committee

21. SC / ST Cell

22. NSS

23. R & D Cell

24. College Academic Committee

25. Examination Grievance Committee

26. Innovation & Incubation Cell (IIC)

27. Maintenance Committee

28. Website Committee

29. Attendance Committee

30. Professional Chapter's Committee

31. Counseling Cell

32. Staff Grievance Cell

33. OBC Cell

34. Alumni Cell

The details of latest Anti Ragging Committee meeting are described herewith:

Anti ragging committee was formed as per the direction of government and guidelines of AICTE on 27.06.2017. Anti ragging committee meetings were convened on 29th June 2017 under the chairmanship of the Principal and in presence of all members.

Agenda of the meeting was

- To maintain ragging free environment.

Minutes of the Meeting and Resolutions

1. Asked to Constitute various committees and such as boys hostel vigilance committee, girls hostel vigilance committee (private hostels) and anti ragging squad .
2. Members are directed to prevent the ragging in and outside of the campus. If anything found members are asked to bring it to the notice of the principal immediately.
3. Members and staff are directed to follow and act accordingly to the law of anti-ragging act.
4. Frequent rounds in the college campus and surroundings.
5. Keep close watch on the visitors on the college campus.
6. Conduct awareness program among the students and counsel them if necessary.
7. Organize meeting with students especially with girls and advise them to regulate their own movements and interactions, especially with strangers.
8. Advise the girl students to avoid emotional relationships with any sort with male students about whose background they have limited knowledge and also advise them about the Do's and Don'ts.
9. Advise the girl students to communicate to their parents and faculty, if any sort of ragging occurs.
10. If any type of ragging is occurred, immediately conduct the meeting and recommend appropriate action to be taken as per the act of Prohibition of ragging in educational institution(26 of 1997) to the concerned authorities.
11. Convener is directed to conduct committee meeting frequently and discuss day to day situation in the campus and inform to the higher authorities.
12. Create peaceful and ragging free atmosphere in the college campus/surroundings.

Action Initiated

- Constituted committees such as boys hostel vigilance committee, girls hostel vigilance committee (private hostels) and anti ragging squad
- Awareness programmes are conducted.
- Frequent rounds in the college campus and surroundings.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

List of existing welfare measures for Teaching and Non-Teaching Staff:

General Amenities:

- Institute organizes free dental and health checkup camps for better health of employees

- All categories of employees and their dependents are provided with free medical facility in Narayana Medical College and Hospital and some of In-Patient & paramedical services allowed on discounted tariffs.
- Non–teaching staff are provided accommodation in the premises of campus
- Transport facilities on subsidized charges to College.
- Free Cell-phone facility for some of the employees
- Canteen facility on subsidized rates.
- All employees are permitted reimbursement of expenses incurred towards boarding and lodging when they proceed on Official work, subject to their eligibility as specified in the HR policy
- Yoga classes for mental and physical well being of employees
- Maintenance Employees, who are exposed to dust and other hazardous areas, are provided shoes, gloves, helmets and aprons.

Incentives and Awards:

- Faculty members are provided incentives based on Students Securing rank in University Examination.
- Best teacher award is given to faculty every year in each department.
- Financial assistance is given on Teacher's Day to the faculties who have secured 100% result in their respective subject

Support given for Faculty Advancement/Life Long Learning:

- Faculty members are given promotions and rise in their salary when they acquire additional qualification like Ph.D. to encourage career advancement.
- The Institution provides financial support for publications in journals and Conferences.
- Staff pursuing higher qualification in their field of education, for attending FDPs, Seminars, workshops, paper presentations, Research related work, National/International conferences, Research viva etc. Faculty members are given promotions and rise in their salary when they acquire additional qualification like Ph.D. to encourage career advancement.
- Registration fee/TA DA reimbursement for FDP/ Conferences/workshops etc
- Full fees will be paid by the Institution for Patent filing.
- Institution provides membership fees to the faculty in professional chapters.

- Institution encourages faculties to visit Universities/reputed institutions across the country to know the latest developments in their related fields.

List of Major Welfare facilities to employees/their family members:

- Fee concession for the children of non-teaching staff members.
- Employees who are drawing salary Rs.21,000 and above are covered under Group Mediclaim Policy.
- All employees appointed on permanent rolls are eligible for contributory provident fund as per the provisions of Provident Fund Act, 1952.
- School/College Fee Concession to employee's children studying in Narayana Educational Institutions.
- As per ESI act 1948, eligible employees drawing less than Rs.21,000, are covered under the ESI Scheme.

- Payment of gratuity is effected to the members at the time of superannuation or while leaving the services of the college, strictly as per the Gratuity rules.
- To assist the employees in case of emergencies and on special occasions, at its discretion would grant advance befitting the situation.
- Twelve days of medical leaves per year are given to eligible staff
- Three months maternity leaves are applicable to eligible staff.

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

Response: 41.6

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

2017-18	2016-17	2015-16	2014-15	2013-14
91	86	82	83	58

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	[View Document](#)
Any additional information	[View Document](#)

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 22.8

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
33	25	22	19	15

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File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	[View Document](#)
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	[View Document](#)
Any additional information	[View Document](#)

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 79.47

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
171	168	153	138	133

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	[View Document](#)
IQAC report summary	[View Document](#)
Details of teachers attending professional development programs during the last five years	[View Document](#)
Any additional information	[View Document](#)

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

Narayana Engineering College, Nellore has a well defined method for performance appraisal system for Teaching and Non-Teaching staff to recognize developing leadership abilities asses the capabilities, competencies and to identify the training needs. Each employee's performance is assessed after completion of every year of service. To assess the performance of Teaching and Non-Teaching staff through performance appraisal system there are different parameters.

Every Faculty Member appointed in the college is assessed for his or her performance based on the API

score included in the proforma. API scores as certified and verified in the proforma are the prime means of assessing a Faculty member for the purpose under Career Advancement and in granting Incentives. The proforma filled by the Faculty Member is checked and verified by HOD at primary level, the Head of the institution at next level, HR at the final level. Recommendations are prepared on the basis of rating and grading derived from the API score.

The faculty appraisal system for **teaching staff** has four components:

CATEGORY 1 (150 Points)

The parameters included are teacher as a persona and teacher as a performer viz. course delivery, question paper setting and evaluation, classroom lectures, seminars, tutorials, , use of innovative teaching methods, course materials, ICT, Labs, student feedback and pass percentage etc.

CATEGORY II (100 Points)

(a) Contribution to co curricular activities including NSS, NCC etc.

(b) Professional contribution to academics, contribution to short term training courses, contribution to University administrative bodies such as Academic council, R&D council Planning & Development committee etc.

CATEGORY III (250 Points)

The Research and allied contribution category is for a score of 250 points.

These are based on the number of publications in Scopus indexed journals, book publication, participations in conferences, sponsored projects, consultancy, Research supervision, awards & honors, fellowship titles, post doctoral/ degrees etc.

CATEGORY IV (50 Points)

This is HOD's assessment, which assesses the attitudinal/ behavioral / professional aspects of the faculty concerned.

Non – Teaching staff:

Self - appraisal of Non – Teaching staff comprises two components.

The first component is based on technical contribution of individuals such as subject knowledge, awareness, productivity, quality, innovation, willingness to learn, diligence etc.

The second component assesses the behavioral aspects like group behavior, punctuality, Quality of work, Regularity, Professional achievements, Workshops, seminars etc attended by the employees.

On the basis of the above details, a committee under the chairmanship of the Principal will evaluate the appraisals of the non-teaching staff and submits its recommendations to HR for final decisions.

It helps to analyze the strength and weakness of the employees of the institution. The systematic procedure helps the Management to motivate the employees for better performance, to provide training in the areas where the faculty needs improvement.

File Description	Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Narayana Engineering college(a unit of Narayana Educational Society) ensures that the internal and external audits are conducted. Both the audits are done on all the aspects of financial functioning of the institute to make sure that the same are carried in a systematic manner, without any deviation from the laid down financial policies and procedures. The institute has a dedicated internal audit team consisting of well qualified and experienced staff members to carry out internal audit duties.

Internal audit team conducts auditing of the Institute's functioning to assure that the set of functions of the institution are carried out in a proper manner. Audit focuses on financial and other related matters, which are included in the manuals. Internal audit after thorough verification of various functions of different aspects, prepare their initial report indicating inaccuracies and deviations in the implementation of the financial policies and procedures of the institution. In doing so, they can find out irregularities in the maintenance of records to bring the same to the notice of the concerned officials. Initial report prepared will be discussed with the chief finance manager to arrive at the final audit report. Final report will be submitted to the Governing body for its approval and ratification,

Apart from the internal audit, the institute engages a reputed firm/agency for conducting external audit in the institute. Such firm or agency conducts its audit normally once in a financial / academic year. External audit conducts detailed audit on all the financial dealing carried in the institute. These both audits' aim and objective is to ensure that all the financial functions are carried in a very systematic manner in line with the policy and procedures laid down by the institute, without any deviation and are supported by vouchers, duly approved by the authorized official. This way the audits ensure that all the functions are carried out in the strict interest of the institute and are directed towards the prosperity and development of the institute.

Copy of the final audit report is brought to the knowledge of the concerned officials to rectify the inaccuracies and inconsistencies occurred in their working. This report also is directed to caution them in not repeating the same or similar mistakes in future.

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 28.83

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
6.97	5.99	6.59	4.94	4.34

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Any additional information	View Document
Annual statements of accounts	View Document

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

Response:

The college has a well-defined financial policy which ensures effective and optimal utilization of finances for academic, administrative and developmental activities which help to implement the institute's vision and mission. We have a dedicated strong financial team in place, which will organize optimum effective utilization of funds. Financial Planning is prepared well in advance for the organization with efficient Budgeting involving the various Academic Departments and Administrative Sections of the Institute. Every year we prepare a budget which involves projected revenue and general expenditure and capital expenditure so that we can manage the funds effectively and planning well in advance. While preparing the budget we will consider the Head of the department requirements which include co-curricular and extracurricular activities in the annual budget. After reviewing of the budget by Principal, the final consolidated budget is forwarded to the Management Committee for approval. The institute is being run with self sufficient funds by generating the cash inflow from tuition fee from students and other miscellaneous incomes. In case of shortage of funds during the expansion or renovation of buildings, the parent company (Narayana Educational Society) always supports by providing required finance and ensures the amount is paid back in certain period based on mutual understanding. We have different purchase committees in place which ensures that the funds are monitored and utilized in an effective manner. The management will review the financial activities through scrutiny of budgets Versus actual in every quarter which will ensure whether the finance utilization is going in correct direction or else management recommends for alternate strategies.

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

IQAC has contributed to institutionalizing the quality assurance processes in the following two areas -

1. Academic
2. Administrative

1. **Academic** :

The Institute is devoted to quality teaching and learning process. It focuses on personality development of students through certificate programmes for skill development, training programmes, and other co-curricular and extra-curricular activities apart from teaching learning,that expand their knowledge for their overall development. IQAC reviews and ensures quality in academic activities undertaken from time to time.

(2) **Administration:**

College ensures high quality in the teaching, development and enhancement of which is supervised and supported by the administrative functioning. Various committees set up in the college are there to respond to the administrative needs. Various committees constituted in different departments help functioning of internal administration in the department reporting to HOD or Principal. IQAC in its periodical verification ensures implementation of quality in administrative functions.

Best practices by IQAC -

Best Practice 1: Academic and Administrative Audit (AAA)

 The Academic and administrative audit is being done at the end of each semester by an internal audit team and by external audit team at the end of the year. Suggestions are given for quality improvement by reviewing the audit reports at different levels and. Besides academics, AAA covers various co-curricular and extra-curricular activities like - guest lectures, bridge courses, certificate courses value-added courses, tutorial & remedial classes, lecture schedule and course files verification, counselling, industrial visits, association activities, external participation, training and placement, collaborations, FDPS, e-learning resources, research, career counselling, workshops / seminars / conferences / extension activities etc, for holistic development of students.

Outcomes of the best practice:

- Principal, HODs, Coordinators and faculty are given suggestions at various levels for improvement based on the discrepancies found during Audit which ultimately lead to overall improvement in the quality of the institution.

Best Practice 2: Teaching- learning and pedagogic initiatives

IQAC organized various teaching and learning initiatives by eminent academicians. IQAC has made a continuous effort to shift from the traditional teacher–centric approach to a student-centric approach. It enabled the institute to use learning approach that integrates student-centered, traditional in-class learning with other flexible learning methodologies using media, web-based learning and e-resources with increased access to educational content and flexibility. Some of the initiatives taken are:

- Organizing expert sessions on various teaching-learning and pedagogic methods.
- Adapting to student centric, ICT enabled and interactive teaching learning methods.
- Organizing faculty enrichment programmes.
- Prominent academicians from reputed institutions were invited for guest lectures.
- Monitoring student academic progress
- Periodical review of teaching learning process.

Outcomes of the best practice are:

- As per the needs of students the teaching pedagogies are styled.
- College has started Moodle-Learning Management System to provide online learning platform to the students.

File Description	Document
Link for Additional Information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

The institution reviews its teaching learning process, structures and methodologies of operations and learning outcomes at periodic intervals through IQAC, Two examples of Institutional reviews and implementations are described below.

Example 1: Student Feedback on Teaching and Learning Process (TLP)

Student feedback on faculty performance is done through comprehensive performance systems and the feedback is communicated to all concerned. Students appraise the faculty through a structured format on a variety of parameters. Based on the feedback the institution up-dates academic programmes and value added programmes most relevant to the current requirements.

Institute has adopted two structured mechanisms to continuously review the teaching learning process are:

1. Online Student feedback

2. Student feedback on TLP.

(a). Online Student feedback:

Online Student feedback has been collecting from students' at beginning of the semester. Feedback analysis has been preparing based on the data and suggested accordingly:

1. Suggestion letters to faculty whose feedback obtain less than 70 (<70)

2. Appreciation letters to faculty whose feedback obtain greater than 90 (>90).

(b). Student feedback on TLP.

Student feedback on TLP has been collecting just before the end-semesters and suggestion/appreciation letters will be issued to the faculty regarding feedback. This feedback has five metrics (attributes) are as follows:

1. Time Sense

2. Subject Command/Delivery

3. Use Of Teaching Aids/ Teaching Methods

4. Attitude

5. Class Management

6. Laboratory Interaction (only for Labs)

Attribute-wise faculty performance is evaluated and suggested accordingly to the concerned faculty who secured less percentage in this regard.

Example 2: Implementation of OBE.

The IQAC reviews the teaching learning process, structures and methodologies of operations and learning outcomes by introducing several initiatives. Sample suggestions of IQAC are used in innovative teaching methods. OBE is initiated by IQAC.

Awareness on pedagogical teaching learning, blooms taxonomy in the design and assessment of course learning outcomes and the outcome based education is given to faculty by conducting various workshops and faculty development programs, conducted in the department and the Institute. Training in Blooms Taxonomy is provided to upgrade the teaching skills and preparation of question papers. The question banks are prepared by faculty members based on Bloom's Taxonomy. Internal assessment 1 will cover Course Outcome (CO) 1& 2, internal assessment 2 will cover CO 3,4 and 5. outcomes and the Knowledge levels are covered in Question banks. Also checks on the standard of the question bank ensure that the questions cover the course outcomes and as per Bloom's Taxonomy.

Outcomes of the practice are:

- With the implementation of OBE model, accomplishment of need can be achieved by the end of the course. Students can understand what is the outcome of the course and teachers can know what is expected of them in teaching during the course.

- Faculty members are provided training in OBE model. Mid question papers are designed in OBE format. Derived COs for all subjects and evaluation is done in both direct and indirect assessment.
- It is a paradigm shift from teacher centric to student centric.

File Description	Document
Link for Additional Information	[View Document](#)

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 2.6

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
7	4	2	0	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	[View Document](#)
Any additional information	[View Document](#)
IQAC link	[View Document](#)

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

Response: B. Any 3 of the above

File Description	Document
e-copies of the accreditations and certifications	[View Document](#)
Details of Quality assurance initiatives of the institution	[View Document](#)
Any additional information	[View Document](#)
Annual reports of institution	[View Document](#)

6.5.5 Incremental improvements made during the preceding five years *(in case of first cycle)* **Post accreditation quality initiatives** *(second and subsequent cycles)*

Response:

The quality enhancement initiatives contributing to incremental improvements in academic and administrative domains, since its inception, are:

Feedback on Teaching Learning*:* The feedback on each faculty from students is taken on various aspects of teaching learning like Time sense, use of teaching aids, Subject command or delivery, class management, attitude, and laboratory management. Feedback in teaching learning helps in assessing the teaching ability of the faculty and in properly advising.

Academic and Administrative Audit (AAA): Academic Administrative Audit are conducted regularly at each end semester by internal audit team and at the end of every year by external audit team. The reviewed audit reports act as an input to the overall quality improvement in various activities.

Teacher's Quality*:* To improve the teaching quality of faculty members Professional Faculty Development Programmes (FDP) are being conducted. The faculty members are also encouraged to acquire additional qualifications to foster their skills.

Strengthening of Research Activities*:* Faculty members are encouraged to publish articles in quality journals.

Industry Academia initiatives*:* Industry academia interaction Programmes are important to equip the students to meet the challenges in their career. Seminars, workshops and technical talks are being conducted to bridge the gap between the university syllabus and industry requirements, regular industrial visits and industry-academia interactions are organised so as to get the practical exposure about the functioning of the organisation, to the students and in utilizing their acquired academic knowledge to the requirement of the industry.

Moodle: Learning management system is being implemented, that allows for extending and tailoring learning environment through online, which enhances quality of existing learning environments.

OBE: To focus on measuring the student's performance through outcomes i.e. Knowledge, skills and attitudes Outcome based education is being implemented. The knowledge and skill sets of the students are evaluated on the required parameters during the course of the programme.

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NAAC Accreditation: IQAC suggested to participate in NAAC accreditation and also to conduct initiative programmes on new NAAC accreditation process.

 ISO certification: Renewal process of ISO Certification process by IQAC is conducted.

Teaching- learning initiatives:

IQAC organised various teaching and learning initiatives to faculty and students by eminent academicians. Some of the initiatives taken are:

- Adapting to student centric, ICT enabled and interactive teaching learning methods.
- Prominent academicians from reputed institutions and industries are invited for guest lecturers on advanced topics.
- Organising expert sessions on various teaching-learning and pedagogic methods.

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 29

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
10	8	5	4	2

File Description	Document
Report of the event	[View Document](#)
List of gender equity promotion programs organized by the institution	[View Document](#)
Any additional information	[View Document](#)

7.1.2

    1. **Institution shows gender sensitivity in providing facilities such as:**
        1. **Safety and Security**
        2. **Counselling**
        3. **Common Room**

Response:

A. Safety and Security –

Safety and security is broadly classified under 4 heads.

1. Physical
2. Environmental
3. Organization
4. Education

1. Physical –

1. 24 x 7 operational CCTV cameras at vital and critical locations.
2. First aid kits and fire extinguishers are available in common places.

3. Security guards are deployed at various placed in the building and in the campus to safeguard the safety.
4. Dispensary is provided to meet health emergencies.

2. Environmental:

The environmental aspect comprises of the physical aspect of security surveillance that helps to maintain safety and security in the premises:

1. Display of Emergency contact numbers of the designated personnel.
2. Movement of visitors is closely monitored.
3. A thorough monitoring and security surveillance is provided till the last women employee / girl student leaves the campus.
4. Separate and secured rest rooms are provided. :

3. organization

Congenial atmosphere is prevailing in the institute where women / girls are encouraged to work and study.

1. Women's Grievance Redressal Cell under Women's Forum is constituted to redress the women's grievances.
2. Boys are educated on the behavioral norms at the time of orientation.
3. Women's Forum conducts different activities to fight against any kind of injustice resulting from gender bias

4. Educational:

1. Self defense training classes are conducted for girl students.
2. Awareness provided on the policy of sexual harassment, gender discrimination and the complaint process.
3. Awareness and training on safety and security (Dos and Don'ts while travelling, emergency contacts, helpline etc.)
4. Posters advocating gender sensitivity are displayed in prominent places.

B. Counseling

Counseling is arranged by the college for girl students in three major areas i.e. Counseling related to academics, career and behavioral patterns.

One faculty member is allotted as a counselor for 20 students. Faculty calls the parent and discusses the academic progress of the ward. Students should meet the counselor once in 15 days. Parents of the students are timely informed wherever the necessity arises such as lack of attendance and poor academic performance.

Counselor provides guidance related to career and placements, encourage the students to attend training programs conducted by the placement cell and also motivate the student for self learning.

The counselor counsels the student on issues like personal, psychological, emotional problems and

difficulties. It helps them to deal with stressful or emotional feelings and to inculcate the positivity in them.

Abnormal behavioral patterns of the students are identified from time to time and such students are referred for psychological counseling.

C.Common Room

Separate Common rooms are provided for boys and girls. Rooms are provided with necessary facilities like first aid box, rest room , cots, beds, mirror, chair, table, washbasin, dustbin, etc.

Facilities are created to cater to health and hygiene related issues typical to the gender.

7.1.3 Alternate Energy initiatives such as:

> **1.Percentage of annual power requirement of the Institution met by the renewable energy sources**

Response: 58.57

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 183742.5

7.1.3.2 Total annual power requirement (in KWH)

Response: 313716

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	[View Document](#)
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 41.13

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 63836.32

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 155200.9

File Description	Document
Details of lighting power requirements met through LED bulbs	[View Document](#)
Any additional information	[View Document](#)

7.1.5 Waste Management steps including:
- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

Solid waste management:

Institute practices the segregation of solid waste into dry waste and wet waste. The collected waste is segregated at the source of generation. Dustbins are placed separately for dry waste and wet waste in the campus.

The dry waste consists of paper, plastic, dry leaves etc are collected separately. Papers, Plastic and scrap are given to the external agencies for recycling.

The dry leaves, twigs etc are collected and decomposed in a pit which is used as manure for trees and plants.

The sanitary waste collected from washrooms is given to a biomedical wash agency having regular pickup service.

Liquid waste management:

The institute practices segregation of waste water into water from wash rooms and water from laboratories. Liquid waste from the wash rooms is conveyed to the Municipal drain and waste water from laboratories is disposed off into closed collecting tank after neutralizing the chemicals etc.

E-waste management

- The condemned batteries and damaged computers are disposed through outside agencies. Obsolete computers and other electronic gadgets are sold to recyclers.
- E-waste generated is given to the authorized dealers who purchase the scrap and reuse the useful components. Apart from this, the electronic and electrical instruments under repair are given to the students during the lab sessions to dismantle and reassemble, which help in application oriented learning. The low configured computers are donated to nearest schools

Various steps have been taken to restrict the generation of waste –

Bio degradable plates, steel plates are used instead of plastic plates; steel spoons replace the plastic spoons

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in canteen. Usage of plastic bags is discouraged in the premises of the college. Awareness programs on waste management are conducted for staff and students to promote eco – friendly practices.

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rainwater harvesting is a technique of collection and storage of rainwater into natural reservoirs or tanks or the infiltration of surface water into subsurface aquifers. The endeavor is to collect and make use of every drop of rain water which drops on the College campus. NECN has an area of 15 acres having 3 blocks, gardens, plantations, play grounds, lawns etc., and situated in average rainfall region it is imperative that proper rain harvesting system is installed on the campus for preserving water, which is scarce in this region.

Three types of rain harvesting systems are installed in the campus. A comprehensive plan for rain water harvesting system is being followed and implemented within the campus. They are,

1) Soak pits – for rain water from roof tops

2) Harvesting pits and ridges– in open area

3) Pavar blocks

1) Soak pits – for rain water falling from roof tops: Rooftop rain water collected on the terrace of institute buildings is collected through adequate pipe system from different parts of the terrace. All the rain water thus collected is diverted to soak pits constructed at various places around the buildings. This helps to recharge the ground water in the campus. It will increase the ground water table of the college premises.

2) Soak pits – in open area: The rain water, which flows down from the higher surface areas, i.e. in the open field and ground, is collected in a particular area by building soil ridges surrounding the area, so that the water does not flow away but stands in that area and soaks into the ground through Harvesting pits (3' wide and 10' deep) constructed at various places in open area and through low lying area dips. This helps in raising the level of the ground water table. Thus if the water table rises, it creates more availability of the water in the wells. This also helps in avoiding soil erosion. Thus the availability of water for the various purposes increases.

3) Paver blocks: Pavar blocks with water permeating property are being used in parking area to recharge the ground water.

7.1.7 Green Practices
* **Students, staff using**
a) **Bicycles**
b) **Public Transport**
c) **Pedestrian friendly roads**

- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

To support and build healthy environment it becomes necessary to adopt green practices. Being a leading institution of Technical Education, Institute initiates the Green Campus activity which will support sustainable environmental development. 'The Green Campus' practice actively promote the various programs for the environment protection and sustainability such as, use of bicycles, public transport, and pedestrian friendly roads, promotes plastic free campus, paperless office, green landscaping with tree and plants.

Students and staff using bicycles, public transport and pedestrian friendly roads

The college is located in the Nellore city and has the bus stop very close by due to which many students commute to the campus using public transportation. Students and staff residing in the nearby areas commute to the college by walk. Some of the staff and students make use bicycles and pedestrian friendly roads to reach the institute and avoiding their personal vehicles. Most of faculty members who are residing at same location, are pooled their vehicles to reach institute to saves fuel.

Plastic-free campus

To avoid use of plastic staff and students use non-plastic items in the institute campus like institute canteen, store, office etc. Our College took an initiation to reduce the plastic bags usage in the campus; in this process college has prevented usage of plastic bags in college canteen and in college premises. Plastic is banned on campus and the same is prominently displayed on all notice boards and corridors. Awareness posters and pamphlets are displayed in prime locations of the campus. College discourages use of plastic by conducting awareness programs to staff and students

Institution has organized clay Ganesh campaign to educate all the students, staff and community aware of using eco-friendly Ganesh for the Ganesh Chathruthi festival.

Paperless office

Institute has ERP (Enterprise Resource Planning) software system and implemented it for academic, training & placement and administrative works to reduce usage of paper. In addition to this, Notices and Circulars by Principal and admin offices are conveyed to all by emails and SMS's. Encourages Internal communication in the campus is through e-mail or e-messages, leading to paperless office. MOODLE and other interfaces are used for the student academic submissions.

Green landscaping with trees and plants

Institute has a canopy of trees and plants that develop healthy environment to safeguard the health of all the inmates. The green belt (30% of total area) has green lawns and trees (maintains biodiversity) which provide shade and beautiful ambience. Institute NSS unit regularly carried out Tree plantation activity. Dedicated staff are allotted for gardening and watering of all trees and plants.

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 4.41

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
30.03	25.50	28.92	27.20	25.97

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	[View Document]()
Any additional information	[View Document]()

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. **Physical facilities**
2. **Provision for lift**
3. **Ramp / Rails**
4. **Braille Software/facilities**
5. **Rest Rooms**
6. **Scribes for examination**
7. **Special skill development for differently abled students**
8. **Any other similar facility (Specify)**

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	[View Document]()
Any additional information	[View Document]()
link to photos and videos of facilities for Divyangjan	[View Document]()

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 13

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7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
4	4	2	1	2

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	[View Document](#)
Any additional information	[View Document](#)

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 24

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
11	06	03	01	03

File Description	Document
Report of the event	[View Document](#)

7.1.12
Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
Any additional information	[View Document](#)
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	[View Document](#)

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7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Any additional information	[View Document](#)
Provide URL of website that displays core values	[View Document](#)

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	[View Document](#)
Any additional information	[View Document](#)

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	[View Document](#)
Provide link to Courses on Human Values and professional ethics on Institutional website	[View Document](#)

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	[View Document](#)
Provide URL of supporting documents to prove institution functions as per professional code	[View Document](#)

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five

years

Response: 36

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
10	08	07	06	05

File Description	Document
List of activities conducted for promotion of universal values	[View Document](#)
Any additional information	[View Document](#)

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

Narayana Engineering College Nellore has the tradition of celebrating all National festivals and birth/death anniversaries of eminent Indian personalities. College observes all national festivals such as Independence Day and Republic Day. All the Faculty, Staff and students of the institution attend these celebrations. Students, teaching and non-teaching staff pay homage to the freedom fighters and martyrs, after hoisting the national flag. These celebrations are followed by various cultural programs, sports and social service activities.

The institute celebrates the birth and death anniversaries of great personalities of India to initiate students into nation's memorabilia.

Gandhi Jayanthi on October 2nd by paying tribute to the father of the Nation,

31st October the birthday of Sardar Vallabhai Patel is celebrated as National Unity day. It is the determination of this Iron Man of India and his undaunting efforts that made Indian Union an unbreachable citadel.

The institute celebrates Engineers' Day on September 15th commemorating the birth anniversary of Mokshagudam Visveswaraya,

Teachers' Day on September 5th to commemorate the birth day of Dr.Sarvepalli Radha Krishnan the best role model of a teacher.

Sadhbavana Diwas is celebrated on the occasion of Rajiv Gandhi Jayanthi.

Every year the students of the institute observe Kargil Vijay Diwas in the month of February to salute the brave-hearts who sacrificed their lives to save the nation from the claws of invasion.

National youth day is celebrated on the occasion of Swamy Vivekannda Jayanthi on 12th January.

National Integration Day is celebrated on 19th November on the occasion of Indira Gandhi Jayanthi.

Babu Jagjeevan Ram Jayanthi is celebrated on 5th April.

Ambedkar Jayanthi is celebrated on 14th April.

Birthday of Abdul Kalam is celebrated on 15th October

File Description	Document
Any additional information	View Document

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Academic activities related to students' attendance, internal and external marks are provided in the college information portal.

User IDs and passwords are provided to parents, students and heads of the departments to access the portal. Parents at any time can peruse the fee dues, attendance, progress and performance of their wards, through online. SMS alerts also are being sent to the parents. No Due Certificates, bonafide certificates etc are issued to the students through the portal.

College provides clear information to the stake holders about all the details of the departments through the website. Principal and Heads of departments carefully monitor and analyse the quality of teaching on the basis on the student's feedback. Feedback on quality of teaching is made known to the concerned faculty.

Systematic and transparent internal evaluation system in line with the guidelines of JNTUA is being implemented.

Workload and Academic Calendar is made known to the faculty in advance.

Transparency in Administrative Functions:

Transparency is maintained in admission of students and in the Admission policy as per the Government norms.

Service rules are made available on the institution website. Administrative Policy Manual, Core Values and Code of Conduct are made available to all the stakeholders on the website, where the roles and responsibilities are well defined.

The institution follows a participative management model where the faculty and the students are members of various committees of the institution and take part in decision making. Institution displays details of all activities and policies in its website for the information of stakeholders.

Transparency in Financial matters:

The Institution is self-financed and the fee is decided as per the guidelines of Fee Regulatory Authority (AFRC), Government of Andhra Pradesh. We have transparent fees collection mechanism to deposit fees in the institution account through DD / Credit / Debit Cards / Online payments. The students have clear information on their scholarships and fee reimbursements. Employee's salary and other remunerations are paid through bank. Before the commencement of academic year, budget is prepared based on the requirements of departments. Consolidated budget is presented to the Governing Body for ratification and approval.

Statutory audit is conducted by internal and external auditors at the end of the financial year. A report of external auditor along with audited balance sheet, income and expenditure statement are available in the website of institute.

Transparency in Auxiliary functions:

The institute provides equal opportunities to all the faculty members to participate in workshops, FDPs, Conferences etc.   Information about the funding opportunities as and when released by funding agencies is circulated to provide equal opportunities to the entire faculty.

Funds/Scholarships received from the Government agencies are audited separately and submitted to the respective agencies.

Welfare Schemes extended to the faculty and staff which are incorporated in the policy document are made accessible to all the employees

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice- I

1. Title of the Practice: Students' Academic Excellence in teaching learning process

2. Objective:

Departments in the college are actively involved in improving the overall results and academic excellence of students. Apart from regular classes remedial classes/coaching for slow learners and various other academic related programmes for advanced learners, are being conducted for achieving academic excellence.

3. The Context:

Students of the college come from various backgrounds and with different abilities of learning. To improve the performance of the weak students, extra classes are conducted where ever necessary. Though some of the students have good knowledge and good understanding levels they are not in a position to avail the opportunities of learning latest technologies due to lack of exposure to career opportunities and training.

4. The Practice:

To improve the performance of students the following programmes were initiated:

Slow learners:

- Remedial classes are conducted for slow learners apart from regular classes for improving their performance.
- Remedial Coaching is also given to those underperformed in end semester exams of the university. Remedial coaching is conducted during extra hours to clear the backlogs.
- Teachers take extra classes to revise the difficult concepts for better understanding.
- Tutorial classes are conducted in every subject to understand the subject better. Based on the student's requirements topics are taught in tutorials.
- Peer learning and group interaction is encouraged involving meritorious students.
- Question bank with key is provided CDF Program (Concepts, Definitions and Formulae) is conducted for Engineering Mathematics, Physics and Chemistry.
- Self learning sessions are arranged.
- The parents of slow learners are given information about their wards performance periodically.

Advanced Learners:

- Extra books are provided in the library.
- Soft skills training Programme, coding skills development, entrepreneurship awareness programmes are arranged for advanced learners.
- Special placement training to excel in placements is given by reputed organizations.
- They are encouraged to refer NPTEL videos, e-books etc
- Gate coaching is given by Eminent and well known faculty from reputed institutes on Saturdays and Sundays. Students who underwent these courses have performed better in competitive exams.
- Certificate Courses are also conducted for advanced learners.

- Additional Assignments.
- Encouraged advanced learners to participate in workshops, conferences and symposia.

5. Evidence of Success:

- Increase in the pass percentage clearly indicates the success of remedial coaching and remedial

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classes.

- Because of remedial coaching the success rate in the university supplementary examination has improved. Because of the remedial classes the overall pass percentage in the university end exams has increased.
- The guidance given to the advanced learners has helped them to excel in their participation in various activities like conferences and symposia.
- The number of students pursuing higher studies in institutions and universities of academic excellence is good.
- The training programmes for students have given them new academic and communication skills equipping them to face campus interviews and in 300 students getting jobs through campus interviews.

Overall these support programmes have helped in improving the quality of teaching learning process.

6. Problems Encountered and Resources Required:

Due to the hectic schedules given by the university we are encountering challenges to find time slots for conducting remedial classes. In spite of this difficulty we are somehow able to conduct the remedial classes.

Some of the students are finding it difficult to attend remedial coaching before supplementary exams

7. Notes

Special coaching for slow and advanced learners is designed to meet the needs of students with less understanding ability to help them make progress in studies.

Best Practice -II

1. Title of the Practice: Community Reach through NSS

2. Objective

The main objective of this initiative by the staff and students of the college is to reach out to the necessities of the society at large and to give back to the community. Creating awareness in the public on several issues they face in their day to day life, helping economically backward people, orphans and old age persons etc. are some of the initiatives taken up to contribute to the society.

3. The Context:

There is a growing tendency in present academia to reach out to the society at large and contribute to the wellbeing and betterment of living conditions prevailing in society.

Some of the Students and staff of the college are voluntarily coming forward to contribute to remove disparity in different areas. The most important arenas in which contribution is made are giving financially aid, bringing awareness on several issues etc. NSS unit of Narayana Engineering College Nellore is thus a

collective initiative of students and staff of the college to understand social problems troubling immediate local community in and around Nellore to integrate these issues with academic study.

4. The Practice:

To inculcate qualities of charity, brotherhood and kindness to fellow human beings, college initiated various programmes meant specifically for the uplifting of community in Nellore district.

Blood donation programmes organized by the students and staff for Blood Bank, Medical Association, Nellore is an exemplary social service practice. Awareness programmes on plastic disposal, eye diseases, diwali fire accidents, earthing and electrical safety, social sites on internet, child education, AIDS, clay Ganesh, energy conservation.

Blood donation camps in association with Narayana Medical college and dental camps in association with Narayana dental college,

Vanam Manam, eye camp, awareness on child literacy,Tree plantation, Swatch Bharat etc are also taken up in the adopted villages like Tp Gudur and Kotturu . Financial helps to the needy people. Visiting old age homes, orphanages and Blind schools is another activity carried out for students under the guidance of teachers.

During every Semester, students and staff of the college visit old age homes, observe and understand their living conditions and help them to lead a better life by distributing food, fruits ceiling fans, medicines and Blankets. Our teachers and students are familiar to the inmates of Geethamayi Oldage Home as they regularly go there and interact with the inmates.

Other Activities initiated are distribution of books and stationary, rice bags, Rally on Helmet Safety, peace rally on Gandhi jayanthi, anti drug rally organized every year for Poor students.

The college observes all important national and international days of social importance like First- Aid-Day, Human Rights Day, International Women's Day, Mental health day, National unity day, voters day, International yoga day etc in the campus and at times extended to beyond the campus.

The various programmes associated with these days are like rallies, camps, conducting seminars are organized in order to develop awareness on social issues to students and the general public. Programmes on Swatch Bharat, Road safety, are also organized.

5. Evidence of Success:

Various programmes conducted have been successful in educating humanity and charity in the students. These programmes are highly successful in bringing awareness in students and public on community living. College and students are given number of appreciations/ awards for various outreach activities. Patients and poor people who are benefitted from various outreach programmes themselves are testimony to the success of those programmes. The observance of various national and international important days is instrumental in spreading basic awareness on national integration, communal harmony and social cohesion in the students. The awesome response from the society and those who received help from the College is an important factor that encourages the students to continue their activities.

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6. Problems Encountered and Resources Required:

Usually general public has a tendency to look down upon the awareness programmes conducted by the students. It was a challenge in the beginning to involve general public to these activities. Students are finding it difficult to balance academic schedules and extension activities, simultaneously. Financial constraints also have restricted the activity to areas in and around the college, Lack of interest in some students, Funds mobilization etc have created some problems in providing extension activities.

7. Notes.

A sense of social responsibility is developed in students as an Outcome of Extension activity.

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

The vision of Narayana Engineering College, Nellore is to be one of the Nation's Premier Institutions for Technical and Management Education and a key contributor for technological and socio-economic development of the nation.

Based on the vision, priority and thrust, the institute consistently provides the best learning experience, to the most productive learning community and in the most creative learning environment in engineering education and to produce technically competent Engineers and Managers.

In line with the institute's mission statement and to accomplish the vision and translate it into a reality, the institution has been using the best teaching learning methodologies like participative learning, experiential learning etc. These learning methodologies can be obtained through industry interactions

The distinctiveness of the institution lies in "Learning beyond the classroom" hence has been conducting various activities such as Guest Lectures, Seminars, workshops, Internships Industrial Visits, etc. through industry interaction apart from classroom teaching to make learning more interactive and interesting.

The industrial collaboration is strengthened to imbibe professional qualities in students for making them conversant with industrial practices. Interaction between institutes and industry is the need of the hour. For students it is important because they get exposure to industry and in getting subsequent placement in various disciplines. Industries are also in need of good students who are well versed with industry standards and capable of achieving those standards. Therefore, there is every need for interaction of industry and academics where academic institutes can prepare students for jobs in multinational companies and industry will also be benefited with the possibility of getting well-trained students. Hence bridging the gap between industry and the institute is a must, to achieve this objective; an Industry Institute Interaction Cell (IIIC) was established in the institution. The objective of the industry interaction cell is to cultivate strong links with industry, promote various activities by faculty and students. To provide continuing education, with the help of persons working in industries so that they can improve their technical

knowledge.   74 activities were conducted under Industry interaction cell during the last five years.

The industrial collaborations also help in leaning competent core technological skills in respective thrust areas. This is mainly done to enhance the practical learning experience of students beyond the theoretical academic structure of the curriculum and it also helps to enhance the industry institute interactions.

The institute has 35 functional MOUs with industries in order to overcome a technological gap between institute and industry requirements. 109 activities are performed under MOU like value added courses, internships, industrial visits, workshops, projects, FDPs, seminars, Technical talks, Guest lectures, research and certificate courses etc during the last five years.

Institute has two way 354 linkages with industries where industry experts facilitate internships, industrial visits, projects, faculty exchange, in plant training and field projects to the faculty and students through various programs. This interaction is maintained under linkages and MOUs and is executed to promote and strengthen the industry institute interaction.

Institute has EDC with an objective of creating and fostering the spirit of entrepreneurship among the students. The ED cell conducts Entrepreneurship camps in which students can be able to interact with experienced industry experts.

The institute has a placement cell with the primary aim of placing the students. While recruiting the students are given pre-placement talks by the recruiters about latest trends in industries. The main goal of this is to groom students for the needs of the industry. Placement cell also undertakes training on recent advancement in technologies to make the students suitable for placements in industries through experts from various industries.

We are able to achieve one of the objectives of our vision statement, by developing our students' as technically competent, through imparting training in various technical aspects, inviting and involving experts from Industries.

5. CONCLUSION

Additional Information :

The details regarding additional information required for Metrics in various criterions exceeded the space provided in the SSR. Therefore the required additional information for some of the metrics are posted in the institutional website and links are given below:

EXTENDED PROFILE:

http://www.necn.ac.in/NAAC/extended-profile/index.php

CRITERION-I :CURRICULAR ASPECTS

http://www.necn.ac.in/NAAC/critertion-i/index.php

CRITERION-II:TEACHING,LEARNING AND EVALUATION

http://www.necn.ac.in/NAAC/critertion-ii/index.php

CRITERION-III:RESEARCH,INNOVATION AND EXTENSION

http://www.necn.ac.in/NAAC/critertion-iii/index.php

CRITERION-I V:INFRASTRUCTURE AND LEARNING RESOURCES

http://www.necn.ac.in/NAAC/critertion-iv/index.php

CRITERION-V:STUDENT SUPPORT AND PROGRESSION

http://www.necn.ac.in/NAAC/critertion-v/index.php

CRITERION-VI :GOVERNANCE,LEARDERSHIP AND MANAGEMENT

http://www.necn.ac.in/NAAC/critertion-vi/index.php

CRITERION-VII :INSTITUTIONAL VALUES AND BEST PRACTICES

http://www.necn.ac.in/NAAC/critertion-vii/index.php

OTHERS:QlM

http://www.necn.ac.in/NAAC/others/index.php

Concluding Remarks :

Narayana Engineering College Nellore   one of the pioneering self-Financed engineering institute of Andhrapradesh is marching ahead with its vision of Producing technically competent engineers imbibed with professional, ethical and social values with dedicated efforts of the management, faculty, staff and students. Institute started with only three UG Programmes, is today offering   6 UG, 5 PG indicating its desire to grow vertically. It strives to achieve academic excellence by developing healthy liaison with all stakeholders to enrich teaching-learning process for producing employable engineers who will be instrumental in national development. Campus is vibrant with lot of all round activities throughout the year supported by professional bodies like IETE,CSI,ISTE,CII student associations and 34 cells and committees. We have been keeping pace with the changing time by adopting blended teaching learning and expanding our knowledge base. The institution is practicing better teaching-learning practices by implementing Outcome Based Education(OBE) by involving all the stakeholders. This is due to pro active faculty members with a proper blend of young and experienced.   The institution is continuously organizing faculty development programmes, seminars and conferences, workshops, for the benefit of faculty, Best infrastructure has ensured excellent academic delivery. This all has been possible due to transparent good governance and a very substantial participation by alumni who have proved their leadership in their respective profession.

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6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification
1.2.1	Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years 1.2.1.1. How many new courses are introduced within the last five years Answer before DVV Verification : 315 Answer after DVV Verification: 307
2.4.4	Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years 2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years Answer before DVV Verification: <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>31</td><td>26</td><td>27</td><td>25</td><td>26</td></tr></table> Answer After DVV Verification : <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>21</td><td>17</td><td>20</td><td>19</td><td>19</td></tr></table>
3.4.2	Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years 3.4.2.1. Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years Answer before DVV Verification: <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>14</td><td>12</td><td>08</td><td>08</td><td>09</td></tr></table> Answer After DVV Verification : <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>4</td><td>3</td><td>2</td><td>2</td><td>3</td></tr></table>
3.4.3	Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years 3.4.3.1. Number of extension and outreach Programs conducted in collaboration with Industry,

Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
19	16	14	11	12

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
19	14	13	11	11

4.2.6 Percentage per day usage of library by teachers and students

4.2.6.1. Average number of teachers and students using library per day over last one year
Answer before DVV Verification : 497
Answer after DVV Verification: 396

Remark : As per students using library on 21/7/17, 26/9/17, 19/10/17, 14/12/17 and 5/1/18.

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

5.1.4.1. Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
2444	1725	1968	1771	1657

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
2483	1774	1879	1830	1629

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
15	16	12	13	09

	Answer After DVV Verification :				
	2017-18	2016-17	2015-16	2014-15	2013-14
	08	07	08	06	04

5.3.3	Average number of sports and cultural activities/ competitions organised at the institution level per year 5.3.3.1. Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years Answer before DVV Verification: <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>34</td><td>30</td><td>23</td><td>19</td><td>17</td></tr></table> Answer After DVV Verification : <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>21</td><td>17</td><td>12</td><td>09</td><td>08</td></tr></table>
7.1.10	Number of Specific initiatives to address locational advantages and disadvantages during the last five years 7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years Answer before DVV Verification: <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>07</td><td>05</td><td>03</td><td>02</td><td>03</td></tr></table> Answer After DVV Verification : <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>4</td><td>4</td><td>2</td><td>1</td><td>2</td></tr></table>
7.1.11	Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere) 7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wise during the last five years Answer before DVV Verification: <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>11</td><td>06</td><td>05</td><td>02</td><td>03</td></tr></table> Answer After DVV Verification : <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr></table>

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11	06	03	01	03

Remark : As per report of initiatives taken to engage with and contribute to local community for 20114-15 and 2015-16 provided by HEI.

| 7.1.17 | Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years |

7.1.17.1. Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
13	08	07	06	05

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
10	08	07	06	05

2.Extended Profile Deviations

ID	Extended Questions
1.3	Number of outgoing / final year students year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
672	706	750	644	681

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
611	590	627	532	574