SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

DNR COLLEGE OF ENGINEERING AND TECHNOLOGY

DNR COLLEGE CAMPUS, BALUSUMUDI, BHIMAVARAM-534202
534202
dnrcet.org

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Dantuluri Narayana Raju College (D.N.R) was established in the year 1945, before India got independence, and was an offshoot of the national movement and Renaissance thinking. Being agrarian, the Godavari region had been kept out of higher education in the pre-Independence period. Sri Dantuluri Narayana Raju, a freedom fighter, an activist, and a visionary, wanted to provide the uneducated rural masses with the hitherto unthinkable and unreachable source for their overall development and welfare, i.e., higher education. That visionary, with the help of a limited number of committed lieutenants and philanthropists, strived hard with a missionary zeal and realised the establishment of a college at Bhimavaram, known as West Godavari Bhimavaram (W.G.B) College, in 1945. In 1964, it was renamed Dantuluri Narayana Raju (D.N.R) College in memory of its founder. Under this premier association, DNR College of Engineering & Technology (DNRCET) was established in the year 2010. DNRCET offers seven UG programmes(B.Tech.) in CE, EEE, MECH, ECE, CSE (AI&ML) and AI&DS and four programmes (M.Tech.)in CE, MECH, ECE, and CSE. The institute has been running successfully with the support of well qualified and committed faculty for the last twelve years, serving the needs of the people in and around this area while also extending its hands to other districts as well. The college has a motto of providing quality engineering education through well-defined teaching and learning methodologies followed by the curriculum of JNTU, Kakinada, in a highly disciplined environment. Though the college was started with an intake of 300 seats, it is now enhanced to 540 seats. The DNR College of Engineering & Technology is also conducting several training programs, workshops, expert lectures, awareness programs, etc. in different disciplines to facilitate the students' preparation for the interviews they will face by the time they complete their graduation. Besides the technical programmes mentioned above, the institution also serves the community in various ways through its NSS unit. It is a great privilege that many students have membership in technical bodies like ISTE and CSI. The dedicated placement cell regularly conducts grooming sessions to make students industry-fit.

Vision

To evolve as a Quality Institution in Teaching, Innovative Research, Entrepreneurship and Consultation in Engineering & Technology, empower rural youth globally competent and self-disciplined technocrats.

Mission

IM1: Inculcate technical knowledge, soft skills through student centric

teaching &learning.

IM2: Strengthen industry institute interaction, provide solutions to

 theever-changing requirements.

IM3: Implant entrepreneurial attitude and ethical values.

IM4: Create work culture towards learning, Research & Development.

IM5: Develop a unique practice that instills responsibility and

accountability among the stakeholders

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Strengths of the Institute:

S1. The college is accredited by NAAC in the year 2019.

S2. Located in Hygienic environment away from residential and commercial areas.

S3. Well equiped classrooms, labs, library, lecture halls, seminar rooms, and administrative blocks.

S4. One of the reputed colleges among top 174 engineering colleges affiliated to JNTUK and preferred by students aspiring to join engineering.

S5. Qualified and well educated management with broad vision for academic excellence.

S6. Robust financial base with many student seats filled.

S7. Provides work friendly environment.

S8. Committed faculty members with good retention ratio (70%) and team spirit.

S9. Excellent Training and Placement Centre

S10. Well established labs with modern equipment and facilities.

S11. Excellent library with digital facility and e- journals.

S12. Available of Wi-Fi enabled networking and e- classrooms.

S13. Disciplined Students.

S14. Healthy atomsphere for faculty, staff, and students.

S15. Excellent in-door and out-door Games and Sports facility

Institutional Weakness

Weaknessesof the Institute:

W1. Inability to reform curriculam as per the current technological developments and industry needs.

W2. Inadequate and delayed funds released by State Government to educational institutions.

W3. No significant industry and Institution initiations.

W4. Industrial visits by students for practical training due to lack of improper system.

W5. Shortage of senior faculty with PhD, industrial research and academic experience.

W6. Lack of NRI student attraction

Institutional Opportunity

Opportunitiesof the Institute:

O1. Engineering consultancy to local industry

O2. Faculty pursue PhDs in local universities without academic and family disruption

O3. Location advantage for Institute - industry tie-ups for project work, consultancy, training and placement

O4. Develop technical and academic expertise in new fields.

O5. R & D projects Industry Sponsored.

O6. Exchange programmes for faculty and students with other institutes.

Institutional Challenge

Challengesof the Institute:

C1. Mushrooming Engineering Colleges

C2. Inability to meet industry demand and market challenge

C3. Diminishing availability of academicians to maintain quality

1.3 CRITERIA WISE SUMMARY
Curricular Aspects

The college is affiliated to JNTUK, Kakinada, and follows the curriculum prescribed by the university. The curriculum is planned and implemented by the institution, guided by its vision and mission. The college offers seven UG programmes and five PG Programmes in the fields of CE, EEE, ME, ECE, CSE(AI&ML),AI&DS and CSE. The college also offered 52 certificate courses during the last five years. Some of the faculty are members of BOS in various reputed organizations. Elective courses have been introduced in nine courses during the last five years. During the last five years, the college has also offered 43 value-added courses imparting transferable and life skills.

Three new courses are introduced in the curriculum to cater to the needs of emerging trends. The students are given options for selecting the electives as prescribed in the university curriculum. The students are encouraged to learn and enhance technical skills through their participation in various add-on programmes organized by various departments of the college. The institution practices equity and equality of opportunity among all students, irrespective of caste, creed, regionalism, gender, etc. Awareness programmes are also initiated by NSS, which extensively carries out various social activities such as environmental protection, ecological preservation, women's empowerment, and human values. Thus, students are encouraged to take part in life skills programmes organized by various departments of the college, apart from field visits and internships in various reputed industries. Structured feedback on the curriculum is obtained from students, teachers, alumni, and parents. The obtained feedback is analyzed, and a report will be furnished for further improvement.

Teaching-learning and Evaluation

Students get enrolled as per Andhra Pradesh state government guidelines. students from   admitted from other states also. The college implements teaching and learning practises with interactive techniques, incorporating various strategies for facilitating slow learners through a collaborative learning process, clarifying doubts, revising important concepts, and practising problems in subjects. The college is maintaining student faculty ratio as per the norms. Student centric methods, such as experiential learning, participatory learning, and problem-solving methodologies, are used to enhance learning experiences. For every 15 students, one mentor has been appointed. Remedial classes, motivational classes, study materials, etc. are offered to support the slow learners. Mentors, faculty, alumni, and senior students are assigned for their academic growth. Scholarly activities are encouraged for advanced learners to satisfy their learning capabilities. Faculty is encouraged to use ICT tools for effective teaching and to utilise e-resources to enrich teaching and learning methods. All the faculty are using ICT facilities to make the teaching and learning process most effective. The institute has adequate faculty as per norms. The institution is strengthened by its well qualified and experienced faculty. Excellence in teaching and learning is achieved by recruiting competent faculty. Recruitment of the faculty is done as per the norms of JNTUK and AICTE. Facilities like ramps, wheelchairs, lifts, etc. are provided for the differently abled students. Self-learning and innovative pedagogies of teaching and learning are adopted for the betterment of students.

The Institute conducts internal and external exams as per university norms. Program and course outcomes are attained as per internal and external assessment. Mechanisms to deal with examination related grievances are transparent, time-bound, and efficient.

Research, Innovations and Extension

The college has a well-defined vision and mission that focuses on the time trusted growth of the institution as well as the academic proficiency of the students. The management, principal, and faculty members are involved together in the formulation and implementation of the quality policy and plans. At all levels, powers have been delegated, So as to provide operational autonomy and a decentralized governance system. A streamlined system has been devised to analyze the grievances and get feedback on how the institution is functioning periodically. The professional development of the faculty members is enhanced by conducting FDP's and training programmes. The financial transactions are monitored by regular audits. The faculty members are motivated to avail funds from external funding agencies for their research work. Two faculty members of the institute are recognized as Research Guides. The incubation centre was established in 2010. The institute has taken proactive measures to implement the R&D policy. Faculty is given financial assistance and encouraged to publish papers at national and international conferences and journals and attend FDP's. There was considerable number of publications during the last five years. Students are also given financial assistance for innovative projects like SIH (the Smart India Hackathon). The institute regularly organizes different extension activities throughout the year to engage the students in community oriented activities to develop a sense of social responsibility, service orientation, and work for the holistic development of society. The NSS unit of the college received umpteen numbers of recognitions from the government or recognized bodies. During the last five years, the college's NSS unit organized several activities. The institution is encouraging the students to participate in NSS activities. The participation of the students in extension activities leads to practical experience that effectively supplements their theoretical knowledge and imbues awareness of civic responsibility, social understanding, leadership, community involvement, and team building skills. The institute has signed 21 functional memorandums of understanding with national and international institutes and industries over the last five years.

Infrastructure and Learning Resources

Infrastructure plays an important role in building the brand of an institute. The institute has 43 classrooms with ICT facilities, well equipped laboratories, and 4 seminar halls. Facilities like departmental libraries, digital library etc., and a 1,000 seated capacity open air auditorium are also available for the staff and students. Considering physical activities to be equally important, the institute created several indoor and outdoor sports facilities, which include an indoor sports complex, a playground, a gym, and a yoga centre. A RO water plant has been installed to meet the campus's drinking water needs. A college-attached hostel facility for boys and girls separately exists.

Transportation is provided to students and staff from every nook and corner of the district at a nominal cost. The library being the hub of knowledge, it is vital to have sufficient titles and subscriptions to cater to the needs of students and faculty. It has an impressive collection of 36192 volumes with 7564 titles, 118 national and international print journals, 10 magazines, and 11 newspapers to cater to the engineering streams. The library books can be easily accessed through the use of the Online Public Access Catalogue (OPAC), which is fully automated with the integrated library management system "ECAP-LIBMAN" software. The college is equipped with a digital library facility where students can access different e-journals and online resources through DELNET, NDL, NPTEL-SWAYAM, JOURNALTOCS, and SHODHGANGA. The library has its own collection of rare books. Each department maintains a library that consists of the latest books, project reports, and theses for reference by the staff and students. The IT infrastructure strategies are developed as per the guidelines of AICTE and the affiliated universities from time to time. The institute is constantly upgrading both the software and hardware as per the prescribed norms and academic standards. The institute has an adequate student computer ratio with two providers each of 200Mbps of bandwidth on the Internet connection. The campus is Wi-Fi enabled, apart from the high-speed LAN system.

Student Support and Progression

The institute provides a number of mechanisms for student support and mentoring. The HoD's and faculty help to identify, understand, and resolve the student's issues. The government of AP provides scholarships to many students based on their eligibility. Every year, the institute has established a thriving tradition of awarding scholarships to deserving and meritorious candidates. Besides, non-government agencies also offered financial support for the students based on their merit and financial background during the last five years. The college is committed to excellence in all spheres to make the stay an enriching experience. The college provides access to all kinds of reinforcements that students would need to complete their education, such as remedial classes, bridge courses, soft skills development, career counselling, and personality enhancement sessions by inviting external experts. As a result, several students benefited from guidance for competitive examinations and career counselling.

The Training and Placement cell offers career counselling and pre-placement guidance at various levels to prepare students for advancement to higher education, as well as internship programmes and placements. The success of training is reflected in placements; the majority of eligible students get job offers in their final year. Co-curricular and extracurricular activities are part and parcel of a student's life in college and enable them to discover their true potential. The students participated in intra-college sports, tournaments, and cultural competitions and achieved various awards during the last five years. The college organises sports and cultural competitions on the occasion of National Sports Day, National Youth Day, Sankranti Sambaralu, and Annual Day. The college also has a strong Women Grievance Redressal System under the roof of Internal compliants Cell. The institution has a registered Alumni association and it works closely with the students and the department specifically, providing guidance and mentorship as well as financial assistance.

Governance, Leadership and Management

With a vision and mission to impart quality technical education, the institute has put efforts in the right direction for academic excellence under effective leadership. DNRCET has a decentralised mechanism for effective implementation of decisions taken by its governing body. The institute prepares its annual strategic plan keeping in mind the directions and guidelines recommended by AICTE and its affiliate universities. The principal, along with the vice principal, IQAC, HODs, A.O., and various committees, ensure the smooth functioning of the institute. DNRCET has a hierarchical organisational structure with well-defined roles and responsibilities. For effective execution, the institute is in the process of creating a paperless environment and has several e-governance initiatives through the Engineering College Automation Package (ECAP). The various bodies, cells, and committees present in the institute work in tandem to achieve the set targets as discussed and decided in the meetings. The institute considers staff welfare as one of its prime objectives, so several welfare policies are operational. Financial support is extended to the staff for their professional development. In the last five years, the college has organised 64 professional development programs. They are also encouraged to attend and conduct programmes like FDPs, STTPs, and conferences. At the same time, the annual performance appraisal is conducted without fail. Optimal utilisation of its resources has mobilised funds from various organizations, which are periodically audited. DNRCET received Rs 33.15 lakhs as funds from non-government bodies and individuals during the last five years.

Prior to the establishment of the IQAC cell, the Institute used a self-disciplined model in all aspects of its operations; however, many policies were formalised after the formation of the IQAC cell. IQAC plays a major role in inculcating a quality culture in the institute, which is functioning effectively and improving the quality

level of the institute. IQAC is regularly evaluating the academic performance of the students and taking steps to improve the student-centric Total Quality Management (TQM) on campus. IQAC is active in guiding the faculty to upgrade their skills and delivering the latest developments to the student community. As a whole, IQAC is responsible to streamline the existing procedures, policies and practices, aiming at overall improvement of the institute.

Institutional Values and Best Practices

The prime role of an education institute is to impart teaching and inculcate the social responsibility among the faculty and students. The Institute has conducted considerable number of gender equity programmes during the last five years. The gender sensitization and professional ethics are a part of the curriculum. To further sensitize the students, the institute conducts frequent training programmes on safety, security, and even personal counseling. The institute facilitates girls' common rooms.

The institute has a 100KVA grid-tied roof-top solar plant that can generate 146,000 KWH of green energy per year. Sensor based energy conservation and use of LED Bulbs, water conservation, plastic ban, landscaping with trees and plants are also implemented by DNRCET and more than 52% of campus lighting is provided by LED.

In the path towards "Reduce, Reuse, and Recycle," the institute has set up a solid, liquid, and e-waste management system. Rainwater harvesting is also planned through multiple pits. Landscaping is maintained on the campus to create an eco-friendly environment. As per the guidelines, the institution allocates scribes for Divyangjan students. The college NSS unit organizes various awareness activities to address the locational advantages and disadvantages of surrounding areas. The institute observes most of the national festivals and anniversaries of great Indian personalities with active participation from students and staff. Transparency in financial, academic, administrative, and auxiliary functions is also maintained by the institute, which demonstrates it in real-world practices through various bodies.

The institute maintains two best practices, such as student counseling, mentoring and NSS extension activities, which imparts human values, and employability enhancement skills to make them industry-ready. As per the Quality Policy, the institute is committed for creating, archiving and disseminating knowledge in Science, Engineering and Technology for the service to the humanity. DNRCET is unique and is provided with a Technical Skill Development Institute (TSDI) which is used to promote Skill Development & Entrepreneurship in and around the rural areas of DNRCET.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	DNR COLLEGE OF ENGINEERING AND TECHNOLOGY
Address	DNR College campus, Balusumudi, Bhimavaram-534202
City	Bhimavaram
State	Andhra Pradesh
Pin	534202
Website	dnrcet.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	M Anjan Kumar	08816-221237	9121214528	08816-221236	dnrcet@gmail.com
IQAC / CIQA coordinator	B.v.s. Varma	08816-221238	9912712546	08816-221236	bvsvarma2002@gmail.com

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details

State	University name	Document
Andhra Pradesh	Jawaharlal Nehru Technological University,Kakinada	[View Document](#)

Details of UGC recognition

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

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	[View Document](#)	07-07-2022	12	

Recognitions

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

Location and Area of Campus

Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	DNR College campus, Balusumudi, Bhimavaram-534202	Rural	10.81	17686

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	30	15
UG	BTech,Electrical And Electronics Engineering	48	INTERMEDIATE	English	30	30
UG	BTech,Mechanical Engineering	48	INTERMEDIATE	English	60	7
UG	BTech,Electronics And Communication Engineering	48	INTERMEDIATE	English	120	118
UG	BTech,Computer Science And Engineering	48	INTERMEDIATE	English	60	39
UG	BTech,Computer Science And Engineering	48	INTERMEDIATE	English	180	180
UG	BTech,Computer Science And Engineering	48	INTERMEDIATE	English	60	49
PG	Mtech,Civil Engineering	24	Degree	English	18	6
PG	Mtech,Mechanical Engineering	24	Degree	English	18	2
PG	Mtech,Electronics And Communication Engineering	24	Degree	English	18	0

PG	Mtech,Computer Science And Engineering	24	Degre	English	18	4
PG	MBA,Management Studies	24	DEGREE	English	120	48

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				13				4				67
Recruited	13	0	0	13	4	0	0	4	51	16	0	67
Yet to Recruit				0				0				0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				19
Recruited	14	5	0	19
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				3
Recruited	3	0	0	3
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.	12	1	0	4	0	0	1	1	0	19
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	48	17	0	65
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

Part Time Teachers									
Highest Qualification	**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**
	0	0	0	0

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

Programme		**From the State Where College is Located**	**From Other States of India**	**NRI Students**	**Foreign Students**	**Total**
UG	Male	275	0	0	0	275
	Female	163	0	0	0	163
	Others	0	0	0	0	0
PG	Male	28	0	0	0	28
	Female	20	0	0	0	20
	Others	0	0	0	0	0
Diploma	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

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	57	34	22	22
	Female	22	9	4	12
	Others	0	0	0	0
ST	Male	0	0	4	5
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	175	138	131	126
	Female	75	60	49	54
	Others	0	0	0	0
General	Male	109	224	198	143
	Female	74	137	109	108
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		512	602	517	470

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Institute is offering UG and PG programs in Engineering along with MBA.
2. Academic bank of credits (ABC):	Institute is NOT eligible and is in the process of getting Autonomous Institution.
3. Skill development:	Various Skill development programs are offered in collaboration with AP state Skill Development Corporation in addition to the value added / certification courses by all departments.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Being affiliate institution, Language courses as per the university syllabus are offered. Institute os in the process of getting Autonomy such that few language courses shall be offered.

5. Focus on Outcome based education (OBE):	Institute applied for NBA Accreditation for the UG Engineering programs. SAR is submitted and waiting for the NBA Expert team inspection. OBE is practised in the institution.
6. Distance education/online education:	Being Affiliated institution, HEI is NOT allowed to offer distance / online education.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, DNR College of Engineering &Technology (DNRCET), Bhimavaram established Electoral Literacy Club (ELC)
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes, ELC consists of student volunteers and faculty members. It is functional.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Yes, the Student Volunteers in ELC extend technical support during the time of voting in various polling booths located in the vicinity of the college. The student volunteers participate in electoral process in voter registration of the students and other stakeholders.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Yes, DNRCET celebrate National Voter's Day every year and students and volunteers participate in good number and democratic values will be infused among them
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	Yes, enrollment as voters is a perennial process. Students who attain 18 years of age will be enrolled as voters

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1594	1563	1404	1413	1258

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

2 Teachers

2.1

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

Response: 100

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

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
84	92	94	85	72

3 Institution

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
412.13	458.87	294.60	413.86	605.26

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

DNR College of Engineering and Technology, affiliated to JNTUK, Kakinada follows the curriculum prescribed by the University. This curriculum is revised periodically by the University Board of Studies. The college ensures effective curriculum delivery through systematic and strategic transparent mechanism. The university publishes the academic calendar for both semesters. The university academic calendar focuses on the date of commencement of the class work, and the number of instructional weeks per mid-term syllabus including the mid-term examination schedule and semester-end examination schedule. The Heads of Departments conducts the meetings to distribute workload, allot subjects, plan the activities of the department and to review the completed syllabus.

IQAC considers the feedback of students, faculty & parents for the best practices.

The college constitutes a Time Table committee consisting of senior faculty members from each department and time tables are prepared based on the academic calendar of the university for academic and co-curricular purposes including theory, practical, tutorial, sports, value education, and add-on classes. This ensures a balance between the various types of activities a student is expected to participate in.

Periodic assessment of curriculum delivery is conducted by IQAC through HODs. Based on the courses allotted, the faculty members prepare and document a detailed teaching plan and notes in compliance with the academic calendar. They meticulously record their day-wise teaching in the provision-given day-wise attendance register which is checked by the HoD concerned twice a month. IQAC also regularly monitors the progress of the teaching-learning process. It enables faculty to efficiently use tools for innovative teaching.

As a part of the Continuous Internal Evaluation (CIE) process, assignments are given to the students twice in a semester and evaluated .The institution strictly follows the University academic calendar in the conduct of Mid Exams. The timetable for the Mid exams is displayed in advance. The internal lab tests are conducted once in a semester and laboratory experimentations are evaluated continuously throughout the semester. The internal examination-related activities like the evaluation of the answer scripts, posting of marks in the portal and display of marks on the notice board for students are implemented in a systematic and time-bound way.

File Description	Document
Upload Additional information	[View Document](#)
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1.2 Academic Flexibility

1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years

Response: 95

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Response: 99.61

1.2.2.1 **Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1594	1593	1404	1413	1200

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

1.3 Curriculum Enrichment

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

Response:

The Institution incorporates cross-cutting topics such as empowerment, environmental sustainability, human values, and professional ethics into the curriculum.

PROFESSIONAL ETHICS AND HUMAN VALUES (PEHV):

PEHV provides basic inputs to students in order to instill human values and help them grow into responsible citizens with proper personalities. It also provides an overview of the numerous challenges that every professional faces when performing their tasks. To create scientific approach and social awareness among the students, lectures and quiz, essay, etc. are conducted by NSS committee. The college takes efforts for integration of ethical and human values through extra-curricular activities also. It gives the student the sensitivity and global perspective needed to properly fulfill professional commitments in today's society. National festivals like Independence Day and Republic Day serve as a platform to enliven patriotic and moral values. Professional Ethics & Human Values, Constitution of india, Indian Traditional Knowledge etc courses are few mandatory courses included in the curriculum and students will be able to understand the importance of ethics and values in their personal, social & professional life after studying these courses.

GENDER SENSITIZATION

The college has Women Grievance Cell and Grievance Redressal Cell to provide counseling to students, promote gender equity among students and also deal with related issues of safety and security of female students, staff and faculty. Gender sensitization takes place in the institution by exposing students to debates about the politics and economics of work, as well as assisting them in critically reflecting on gender violence. Students are educated about the biological, sociological, psychological, and legal dimensions of gender. Gender sensitization is being improved using the research facts that have been developed. Professional men and women are better able to work and live together as equals. Every learner develops respect for women from all areas of life. The institute follows the Andhra Pradesh government's reservation policy for female students.

ENVIRONMENTAL STUDIES

DNRCET promotes environmental protection through tree plantation and other sustainable development programs. Every year, N.S.S. committee undertakes a host of activities in the nearby villages during the special camps. In these camps, N.S.S. organizes various environment related programs including tree plantation, village cleanliness, cleaning of gutters, digging of soak peats, plastic free drive, Poster Competition, Debate Competition, etc. The student should be knowledgeable about natural resource conservation in order to be recognized for mankind's protection. Our curriculum contains a central theme of above aspects.

IPR & PATENTS

Engineering students who aspire to be entrepreneurs and start businesses are eager to learn about

Intellectual Property Rights(IPR) which can serve as the icing on the cake for their ideas and creations. Engineers should learn the fundamentals of the three conventional domains of intellectual property, copyrights, trademarks and patents. The above ideas are nearly incorporated in the curriculum.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

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

Response: 40.46

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

Response: 645

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

1.4 Feedback System

1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website (Yes or No)

Response: Yes

File Description	Document
Upload supporting document	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 80.09

2.1.1.1 **Number of students admitted year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
512	602	517	542	470

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

2021-22	2020-21	2019-20	2018-19	2017-18
732	732	612	612	612

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

Response: 85.09

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

2021-22	2020-21	2019-20	2018-19	2017-18
345	290	222	250	257

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

2021-22	2020-21	2019-20	2018-19	2017-18
356	356	297	297	297

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.2 Student Teacher Ratio

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

Response: 18.98

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 using ICT tools

Response:

DNRCET follows the student centric methodologies on addition to the regular teaching practices as mentioned below.

STUDENT CENTRIC METHODOLOGIES

PARTICIPATORY LEARNING METHODS	- Assignment - Case studies - Group task, Quiz - Seminar, - Competitions – project expo, - Sports activities - Cultural activities - Peer-assisted learning
PROBLEM-SOLVING METHODOLOGIES	- Assignments - Home work - Tutorial - Simulations - Class room exercises Problems, - case studies that involve current global/societal issues

Experiential learning Methods(*Learning through reflection on doing*)	• Demonstration • Field work / visit • Internship • Seminar • Workshop • Laboratory experiment • Communication Skill lab training • Industrial training
THE HUMANITIES	• Cultural activities • Celebrations • Report writing • Quotes / References • Orientations / Motivational talks • Ethical dilemmas
SELF-DIRECTED LEARNING	• Open elective • Competitions • MOOC certification • Value added courses • Digital learning • Online survey / quiz • Literature survey • Web based research
ROLE PLAY	• Seminar • Debate • Quiz • Project presentations • Competitions • Event management • Professional / ethical dilemmas
PROJECT-BASED LEARNING	• Project- Academic, or research • Mini-project • Internship • Real time projects
Integrated/Inter-disciplinary learning	• Open elective

A sample lesson plan prepared and followed for Mathematics-I course is atttached for ready reference.

Faculty uses all the ICT resources effectively for the curriculum delivery. ICT includes the ECAP as Institutional LMS, NPTEL/Swayam and other MOOCs available that are offerd by various agencies. The attached lesson plan also shows the listing of ICT web refernces used by M-1 faculty.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

2.4 Teacher Profile and Quality

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

Response: 100

2.4.1.1 **Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:**

2021-22	2020-21	2019-20	2018-19	2017-18
84	92	94	85	72

File Description	Document
Upload supporting document	[View Document](#)

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

Response: 19.67

2.4.2.1 **Number of full time teachers with NET/SET/SLET/Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
19	18	18	15	14

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.5 Evaluation Process and Reforms

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

Response:

The institute has worked out a powerful mechanism to treat with examination related grievances which are transparent in the pattern and conduction of continuous internal evaluation (CIE) and redressal of grievances within time frame. The college strictly adheres to the guidelines and rules framed by JNTUK to

which our college is affiliated to while conducting internals and semester-end examinations. The end semester examination is conducted by the university and the students appear at the respective centre allotted by the university (jumbling system).

At Institute level:

At the Institute level, the Dean of examination along with his crew handles the issues regarding evaluation process. The faculty distributes evaluated answer scripts to students and any clarifications or grievances are addressed by the faculty and justice is ensured. The internal marks are displayed on the notice board and students can verify answer scripts in case of any doubt and will be rectified.

If any discrepancy like mistakes in question paper, marks allocation, corrections are noticed by tthe students, the concerned faculty of the subject will resolve the discrepancy and the necessary corrections will be made. If a student is not satisfied with the marks awarded even after resolution by the faculty, then he may represent the same to the HOD concerned. All such representations are attended transparently and are reassessed if necessary.

Parents are informed about their ward's performance through SMS and E-Mail. Students are counselled by the faculty mentor and remedial classes are conducted for students who failed in the examinations. The university issues circular and specifies a stipulated time period to post the Internal Assessment marks and they are entered in the University web portal accordingly. Students can individually view their performance in the University portal.

At University level:

If the students have grievances related to the evaluation of university answer scripts, the circulars issued by the university in this regard will be intimated through notice boards to all stakeholders. Students can apply and follow the evaluation procedure as specified below.

Re-Evaluation:

Students can apply for re-evaluation within a week from the declaration of results, if they are not satisfied with their results. The results of re-evaluation will be announced as per the university norms.

Challenge Evaluation:

If re-counting/re-evaluation results are not satisfactory, a student can apply for challenge evaluation within a week after the announcement of the revaluation results. The evaluation process is carried out by two subject experts after then result will be announced. The evaluation process is so well knitted that all students are ensured justice. The entire process is maintained transparent and completed within time frame as specified.

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

2.6 Student Performance and Learning Outcomes

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

Response:

The college has clearly stated all program outcomes, program specific outcomes and course outcomes for all programs. The faculty, industry and alumni are actively involved in defining program outcomes and program specific outcomes of all programs in the college. The outcomes are prepared based on the expected graduate attributes, skill sets that the students have to acquire values that they must imbibe for becoming good citizens.

* The affiliating university has defined the course outcomes of each course and printed in the academic regulation books.
* The course outcomes of all the programs are made known to the students and staff through display boards kept at prominent places in all Departments and on the website of the college.
* Individual copies of the regulation books are distributed to all the students which contain details of the course outcomes.
* Academic Regulation books are also available in the library for student access. Orientation program for all the new students is conducted every year at the beginning of the academic year to educate about all course outcomes.
* At the beginning of the academic year all the faculty members will prepare the course files and laboratory manuals.
* The course file contains Department vision, mission, course syllabus, course outcomes, individual time table, program objectives, program outcomes, various mapping matrices, unit plan, lesson plan, course plan, unit wise material, direct and indirect assessments and student grading sheets.
* The university has adopted OBE and the same is being implemented. Program Outcomes (POs) and Course Outcomes (COs) are well defined for each program. This is the shared information or resource among all the stake holders of the university system. The institution also adopted OBE and articulated its Program outcomes which are given below.
    1. Engineering knowledge.
    2. Core Problem analysis.
    3. Design / development of solutions.
    4. Conduct investigations of complex problems.
    5. ICT Create.
    6. Societal Needs.
    7. Environment and sustainability.
    8. Values and Ethics.
    9. Team Work.
    10. Communication.
    11. Project management.

12. Life-long learning.

CO, PO attainments of UG - EEE program are attached as sample.

File Description	Document
Upload Additional information	[View Document](#)

2.6.2 Pass percentage of Students during last five years

Response: 91.83

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

2021-22	2020-21	2019-20	2018-19	2017-18
386	366	313	322	198

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

2021-22	2020-21	2019-20	2018-19	2017-18
410	410	344	346	216

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.87

File Description	Document
Upload database of all students on roll	[View Document](#)

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 24.13

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

2021-22	2020-21	2019-20	2018-19	2017-18
3	8.25	4.8	8.08	0

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

DNR College of Engineering and Technology believes in inculcating innovative ideas among student community, there by contributing to Nation's development that solves societal problems. Strong academics, industry relevant training, industry visiting, emerging technology knowledge through R&D and Professional mind-set with human approach are the essential attributes that determine the success of our institute. The academic and research expertise contribute to the Innovation Ecosystem through breakthrough solutions and suggestion for solving critical problems, and motivating students to become Entrepreneurs. The Institution provides a conducive environment for promotion of Innovation and Incubation. All required facilities are provided and Guidance is extended to the students. Students are encouraged to actively involve in the application of Technology for societal needs. Necessary support is provided for Documentation, Publication of Research Papers and also for obtaining patents.

Research and Development laboratories are established in all the departments to conduct the research by faculty members and students. ECE Department consists of R&D Lab in Room No: A103 with an Area of 84.29 Sq. m, and having 10 Dell Personal Computers with I10, 10th Generation Processors. The PC's are installed with Electronic Design Automation Tools like Xilinx, Matlab, and Micro-wind, Multisim for doing research in various domains. This laboratory provides required components, devices, Development Boards to students for making prototypes. Mechanical Department consists of CNC Lab in Room No:

A201 with an Area of 74.29 Sq. mm, and having CNC lathe machine and 3D printer provided to students for making prototypes. Civil Department consists of Strength of materials Lab in Room No: FG01 and Concrete Technology Lab in Room No: CG02 are with an Area of 84 Sq. m, and 107 Sq. m respectively having wooden plants, cardboards, cement, sand, bars of 8mm. EEE Department consists of R&D Lab in Room No: G103 with an Area of 35 Sq. m, having 6 Dell Personal Computers. The PC's are installed with Electronic Design Automation Tools like Matlab, and Multisim for doing research in various domains. The above facilities are useful to create successful entrepreneurs with adequate support.

DNRCET signed MoUs with 21 industries. Under this agreement they provide indusial training, industrial visits, workshops, communication skills, placements, entrepreneurship development for faculty and students. In addition, to the above-mentioned activities institute conducts Student Innovative Idea competition every year as an event in tech fests that is evaluated by appointed external academic experts.

Recently Dr. Narayan Swami, Professor delivered about carrier guidance in that he conceived an idea that the spirit of innovation has to be incubated in the minds of the students. From then onwards, the college has been encouraging the students to come out with innovative solutions for the problems that are faced by the students and the society.

DNRCET management is highly encouraging and promoting in-house academic research activities.

OUTCOMES	
Academic Year 2021 -22	
Sno	**Contents**
1	Road Sweeping Machine
2.	Fabrication of Electric Vehicle
3.	Fabrication of Solar Grass Cutting Machine
4.	English Bond and Flemish Bond Brick Wall
5.	Prototype Reinforced Concrete Slab
Academic Year 2020 -21	
1	Design and Fabrication of a Closed Space Heating System Using Geothermal Energy
2.	Design and Fabrication of Drilling Machine Using Solar and Wind Energy.
3.	Fold and Fault Plane Prototype
4.	Model of Foundation of Footing
5.	IOT Based Smart Agriculture Monitoring System
6.	Design of Smart Gun By Employing Biometric System
7.	IOT Based Accident Avoidance Using Multi Sensors
Academic Year 2019-20	
1	Design And Fabrication of Box Transportation Mechanism
2.	Atmospheric Air To Water Generator
3.	Design and Fabrication of Vertical Axis Wind Turbine.
4.	Slab Reinforcement
5.	Model Of 8mm Diameter Reinforced Column
6.	Automatic Speed Control of Vehicles In Restricted Areas, Accident Detection & Anti Vehicle Theft System
7.	Design And Implementation of Women Safety And Alerting System Using Arduino
8.	IOT Based High Security And Authentication of Student Identification In Examination Hall

File Description	Document
Upload Additional information	[View Document](#)

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

Response: 42

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

2021-22	2020-21	2019-20	2018-19	2017-18
13	5	7	12	5

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.3 Research Publications and Awards

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

Response: 0.86

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

2021-22	2020-21	2019-20	2018-19	2017-18
35	19	16	12	4

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.3.2 Number of books and chapters in edited volumes/books published and papers published in

national/ international conference proceedings per teacher during last five years

Response: 0.18

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

2021-22	2020-21	2019-20	2018-19	2017-18
3	5	2	3	5

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

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

The institution has been organizing a good number of extension activities that are carried out in the neighborhood community. DNRCET encourages the students to interact with the neighboring communities to explore the opportunities for involvement in social work. DNRCET-NSS Unit has adopted nearby village Yanamdurru which is 7K.M distance from our institution. DNRCET-NSS Unit has organized several extension activities in adopted village. It helps in developing interpersonal relationships, leadership qualities, organizing skills, understanding the life of underprivileged people, help society in times of need, and inculcate moral and human values among the students.

The co-curricular, extracurricular, and relevant extension activities are planned in such a way that the students have ample opportunities to expose themselves to societal issues thereby promoting them to extend their domain knowledge and practical skills on a real-time basis, the following activities for the holistic development of students.

1. National Service Scheme: The activities about community service under the scheme promote the students' attitudinal development in acquiring social skills such as empathy, respect, and teamwork.

2. Health camps: the institution has organized several Health camps in our adopted village through these camps, the students get the knowledge of different ailments, conditions and have the possibility of identifying a problem, formulating a problem, in making devices or computation tools or innovative methods for diagnosis and/or cure.

3. Tree plantations and environmental issues: The importance of man co-existing with nature and the

need for a sustained approach to preserve the ecosystem becomes a serious challenge to engineers too besides policymakers and other scientists. The development of new technologies, systems, and products incompliance with environmental standards is the need of the day.

4. Digital literacy: The students get enough opportunity to identify the gaps between technology development and end-user application. This entails the students to create solutions tailor-made to the need of the customers and clients

5. Hygiene and cleanliness: Pollution and untidy environs are the places where we breed communicable diseases as well project a bad picture to the people who are interested to collaborate with. This becomes an important dimension for engineers to innovate tools, devices, and methods to sustain a clean environment.

6. Outreach activities: The students and the faculty of the departments actively engage with the college neighborhood to transfer the domain knowledge to the development of society. It is perceived as an opportunity to identify needs besides mere knowledge transfer.

For the benefit of the neighborhood communities, the institution has organized   several programs like International Yoga day for the mental and health benefits and its sustainability to human beings, Swachh Bharath, blood donation camps, health check-up camps, Off-Line/Online electoral registration process campaigns, etc. and also to make the neighborhood community aware of government initiatives and also to make them adopt a good lifestyle.

All the activities are planned and conducted in such a way that they become relevant to the program domain and contribute to the students' holistic development.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.2 Awards and recognitions received for extension activities from government / government recognised bodies

Response:

Education is the process of preparing the individual to find out one's inherent potentialities and develop the same to the maximum extent in order to derive utility for himself and contribute to the society. Educational institution is an important social agency whose contribution to the development of the society is most expected and the national development too is revolving around it. Extension activities are the voluntary efforts of the educational institutes, inspired by ethical excellence towards social development through various activities like, enhancement of educational standards of underprivileged groups, adult education activities, environmental awareness, ecological conservation, health awareness, healthcare and sanitation, adoption of village for holistic development is an addition to the academic commitment of the

institution. Understanding the social responsibility, gratification of institutional social responsibility through enhanced extension activities will take the institution to eminence on the part of educational institution in general and the society where it is located in particular.

DNRCET proudly conducts many extension activities for the benefit of surrounding community. Besides it strongly believes that extracurricular activities will open avenues for the students to make social participation and contribute for the social empowerment. Under the NSS Unit, DNRCET has conducted following programs involving the student volunteers: Swatch Bharath, Tree plantation program, Legal awareness program, Blood Donation camp, Digital Financial Literacy Program, Clean and Green, Voters Day celebrations and Ban on Plastic usage, and awareness program on Disha App. The very purpose of conducting these activities is many folds to create awareness of health, need of maintaining clean environment, to enlighten the adverse effects of plastic, importance of planting trees. By involving students in these activities, they will come to know the need of upliftment of villages, their responsibility as engineers, and need of literacy and how to make rural population tech savvy at least to carry out their daily transactions.

DNRCET strongly insisted extension activities as one of the important objectives to be fulfilled on par with its main activities like curriculum development, providing enough and appropriate infrastructure, examination and scholastic development etc. The impact of these extension activities is tremendous and admirable and tangible change in students' communication, ability to face new people and empathy towards fellow men. The experience reflected in better career outcome after their graduation.

For the participation of the above extension activities DNRCET NSS Unit has been recognized with several appreciation certificates, Awards by the government /governmental recognized bodies NGOs and reputed clubs. For this Endeavour, DNRCET NSS program officer and student volunteers received awards and recognitions from sub divisional superintendent of police, Narsapuram, Sri Krishna Foundation, Sri Vasavi Club, Lions Club (Ganapavaram), Sri Vignana Vedika, Rotary Club of Bhimavaram, Inner wheel club of vijayawada, Swachh Bharath Abhiyan, ASN Raju Charitable trust, and ASRAM hospital, Eluru. The received awards include Best NSS PO, Best NSS Volunteer and Best NSS Unit.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years

Response: 49

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**

2021-22	2020-21	2019-20	2018-19	2017-18
18	8	8	9	6

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.5 Collaboration

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

Response: 21

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

Response:

DNRCET has a sprawling campus in 10.81 acres of land with adequate and state of the art infrastructure.Sufficient supporting facilities are provided for an effective ambience in curricular, co-curricular andadministrative activities.The academic blocks of all the departments are equipped with advanced infrastructure facilities over a built-up area of 17868 Sq.m allocated exclusively for instruction functioning.The college has enough space, satisfying the norms of AICTE, the approval body and JNTUK,the affiliating authority for the smooth and effective conduct of academic activities.

· All the departments have exclusive ICT enabled Classrooms (Total 43 Classrooms and 4 Seminar halls), HOD room, meeting room and department libraries. However, the books in the Department library will only cater to the reference requirements of departmental faculty.

· 34 laboratorieswithadvancedsoftwareandequipmentareprovidedconforming to the syllabi norms. Instruction manuals of all laboratories are prepared and supplied to the students. They are given freehand to perform laboratory experiments, carry out project works under the supervision of qualified and skilled lab assistants beyond the syllabi.

· Central Library supports the Institution in realizing its primary goal of imparting quality technical education. The library has automated all its activities to provide better, effective and immediate services to user fraternity consists of 36192 volumes.

· The institution has its uniqueness in the field of sports and games. It has a gigantic playground spread over 8 acres of land for Cricket, Basket Ball, Volley Ball etc.…An Indoor stadium with facilities for Table-Tennis, Badminton etc. It has an indoor auditorium with 1000 seating capacity, and also an open-air auditorium. The students are encouraged to participate in extra-curricular, inter and intra sports and games meet apart from their academics.

Extra-Curricular Activities:

- The institution also encourages the students to participate in various extracurricular activities inside and outside the campus. The institute is sending the students to district, state level competitions conducted by various Govt and semi Govt organizations like SETWEL, JNTUK, Jana vignanavedikha etc...

YOGA PRACTICE:

- In this modern era every individual needs to overcome the stress to have peace of mind. The institution educates the students and faculty with yoga experts. The National Yoga Day is organized every year with enthusiastic participation of faculty and students. The physical director is a well experienced and certified YOGA mentor.

File Description	Document
Upload Additional information	[View Document](#)

4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 29.93

4.1.2.1 **Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
112.63	217.51	145.36	139.02	39.45

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS), subscription to e-resources, amount spent on purchase of books, journals and per day usage of library

Response:

DNR College of Engineering & Technology has a gigantic library with vast collection of books, journals and magazines.All books are bar coded and the issues and returns are automated and maintained using "Engineering College Automation Package –Library Management system E-CAP LIBMAN" software.

KNIMBUS means knowledgeable super natural being or saint. This e-Library portal provides users all the knowledge including Open e-books 1858, open journals 990, Journal Storage (JSTOR) 535, Springer 339, Science Direct 189available through the library on any device from anywhere. It also gives remote access to the students and the staff members. Like physical library, this e-Library houses all the knowledge patrons with unlimited space and growing collection of content. The e-Library aggregates all the library subscriptions, eBook collections, open access resources, multimedia learning content and electronic document repositories - all on one cloud platform.KNIMBUS digital library is available with integrated facilities for accessing e-journals, e-books, university question papers and other information. The librarian makes all efforts to acquire useful books including rare books, project reports and other knowledge resources to enrich its collection. The library has all the prescribed, recommended and reference books as per the university norms. A collection of back volumes and previous year's university question papers are

provided.

For electronic resources,Developing Library Network (DELNET)has been subscribed which provides access to 1824 Lecture Video, Journals-Engineering 276, Mechanical Engineering 80, Technology 77, Civil Engineering 70, Electrical Engineering 55, Computer Science and Engineering 48, e-Books-Physical Science, Engineering& Tech 926, Engineering 388, Management 210, others 375.

The library contains 36192 numbers of volumes and 7564 titles. An amount of rupees seven lakhs will be spent every year depending upon the requirement and claims put forth by the stake holders. In addition to the above an amount of rupees two lakhs will also be spent in every academic year for the purpose of journal subscriptions. Approximately350 members visit the library daily.

The college library has a stack of books on auto-biographies of eminent personalities around the world, books on inspiring life stories, success stories, and morals, motivational and devotional entities. The library has many books on yoga, meditation, sports, business and leadership qualities. There are some retrospect genre of books on Geography, Indian history, World history and History of mankind, books about history of metals, material and innovation. There is a separate section of books for competitive exams, Mathematical puzzles, Guinness records, Contemporary icons from sports, films, Business and Politics etc...

Total no of Volumes   : 36192

Total no of Titles   : 7564

Area of Library   : 820 Sq.m.

Seating capacity   : 225 members

Facilities available:

LAN   : Yes

Internet connectivity   : Yes

Automated services   : Yes

Working Hours of Library:

a. Week days : 8.00 A.M to 8.00 P.M

b. Issue Timings: 8.30 A.M to 5.00 P.M

Name of ILMS software: "ECAP-LIBMAN"

Nature of automation (fully or partially): fully

Version: 2.3

Year of automation: 2014	

File Description	Document
Upload Additional information	[View Document](#)

4.3 IT Infrastructure

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

Response:

The Institute is committed to providing state-of-the-art IT infrastructure and services. With the growth of users, IT services and increasing internet bandwidth demand, the institution has scaled up the switching capabilities and implemented through optical fiber cables and Wi-Fi access. The Institute has high-end core switches and servers. The upgradation of computer systems is taken up on periodically. The printers and scanners are also upgraded with new additions to the laboratories, office, library and departments. The college annually purchases/upgrades and replaces or adds a fleet of computers, hardware's, etc as per the requirements. The IT infrastructure is continually upgraded.

The bandwidth has been progressively increased from 20 Mbps to 200 Mbps over a period of 12 years to suit the demands. For ease of access, all blocks have been enabled with Wi- Fi (11 ROUTERS). All the seminar halls have been installed with LCD projectors. Biometric scanner based attendance capturing system is upgraded for faculty members.

Description on IT facilities

The IT facilities available in our college can be summarized as follows,

LAN Facility

There are 50 data network switches (10/100 & Giga byte), 38 CCTV cameras, Intercoms and wifi access points.200Mbps of internet connectivity is shared across the campus, where as 200 Mbps is shared for the students.

Internet Bandwidth   : 200 MBPS + 200 MBPS (2lines Mahi and VCV)

Accessibility of Wi – fi   : Good

Server configurations in data center

There is 1 server with DELL EMC Xeon E-3 version-3.0, 64 GB RAM, 2 TB hard drive and also have E-CAP, MOODLE and Putty Servers.

Work station

432 desktops are provided to all the department labs with configurations of Intel core i3 (3rd, 4th, 6thand 7th) generation processor, 8GB/4GB RAM, 1TB HDD/500GB HDD/256 GB SSD, with LAN connectivity. 50 desktops with configurations of core i3 8GB RAM, 256 GB SSD are available to carry out academic and administrative work.

Printers

11 Canon LBP 2900, 3HP Laserjetprinters,7Xeroxworkcentersand5scannersareprovidedacrossthecampusfor academic and administrative purposes.

Wi-Fi

11 Extendable Wi-Fi access points are placed in various places like Library, corridors, and Labs. Wi-Fiaccess is provided to all the students which is monitored and controlled by fire wall. All access points arerouted to a Wi-Fi controller in the Data Centre where configuration and updates are maintained in acentralized fashion

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

Response: 3.69

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

Response: 432

File Description	Document
Upload supporting document	[View Document](#)

4.4 Maintenance of Campus Infrastructure

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

Response: 50.87

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

2021-22	2020-21	2019-20	2018-19	2017-18
294.50	240.66	149.23	274.83	152.24

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

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

Response: 87.89

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

2021-22	2020-21	2019-20	2018-19	2017-18
1283	1373	1390	1321	989

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

5.1.2 *Capacity building and skills enhancement initiatives taken by the institution include the following*

> 1. *Soft skills*
> 2. *Language and communication skills*
> 3. *Life skills (Yoga, physical fitness, health and hygiene)*
> 4. *ICT/computing skills*

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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

Response: 72.39

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

2021-22	2020-21	2019-20	2018-19	2017-18
1608	906	1299	972	450

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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

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

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)

5.2 Student Progression

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

Response: 60.76

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

2021-22	2020-21	2019-20	2018-19	2017-18
274	263	209	145	100

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

2021-22	2020-21	2019-20	2018-19	2017-18
468	396	331	298	138

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

5.2.2 Percentage of students qualifying in state/national/ international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 100

5.2.2.1 *Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years*

2021-22	2020-21	2019-20	2018-19	2017-18
10	15	8	10	66

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

2021-22	2020-21	2019-20	2018-19	2017-18
10	15	8	10	66

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

5.3 Student Participation and Activities

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

Response: 31

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

2021-22	2020-21	2019-20	2018-19	2017-18
7	0	9	8	7

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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

Response: 27.6

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

2021-22	2020-21	2019-20	2018-19	2017-18
31	17	30	30	30

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

5.4 Alumni Engagement

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

Response:

DNR College of Engineering and Technology started its alumni association n 2015 with 25 members initially. Later it got registered. DNRCET feels proud of its Alumnus working in various capacities catering to the needs of society and the Alumni association extends its direct and indirect help to the management and to the students through various means.

Objectives:

- To maintain and update the alumni coordination cell website.
- To communicate the college events to the alumni.
- Invite alumni to the campus to take their ideas for the improvement of the institute.
- To request the alumni to extend their contribution towards the development of the institution.
- To take up the help of alumni for higher education.
- To conduct career guidance sessions with the alumni.
- To explore internship opportunities with alumni.
- To bridge the gap between the college and alumni.
- Keeping complete track of alumni with their required details.
- Inform them about the current changes and achievements of the institute.
- Alumni association meetings take place yearly and future plans are discussed in the meetings.
- Along with the association meeting annual alumni meet is also organized at the institute level every year.
- Alumnus contributes in various non-financial firms such as alumni interaction week, alumni challenge competitions, etc.

Alumni on our campus for the benefit of the juniors, namely for conducting viva, STP activity, conducting mock personal interviews, discuss business and entrepreneurship opportunities. During the interaction, alumni highlighted the importance of current trends in the market and guided the students about the career opportunities in different fields. They also shared their personal experiences with students. Alumni visit campus at regular intervals to support the existing batch of students in planning and organizing events, extend support and guidance for functioning of various students clubs. Alumni who are entrepreneurs have been providing inputs on how to start a new venture and turning them in to job providers, as a result nearly fifty percent of students became entrepreneurs. Some of the alumni are actively participating in social services combining with creative activities for rural area kids. These activities are quite motivational and create enthusiasm among children resulting in awareness related to importance of education among poor children. All these activities are carried out during weekends. Whenever these alumni visit the campus they motivate students to follow their path for the betterment of the society. Alumni extend their support for campus placements and summer and winter internships for HR, Finance and Marketing students from time to time.

DNR College of Engineering and Technologyorganizes Alumni Meet 'CONNECT' every year. Connect is a formal function which consists of inauguration, alumni interaction with students. Cultural programs by present batch of students will be held followed by dinner. During the program alumni gives insights of various specializations and industry to the existing batch of students. Alumni share their corporate experiences, guide current batch of management students and assures the students for continuous interaction with their junior counterparts.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

Response:

DNR College of Engineering & Technology has a well defined mission and strives to attain its vision with an organized planning. The institution is headed by the President and Secretary and Correspondent providing quality education to make the students with employable skills. The vision and mission of the college is implemented through a clear policy. The governing body of the institution meets annually to make the plans for the development of the institution. It authorizes the principal in implementation of the policies set by the General Body members. The principal is the chairman of the academic committee along with the heads of the department as it aims at designing the academic plans for the implementation of the strategies and effective deployment.

The institute supports a trend of decentralized governance system with participative management including well defined inter-relationships.

The management of the institute has two basic committees, governing body and college academic committee. Regular meetings of these committees held for the effective and smooth functioning of the institute. There are three levels of administrative setups in the decentralization structure under which all the activities of institute are carried out.

Institute level: All the main decisions related to the institute are taken by the principal in consultation with the heads of department. Principal is the academic and administrative head of the institute and the member secretary of the governing body. Financial power is given to principal for the development of the institution.

Department level: The department heads are responsible for day-to-day administration of the department and report to the principal. In addition, faculty and staff members are part of the decision making bodies. Students are also part of the decision making organs and also participate through different formal and informal feedback mechanisms to improve the system and procedures. Suggestion boxes are kept in every prominent places to collect the suggestions from students, faculty, staff other stakeholders.

Various committees: There are 33 committees at the institute level where faculty, students and stakeholders take part collectively in decision making aspects. These committees will help the students and faculty to excel in their leadership skill and test their performance through the outcomes of the activities.

Case study: Taking a case study of NSS Cell with students volunteers where the students actively gets involved in social responsibilities within the campus, neighborhood community, etc. These programs will helps students to develop holistically. The faculty and the students get a chance to meet and interact with public and public servants and other NGOs who may get inspired to serve the society at large. This activity will help the stakeholders to realize the importance of the NSS activity which helps the transformation of the life style of the community towards healthy environment. One of the important services rendered by

NSS volunteers is disseminating information about latest developments, non-conventional energy, low-cost housing, sanitation, nutrition and personal hygiene etc.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

Response:

The college has a clearly defined organizational hierarchy structure to support executive processes that are clear and reliable with its purposes and supports effective resolution making. The organizational structure executes functioning of institutional capacity and educational effectiveness through various Committees.

The Principal, and HODs, with the help of faculty members, evaluate the progress achieved and problems faced by various committees. The functioning of the institutional bodies not only effective but also efficient in producing tangible results. The policies, administrative system of the institute are meticulous. Not only the above, appointments and service rules along with procedures are followed thoroughly. The management has always welcomed the views and suggestions expressed by the faculty members in taking institution forward. The presence of the faculty can be found in all the committees.

The Institutional Management is designed in a logical way with transparency to get the optimum results out of it. Hierarchy structure is established from top management to down the level clearly demarking the duties, responsibilities, accountability and authorities at every stage. The Governing Body of top management, Principal, HODs, teaching, non-teaching, and students work as a team to reinforce the culture of excellence.

Principal is the chairperson of administrative and academic activities of the institution. Heads of the departments take the responsibility of heading all the administrative and academic activities of the department. The HODs possess academic autonomy in accordance with all academic aspects. They are entitled to take decisions as per the needs of the institution.

The IQAC submits not only the Strategic Perspective Plan, but also submits various proposals for academics, administration and policy formulations. All proposals after ratification by the Governing Body are deployed and periodically reviewed by the IQAC. Various Committees in the College independently deploy their plans and report to the IQAC with regard to Quality Assurance.

Our College is committed to impart Quality education to the youth enabling them to develop the right attitude, professional competence and inculcating the right ethical values. There is a formally stated

Quality Policy.

- Providing excellent infrastructure and conducive learning environment
- Building a harmonious work culture and motivating everybody to contribute the best.
- Proactively responding to changing needs of industry, parents and the society by embracing latest technological trends in the field of education.
- Complying with requirements of ISO 9001:2008 Standards and striving continually to improve the quality of operations of the Institution.

Strategic plan

By taking into consideration above mentioned aspects, the following is the strategic plan for the quality enhancement of the Institution:

- Aim to get autonomous status for the institution by 2023-24.
- Strengthening the student development and campus facilities,
  Enhance the output in research and consultancy.
- Enhance the industry institute collaborations. Standardizing the ICT based teaching-learning processes. Improve internal support system.
- Strengthening alumni.
- All the above strategic plans are monitored by the IQAC that meets often and decide on academic quality control issues.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.2.2 Implementation of e-governance in areas of operation

1. **Administration**
2. **Finance and Accounts**
3. **Student Admission and Support**
4. **Examination**

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)

6.3 Faculty Empowerment Strategies

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

Response:

The Institute authorities bear in mind that the well being of teaching and non-teaching staff is important for effective functioning of the Institute. In line with this, many welfare measures have been implemented.

1. Full-fledged canteen is available in the campus to provide food and snacks to the staff at subsidized rates.
2. Transportation facility is available to teaching and non-teaching staff members at concessional tariff..
3. Faculty members were provided financial support for FDP/Seminar/Workshop/ Conference.
4. Faculty members are entitled to get sick leave when they are suffering from illness.

During this period salary will be paid.

1. The Auditorium and Conference Hall of the Instituteare made available to the family functions of the staff conducted during holidays and outside officehours.
2. Maternity leave will be provided for lady faculty members.
3. Sports room, Gymnasium are available to all teaching and non-teaching staff members.
4. Research support (Ph.D.) through library facilities, equipment, infrastructure and other needed support.

Performance Appraisal System:

The college has Standard-Based Conceptual framework used for Faculty and Staff Performance Appraisal which incorporates both responsibility and specialized expansion of the staff. The Principal takes the overall accountability for the staff performance management.

The functioning status of the Performance Appraisal System is as follows:

*1.Self-Appraisal:*Self-appraisal forms were distributed at the beginning of the year and faculty fills at the end of the academic year. The faculty members answer various questions pertaining to teaching learning methodology, use of technology in teaching. Faculty members are analyzed through instructional work assigned, responsibilities undertaken, Counseling of students, research and publication, participation at national and international conferences and supervisory support.

*2.Students Evaluation:*The feedback from the students for each course collected and discussed for any improvements. The feedback score is taken as one of the parameter for self appraisal. The students review the teacher on various parameters like syllabus coverage, planning and preparation, voice audibility, content presentation, Blackboard management, mentoring, dedication and hard work. Individual faculty report and correlation report are generated at the end of the evaluation.

3.HODs Evaluation: HoD analyze the faculty through the parameters which are initiative, responsibility, punctuality, commitment, development, oral and written communication, team work, leadership, relationship with fellow faculty and staff, maturity, temperament and relationship with students.

*4.Principal Evaluation:*The final analysis of Performance Appraisal is done by the Principal at the end of

academic year.

Faculties with positive feedback are appreciated and those with poor feedback are counseled to make special efforts to improve their way of teaching for better learning. Faculty that do not show any improvement are replaced by better faculty for that course.

Performance Appraisal for the non-teaching staff

The appraisal of non-teaching staff is done by the office in-charge with the help of the Principal. The daily activities are observed and instructions are given for improvement. In case of negligence, the worker is advised to make possible changes by the Principal. The feedback given by the office-in charge is analyzed by the Principal, appropriate decisions were taken for further improvement.

File Description	Document
Upload Additional information	[View Document](#)

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

Response: 74.71

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**

2021-22	2020-21	2019-20	2018-19	2017-18
65	83	81	60	30

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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

Response: 85.23

6.3.3.1 **Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
89	115	155	62	35

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

2021-22	2020-21	2019-20	2018-19	2017-18
21	20	22	26	19

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

6.4 Financial Management and Resource Mobilization

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

Response:

DNRCET is affiliated to JNTUK University and approved by AICTE. There will be a revision of the fee structure based on the expenditure for every three years. Most of the income is through scholarships of state government. Sponsors from inside the association and outsiders from society (DNR College Association) help the institute in providing various scholarships to meet the deficit.

The institute was established for the development of rural area students.

The sources of income of the institution are as detailed below.

a. From the students

1. Tuition fee
2. Special fee which includes University fee and other student activities
3. Examinations fee

b. From other agencies

1. NSS /CSR funds from companies/NGOs
2. R&D or any other funded projects
3. Consultancy

1. Corporate training
2. Industry problems

c. From society and other well wishers

1. Society contributes whenever need arise such as inordinate delays in the tution fee release from the State Govt, lack of funds etc.

Funds utilization:

Funds are utilized on academic and administrative activities.

The major beneficiaries are the students for their holistic growth and also the committed faculty who discharges their duties.

Institutional strategies for optimal utilization of resources:

DNRCET, being self financing institution utilizes its resources according to its demands. HoDs and the committee heads put forth their proposed budget to the principal and in turn receive the approval from the principal for which they are accountable for the expenditure/utilization. Institution gets loans from Union Bank of India, Canara Bank and Syndicate Bank in times of needs. All loyalties of our institution in terms of financial transactions are maintained with Union Bank of India.

DNR College association provides financial help to the institution in case of uncertainties. The Institute has a system of internal and external audit. Internal audit is aimed at improving the governance of the institution. An external audit is carried out by an independent auditor in accordance with the law. The budget is prepared well in advance by taking into consideration the financial requirement of every department.

Internal Audit:

Internal audit which is conducted quarterly, verifies all the transactions and recorded accordingly. Mr B Simhachalam is the internal auditor of the institution who visits our institution periodically and takes care of financial transactions.

External Audit:

Every year by the end of the financial year, the external auditor verifies all the documents of budget, allotment and utilization and prepares the required financial documents to be submitted to the management. Mrs KSN Raju & Associates bearing identity M.No-024215, a leading financial examiner in this zone, looks after all monetary dealings of the institute externally.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.5 Internal Quality Assurance System

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

Response:

The major objective of Internal Quality Assurance Cell (IQAC) is to extend a scheme for responsive, reliable and catalytic enhancement in overall performance of the Institutions.

The IQAC being the central body within the college, monitors and reviews the teaching learning process, structure and methodologies of operation regularly through its organizing committee members and meetings are conducted periodically.

The initiatives contributed significantly for institutionalizing the quality assurance strategies and processes are as follows:

1. Relevance, Equitable in quality of academic and research programme.
2. Optimized and integrated methods of teaching and learning.
3. Credibility of evaluation procedures.
4. Ensuring the adequacy, maintenance and functioning of the support structure and services.
5. Organizing Faculty development programme in each department.

Two of the practices that are institutionalized as a result of IQAC initiative are demonstrated below:

1. Implementation Outcome Based Education.
2. Campus Recruitment Training (CRT) programme to set up a platform.

The three components that encompass an outcome-based approach to learning are:

- An explicit statement of learning intent expressed as outcomes which reflect educational aims, purposes and values;
- The method or approach to enable the intended learning to be achieved and demonstrated (curriculum, teaching, learning, assessment and support and guidance methods)
- Criteria for assessing learning which are aligned to the intended outcome.

METHODOLOGY OF OPERATIONS:

The IQAC being the central body within the college, monitors and reviews the teaching learning process, structure and methodologies of operation regularly through its organizing committee members. IQAC regularly conducts meetings in a periodical intervals to monitor and take steps to initiate new structures, process and methodologies of operations.Review on the teaching learning process and methods of operations and outcomes are analyzed based on targets and the reports of the Academic audit.

IQAC assembles feedback from students in specifically planned arrangement questionnaires twice in a

year. Feedback is collected on curricular aspects, teaching- learning methods, faculty and institutional programs. Steps are taken to develop overall performance of the college by evaluating the feedback from the stakeholders. The College Academic Committee comprising of the Principal, Vice principal and all HoDs along with examinations in charge monitors and reviews teaching-learning and other activities of the institution.

The suggestion box is placed in every section and also in particular vital instances to get feedback of the students. Suggestions are considered whereas mounting strategies correlated to the institution.

The Departmental committee meets with all faculty members at the commencement of the semester. A teaching course file is maintained by each faculty member, signed by the HODs are presented in every semester to the principal for approval. Some of the teaching-learning methods are:

- Preparation of course plan at the beginning of every semester.
- The seminars and workshops are conducted for the faculty members.
- Examining students by conducting internal tests.
- Holding extra classes if necessary for course completion.
- Arrangement of remedial classes, doubt clearing classes for slowlearners.
- Establishment of research cell in order to encourage researchactivities.
- Automation and digitalization of library.
- Usage of ICT tools in teaching learning process.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.5.2 Quality assurance initiatives of the institution include:

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
2. **Collaborative quality initiatives with other institution(s)/ membership of international networks**
3. **Participation in NIRF**
4. **any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc**

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

Response:

The institution acknowledges the fact that today India is the youngest nation in the world with 69 percent of its population between 18 to 35 years of age. This demographic dividend that India achieved has to be harnessed for the progress of the nation. Ergo, the institution is very keen on identifying the desires and aspirations of the new generation and the measures to enrich the abilities and professional skills of both boys and girls, without any discrimination.

Safety and Security: In DNRCET, Safety and security plays an important role. All the students and faculty are provided with ID cards and are allowed to the campus only after checking thoroughly . The Anti-Ragging committee play an important role and they will monitor the campus frequently for providing safety to the students.

Also, CCTV cameras are incorporated in all corridors and Drawing Halls and the campus is under Electronic surveillance which can be monitored from the central unit. Women Internal Complaints committee is formed with chairperson and co-ordinator, G.Jyothi, MBA dept with 4 faculty members and 3 student members who conducts several awareness programmes on gender issues. This committee deals with complaints relating to sexual harassment at work place.

Counseling : A counseling committee is formed in DNRCET with a chairman and co-ordinator B.Meshak Raju , BS&H dept with 6 faculty members to look after student counseling at regular intervals for healthy progress in Professional guidance, career advancement and all round development , for boosting self esteem of weaker /physically challenged students and diagnose the learning difficulties of students and help them to overcome the same. A counselling room is allotted for counselling the students by the faculty in Room No.G-301.

The department identifies mentors to counsel the students in academics, and co-curricular, extra curricular activities. Each faculty is assigned maximum of 18 students.

Rest Room:

DNRCET provides rest rooms both for boys and girls separately. All the facilities are provided. A restroom is a place used to literally take a break, although it also has public convenience facility. A washroom is a place where people can wash as well as relieve themselves. Restrooms have hand basins and urinals. At respective places, First –aid kits are provided. A separate room is allotted with room No.IG-07 and IG-10.

File Description	Document
Upload Additional information	[View Document](#)

7.1.2 The Institution has facilities and initiatives for

1. **Alternate sources of energy and energy conservation measures**
2. **Management of the various types of degradable and nondegradable waste**
3. **Water conservation**
4. **Green campus initiatives**
5. **Disabled-friendly, barrier free environment**

Response: A. 4 or All of the above

File Description	Document
Upload supporting document	[View Document](#)

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

1. **Green audit / Environment audit**
2. **Energy audit**
3. **Clean and green campus initiatives**
4. **Beyond the campus environmental promotion activities**

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)

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

Response:

India, as a country, includes individuals with different backgrounds viz., cultural, social, economic, linguistic, and ethnic diversities governed and guided by the Constitution irrespective of caste, religion, race sex. Fairfield Institute of Management & Technology sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties, and responsibilities of citizens which enables them to conduct as a responsible citizen.

To equip students with the knowledge, skill, and values that are necessary for sustaining one's balance between a livelihood and life by providing an effective, supportive, safe, accessible, and affordable

learning environment. These elements are inculcated in the value system of the college community. The students are inspired by participating in various programs on culture, traditions, values, duties, and responsibilities by inviting prominent people. The institute conducted awareness programs on Police Commemoration Day,International day of Persons with disabilities,cleanliness, Swachh Bharat,Awareness on Road safety, International Yoga day celebrationsetc. involving students. The college establishes policies that reflect core values. Code of conduct is prepared for students and staff and everyone should obey the conduct rules. The affiliating University (JNTUK) curriculum is framed with mandatory courses like Professional ethics and human values, Constitution of India, Essence of Indian Traditional Knowledge, as a small step to inculcate constitutional obligations among the students.

Also, we celebrate Pongal festival in the month of January every year.Festive celebrations include decorating cows and their horns, ritual bathing and processions. It is traditionally an occasion for decorating rice-powder based kolam artworks, offering prayers in the home, temples, getting together with family and friends, and exchanging gifts to renew social bonds of solidarity.

Constitution Day is celebrated on 26th November every year. The programme initiates with Preamble reading of the constitution followed by lectures on the sensitization of students on responsibility towards the constitutional values, rights, duties and responsibilities of citizens. Students are encouraged to participate in activities like essay competition on the related themes. viz. 'Economic Thoughts of Dr. B. R. Ambedkar'.

File Description	Document
Upload Additional information	[View Document](#)

7.2 Best Practices

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

Response:

BEST PRACTICE – I

1. **Title of the Practice: Counseling & Mentoring System for Students**

2. **Objectives of the Practice**

To minimize dropouts, improve performance and reduce stress of the students through personal counseling.

3. **The Context**

Students undergo various problems of stress- personal, academic, physical, mental. Engineering education is a time bound course with time limitations to complete their work especially during the first two years. Students are new to professional college life and the demands of education; create a lot of stress, especially

to hostel students who are away from family for the first time. Also, in the economically weaker students and students from educationally weak background, this creates a lot of complex and do not perform well due to inhibitions. Statistics reveal increasing number of suicides and dropouts. Considering the student-teacher ratio in classrooms, it is impossible at times to give personal attention to students in class. One solution therefore is a Mentoring which can form the bond between teachers and students in the true sense. Mentoring is required for students to achieve emotional stability and to promote clarity in thinking and decision making for overall progress.

4. **The Practice**

The practice is that of creating an efficient mentoring system. Each teacher is assigned 15-20 students for the complete duration of their study. They meet at least once a week to discuss, clarify and primarily to share various problems which may be personal, domestic, academic, etc. The mentors encourage the students to participate in co-curricular and extra-curricular activities and sports. Their academic performance and other activities are all recorded. Students should inform their mentors on all their movements like their absence from college, sickness etc. The mentors also keep in touch with the parents on their attendance, test performance, fee payment, examinations etc. The teacher is equipped with all the necessary information about his/her wards on a file. The teacher involves local guardians and parents as well, whenever necessary for any advice or help. At the end of every month the mentors prepare a report of their mentees progress. The mentors also counsel the students in need of emotional problems. When the students have any problem in any department either with the staff or with work completion the mentors speak with the respective staff and sorts out the problem. Mentors take special care of slow learners, who are given advice on how to study, prepare a time table for study and clarify the doubts and also given notes to study. They will meet the mentors once a month and get the report of the progress and achievements of students and complaints of and by the students. These complaints are discussed with the Principal and necessary action taken to rectify the complaints.

5. **Evidence of Success**

Student counseling committee works actively and maintains regular touch with the students for sort out the problems that they encounters during their studies at any stage. The immediate solutions given to the students are as follows.

  - Reduction in absenteeism.
  - Improvement in overall performance.
  - Improvement in personality.
  - Increased participation in co-curricular activities.
  - Improvement in behaviour and attitudes
  - Improved interpersonal relationship with elders and peers.
  - Becoming responsible citizen.
  - Improvement in performance of weak students.
  - Increased campus selection ratio.
  - Receiving awards and recognition

6. **Problems Encountered and Resources Required**

Majority of the Students are unwilling to open and share their problems freely to the mentors. Therefore it makes the mentor to understand the problems of him/her to give right guidance.

Best Practice-2

Title of the Practice: National Service Scheme (N.S.S.) Extension Activity

Objectives: The main objective is to inculcate moral and ethical values through service to humanity among the students and become responsible citizens of the nation.

The Context: The institute conducts its N.S.S. activities during the academic session as a team work of N.S.S. volunteers under the active guidance and leadership of program officer. The N.S.S. unit utilizes this notion of the student youth to work practically and enthusiastically in the adopted villages by involving them as N.S.S. volunteers with the purpose of inculcating awareness in rural community regarding education, prevention of disease.

The Practice: In DNRCET, N.S.S. committee is formed and headed by the principal as chairman and one senior faculty as programme officer.NSS performs various activities in the nearby adopted villages and in the institution. DNRCET encourages the students to interact with the neighbouring communities to explore the opportunities for involvement in social work. Blood donation camps and Health check-up camps are arranged periodically and on days of commemoration.

Evidence of Success:

In DNRCET, in the past five years, college N.S.S. unit have organized various activities including unit camps, district camps, special camps and celebrating special days. As a result of these activities, a noticeable change has been observed in the personality of the students. The college has a systematic mechanism to get the students actively involved in social movements and activities through its NSS programmes. In the last five years, total 49 activities have been organized and many Govt officials and higher officials participated in the NSS activities.

Summary of the activities:

Academic Year	Number of Activities	Number of Students participated	
2021-2022	11	428	
2020--2021	8	650	
2019-2020	13	530	
2018-2019	9	620	
2017-2018	8	610	

Awards & Certificates

- NSS unit also received awards for their extension activities and some of them are Best NSS Unit Awards from Sri Vijgnana Vedika, Best NSS PO in Azadika Amrit Mahotsav, Republic day celebrations, Kishori vikasam, Uttamasevak award from Swachh Bharat Mission etc. Also, many students received certificates for their contribution to NSS activities.

Problems Encountered and Resource Required: Service to mankind is service to God. Though N.S.S., volunteers are directed to work for the cause of community and Society to live up to the expectations of the people.

File Description	Document
Best practices as hosted on the Institutional website	[View Document](#)

7.3 Institutional Distinctiveness

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

Response:

DNRCET is provided with a Technical Skill Development Institute (TSDI). It is used to promote skill development& entrepreneurship in and around the rural areas of DNRCET. It is also serving as an important task of providing high quality skilled manpower as part of the "Knowledge and Skills Mission "of Government of A.P.As per some estimates, Andhra Pradesh will face an incremental Human resources requirement of approximately ten million skilled workers from 2012 till 2022, across the high-priority and emerging sectors. Thus the main objective of the program is to implement a structured and pragmatic solution to skill & up skill the workforce in and around the rural areas of DNRCET and to increase employability, and promote entrepreneurship in sync with Industrial growth.

The institution has provided five labs for training, viz.,

- The computer based training lab (CBT)
- Electrical home lab
- Electronics home lab.
- Electronics office lab

- R&AC Lab

To facilitate the above, the target population has been divided into seven segments, viz.: Drop outs, Engineering skills, degree & PG, in-trade services, agriculture & allied, crafts, entrepreneurship development. Separate programmes will be designed for each segment. A hybrid model where t-SDI carries out its own programmes as well as value-adds & collates the training being done by other departments is being adopted by the corporation to start with. Some unique & best of class training programmes like Siemens Centers of Excellence Clusters, Capital Area Skilling, Train the Trainer, etc. are part of the whole gamut of trainings to be offered at different levels. In addition to the practice training offered at these TSDI's, it is considered that the course would be more effective and fruitful if relevant material related to the course is also provided to the participants for revision and ready-reference .Consequently, an attempt was made to create the requisite content by the experienced faculty and the trainers. TSDI is staffed with best of talent in this sector & will partner with leading training providers &industry to carry out the training programmes. It aims to develop a best-in-class learning management

system and placement and tracking mechanism. Ultimately, it aims to be among the best training provider

Organizations in the state.

- During the span of last five years almost 4417 students got training from this project. They are:
- 350 UG students
- 2363 Polytechnic students
- 1126 ITI Students
- 578 Social Welfare Students(SSC & Below SSC Students)
- This project has evidenced a big success with a huge number of students who got training from this project, enhanced their English communication skills, soft skills and their life skills, increased their self confidence, and learnt corporate etiquettes.
- Recently a few students from DNRCET are hired by a reputed MNC, and some more students are waiting for offer letters.

File Description	Document	
Any other relevant information	View Document	

5. CONCLUSION

Additional Information :

With the purpose of "Social transformation via active education," the DNR College of Engineering and Technology was founded through the collaborative efforts of specialists with extensive and outstanding academic involvement in the field of technical education. DNR CET, focus is placed on educating deserving young students who want to pursue higher education in engineering and who want to acquire skills to satisfy industry demands. DNR CET has unique qualities that have led the institution to quality and excellence in all of its endeavors.

DNR CET, an exclusive educational stream for student's education founded with the motto of providing the uneducated rural masses with the hitherto unthinkable and unreachable source for their overall development and welfare, i.e., higher education, provides qualified employees to the technical and IT sectors of the global labour market. DNR CET, which has been approved by the AICTE and is affiliated with the Jawaharlal Nehru Technological University, Kakinada (JNTUK), began operations in 2010 with 300 students and has since expanded to include 100 staff members and 1564 students.

The institute provides 4 M.Tech (P.G) Programs (CSE, DECS, Machine Design, Structural Engineering), and MBA, and 7 B.Tech Programs (CE, ME, CSE, ECE, EEE, CSE(AI&ML), and AIDS). Along with establishing MoUs with reputed industries. They are offering placement training, student-industry visits, internships, workshops, and guest lectures.The library having 36192 technical and non-technical books, 118 periodicals, 10 magazines, and several CDs, it is a veritable knowledge treasure mine.

In addition to encouraging students' participation in athletics, the institute promotes the idea that "A Sound Mind in Sound Body." We have designated a specific time for games for students to produce and activate their hidden energies in order to make them mentally and physically sound in order to ensure this.

Concluding Remarks :

The DNRCET has been running successfully since the year of establishment 2010 with the support of well qualified and committed faculty for the last 12 years serving the needs of the people in and around this area besides extending the hands to other districts also. The college has a motto of providing quality engineering education through well defined teaching learning methodologies followed by the curriculum of JNTUK, Kakinada in a highly disciplinal environment and is committed to provide all requirements in curricular and co-curricular activities to the students and make them technically strong with technical knowledge, soft skills, ethics so as to enable them become responsible Engineering Professionals of good standards. The DNRCET is committed to strive for continual improvement of its quality management system through customer satisfaction in terms of achieving academic excellence. In addition to encouraging student's participation in athletics, the institute promotes the idea that "A sound mind in sound body". Several awards and recognitions were bagged by present and past students and the legacy is being continued in the days to come.