



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

DNR COLLEGE OF ENGINEERING AND TECHNOLOGY

BALUSUMUDI BHIMAVARAM WESTGODAVARI DISTRICT

534202

www.dnrcet.org

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 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 the 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 realized the establishment of a college at Bhimavaram, Known as **West Godavari Bhimavaram (W.G.B) College** in 1945. In 1964 it was renamed as **Dantuluri Narayana Raju (D.N.R) College** in memory of its founder. Under this premier association DNR College of Engineering & Technology was established in the year 2010. DNR CET offers Five B.Tech programmes in CE, EEE, MECH, ECE and CSE, Four M.Tech Programmes in CE, MECH, ECE and CSE. The institute has been running successfully with the support of well qualified and committed faculty for the last nine 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 discipline environment. Though the college was started with an intake of 300 seats, it is 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 for facilitating the students to face the interviews by the time they complete their graduation. Apart from the technical programs mentioned above, the institution is also serving the society by different means through its NSS unit. It is a great privilege that many students have membership in technical bodies like ISTE & CSI. The dedicated placement cell regularly conducts grooming sessions making students industry-fit.

Vision

To evolve as Centre of Excellence in Teaching, Innovative Research, Entrepreneurship and Consultation in Engineering & Technology and to empower the rural youth with technical knowledge and professional competence thereby transposing them as globally competitive and self-disciplined technocrats.

Mission

1. To inculcate technical knowledge and soft skills among rural students through student-centric learning process and make them as competent Engineers with professional ethics to face the global challenges, thus bridging the rural-urban divide.
2. Strengthen industry institute interaction to enable the students to work on realistic problems and acquire the aptness to face the ever changing requirements.

3. To implant entrepreneurial attitude and ethical values among the learners.
4. To create a work culture where teacher adore facilitation and learner enjoys learning for Research & Development.
5. To develop a unique practice that instills responsibility and accountability in association with various stakeholders.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Constant encouragement and utmost support from the Management.
- Located in the heart of the town and surrounded by villages.
- Dedicated, well-qualified and competent faculty with research intent.
- Effective mentoring system providing constant guidance to the student and feedback to the parent regularly.
- Global outlook under a strong leadership
- MoU with foreign university.
- Alumni play a critical role in guiding the students towards success.
- Providing scope for all-round development of personality of the student through Sports, Charities like DNR Irised Youth Association (DIYA) and Consultancy like Quality Awareness Cell (QAC).
- Service oriented activities through NSS unit to contribute in nation building.
- Personality and skill development programs for goal setting and improving the leadership skills by reputed agencies and iconic personalities.
- Good ambience through infrastructure facilities.
- The campus is totally under Surveillance.
- Women's Empowerment Cell (WEC) is vital and contributes to a better society.
- The library has an excellent collection of scholarly resources in the areas of Science, Engineering & Technology in conventional books and digital format.
- Campus Recruitment Training (CRT) programmes.
- State-of-the Art laboratories and well equipped workshops.
- Technical Skill Development Center is established by AP State Skill Development Centre (APSSDC) under SIEMENS project to train the rural unemployed youth in the technical skills to create opportunities.
- General amenities like Bank, Post office, R.O plant, Play ground, Indoor stadium, Gym.
- Transport facility from various villages in and around west Godavari district..
- The institution has Roof top grid tied solar power plant with 100KVA output.

Institutional Weakness

- To enhance financial support for R&D activities to the faculty and students.
- Industry institute interaction for Research and student internships.
- Institute lacks in revenue generation.

- Moderate placement ratio.
- Few students are pursuing higher education.
- Involvement of alumni at institute level is less.
- Students admitted from rural belt need to be trained.

Institutional Opportunity

- Inculcating the culture of employment and entrepreneurship to rural youth through technology transfer.
- To arrange more number of FDPs/ STTPs/ National / International conferences and workshops.
- Scope for inter disciplinary and sponsored projects
- Involvement of faculty and student exchange programs with State, National and International organizations.
- To enhance the technical skills of the student through APSSDC t-SDI SIEMENS.
- To reduce the gap between the rural and urban divide, by imparting quality education.
- To enhance engineering consultancy to local industries.
- Scope of conducting state and national level programs through AP Skill Development Corporation and PMKVY.
- Utilization of alumni services for the betterment of the stakeholders

Institutional Challenge

- Global recession may hamper placement opportunities in core areas for students. To come out from this challenge the desired core objectives and outcomes are to be achieved satisfactorily
- Meeting the ever changing requirements of industry and society as a whole.
- Improving communication skills of students hailing from rural background who are very good in technical competencies.
- To motivate students towards GRE/IELTS/TOFEL/GATE/GMAT.
- Inculcation of research culture among undergraduates.
- Strengthening the consultancy and funded research activities.
- The activities through industry institution interaction cell need to be improved.
- Growing competitions with other technical institutes.
- Full filling the changing scenario in the education sector.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The College is affiliated to JNTUK, Kakinada and follows the curriculum prescribed by the university. The Curriculum planning and implementation is prepared by the institution guided by its Vision & Mission. The college offers five programs in the field of CE, EEE, ME, ECE and CSE. The college also offered 53 certificate courses during the last five years. Some of the faculty are the members of BOS in various reputed organizations. Elective courses have been introduced in nine courses during the last five years. The college also offers 25 Value added courses imparting transferable and life skills during the last five years.

Two 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 programs organized by various departments of the college.

The Institution practices equity and equality of opportunity among all the students irrespective of caste, creed, regionalism, gender etc. Awareness programmes are also initiated by NSS, which extensively carry out various social activities such as environmental protection, ecological preservation, women empowerment and human values. Thus students are encouraged to take part in life skill programs organized by various departments of the college apart from providing field visits/internships in various reputed industries.

Structured feedback on curriculum is obtained from students, teachers, alumni and parents. The obtained feedback is analyzed and the report will be furnished for further improvement.

Teaching-learning and Evaluation

Students get enrolled as per Andhra Pradesh state Government guidelines. During the last five years 46 students have been admitted from other states. The college implements teaching learning practices with interactive techniques, incorporating various strategies for facilitating slow learners by collaborative learning process, clarifying doubts, revising important concepts and practice problems in subjects. The college is maintaining 9:1 student faculty ratio. Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences. For every 15 students one mentor has been appointed.

Remedial classes, motivational classes, study material etc. are offered to support the slow learners. Mentor, faculty, alumni, senior students are assigned for their academic growth. Scholarly activities are encouraged for advance learners to satisfy their learning capabilities. Faculty is encouraged to use ICT tools for effective teaching and to utilize e-resources to enrich teaching – learning methods. All the faculty are using ICT facilities to make Teaching Learning process most effective. The institute has adequate faculty as per norms. The institution is strengthened with well qualified and experienced faculty. Average percentage of full time teachers with Ph.D is 22.78% during the last five years.

Faculty is recognized with suitable awards. Excellence Teaching - Learning is achieved by recruiting competent faculty. Recruitment of the faculty is done as per the norms of JNTUK and AICTE.

Facilities like ramp, wheelchair, lift, separate digital library etc. are provided for the differently abled students. Self learning and Innovative pedagogies of teaching and learning are adopted for better growth of students.

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

Research, Innovations and Extension

The college has a well-defined vision and mission that focus on the futuristic growth of the Institution as well as the academic proficiency of the students. The Management, Principal and faculty members involve together in formulation and implementation of the quality policy and plans. Powers have been delegated to all levels so as to provide operational autonomy and decentralized governance system. A streamlined system has been devised to analyze the grievances and to get the feedback on the institution functioning periodically. Professional development of the faculty members is enhanced by conducting FDPs and training programmes. The financial transactions are monitored by the 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.

Incubation center is established in 2014. Intellectual Property Rights Cell is established in the college. IPR cell conducted 103 activities during last five years. 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/journals and attend FDPs. There are 181 publications during last five years. Students are also given financial assistance for Innovative projects like SIH(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 to work for a holistic development of the Society.

NSS unit of the college received 28 recognitions from Government/ recognized bodies. The NSS unit of the college organized 71 activities during the last five years. The institution is encouraging the students to participate in NSS activities. The participation of the students in extension activities leads to practical experience which effectively supplements their theoretical knowledge imbining awareness of the Civic responsibility, Social understanding, Leadership, Community and team building skills. The institute has 25 functional MoUs with National/ International institutes and Industries during the last five years.

Infrastructure and Learning Resources

Infrastructure plays an important role in building the brand of institute. The institute has stipulated number of class rooms with ICT facilities, well equipped laboratories and seminar halls. Facilities like departmental libraries, computer centre with 412 systems, 1000 capacity auditorium are also available for the staff and students. Considering physical activities also to be equally important, institute created several indoor/outdoor sports facilities which include indoor sports complex, play ground, Gymnasium and Yoga Centre. R.O water plant is installed to cater the needs of drinking water in the campus. College attached hostel facility for boys

and girls separately. Transportation is provided to students and staff from every nook and cranny of the district at nominal cost.

Library being hub of knowledge, it is vital to have sufficient titles and subscriptions to cater the needs of students and faculty. It has an impressive collection of 29422 volumes of 5985 titles, 40 National & International print Journals, 10 Magazines and 13 News papers to cater to the Engineering streams. The library books can be easily accessed through the use of Online Public Access Catalogue (OPAC) and is fully automated with integrated library management system "ECAP- LIBMAN" software. The college is equipped with digital library facility where students can access different e-journals and online resources through DELNET, NDL, NPTEL-SWAYAM, JOURNALTOCS and SHODHGANGA. The library own collection of rare books. Each department maintains a library that consists of latest books, project reports and thesis for reference by the staff and students.

The IT infrastructure strategies are developed as per the guidelines of AICTE & affiliating University 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 adequate student computer ratio with 120 Mbps (100Mbps+20Mbps) bandwidth of the Internet connection. The campus is Wi-Fi enabled apart from high speed LAN system.

Besides 10% maintenance budget, institute allocates 18% of the annual budget to the physical and academic support facilities.

Student Support and Progression

The institute provides a number of mechanisms for student support and mentoring. The HoDs and faculty help to identify understand and resolve the student issues. The Government of AP provides scholarships to 71.6% of students based on their eligibility. The institute has initiated a thriving tradition of scholarships extending every year to meritorious and deserving candidates. Besides, Non government agencies also offered financial support for 14.11% of the students based on the merit and financial back ground during the last five years.

The college is committed to excellence in all spheres to make the stay in the college 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 counseling and personality enhancement sessions by inviting external experts. As a result 41.91% students are benefited by guidance for competitive examinations and career counseling. The institution also offerers VET programs and many of the students are getting benifitted by them.

The Training and Placement cell provides, career counseling and pre-placement guidance at various levels to prepare the students for progression to higher studies as well as Internship programmes and finding suitable placements. The success of training is reflected in placements, majority number of eligible final year students get job offers in their final year itself. 72.87% of appeared students qualified in State level examinations during the last five years.

Co-curricular and Extra-curricular activities are part and parcel of student's life in the college which enables them to discover their true potential. The students participated in Intra College sports, tournaments and cultural competitions and achieved 103 awards during last five years. The college organizes 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 Women Empowerment 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, institute has put efforts in the right direction for academic excellence under effective leadership. DNR CET has decentralized mechanism for effective implementation of decisions taken by its governing body. The institute prepares annual strategic plan keeping in view of the directions and guidelines recommended by AICTE and Affiliating University. The Principal along with Vice Principal, IQAC, HODs, A.O and various committees ensure the smooth functioning of the institute.

DNR CET has hierarchical organizational structure with well defined roles and responsibilities. For effective execution, institute is in process to have 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 objective, thus several welfare policies are operational. Financial support is extended to the staff for their professional development. The college organized 64 Professional development programs in last five years. They are also encouraged for attending and conducting programs like FDPs, STTPs and conferences. At the same time the annual performance appraisal is conducted without fail. Optimal utilization of its resources has mobilized funds from various organizations, which are periodically audited. DNR CET received Rs 33.15 lakhs as fund from non-government bodies and individuals during the last five years.

Prior to establishment of IQAC cell, Institute was practicing self disciplined model in all facets of its operations, however after IQAC formation many polices are formalized. IQAC plays a major role in inculcating quality culture in the institute which is functioning effectively improving the quality level of institute. IQAC is regularly evaluating the academic performance of the students and take steps to improve the student centric Total Quality Management (TQM) in the campus. IQAC is active in guiding the faculty to upgrade their skills and delivers the recent developments to the student's 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 at the same time inculcate social responsibility among its faculty and students. The Institute has conducted 35 gender equity programs during the last five years. The gender sensitization and professional ethics are part of the curriculum. To further sensitize the students, institute conducts frequently training programs on safety, security and even personal counseling. Institute facilitates girls common rooms.

The institute has a facility to generate 1,46,000 KWH per annum green energy through 100KVA grid tied roof top solar plant. More than 52% of campus lighting is provided through LED. In the path towards "Reduce, Reuse and Recycle", institute has set a solid, liquid and e-waste management system. Rain water harvesting is also planned through multiple pits. Landscaping is maintained in the campus to create eco-friendly environment. Institute practices plastic free and paperless office along with pedestrian and bicycle friendly environment.

Along with lift and ramp facility, a separate digital library is also provided for physically challenged persons. As per the rules and guidelines, the institution allocates scribes for Divyangjan students. The college NSS unit organizes various awareness activities to address the locational advantages and disadvantages in surrounding areas. Institute not only has Code of Conduct hand book for all its stake holders but also believes in promoting human values, National integration, communal harmony and social cohesion. Institute observes most of the National festivals and anniversaries of great Indian personalities with an active participation from students and staff. Transparency in financial, academic, administrative and auxiliary functions is also maintained by the institute and demonstrates them in the real practices through various bodies. The institute maintains two best practices such as **DIYA** (DNR Irised Youth Association) impart to the human values and **Employability Enhancement Skills** to make them industry ready. As per Quality Policy, the institute is committed for creating, archiving and disseminating knowledge in Science, Engineering and Technology for the service to the humanity.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	DNR COLLEGE OF ENGINEERING AND TECHNOLOGY
Address	BALUSUMUDI BHIMAVARAM WESTGODAVARI DISTRICT
City	BHIMAVARAM
State	Andhra Pradesh
Pin	534202
Website	www.dnrcet.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	U RANGA RAJU	08816-221237	9000380115	08816-221236	dnrcet@gmail.com
Associate Professor	B V S VARMA	08816-221238	9912712546	-	phdvarma@gmail.com

Status of the Institution	
Institution Status	Private

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of establishment of the college	01-01-2010

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Andhra Pradesh	Jawaharlal Nehru Technological University,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	04-04-2018	12	

Details of autonomy

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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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	BALUSUMUDI BHIMAVARAM WESTGODAVARI DISTRICT	Urban	10.81	14602

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	120	74
UG	BTech,Electrical And Electronics Engineering	48	Intermediate	English	60	41
UG	BTech,Mechanical Engineering	48	Intermediate	English	120	73
UG	BTech,Electronics And Communication Engineering	48	Intermediate	English	120	120
UG	BTech,Computer Science And Engineering	48	Intermediate	English	120	120
PG	Mtech,Civil Engineering	24	B.Tech	English	18	18
PG	Mtech,Mechanical Engineering	24	B.Tech	English	18	0
PG	Mtech,Electronics And Communication Engineering	24	B.Tech	English	18	6
PG	Mtech,Computer Science And Engineering	24	B.Tech	English	18	5

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	18				23				105			
Recruited	16	2	0	18	22	1	0	23	83	22	0	105
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				65
Recruited	56	9	0	65
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				31
Recruited	29	2	0	31
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.	0	0	0	0	0	0	0	0	0	0
Ph.D.	16	2	0	22	1	0	0	0	0	41
M.Phil.	0	0	0	0	0	0	2	1	0	3
PG	0	0	0	0	0	0	81	21	0	102

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	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

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	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

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
PG	Male	22	0	0	0	22
	Female	7	0	0	0	7
	Others	0	0	0	0	0
UG	Male	297	0	0	0	297
	Female	131	0	0	0	131
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	25	17	22	24
	Female	4	6	7	5
	Others	0	0	0	0
ST	Male	2	1	2	0
	Female	0	0	1	0
	Others	0	0	0	0
OBC	Male	112	78	109	122
	Female	43	34	41	105
	Others	0	0	0	0
General	Male	46	110	134	132
	Female	31	111	83	78
	Others	0	0	0	0
Others	Male	7	2	5	3
	Female	0	1	2	1
	Others	0	0	0	0
Total		270	360	406	470

3. Extended Profile

3.1 Program

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

Response: 09

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
09	09	09	09	07

3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1258	1142	1131	1155	1213
File Description	Document			
Institutional Data in Prescribed Format	View Document			

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

2017-18	2016-17	2015-16	2014-15	2013-14
306	306	306	306	258
File Description	Document			
Institutional data in prescribed format	View Document			

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

2017-18	2016-17	2015-16	2014-15	2013-14
209	302	344	322	335

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

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

2017-18	2016-17	2015-16	2014-15	2013-14
146	145	141	120	95

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
146	145	145	125	97

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 52

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

2017-18	2016-17	2015-16	2014-15	2013-14
605.25	804.66	703.72	835.89	775.53

Number of computers

Response: 479

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

The College is affiliated to JNTUK, Kakinada and follows the curriculum prescribed by the university. The Curriculum planning and implementation is prepared by the institution guided by the Vision, Mission, Core Values and other social responsibilities that the institution has to discharge in tune with the national goals.

At the beginning of every academic year, the IQAC commences meeting with all HODs and initiates the process of preparation of the blueprints for curriculum planning and deployment by every department. The Head of the Departments convene meetings and prepare the curriculum planning and deployment blueprint. Periodic meetings of the Heads are convened to review the process of implementation.

The institution ensure delivery of the curriculum in the following ways:

- Allotment of work load in each department is done based on specialization/options of faculty.
- Timetables are prepared by the timetable Committees in the departments and are approved by the Principal.
- Faculty members prepare lecture notes and teaching plan for theory subjects and laboratory manuals for practical subjects according to the curriculum of JNTUK, Kakinada before commencement of class work.
- Based on the pre-requisites, extra hours are allotted to certain subjects.
- HODs monitor the syllabus coverage for every 15 days.
- Adherence to syllabus completion as per teaching plans is monitored through teaching diaries.
- Class teacher continuously evaluates to identify slow learners and plans remedial classes if necessary.
- Feedback from students is obtained twice in a semester for each course on various aspects of teaching learning process.
- Internal examinations for theory and practical subjects are conducted as per the schedule by the university.

- Question papers for the internal tests are designed such that the course outcomes are attained.
- Teaching faculty are entrusted with the task of mentoring 15 students on academic and personal issues, leading to a better learning atmosphere and to sustain their performance.
- Contents beyond the syllabus are taught through industrial visits, e-learning and guest lectures by experts from the industry.
- Periodic meetings are conducted by the Principal with HODs to review on syllabus completion and student's performance in Academic and Non academic aspects.
- e-Resources like DELNET, NPTEL-SWAYAM etc., are provided in library to supplement the syllabus.
- Teachers are encouraged to adopt audio-visual teaching methods such as PPTs, ICT tools and online courses.

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

Response: 53

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

2017-18	2016-17	2015-16	2014-15	2013-14
10	10	11	12	10

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

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

Response: 10.05

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

2017-18	2016-17	2015-16	2014-15	2013-14
6	2	2	2	1

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

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

Response: 22.22

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

Response: 2

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	View Document

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

Response: 100

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

Response: 09

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

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-

on programs as against the total number of students during the last five years

Response: 58.76

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

2017-18	2016-17	2015-16	2014-15	2013-14
733	657	556	790	733

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document

1.3 Curriculum Enrichment

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

Response:

- The Institution practices equity and equality of opportunity among all the students irrespective of caste, creed, regionalism, gender etc.
- Both male and female students are given equal representation in all Committees/forum etc.
- Equal opportunities are given to both the genders in terms of employment, training programmes, sports activities etc., and so gender issues do not arise.
- Women's day is celebrated with vigor in the institution campus.
- Girls and boys participate in various co-curricular activities such as paper presentations, organization of paper contests, group discussions and technical quiz programmes.
- Both boys and girls are associated with academic, co-curricular and extracurricular activities.
- Awareness programmes are also initiated by NSS, which extensively carry out various social activities such as environmental protection, ecological preservation, women empowerment and Human values etc.

Besides the above activities, university prescribed curriculum also integrates these crosscutting issues through syllabus and pedagogy:

Curriculum Core Papers:

- **Environmental studies**

- This course is introduced for students of R13, R16 Regulation in UG Programmes and the topics regarding awareness on the environmental social issues, environmental legislation, global treaties, environmental impact on economic development, Importance of ecological balance, environmental development activities, measures for environmental balance, environmental impact assessment, and also about the environmental policies and regulations are covered.

-

- **Gender Sensitization**

- This course is introduced for students of R13, R16 Regulation in UG Programmes and the topics regarding gender discrimination and empowerment, need of gender sensitization, gender justice and gender equality, contribution of both the genders in creation and development of a well balanced society, gender socialization, gender stereotypes, amendments and national policies related to the gender equality are covered and for better understanding and impact students are also encouraged to do role-play acts related to gender discrimination during college events.

-

- **Human Values and Professional Ethics**

- This course is introduced for students of R13, R16 Regulation in UG Programmes and the topics regarding morals, values and ethics, work ethics, respect for others, self confidence, engineering ethics-consensus and controversy, professional and professionalism, uses of ethical theories, engineering as social experimentation, engineer's responsibility for safety and risk, engineer's responsibility and rights, global issues related to environmental ethics, analyzing ethical problems in research and intellectual property, patent rights are covered and also seminars on professional ethics and human values are also conducted for better understanding to the students.

File Description	Document
Any Additional Information	View Document

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

Response: 25

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

Response: 25

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 12.96

1.3.3.1 Number of students undertaking field projects or internships

Response: 163

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	View Document

1.4 Feedback System

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

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

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

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed**D. Feedback collected**

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

File Description	Document
URL for feedback report	View Document

NAAC

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

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

Response: 0.8

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

2017-18	2016-17	2015-16	2014-15	2013-14
5	11	19	7	4

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

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 62.16

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

2017-18	2016-17	2015-16	2014-15	2013-14
470	406	360	270	334

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

2017-18	2016-17	2015-16	2014-15	2013-14
612	612	612	612	516

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

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years**Response:** 64.69

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

2017-18	2016-17	2015-16	2014-15	2013-14
260	189	139	193	176

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

2.2 Catering to Student Diversity**2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners****Response:**

The college arranges Orientation Program to the parents and students admitted into I B.Tech before the commencement of the classes regarding facilities, faculty expertise, rules and regulations of the college and also share information regarding affiliating university.

The students and parents are encouraged to express their expectations and elicit other information during program and provide a platform to access and act accordingly. The requirements of students are identified and addressed at the earliest by way of a strategic approach that involves bridge programs, communication skills, personality development and motivational sessions. Institute has a mechanism which continuously monitors and evaluates the students.

The participation of the students in class room discussions, class room seminars, class committee meetings and performance in class tests help to assess their learning abilities and identify slow learners and advanced learners.

The advanced learners of the college are promoted:

- In addition to the regular material, add-on materials also provided.
- Encouraged to present papers and to write research articles.
- Peer teaching and group presentations are encouraged by teachers.
- Given the lead role to plan and organize fests/events, departmental seminars/ conferences which gives them an opportunity to interact with the academia and industry experts.
- They are groomed to represent the college during seminars, paper presentations and student fests organized by other colleges.
- Provide digital library for e-Resources to better understanding of complex problems.
- Motivated to strive for higher goals and provided with additional inputs for better career planning and growth through pre assessment examinations like CustCo and CO-Cubes.
- Offering special coaching for examinations like GATE and PGECET.

Initiatives for Assisting slow learners:

- Identifying the academically weak students based on their classroom performance, students are divided into groups and mentors (faculty members) are assigned to each group right from I to IV year.
- The mentor provides requisite guidance and assistance by way of arranging special tutorials, video lectures and personal attention by the faculty concerned.
- The mentor will be in touch with the parents and frequently inform to update the status of their children.
- Remedial classes are conducted in courses where failures are more in external examinations.
- Apart from the conventional teaching, the students are taught using modern teaching aids like LCD, etc.
- They are provided with question banks, course materials, model question papers and e-books. Bridge courses are arranged for the lateral entry students in the II year to cope up with regular students.

2.2.2 Student - Full time teacher ratio

Response: 8.62

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0

2.2.3.1 Number of differently abled students on rolls

File Description	Document
Institutional data in prescribed format	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem

solving methodologies are used for enhancing learning experiences**Response:**

Faculty members are shifting the focus over last few years, to a student centric learning process, in place of conventional teaching-learning process of transferring the knowledge to students, through classroom lectures. The focus is on knowledge transfer and learning through students active participation and involvement. The faculty provides a platform to students to explore independently, learn through self study and guides them to develop effective and lifelong skills.

1) Active learning: The faculty adopt active learning by involving students in the learning process more directly through the activities like Brain storming, quiz, debate, group discussions, role play, games, model making, mini projects, presentations, essay writing, elocution, case studies and simulations on technical content.

2) Collaborative Learning: This is implemented by forming student teams, working jointly to solve a problem, complete a task/project, participating in debates or design a product.

3) Inquiry-based Learning: Students are encouraged to search and make use of resources beyond the classroom for investigation of open questions/problems, developing their critical thinking and increasing understanding levels by conducting review of research papers, surveys, etc.

4) Cooperative Learning: The faculty focus on cooperative learning methodologies. Students work together to maximize their own and each other's learning in student chapters and also while performing various activities using think-pair-share, round table techniques, etc.

5) Problem based Learning: In projects/competitions, participating students are assigned different tasks, assignments, portfolios, activities in which students engage in complex, challenging problems and collaboratively work towards their solutions by using inter-disciplinary knowledge such as design and implementation of Software/Apps, Design and building Robots etc.

6) Experiential Learning: Field based experiential learning like Internship, service learning and class based experiential learning like role plays, games, case studies, simulation, virtual lab and presentations are practiced.

7) Project based Learning: Students work on application of theory learned through projects/model building/simulation in the form of design and fabrication of some systems. It helps to bridge the gap between theoretical concepts and its practical applications. The effective phases of survey, case study, implementation, testing and report writing ensure the required project-based learning among the students. Some subjects are augmented with learning through implementation of mini-projects.

8) Experimental Learning: The faculty members maintain foster learning environment by engaging in rich experiential content of teaching through experimentation, demonstration, visual aids, periodical industrial visits, organizing exhibitions as well as presenting papers. Usually, students present seminar on contemporary topics as well as state-of-the-art technologies.

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

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 146

File Description	Document
List of teachers (using ICT for teaching)	View Document

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

Response: 16.55

2.3.3.1 Number of mentors

Response: 76

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

Creativity and innovation bring about interest and motivation to learners as well as trainees, which eventually lead to learning. Perhaps the simplest way to transform a class in a powerful way is to adopt active learning strategies that get students working with course material in the classroom either individually or in groups. Active learning strategies, unlike open class discussions are timed, structured and designed to give students a chance to learn by acting on a specific piece of content in a specific way.

Students learn material better when they engage it actively rather than absorb it passively. The institute introduced e-learning platforms to facilitate independent learning where students can access online course content. Thus e-learning platform bridge the gap between classroom learning and advanced learning.

Teaching-learning is a phenomenon where the teacher and the student are learning. By this method, the teacher is refining his/ her subject knowledge and effective teaching skills, where as the student finds it easier to understand the subject and its application. Our teaching faculty's endeavor is to follow this method meticulously so that both the participants get benefit and value addition to their efforts.

Traditional teaching has been replaced with more innovative and creative ways of disseminating, sharing and facilitating knowledge in students. As both are involved with commitment, through this method, an interest has been created in the student and the teacher to encourage the student to come out with new and innovative ideas. This method also motivates both the teacher and the learner.

A teacher finds out innovative learning ways by using teaching aids to encourage the student's involvement. In this endeavor, our faculty demonstrate live/practical/ day-to-day example to discuss a topic, coupled with technology. This teaching-learning innovative method would certainly encourage the students to raise questions and get answers to their queries with working model development. This kind of support would certainly enhance their innovative skills and creative ideas.

The following are the technologies and facilities for effective teaching and learning:

- All departments are well equipped with ICT-enabled facilities for teaching.
- E-Library resources and online content are used by teachers where the courses need updated information.
- Live interaction facility with industrial experts.
- Periodical industrial visits.
- Industrial internships in renowned industries.
- Training programs are provided in every semester on latest trends.

2.4 Teacher Profile and Quality

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

Response: 98.24

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

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

Response: 22.74

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

2017-18	2016-17	2015-16	2014-15	2013-14
40	31	28	25	23

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

2.4.3 Teaching experience per full time teacher in number of years

Response: 8.31

2.4.3.1 Total experience of full-time teachers

Response: 1213

File Description	Document
Any additional information	View Document

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

Response: 2.32

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	2	1	0

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

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

Response: 25.64

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

2017-18	2016-17	2015-16	2014-15	2013-14
43	35	35	27	28

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

2.5 Evaluation Process and Reforms

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

Response:

The D.N.R. Collge of Engineering and Technology is affiliated institution of JNTUK and follows the evaluation norms of the university. The university has adopted major reform in evaluation by introducing credit based grading system from the academic year 2016-17 and the institute has adopted the same.

The College has its own system of continuous internal evaluation of the students within the frame work of university regulations. There is a two stage process at the institution level for continuous evaluation of students: Formative Assessment and Summative Assessment put in place as per the instructions of the University.

Formative Assessment:

- The IQAC mandates the teachers to use classroom tests for the evaluation of students.
- The College has the practice of conducting Question-Answer sessions to understand the learning levels of students and evaluate the concept clarity.
- Student Seminars to assess presentation skills and ability to participate.
- Syllabus based quiz to assess the ability to think, connect the concepts and interact with the group.
- Assignments for each unit.

Summative Assessment:

Continuous assessment in theory subjects:

As per the JNTUK regulations, two internal mid-term examinations will be conducted. As per R13 regulation, the better performance in either of the examinations is considered for internal marks. As per R16 regulation, the better performance will carry 80% and other one carries 20% of weightage in the total 30 marks allotted for internal tests which include a descriptive examination for 15 marks and an objective online quiz for 10 marks, 5 marks for Assignments and 70 marks for university semester end examinations.

Continuous assessment in practical subjects:

There shall be a continuous evaluation during the semester for 25 internal marks and 50 semester end

examination marks. Out of the 25 marks for internal, 10 marks for day-to-day work, 5 marks for record and 10 marks for internal test conducted by the concerned laboratory teacher.

Continuous assessment in projects:

As part of the internal assessment of projects which are done in Final year, college follows the university framework.

- Project Review Committee (PRC) is formed for every department consisting of Head of the Department, Project In charge and two senior faculty members.
- Students are formed into different groups consisting four or five in each. The groups collect and review the literature on a topic and submit the title with objective, plan of action for title approval to PRC.
- Project Review Committee assesses and approves projects for each group. After obtaining the approval of the PRC, each group is allotted to a faculty member as a Guide for the project and can start the Project work.
- Review meetings are conducted for the continuous assessment in project. Review 1 covers abstract and block diagram, Review 2 covers implementation and Review 3 covers final results with code.
- The Institution scrupulously follows the norms set by the University for conducting the internal and external examinations.
- Out of a total of 200 marks for the project work, 60 marks shall be for Internal Evaluation and 140 marks for the End Semester Examination.

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

Response:

There is complete transparency in the internal assessment. The criterion adopted is as directed by the university.

- At the beginning of the semester, faculty members inform the students about the assessment process.
- The internal assessment test schedules are prepared as per the university calendar and communicated to the students well in advance.
- To ensure proper conduct of descriptive tests, invigilators are assigned to each examination hall as per university norms. Evaluation is done by faculty members within three days from the date of examination.
- The corrected answer scripts at random are verified by HOD to ensure the standard evaluation process.
- The corrected answer papers are distributed to students for verification. The scripts are submitted to the examination section, after rectification of the grievances.
- The marks obtained by the students in internal tests are displayed on the department notice board and uploaded in the university web portal along with their attendance.
- Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and the promptness in submitting the record.
- For laboratory courses, the marks scored by the student for each experiment is indicated in the

record. The independent learning, practical approach to the real-time applications is assessed through viva-voce.

- For the quality of the projects, the evaluation is done by Project Review Committee along with the project Guides.
- To ensure the transparency and refrain from malpractices, the university has introduced jumbling system for theory end-examinations.
- The end examination for the laboratory and projects shall be conducted by the external examiner appointed by the University in the presence of internal examiner.

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

Response:

The college has a three-level grievance redressal mechanism:

Level 1 - Departmental Level: As per the norms, two mid examinations are conducted in each semester and the answer scripts are evaluated within 2 to 3 days. Evaluated scripts are given to students for verification and formally displayed in the college notice board. Grievances like awarding less marks, papers not evaluated properly, counting mistakes, and attendance of students are verified by the respective teachers at first level and then taken up to the Redressal Committee consisting of Head of the Department, subject teachers and mentors. The committee will look into the issue and analyze it, taking opinions of all committee members and relevant faculty to resolve.

Level 2 –Institute level:

The Institute appoints an Examination Cell Incharge /Supervisor who monitors all the online / theory examinations, displays schedules and instructions to the students, for smooth conduct of JNTUK examinations. If students are facing any problems, they are solved by the Observer appointed by University. The grievances during the conduct of online/theory examinations shall be attended by the principal, forwarded to the University if required.

Level 3 –University level:

The grievance redressal at the University level is transparent and time-bound. The university system makes provision for recounting, revaluation and challenge revaluation with a prescribed fee. The queries related to result, printing errors, grace marks etc. are forwarded to the university by the principal. Any queries of students during online examinations are communicated to the JNTUK immediately to get rectified.

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

The academic calendar will be decided by the Affiliating University JNTUK, which has to be followed meticulously.

- The Principal and the HODs, together in consultation with faculty, prepare the academic and examination calendar, based on the university calendar incorporating curriculum, co-curricular, extracurricular activities.
- Each department has its own schedule, following the university calendar. Faculty plans their lesson plans in compliance with the university academic calendar.
- Academic activities are scheduled in tune with the university calendar at the beginning of academic year.
- The academic year shall be divided into two semesters. The Semester that begins in June shall be called as odd semester and the semester that begins in December is known as even semester.
- The total duration of the each Semester shall include registration, teaching, continuous internal evaluation, tests, end of semester examination, evaluation, result declaration and vacation.
- First midterm examination shall be conducted for the first 3 units of syllabus and second midterm examinations shall be conducted for the remaining 3 units as per the dates specified by the university.
- The internal examinations for practical sessions will be conducted before the end of theory examinations.
- The end examination shall be conducted as per the timetable fixed by the university.
- College should upload the internal marks of theory subjects, laboratory work, mini project, technical seminar, comprehensive viva and main project in the stipulated time given by University.

2.6 Student Performance and Learning Outcomes**2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students****Response:**

The 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 by displaying 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(Outcome Based Education) 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.

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

Response:

The various Assessment tools are: **Direct Assessment and Indirect Assessment:**

Direct Assessment Tools:

- Performance in Mid Examinations: This type of assessment is carried out through the mid

examinations which are held twice a semester. Each and every mid examination is focused on attaining the course outcomes. Mid examinations include Descriptive, Online (Quiz) and Assignment.

- Performance in End Semester Examinations: End Semester examinations is a metric for evaluating whether all the Course outcomes are attained or not. It is expected that a student should score at least 40% of Maximum marks of the course for the attainment of course outcomes.
- Laboratory Tests: Day to day evaluation of student's performance in the laboratories with respect to conduct of various experiments is also taken as criterion for attainment of course outcomes.
- Project Evaluation: Evaluation of the student based on the project work is also taken as an important criterion for attainment of course outcomes.

Indirect Assessment Tools:

- Program Exit Survey: Feedback from the students in the form of Program Exit Survey is conducted at the end of B.Tech program to analyze all the program outcomes.
- Exit Survey on Program Specific Outcomes: This survey is also conducted at the end of B.Tech program to analyze all the program specific outcomes.

Mapping of the COs, POs and PSOs is done in strict compliance with the suggestions given by IQAC. The creation of a programme mapping allows the faculty to have a clear overall picture of the outcomes. Programme mapping can help the students to understand how far they have been able to achieve the programme outcomes and it also helps them to do some introspection with regard to their performance. It helps the faculty to understand the gaps in the curriculum and suggest remedial measures.

2.6.3 Average pass percentage of Students

Response: 72.51

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

Response: 153

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

Response: 211

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.56

NAAC

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 0

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

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

File Description

Document

List of project and grant details

[View Document](#)

3.1.2 Percentage of teachers recognised as research guides at present

Response: 1.37

3.1.2.1 Number of teachers recognised as research guides

Response: 2

File Description

Document

Any additional information

[View Document](#)

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

Response: 0

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

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

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other

initiatives for creation and transfer of knowledge**Response:**

Institution is located in an eco friendly campus and management encourages staff and students to carry out research projects that give practical solutions to problems which causes hazard to the environment. The college has an Incubation Centre named as DNR Engineering Incubation Centre established on 6th March 2014, the members are from the DNR CET- R & D committee. The main aim of this centre is to empower independent work abilities tuned in to the national approach of "Make in India".

We aim to work on three axes

1. Promote start up culture through interventions at Pedagogical, Co-curricular and Social level.
2. Implement Startup policy and support through Entrepreneur-in-Residence program, provide Initial Hand Holding Support, Mentoring, Infrastructure, Resources Support etc.
3. To match the requirement of industry allied areas of current technologies. the R & D committee has framed some objectives and initiates.

Objectives and Initiates of R&D Centre

- Explore research culture of societal relevance among faculty members and students.
- Motivating faculty to undertake major and minor research projects from various funding agencies.
- Creating awareness towards Intellectual Property Rights (IPR).
- Enhance interactions between researchers to cater Interdisciplinary developments.
- Guidance to publish research articles in reputed journals.
- Encourage faculty members to pursue Ph.D.
- Providing incentives for findings & publications in reputed journals/conferences and also for obtaining research projects from the government/ non-government agencies.
- Motivate students to participate in research related activities.

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

Response: 103

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

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

File Description	Document
Report of the event	View Document
List of workshops/seminars during the last 5 years	View Document
Any additional information	View Document

3.3 Research Publications and Awards

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

Response: No

File Description	Document
Institutional data in prescribed format	View Document

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

Response: No

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

Response: 0

3.3.3.1 How many Ph.D.s awarded within last five years

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

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

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

Response: 0

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

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

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document

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

Response: 0

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

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

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

3.4 Extension Activities

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

Response:

DNR College of Engineering & Technology is not only excel in academics but also in other extension activities. The NSS unit of the college actively takes part in various activities organized by the government, to impart and sensitize students on social issues and sensitivity towards social responsibility from theoretical foundation to practical. DNR CET created a platform named DIYA- Social Welfare Community apart from NSS unit. Both work together addressing issues related to neighborhood community. Faculty coordinators and student members involve themselves in activities throughout the year. The foundation gives parcel of significance to holistic development of students and sorted out numerous network development activities from the inception. The institution has self financed NSS Unit recognized by JNTUK, Kakinada. Budget is allocated to the NSS unit by the institution intermittently keeps up isolated record. A senior faculty is assigned as Program-Officer for the NSS Unit to implement and monitor the activities.

- DNR CET conducts regular awareness programs on Anti-ragging in collaboration with local police

and judicial authorities, to make the campus a ragging free zone.

- Organize career guidance programmes at nearby schools to create awareness among school going students for choosing their career-oriented courses after completion of their schooling.
- Developing leadership qualities among the students and unemployed youth through the camps on Health awareness, Blood Donation and literary programs.
- It organizes awareness programmes on Road safety by distributing brochures on wearing helmet, seatbelts, drunk and drive, minor driving, following safety rules etc.
- Create awareness of seasonal diseases by printing and distributing relevant pamphlets among the public.
- Donates fruits and bread to the orphanages on the occasion of National leader's birth anniversary.
- Supporting the victims of Hud-Hud cyclone by providing rehabilitation needs.
- Visiting a few villages in and around Bhimavaram town to educate the people for better livelihood in many aspects.
- Conducted awareness programs on voter enrollment and also enrolled the eligible voters in the institutes and villages around Bhimavaram.
- Every year Blood donation camps are organized by the NSS unit in collaboration with various organizations.
- Free Dental and Eye checkup camps as social campaign of NSS Unit that aims to create awareness.
- Conducted awareness campaign about effective utilization of water resources.
- NSS unit organizes awareness programmes in neighboring villages on the consumption of harmful substances like liquor/alcoholic drinks, anti-tobacco and drugs.
- Swachh Bharath, Clean and Green, Plantation, Cashless Transactions are some of the testimonial programmes directed by NSS unit.
- The faculty and students have supported the Arunodaya monovikas kendram, Bhimavaram through NSS unit for the development of disabled school children, gave generous alleviation material as nourishment such as food, garments and bed-covers to the destitutes.

•

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

Response: 0

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

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

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document

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

Response: 71

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

2017-18	2016-17	2015-16	2014-15	2013-14
16	9	10	19	17

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document

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

Response: 50.51

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

2017-18	2016-17	2015-16	2014-15	2013-14
668	446	272	735	882

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

3.5 Collaboration

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

Response: 105

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

2017-18	2016-17	2015-16	2014-15	2013-14
28	22	19	19	17

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document

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

Response: 19

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

2017-18	2016-17	2015-16	2014-15	2013-14
3	6	4	4	2

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document

NAAC

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The college management has been keen on providing well established infrastructural facilities since the inception of the college. The college has fully developed infrastructural facilities with a built up area of 19898.22sq.meters. The campus has 10 blocks which consist of various streams of engineering programs. The institution highly facilitated with Wi-Fi enabled class rooms, well equipped ICT and smart class rooms. The laboratories are fully equipped as per AICTE and affiliating University norms. The Head of the Departments prepare budget proposals for every academic year and submit them to the Principal. The Governing Body of the college meets once in a year to approve and sanction the budget proposals which is submitted by the Principal.

Facilities for Academic activities:

- Block-A: Administrative block comprising of Principal, President, Secretary & Correspondent chambers, Administrative office, ECE Communication lab, IQAC room, Computer Based Training Lab (CBTL), Placement cell, CAD lab and a Seminar hall with a seating capacity of 300 members. For Divyangjans and others, a lift facility is provided which is connected to all other blocks.
- Block-B: It is occupied by Thermal Engineering, MT, HT Labs, Staff room and Class rooms of Mechanical Engineering.
- Block-C: It is occupied by TE, GTE, CT, ASE and W.W.E Labs of Civil Engineering, Physics Lab, Chemistry Lab, Reprographic centre and Fuels Lab of Mechanical Engineering.
- Block-D: It is occupied by M&I, Metallurgy, Servicing & Maintenance, PT Labs, Workshop, Drawing hall and the department library of Mechanical Engineering.
- Block-E: It is occupied by Drawing Halls and an Open-air auditorium.
- Block-F: It consists of FMHM, SM labs, Staff room and class rooms of Civil Engineering.
- Block-G: It consists of EC, EM-I&II, EMS, PS, PE, CS Labs, Staff room, smart class room and class rooms of Electrical & Electronics Engineering.
- Block-H: It is occupied by IC application, EDC&PDC, BE labs, Staff room and class rooms of Electronics & Communication Engineering.
- Block-I: It consists of Vice Principal chamber, CSE HOD Chamber, staff room, central library, Digital Library, Construction, Transport Departments, store room, BS&H staff room, Computer labs, English language lab, Class rooms and smart class room.
- Block-J: It consists of M.Tech class rooms, smart class room and seminar halls.

The other facilities available are:

- Surveillance cameras.

- Internet facility with two ISPs (BCN broadband 100Mbps + BSNL broadband 20Mbps.)
- Solar power plant of 100KVA
- R.O Plant with capacity of 500LPH
- Reprographic room
- Canteen
- 125kVA generator
- 220 kVA power line
- Transport facility
- College Attached Welfare Hostels for boys and girls.
- Book Stores
- Post Office
- Bank and ATM.

Facilities for Co-Curricular Activities:

- Indoor Auditorium with 1000 seating capacity.
- Open Air Auditorium.
- Seminar Halls with ICT facility
- Boardroom.

Facilities for Extracurricular Activities:

- Indoor stadium for Shuttle, Badminton, Table-Tennis.
- Indoor games such as Chess and Caroms.
- Cricket ground.
- Volley ball courts.
- Basket ball court.
- Kho-Kho court.
- Tennis Courts.
- Well equipped Gymnasium.

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

Response:

The institution has its uniqueness in the field of sports and games. It has a gigantic play ground 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.

Indoor and outdoor Facilities for Sports and games available in the institution:

s.no	Name of Sports & Games	No of Courts/Items	Area
1	Cricket ground	1	12864 sq.mt

2	Volley ball courts	3	486 sq.mt
3	Basket ball courts	1	436 sq.mt
4	Tennis courts	2	521.50 sq.mt
5	Shuttle courts	4	684 sq.mt
6	Parallel bars	1	11.5 ft. long and 6.5 ft height
7	Horizontal bars	1	7.8 ft long and 9.1 ft from floor
8	Roman rings	1	8.2 ft from floor
9	Kabaddi courts	2	260 sq.mt
10	Kho-kho courts	2	570 sq.mt
11	Running track	1	4340 sq.mt
12	Long jump	1	35 sq.mt
13	Tennikoit courts	2	67.1 sq.mt
14	Shot-put	2	-
15	Javelin throw	4	-
16	Chess boards	3	-
17	Carrom boards	2	-

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 vignana vedikha etc...

Gymnasium:

The institution has a splendid gymnasium. A full time Trainer and a Physical Director regularly monitor the students and faculty workout for their physical fitness.

List of Gym Equipment

S.no	Name Of The Item	Usage
1	Hyper Extension	to develop shoulder and knee strength
2	Smith Machine	to develop tighs, shoulders and chest
3	Wrist Conditioner	to develop the wrist strength
4	Tigh Machine	to develop the knee strength
5	Wall Bar	to develop the whole body flexibility
6	Squat Stand	to develop the arm string and muscle and knee
7	Double Twister	to develop hip flexibility
8	Motorised Tread Mill	to develop whole body
9	Cross Trainer	to develop knee and back

10	Recombinani Bike	to burn more calories	
11	Stepper	to develop the knee strength	
12	12 Statims Multi Gym	development of Whole body	
13	Abdominal Crunch	to develop the Abdominal Strength	
14	Abcore Machine	to develop the shoulder abdominal	
15	Cable Crossovers	to develop the latissimus dorsi, shoulder& back muscles	
16	T-Bar	to develop the shoulder, latissimus dorsi and back muscle	
17	Dumbles 200Kg	to develop the Bicep muscle, Forearm Muscles	
18	Steel Plates 200Kg	to develop shoulder and chest	
19	Dip Stand	to develop the chest and shoulder	
20	Bench Press	to develop the chest	

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.

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

Response: 92.31

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 48

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
any additional information	View Document

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

Response: 18.67

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

2017-18	2016-17	2015-16	2014-15	2013-14
7.5	75.77	127.44	286.54	235.2

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document

4.2 Library as a Learning Resource

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

Response:

DNR College of Engineering & Technology has a gigantic library with vast collection of books, journals and magazines. A digital library is available with facilities for accessing e-journals, e-books, NPTEL videos etc. 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 years university question papers are provided. All books are bar coded and the issues and returns are automated and maintained using “ECAP –LIBMAN” software.

Total no of Volumes : 29422

Total no of Titles : 5985

Area of Library : 720 Sq.m.

Seating capacity : 150 members

Facilities available:

LAN : Yes

Internet connectivity : Yes

Automated services : Yes

Working Hours of Library:

a. Week days : 8.00A.M to 6.00P.M

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

c. Sunday: 10.30 A.M. to 01.00P.M

Name of ILMS software: "ECAP-LIBMAN"

Nature of automation (fully or partially): fully

Version: 2.3

Year of automation: 2013

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

Response:

The college library has a stack of books on auto-biographies of eminent personalities around the world, books on inspiring life stories, success stories, 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...

Collection of Rare Books – 272 Nos. (Biographies – 30, Dictionaries -11, Handbooks – 21, Personality Development – 146, Spiritual – 29, Story Books – 15, Others - 20)

File Description	Document
Link for Additional Information	View Document

4.2.3 Does the institution have the following:

1.e-journals

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

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

Response: 6.91

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

2017-18	2016-17	2015-16	2014-15	2013-14
3.07	5.22	9.99	10.55	5.74

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

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

Response: No

File Description	Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 30.7

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

Response: 431

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The institution is giving top priority for the development of IT infrastructure. Campus is provided with 479 computers and 22 Wi-Fi routers in various laboratories and departments to contribute to effective teaching-learning environment.

LAN facility:

- The institution had a LAN facility wired with CAT5, CAT6 connectivity in the beginning of the days later it has upgraded with Optical fiber connectivity to all the computers.

Wi-Fi facility:

- The Wi-Fi facility is available in the campus comprises one Microtek router in CSE Lab, seven D-Link routers installed in all the departments and 14 Jio routers placed in corridors of all blocks.

Internet Service:

- Internet facility is initiated in the year 2010 with a speed of 2 Mbps. It has enhanced to 20 Mbps in 2013. In later stage the institute is provided with two ISPs, one with 20Mbps and another with 100Mbps.
- The academic advisory committee of DNR CET periodically reviews the IT infrastructure and recommends the necessary upgradation as per the guide lines of AICTE and university from time to time.

Other IT devices:

- The institute constitutes 16 Projectors, 3 smart boards, 11 Printers, 6 Scanners, 1 Fax machine and

8 Xerox machines.

List of Software:

- 1.ANSYS
- 2.STAAD.Pro
- 3.CATIA
- 4.ArcGIS 9.0
- 5.AutoCAD
- 6.MAT LAB 2017 B
- 7.XILINX
- 8.MULTISIM
- 9.TASM
- 10.M.S OFFICE
- 11.IBM RATIONAL ROSE
- 12.ORACLE-10G/11I
- 13.RED HAT LINUX SERVER
- 14.P SPICE (ORCAD)
- 15.MENTOR GRAPHICS V.6.4
- 16.GLOBARENA
- 17.WINDOWS 10

Up gradation of IT facility in the institution:

Academic year	IT facility and its specification	Quantity
2010-11	HCL systems, core2duo processor, 2GB (DDR3) RAM and 320GB Hard Disk.	213
2011-12	Acer Core 23 Duo DDR3 320GB	110
2013-14	HCL systems, core2duo processor, 2GB (DDR3) RAM and 500GB Hard Disk	06
2015-16	DELL Systems, Optiplex 3020, i3 (4160) processor, 4GB (DDR3) RAM & 500 GB Hard Disk	075
2017-18	ACER Systems, i3 7th Gen. processor, 4GB (DDR3) RAM & 1 TB Hard Disk	075

4.3.2 Student - Computer ratio

Response: 2.63

File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)**>=50 MBPS****35-50 MBPS****20-35 MBPS****5-20 MBPS****Response:** >=50 MBPS

File Description	Document
Any additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)**Response:** No

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document

4.4 Maintenance of Campus Infrastructure**4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years****Response:** 20.19

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

2017-18	2016-17	2015-16	2014-15	2013-14
155.88	192.99	122.78	140.01	131.8

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

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

Response:

All the Departments are provided with required infrastructure facilities like class rooms, staff rooms, laboratories, waiting halls for girls and boys separately. The effective usage of the facilities such as Sports and Central Library is ensured by introducing exclusive hours under the supervision of faculty members. Students can also avail the facility of yoga training every week.

1. Maintenance of infrastructure:

- Infrastructure facilities are maintained by the Engineering Maintenance department headed by a Civil Engineer.
- Any kind of complaints are registered in maintenance register which are physically examined and rectified by the maintenance department.
- The Electrical & Electronic equipment maintenance is carried out throughout the year.
- Regular repair and maintenance of the equipment in the laboratories shall be carried out by the service provider during the vacation between the semesters.
- Stock verification is done at the end of every year by the concerned In-charges.
- The cleaning of the whole institution is take care by janitors under the supervision of supervisors.
- Security of the institution is being maintained by the external agency.
- Fumigation of the entire institute is done frequently by sanitary workers.
- The landscaping maintenance is done by maintenance department.

2. Library Advisory Committee:

- The Library Advisory Committee is constituted with Principal and all HODs, review and suggest the necessary steps for the upgradation of library facilities.

3. Maintenance of Labs and computers:

- All the computer related facilities including hardware, software computer peripherals and UPS are maintained by technical supporting staff in the laboratories.
- Lab-in-charges record the details of consumable and non-consumable equipment in respective registers.
- Major breakages of any equipment are reported to the respective HODs for immediate action.
- Regular cleaning of the machines is done by the janitors in the presence of lab technicians.

4. Maintenance of sports complex (Indoor stadium):

- Maintenance of indoor stadium is supervised by physical director, required up gradations are reported to principal every year.

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 71.6

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

2017-18	2016-17	2015-16	2014-15	2013-14
920	837	811	812	844

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

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

Response: 14.11

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

2017-18	2016-17	2015-16	2014-15	2013-14
173	242	90	142	186

File Description	Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes –

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

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: E. 3 or less of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

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

Response: 41.89

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

2017-18	2016-17	2015-16	2014-15	2013-14
395	467	545	525	528

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

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years**Response:** 5.1**5.1.5.1 Number of students attending VET year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
42	59	89	49	59

File Description	Document
Details of the students benefited by VET	View Document
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases**Response:** No

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

5.2 Student Progression**5.2.1 Average percentage of placement of outgoing students during the last five years****Response:** 43.86**5.2.1.1 Number of outgoing students placed year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
89	126	144	149	157

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document

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

Response: 0

5.2.2.1 Number of outgoing students progressing to higher education

File Description	Document
Details of student progression to higher education	View Document

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

Response: 57.75

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

2017-18	2016-17	2015-16	2014-15	2013-14
00	92	73	87	66

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

2017-18	2016-17	2015-16	2014-15	2013-14
123	141	105	109	89

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document

5.3 Student Participation and Activities

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

Response: 53

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

2017-18	2016-17	2015-16	2014-15	2013-14
8	29	8	5	3

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

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

Response:

The student council plays an active part in the day to day academic and co-curricular activities of the institution. The students involve themselves in events such as college day, hostel day and various club activities. The college provides ample avenues for developing technical skills, updating knowledge, personality development and service to the society through various student committees. The various academic and administrative bodies, which have student representations in them, are

1. Anti-Ragging Committee

This committee peeps into the matters of any ragging issues within and out of the college premises. Students in this committee are very vigilant in safeguarding their juniors during leisure hours, they voluntarily roam within the campus and monitor their junior to create an eco friendly environment in the campus. Stringent action will be initiated against the rules violators.

2. Women welfare/ sexual harassment eradication committee:

This committee mainly focuses to enhance the self- esteem and self-confidence of girl students and female

faculty in the college. This cell organizes activities particularly on issues pertaining to 'gender sensitization', violence against women and legal provisions under the sexual harassment of women at workplace. The active participation of students in this committee is clearly evident in different events conducted by the college. They along with them provoke the rest to participate in all the events. Safeguarding women's rights is their motto.

3. Library committee:

In this committee, student members involve to play a vital role in recommending the books and journals that they feel are highly essential and beneficial for their academics and career.

4. Transport committee:

Transport committee is to regulate the transit of buses from various corners of the district; In this committee student members monitor the routes, timings and ensure discipline among the students inside the buses.

5. Canteen committee:

In this committee, student members regularly monitor the quality of food supplied and Hygiene environment in the canteen. It takes measures to improve the services with regards to quality of the food provided.

6. Hostel committee:

The Hostel functions under the administrative control of the warden. Student members in this committee is to ensure the hostel facilities and the quality of food provided to be clean and healthy and conducting periodical meetings with student representatives to redress their grievances.

7. Student activity center:

The student activity center is governed by the student council that plays a vital role in organizing various eco friendly student activities for their all round development .

8. Sports committee:

The students are actively involved in this committee from all the branches as members. student members are responsible for all Intra and Inter collegiate sports and games events in the college.

9. NSS committee:

This committee has a trained officer and hundred student volunteers, who are taking up different service-oriented activities in and around the campus. Our student volunteers are totally committed for the community service through which they enhance their personality development and social responsibility.

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

level per year**Response: 4**

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

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

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

5.4 Alumni Engagement

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

Response:

DNR College of Engineering and Technology has its alumni association which was started in 2015 with 25 members initially, Later it got registered. DNR CET feels proud of its Alumni association which extends its direct and indirect help to the management and to the students through various means; they foster a spirit of loyalty and the general welfare of our college. Our alumni association helps in supporting our organization goals. Majority of the alumni have their foot prints in top notch companies. Alumni meeting are conducted every year, where they discuss the current scenario and thereby help their juniors in catering their needs towards the industry. Amid the Alumni meets, individual department grads are tented up for discussing on improving the current standards thereby making them at par with the industry requirements

Apart from job opportunities they also conduct eye catching sessions on the strategic methods to meet the necessities of diverse competitive examinations like GRE, TOEFL, and other job oriented examinations such as RRB, SSC, Public service commission's, etc., Alumni help students in creating awareness about special scholarships and free ships available to different categories of students by government and non-government organizations based on their qualification and skills. The members of the association who already got placed in different organizations assist the ongoing batch students in getting placed.

The main objective of this association is to escalate the career growth of their peers and make their juniors succeed in their desired path. They share their encounters; refresh the current patterns in the market. Association energizes their youngsters by extending rewards to meritorious students.

However, because of the great affinity shared by the college's teaching and non-teaching staff to students, the young graduates are in consistent touch with the college through different social networking sites.

The college alumni association has its portal/link available in college website for the fresh graduates, who have completed their course to get registered in the portal by providing their basic information.

Alumni association was probably instrumental in college success. Alumni association is an added feather in the crown of DNR CET.

5.4.2 Alumni contribution during the last five years(INR in Lakhs) ? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: <1 Lakh

File Description	Document
Alumni association audited statements	View Document

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

Response: 5

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

2017-18	2016-17	2015-16	2014-15	2013-14
1	2	1	1	0

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

VISION

To evolve as centre of excellence in teaching, innovative research, entrepreneurship and consultation in engineering & technology and to empower the rural youth with technical knowledge and professional competence thereby transposing them as a globally competitive and self-discipline technocrats.

MISSION

- 1.To inculcate technical knowledge and soft skills among rural students through student-centric learning process and make them as competent engineers with professional ethics to face the global challenges thus bridging the rural-urban divide.
- 2.Strengthen industry institute interaction to enable the student to work on realistic problems and acquire the aptness to face the ever changing requirements.
- 3.To implant entrepreneurial attitude and ethical values among the learners.
- 4.To create a work culture where teacher adore facilitation and learner enjoys learning for research and development.
- 5.To develop a unique practice that instills responsibility and accountability in association with various stakeholders.

DNR College of Engineering & Technology popularly known as DNBCET is affiliated to JNTUK, Kakinada is a self financing institution. It has a well defined mission and strives to attain its vision with an organized planning. The institution is governed by Sri G V Narasimha Raju, President, Sri G Satyanarayana Raju, Secretary & Correspondent and other members of body to provide quality education for the students towards the employability. The vision and mission of the college is implemented through a clear policy. The governing body and Head of the Institute meet 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 its members for designing the academic plans for the implementation of the strategies and effective deployment through the heads of the department and faculty members.

Heads of the department and the faculty design department wise plans for every semester well in advance with annual plan, lesson plan, lecture notes, lab manuals and bridge classes in tune with the policies of the institution to provide effective teaching-learning process. The principal advises the faculty and student to

constitute various committees in the institution. These committees ensure curricular, co-curricular and extracurricular activities effectively. Main priority is given in setting the targets as per the needs of the stake holders and the functional mechanisms are periodically revived. The faculty is predetermined to achieve the mission of the college.

6.1.2 The institution practices decentralization and participative management

Response:

The Institution follows the policy of decentralization. The governing body members, president, secretary and correspondent delegate all the academic and non-academic decisions to the academic committee headed by the principal.

The college academic committee contrives common working procedures and deposes the implementation through department. The head of the department manages the day to day activities of the department and aware of curricular, co-curricular and extracurricular activities in the institution.

The institution has other committees like alumni, NSS, training and placements, library, women empowerment cell etc. These committees support the academic module.

The principal, vice- principal, IQAC coordinator and HODs collectively frame and decide all policies, rules & regulations related to admission, discipline, counseling etc., and implements the same effectively.

The principal acts as the chief superintendent for the college examination cell to conduct university examinations and college internal examinations smoothly.

The heads of the departments will identify and also oversee the process of student counseling and take required remedial measures in their departments. A mentor is allotted for every 20 students right from the first year. The mentor monitors the academic progress of each student and provides the required counseling to see that all the students excel in their studies.

The mentor regularly interacts with the parents of the irregular and academically weak students for taking their support to develop their ward.

Faculty members are given representation in several committees constituted by the principal to conduct various activities to encourage and develop the life skills and leadership skills in the students.

The students are also made members in these committees to encourage participative management. Sports facilities have also been well established to bring about a holistic development in the students.

The Training & Placement (T&P) cell of the institute gives intensive training to the student for campus recruitment and provides career guidance. It is also organizes campus recruitment drives for the students.

The Entrepreneur Development Cell (EDC) and Industry Institute Interaction Cell (IIC) aim at supporting students with self employable skills.

6.2 Strategy Development and Deployment

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

Response:

The IQAC of the institution originates the process of the preparation of the strategic plan by consulting all the heads of the department and coordinators of various committees. This also conducts brain storming sessions with the other stakeholders to prepare a perspective and strategic plan. It helps to set effective targets to reach the vision and mission of the institution.

AVISHKAR-2K17 was such an event planned strategically and implemented in the institution.

Title: AVISHKAR-2K17, A National level Technical Symposium.

Objective of the Practice

- To provide the platform for students across the country to display their technical prowess.
- To encourage generation of new thoughts and exchange their technical ideas.

- To provide an arena for the best engineering minds from all over the country to bring their innovative ideas and convert them into solutions.
- To invite students from all over the country to share our vision and be part of what ensures to carry forward the legacy of technical excellence.
- To provide a competitive platform to ascertain among the students and learn from others.
-

The Context

- Considering the rapid pace of development of technology a need is felt to conduct a symposium to encourage participants to stay abreast to the most recent progress in their fields.

Strategic Planning

- Meeting was held two months before the event:

Agenda

- Determine the event date in the month of September.
- Identify planning committee, event convener, event coordinators and student coordinators for planning process under the advises of all the HODs.
- Establishing plans for weekly meetings to make the event grand success.
- Review on last year's events drawbacks and success. Discussion of retaining successful events or removing some obsolete events.
- Finalize no of events, objectives, program outline. Key communication messages for printed invitations, banners, notepads and web-based materials & app development.
- Prepare budget estimate
- Identification of venues for each event.
- Confirm and Submit lodging reservations for judges as well as student participant from outside.
- Identify guests for inauguration and valedictory ceremony.
- Identify judges for various events.
- Confirm invitation lists for meals and give details for lunch to accountant.
- Design and develop event database for mailing invitations and tracking outline ceremony.

Implementation

- Invitations and brochures are distributed to all colleges
- Entries are collected
- Banners are displayed
- Venue centres are made ready
- Registration of event
- Chief guest is received at campus

- Inauguration is conducted
- Events are started
- Judges evaluate events
- Results send to certificate writing committee
- Prizes and certificates are distributed , students feedback collected in valedictory function
- report of the event is prepared
- corrective action for next **AVISHKAR-2K18** is discussed

Evidence of Success

- Practical skills exposed.
- Showcasing technical knowledge and innovations.
- Hands-on experience on the recent trends in technology.
- New perspective towards programming with industry standards.

Resources

- Human resources -faculty, student coordinators, staff
- Laboratory and venues
- Stationary

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

Response:

- DNR College of Engineering & Technology has well designed organizational structure for smooth functioning of administrative and academic processes.
- The governing body is the decision making body governed by the president and secretary & correspondent. The Principal, the executive head, is assisted by the vice- principal, IQAC coordinator, the heads of department which depicts its organizational hierarchy.
- The institution governing body discusses various aspects in detail and arrives at the necessary strategies and plans to keep up the quality of education in the campus.

- The opinions of faculty and staff are always considered positively for evolving policies.
- The Principal and all Heads of Departments meet regularly to carryout academic and other administrative work and also monitor the day-to-day administration of the college, plans and execute all academic policies in consultation with respective committees constituted.
- Grievances of the Staff and the students are redressed appropriately to maintain a healthy environment for teaching and learning process.
- To arrive at the target to be specified, Management seeks the information from all stakeholders, observers and evaluates the best plan and strategies of development activities that are striving for prospecting.
- Recruitment of teaching, non teaching and office administration staff is planned at the end of every academic year as per the requirements of the next academic year.
- Staff appraisal system is in existence in tune with the promotional policies.
- The grievance redressal mechanism helps the college to serve better by understanding the expectations.

File Description	Document
Any additional information	View Document

6.2.3 Implementation of e-governance in areas of operation

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

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document

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

Response:

DNRCET is a part of DNR COLLEGE ASSOCIATION with the extensive support of the management; the principal has formed distinct committees/cells as per the guidelines of “AICTE”. These Committees /cells are effectively implementing the college Academics, Administration, curricular and extra – curricular activities. Principal assigns specific tasks to the Committees/cells to organize events of the institution.

The following are the committees/cells formed in the institution:

Committee for SC/ST, Minority Cell, Grievance Redressal Cell(Academics), Anti Ragging committee, Disciplinary committee, Examination & Malpractice committee, Women Empowerment Cell, Alumni committee, Hostel committee, Library committee, Sports & Games committee, Placement & Training cell, Career Guidance Cell, Cultural committee, Admissions committee, NSS unit, College Academic committee, Consultancy Committee, Entrepreneur Development Cell, College Topper Committee, Canteen Committee, Student Activity Centre, Research And Development Cell, Intellectual Property Rights (IPR) cell, Purchase Committee, Energy Committee, Right to Information Committee, Social Welfare Committee, Website / ICT Committee and Industry Institute Interaction Cell.

Activities conducted by various committees are documented regularly.

A minimum of two meetings will be held prior to the event in the presence of principal, coordinator and

committee members. The institution strength grows incredibly with a strong Alumni connect. Academic calendar prescribed by JNTUK, Kakinada is strictly followed with the support of department heads and respective committees.

Example:

Title of Practice: Ragging – free campus

Ragging has ruined countless innocent lives and careers. In order to eliminate this menace from the campus in the beginning of every academic year the principal advises the anti ragging committee to conduct awareness program. As per the guidelines of hon'ble Supreme Court, DNR College of engineering and technology formed anti-ragging committee headed by Principal, Vice Principal, HODs and faculty to monitor the ragging complaints. Institution practices zero tolerance on ragging of students. The Institution has sets up anti-ragging squads. The duty of the squad is to keeps vigil on and off campus and also near-by area of the campus before, during and after working hours. There are separate squads to monitor activities in boy's hostel and girl's hostel. Faculty is encouraged to travel in college buses and they monitor the students during the travel as well. The squad counsel students not to indulge into any kind of ragging activity, which would invite disciplinary action against them.

In case of any complaint is received, the anti-ragging committee inquires the matter. If the act of ragging is proved without any doubt then the action is recommended to the authority and disciplinary action is taken against the culprit. If the matter is serious then the same would be reported to the police for further action. However, no major complaints reported in the campus and the college is a ragging free campus.

6.3 Faculty Empowerment Strategies

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

Response:

Institution carries out several welfare measures for teaching and non teaching staff.

- Faculty members are eligible to utilize 12 casual leaves in an academic year.
- Vacation leaves are also provided to teaching and non teaching staff during summer.
- In any special case the faculty can avail three permissions in a month. Increments and special incentives are given to faculty members yearly based on their performance in the academics.
- Maternity leaves are provided to female staff after completing minimum two years probation in the institution.
- On duty leave is given to the teaching faculty to attend seminars, conferences, workshops, training Programs and faculty development programs.
- Subsidized transportation for teaching and non teaching.
- The staff is provided a fee concession for their children education in the sister concerned

institutions.

- Monetary benefits are provided for those with higher qualifications such as M Phil /PhD and appreciation to faculty and staff for performing good work and completing PhD program.
- Monetary benefits are also provided to faculty for publishing papers in National/International seminars.
- The institution provides the Employees' Provident Fund (EPF) facility. Employees' Provident Fund is deposited with the institution's contribution in the employees account.
- Salary advance facility is provided for teaching and non teaching staff for the special occasions and festivals.

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

Response: 0

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

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

File Description

Document

Details of teachers provided with financial support to attend conferences,workshops etc during the last five years

[View Document](#)

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

Response: 12.8

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

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

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

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

Response: 6.99

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

2017-18	2016-17	2015-16	2014-15	2013-14
22	11	5	8	2

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	View Document
Details of teachers attending professional development programs during the last five years	View Document

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

Response:

The process of effective utilization and improvement of the human resources, the institution adopts three methods for the performance appraisal of teaching and non teaching staff they are

- Self Appraisal system,
- Teacher Evaluation by Student
- Personal Observation by the Principal

The institution designs a specific proforma for self appraisal and teacher evaluation by student. Principal examines and monitors the employee's qualifications, performance and behavior. Punctuality, obedience and dedication towards the assigned tasks are the other parameters on which an employee is evaluated. The management also evaluates the performance of the faculty based on their teaching, research, participation in teamwork, arranging co-curricular activities etc. The pivotal aim of appraisal in the institution is to

improve the quality of education for the students through the development of staff. The appraisal system is also motivates the staff to excel and put forth the best of their efforts. The following factors are deeply analyzed for teaching staff

Self appraisal form contains:

- Experience
- Academic work like syllabus completion, pass percentage etc.,
- Personal contribution in class rooms and laboratories
- Contribution in non academic works
- Skills up gradation through workshops, FDPs, conferences and seminars
- Pursuing higher studies like Ph D
- Research activities
- Leaves utilization
- Work discipline
- Monitoring and counseling methods

Teacher Evaluation by Student form contains:

- Teaching plan in the class
- Objectives of the lecture
- Sequence of subject matter
- Teacher's commitment
- Communication skills
- Coverage of syllabus
- Availability to the students
- Questioning and interaction
- Relationship with students...etc.,

The following factors are deeply analyzed in the appraisal for non teaching staff

- Experience
- Skills up gradation through shorter courses
- Punctuality
- Commitment
- Availability on holidays and out of working hours
- Higher studies
- Work discipline
- Feedback from HODs

Those who have not shown satisfactory performance are invited for the counseling. The findings about their performance are made known to them. They are advised to improve.

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The institution has our own internal audit team who conduct the internal audit on a regular basis. In addition to that the institution appointed an external agency to conduct the audit to verify and certify the entire recurring and non-recurring and the Capital Expenditure of the institute each year.

A qualified staff member from our finance department has appointed as internal auditors and they do a thorough check on each payment and vouchers on a half yearly basis. Likewise external auditors do a thorough check on payment and vouchers on a yearly basis. So far there have been no major objections from any of the audit teams. Minor error pointed out by the audit team was corrected immediately. Precautionary steps are taken to avoid such mistakes in future. The institute regularly follows internal & external financial audit system.

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

Response: 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0.00	0.00	0.00	0	0.00

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

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

Response:

DNR College of Engineering & Technology is a self-financing institution approved by AICTE, New Delhi, affiliated to JNTUK, Kakinada. The sources of the income come through tuition fee, as fixed by Government of Andhra Pradesh from time to time and revenue generated through testing and consultancy services provided to society. The College is functioning under the DNR College Association Educational

Trust. DNR College Association was established in 1945 and has been serving the society by running various educational institutions. Donations are received from well wishers (alumni), industrialists, individuals, charities like Vasudha foundation and philanthropists like Gangavaram port trust etc. for institutional activities. At some stages, the institution borrows loans from banks for capital expenditure on various projects adopted.

The institutional expenditure is as follows.

- salary payments
- Laboratory infrastructure and maintaining building infrastructure
- Purchasing of Library books, subscription of journals and rare books in the library
- Construction of new buildings
- Establishment of new labs
- Purchase and maintenance of buses for Transport.
- Organizing events in the college such as workshops, hands on training, national level events such as Tech-Fests, sports day etc.

Optimal utilization of funds is ensured through the following:

- Adequate funds are allocated for effective teaching-learning practices that include conduction of orientation programs, workshops, inter-disciplinary activities, training programs that ensure quality education.
- Adequate funds are allocated for development and maintenance of infrastructure
- Funds allocated for social service activities as a part of social responsibility.
- All purchases are done through competitive quotations resulting in least cost of procurement.
- In-house maintenance of equipment to maximum possible.
- Our buildings are green and require minimum use of electricity during the day.
- Use of solar power to minimize the usage of grid connected electricity.

6.5 Internal Quality Assurance System

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

Response:

Internal Quality Assurance Cell: DNR CET has formed an Internal Quality Assurance Cell (IQAC) in

04-07-2016. Earlier, academic committee was taking care of all the role and responsibilities of the IQAC. The cell is coordinated by a team of faculty representatives from all the departments. IQAC coordinator and members ensure the academic and non-academic on achieving organizational goal and justify the Mission and Vision of the Institute. The IQAC focuses on academic and administrative policies.

Two practices institutionalized as a result of IQAC initiatives are:

1. Weekly Test System:

The institute believes in the process of continuous assessment and evaluation of the students. As per the university norms the institute was conducting two mid-term examinations for every subject. As the students were acquiring less marks, IQAC decided to conduct remedial classes and weekly tests to improve the performance in the end examinations. In this process the IQAC is effectively pursues the conduction of weekly tests and its results.

2. Project based assignments:

DNRCET initiated Project based assignments as a part of encouraging the participative learning recommended by IQAC. Students apply their knowledge on prototype design to improve their problem solving methodologies by experiential learning. This method inspires students to obtain deeper knowledge of the subjects. There is a fair chance of retaining the knowledge gained through this method rather than through traditional textbook- centered learning. As it combines team- based and independent work, students become self driven and confident. DNRCET Students developed prototypes, participated in Smart India Hackthon 2017 and Smart India Hackthon 2018 conducted by MHRD, New Delhi. The departments are regularly conducting technical symposiums like AVISHKAR, ALOKA, ENCORE, AVANI, VEDANSHI, etc. In addition, local chapters of professional societies like ISTE, CSI, ORACLE etc also conducting the technical activities in the campus.

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

Response:

The institution formed an IQAC cell with the following members and it assess the teaching and learning process in the institute and recommend the steps to be taken for improvements. Under the Chairmanship of Principal, the Internal Quality Assurance Cell (IQAC) has been constituted.

Example – 1

Teaching and Learning Process (TLP)

The institution encourages the teachers and students to undertake self motivated improvement activities with the goal to continuous improvement in their performance. University creates academic calendar before the commencement of each academic year. Based on the academic calendar issued by the University, Institute defines the schedule for the academic year and publish academic calendar. In addition to above, the timetable of each semester in the academic year is planned by the HOD and the time table in charge of each department.

The institute sends the faculty for faculty development program in the area of their teaching subjects to update the knowledge and to keep up with the current trends. Students are encouraged for the industrial visit and internship during their studies. The principal appoints internal flying squad for smooth conduction of the examinations. The IQAC reviews the attainment and issues further recommendations.

Example – 2

Feedback Mechanism

Academic committee consists of principal as chair person, Vice Principal and all HODs. Academic committee meets at the beginning of the semester and end of the semester to collect the feedback of the students and the corrective action will be implementing through the IQAC. Feedback is collected from the students twice in a semester. It is collected and consolidated at the institutional level.

The feedback is collected and evaluated by the academic committee and the corrective actions will be implemented through IQAC. Feedback is also collected after Extra & Co-curricular activity. The corrective actions will be implemented through IQAC. There is a parent feedback, which will be send to the parents of each students in the institution and feedback of parents are collected regarding to the academic and non-academic activities. Feedback also analyzed and corrective actions will be implemented through the IQAC.

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

Response: 0.6

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	1	0	0	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document

6.5.4 Quality assurance initiatives of the institution include:

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: C. Any 2 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document

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

Response:

The institution strives at all times to improve all the metrics in the college. In the preceding years the following measures were implemented to improve quality of education imparted.

- The internet facility is enhanced from 20Mbps to 120Mbps.
- The campus is enabled with Wi-Fi facility
- The institute is encouraging meritorious students through the scholarships. The number of students

gets benefited by this scholarships increasing year to year.

- There were number of excellent outreach programs conducted by the NSS volunteers during the last five years. During the last five years the number of programs increased and number of participating students and faculty also increased.
- Students are encouraged to attend certificate programs. During the last five years the number of certification program organized by the institution and the number of participation is also tremendously increased.
- A prestigious platform APSSDC-LEAP (looking for employment in Andhra Pradesh) by SIEMENS is established to develop employability skills in rural youth.
- Number of faculty registered for Ph.D is increased than the previous years.
- Number of faculty attending for FDPs/Workshops/Conferences is more compared to previous.
- Our recruiters in our campus are increasing year to year.
- More number of companies recruited the large number of students than the previous years.
- Renovation of all laboratories and academic facilities are expanded.
- Continuous upgradation and procurement of computer facilities.
- Invited talks by distinguished speakers to motivate the students.
- The students attending for the internships from all branches in the reputed companies are increasing every year.
- The institution is upgrading to participate in e-learning through MOOCs, SWAYAM and NPTEL.
- The institution is encouraging the students to become successful entrepreneurs by conducting the talks by eminent personalities.
- Motivate students to develop their own startups.
- Number of MoUs with different organizations has been increased.
- The institution is equipped initially with 100KVA and it is enhanced to 200KVA rooftop solar system.
- An R.O plant of 500 LPH is provided in the campus for drinking water.
- Lift, ramps, digital library and separate rest rooms are provided for benefit of Divyangjans.
- Active alumni is constituted and registered for inviting their contribution for the placement of students.

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response: 35

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

2017-18	2016-17	2015-16	2014-15	2013-14
8	7	7	6	7

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

Response:

In DNR College of Engineering & Technology, all the measures are taken towards gender sensitivity by the women empowerment cell for women safety and security. Whenever issues like ragging, eve teasing etc. complaints received from students especially from girls, this cell members act accordingly. Before the commencement of the academic year, the members of the women empowerment cell, along with HODs will conduct one awareness program in seminar hall.

The women faculty members from different branches will execute the problems and solve in a successful way. Especially faculty focuses on girl's safety in and around the campus. By doing counseling and mentoring, the rapport between student and faculty will develops a good bondage to express their problems without turn back and they feel comfortable. At the same time in our campus we have well equipped rest rooms for the girls with good ventilation facility. Rest rooms are furnished with beds when student's get ill

health. And also we are providing first aid box with minimum requirements. In emergency condition we are dispensing medical prerequisites to take care about student's health.

Suggestions to the Women/ Girls Safety:

In our college campus along with the education, we are providing some safety measures to the girl/ women how to overcome from difficult situations where they are stuck. The following points every girl/ women should know about personal safety.

- Self- defense
- Escape is always your best option
- You have a right to fight
- Pepper spray
- Safeguard against home invasions
- Avoid a car – jacking
- Use mobile tracking
- Use your sixth sense
- Use the internet wisely

In our campus we are providing equitable rights to all the students. It means fairness of treatment for women and men, according to their respective needs. This may include equal treatment which is considered in terms of rights, benefits, obligations and opportunities.

File Description	Document
Any additional information	View Document

7.1.3 Alternate Energy initiatives such as:

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

Response: 80

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

Response: 146000

7.1.3.2 Total annual power requirement (in KWH)

Response: 182500

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 51.81

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

Response: 2150

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 4150

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

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

Response:

Solid waste management:

All solid wastes are collected by designated personals from the bins placed at different locations of the campus. The collected waste can be categorized as

- Degradable (papers, dust, leaves, twigs etc.)
- Non degradable (plastic, glass bottles ,food wrappers etc)

The collected degradable waste is burnt to form ash. The produced ash is used as fertilizer for farming.

The Collected Non degradable waste is disposed to the dumping yards beyond the municipal limits, which shall be processed by municipal authorities.

Liquid waste management

RO back water is effectively collected and used for plantation. Liquid waste from toilet is segregated and let out into septic pits. Also Liquid waste from other points of generation like canteens and hostels is segregated and conveyed to the municipal drainage systems.

e-waste management

Being an institute of higher education the need for utilization of electronic and computing systems becomes mandatory. Thus it necessitates having an e-waste management system as most of the electronic goods become obsolete after a period of three to four years. The remaining e- waste is disposed through a vendor on periodical basis.

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rain water harvesting structures and utilization in the campus

Response

- Rain water harvesting is the accumulation and storage of rain water for reuse purpose.
- Rain water harvesting pits are located at each block in our college.
- On the whole the rain water harvesting helped and accounted largely for raise of underground water level.
- As a result of this effort the institute ensures with sustainable water supply throughout the year.

7.1.7 Green Practices

- **Students, staff using**
 - a) **Bicycles**
 - b) **Public Transport**
 - c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**

- **Green landscaping with trees and plants**

Response:

DNRCET gives at most priority to develop greenery and protect the environment in and around the college.

Bicycles

Some of the staff and students are utilizing bicycles

College transport

The college has a fleet of 10 buses for students and staff from every nook and corners of the district.

There is a strict prohibition on movement of vehicles in the campus during the college time.

The students are instructed to follow the basic rules and groomed to be responsible and enlightened citizens.

Public transport

Since the Institute is located in the heart of the town, most of the staff and students use public transport like APSRTC and Railway services to attend the college.

Pedestrian friendly roads

The roads are absolutely pedestrian friendly in the campus. All the vehicles are parked at the appropriate parking places.

Plastic free campus

The main objective is to eliminate usage of plastic in the campus.

DNRCET discourages the use of plastic bags and plastic containers.

Paperless office

E-cap (college automation software) is installed in order to reduce the time and paper usage. The examination cell uses JNTUK portal for all the correspondence to the university. All the messages or communication are conveyed to the staff, students and parents through SMS and e-mails. The complete campus is Wi-Fi enabled, making it much easier for paperless activities.

Green landscape with trees and plants

The institute has taken several measures for planting of trees to make a green campus. 50% of total area is

covered with trees and lawns. A number of trees exist at different places in the institute. Tree plantation in the campus is a regular activity. The students are encouraged to maintain eco-friendly environment and participate in various programmes conducted by NSS unit. NSS provide service in planting, watering the trees and plants.

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

Response: 0.42

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

2017-18	2016-17	2015-16	2014-15	2013-14
1.10	1.16	1.56	11.59	1.22

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document

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

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

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: C. At least 4 of the above

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

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

Response: 25

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

2017-18	2016-17	2015-16	2014-15	2013-14
5	3	5	6	6

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

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

Response: 24

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

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

File Description	Document
Report of the event	View Document
Any additional information	View Document

7.1.12

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

Response: Yes

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

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

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of website that displays core values	View Document

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

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics**Response:** Yes

File Description	Document
Any additional information	View Document

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

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

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years**Response:** 34

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

2017-18	2016-17	2015-16	2014-15	2013-14
7	7	7	7	6

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

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

India is a land of multi festive nation.

All the festivals are celebrated with determination and enthusiasm.

National festivals like Independence Day and Republic day are celebrated to develop patriotism in the students.

September 15th is celebrated as Engineer's Day.

Swami Vivekananda birthday is celebrated to inspire the youth.

Religious festivals like Pongal, Christmas and Ramzan are celebrated to swill the great heritage of India.

These celebrations unite students and develop their leadership skills.

File Description	Document
Any additional information	View Document

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

Response:

The Institute believes strongly in maintaining complete transparency in its financial, academic, administrative and auxiliary functions. All the decisions that are taken in the Institute are discussed in the appropriate administrative bodies and everyone is taken into confidence before their implementation. All the academic decisions are taken in the council of HODs and the proceedings of the same is circulated to all the faculty members of the Institute thereby, maintaining complete transparency in all academic decisions.

Students are also taken into confidence while making important decisions that will have a direct bearing on them and any student related issues are discussed during class representatives meeting and in academic committee. The internal evaluation process including conduct of examination is highly transparent where the students have complete faith in the system.

All the information related to financial transactions is open to anybody for scrutiny. All the purchases that are made in the institute shall go through a proper channel. The budget is prepared considering the inputs from the HODs, Principal and the Management. The income and expenditure is audited by an external agency at regular intervals of time. The IQAC is empowered to check all the documents of the institute and recommend for improvement. The IQAC visits every department once in a semester and evaluates academic and administrative performance and gives its recommendation.

The conclaves are held among the Management Members and the council of HODs where all issues of the Institute are discussed, deliberated and appropriate solutions are suggested for overall growth of the Institute.

The website of the Institute is made informative that contains all the relevant information about the Institute that include admission policy, fee structure, faculty profile, important links, mandatory disclosure, etc., for public knowledge. This demonstrates that the transparency is given the highest priority in the Institute.

7.2 Best Practices

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

Response:

DIYA – Light for Life (Student voluntary program)

Objectives of the program:

- To help the poor and needy people.
- Providing basic needs to the homes of disabled, orphanages & old age homes.
- Conducting cultural and literary competitions among the children in the orphanage homes to develop the sense of belongingness with the society.
- To develop the sense of social responsibility in every young mind.
- To inculcate the noble qualities and develop the organizing skills among the students.

The context:

DIYA –Light for Life (*DIYA an acronym for DNR Irised Youth Association*) is a student voluntary organization at DNR CET initiated with the motto of helping the poor and needy people. Every person does have a kind heart, but he/she does not know about the kindness that can show to others unless experiences a chance. To do social work like helping others we do not need much money rather there is need of dedication to help needy people.

The Practice:

- Fund for the programs collected through the fund rising box.
- Student coordinators visit the orphanages and old age homes during holidays and study their basic needs and try to provide them soon.
- Conducting recreational program in the orphanage homes and distributes prizes.
- The college has an NSS unit with which **DIYA** coordinates in conducting blood donation camps, medical camps and provide the necessary helping hand to community.

Impact of the practice:

- **DIYA** provided idli cooker, slates, books, sports kits and portable solar lights to the Emmanuel Orphanage home, Bhimavaram.
- Provided ceiling fans, 25 kgs rice bags-4, blankets and towels to the Gandhi Old-age Aasramam at Taderu, Bhimavaram.
- Rupees 7500 donated to the MRK Poly Technic student who met with an accident.
- Students participating in these programs earn organizing skills and learnt about the critical situations in which people in orphanages are encountering.
- They also understand how to alleviate their sufferings.

Problems encountered and resources required:

- Fund collection is a challenging task to the students as the need is like ocean in size.
- Students lose valuable classes during their attendance at community supporting camps.

Best Practice – II**Title: Employability Enhancement:****Objective of the Practice:**

The objective of this practice is to focus on skill development and career paths for the young engineering graduates for business, industry and self employment.

- To develop and maintain a highly skilled, employment – ready workforce that supports and enhances the economic health of every individual student.
- To train the students in the field of English communication skills, soft skills, inter personal and intra personal skills and preparing them to work with teams in MNCs.
- To develop a best-in-class learning management system and placement and tracking mechanism.

The Context:

The students are from vernacular back grounds that have come from villages. It is necessary to impart required skills for employability. The Government of Andhra Pradesh (GoAP) has come into existence

after bifurcation. The immediate necessity for industrialization is the manpower development. In the process the GoAP gave high priority for skills development through establishing Andhra Pradesh State Skill Development Corporation (APSSDC). The DNRCET, Bhimavaram Campus has been selected as a technical Skill Development Institute (t-SDI). The DNRCET is providing infrastructure in laboratories by adopting latest technologies in engineering design to serve the needs of various industrial units, training the students to improve employability, placement of students and enable the students to compete at the national and international level employment with better remuneration and professional group.

Making the students, from rural background, come out of their mother tongue influence is a very big challenge. Improvement of communication skills in English language is a pre - requisite in the present multi - cultural corporate world.

The Practice

- To make qualitative improvements in imparting technical education, students are given experimental training in laboratories with latest technologies.
- The institution has provided 5 labs for training, viz.,
 - **The computer based training lab (CBT)** is providing audio – visual classes, power point presentations and video classes about all five labs, a detailed video explanation on every experiment followed by a test on that experiment. Training will be given to each student in the basic, expert and master levels.
 - **Electrical home lab** - the students are trained in home wiring and Industrial wiring, Electrical equipment installation and safety measures.
 - **Electronics home lab** - the students are trained for basic operations & minor repairs of home appliances and utilization.
 - **Electronics office lab** through which students get training on corporate office equipments installation, utilization and minor repairs of printers, scanners, computers, Intercoms etc.,
 - **R&AC Lab** - in this lab student are trained to create basic tools, awareness of air conditioning and refrigeration systems, their utilization and minor repairs.
- In addition to the above training from the laboratories, special slots allotted for building English communication skills through English communication skills lab.
- Soft skills by expert trainers in the campus for enhancing public speaking skills, confidence building, handling critical situations, positive thinking, time management and presentation skills.
- Group discussion, debate, just a minute, essay writing, storytelling, mock - interviews and also competitions conducted regularly to help students understand and evaluate real time issues and handle effectively the problems that they face in day to day life.

Evidence of success:

- Implementation of APSSDC-SIEMENS project in DNRCET has resulted in high success in the form of increase in number of students with obligatory industrial skills.
- During the span of last 2 years almost 2206 students got training from this project. They are:
 - 223 Engineering students from DNRCET
 - 521 DNR Polytechnic students
 - 78 Students from DNR English medium school
 - 326 Social Welfare Students

- 526 Students of other Polytechnics
- 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 Polytechnic students from DNBCET are hired by a reputed MNC, and some more students are waiting for offer letters.

Problems encountered & resources required:

- 1.Many students are from villages with poor communication skills and lack of industrial knowledge becomes a tough job to the faculty to mobilize and create interest.
- 2.Some students, especially girl students from rural back ground, are having least awareness. Due to this they are not serious during the training period.

7.3 Institutional Distinctiveness

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

Response:

DNBCET is provided with a Technical Skill Development Institute. It is used to promote skill-development & entrepreneurship in and around the rural areas of DNBCET. 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 DNBCET 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 t-SDI'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. t-SDI 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 two years almost 2206 students got training from this project. They are:
 - 223 Engineering students from DNBCET
 - 521 DNR Polytechnic students
 - 78 Students from DNR English medium school
 - 326 Social Welfare Students
 - 526 Students of other Polytechnics
- 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 DNBCET are hired by a reputed MNC, and some more students are waiting for offer letters.

5. CONCLUSION

Additional Information :

The institute has global outlook under a strong leadership. The president of the college is a pioneer of the institute and honored with life time achievement award and Siksha Bharathi Puraskar. Under his dynamic leadership, the Institute has adequate infrastructure, supporting academic facilities, state of the-art laboratories with well qualified and experienced faculty members with good retention ratio. The Institute gives highest priority to teaching- learning process. Emphasis is given on extra and co-curricular activities for holistic development of students. The attempts to deliver the best quality in Teaching Learning and overall development of our students, Faculty and Staff members are achieved through various initiatives under strong leadership. Besides, the institute as a part of social responsibility conducting skill development programs to placements in association with APSSDC LEAP (Looking for Employment in Andhra Pradesh) projects for the unemployed youth from various institutes in the west Godavari district. Indoor and eco gym facility also provided for physical fitness for the stakeholders. Institute establishes 100KVA solar power plant as a social responsibility on energy conservation and green initiatives. Besides, on the reputation of the institute many people involved in the development of the institute, in different ways like, donations for buildings, encourages students by announcing the medals and cash prizes etc... The institute is chosen as examination center for both online and offline by the government and non government organization. The colleges also conducting different training programs supported by different government organizations like Muslim minority organization, Kapu corporation etc., with the placement assurance. Subsequently several students also obtained employment in National and Multi National companies like TCS, Wipro, Infosys etc.. The institute facilitates MOUs with industry like ESF labs, companies like TCS, COIGN Consultancy, Matchwell Technology Solutions, Karadi Path Education, Dharani Engineering Services, Design labs, BSP Hydro Dredging Works, DSNM, WEBCOGNIZE Softech, Sirazee Tiles, VNDDT and APSSCDC. The institute has MOUs with universities like Lincoln University, Malaysia. The Institute has a huge playground consisting of 8 acres. This also used as cricket stadium supported by cricket association, Government of Andhra Pradesh.

Concluding Remarks :

Institute has well framed vision and mission, considering the needs of the society. Best academics, infrastructure, industry -interaction, incubation centre, self-learning, co-curricular and extra-curricular activities are some of the special features which cater to the comprehensive development of the students. The college aims to train the students not only in academics and technical areas but also in social skills, soft skills, ethical values and personality development. The college has highly qualified, well experienced and dedicated faculty ready to impart academic and practical aspects of the subjects and equip the students to transcend the textbook brilliance.

The governance of the institute comprising of Governing Body, College - Departmental Advisory Board, Internal Quality Assurance Cell, Academic Monitoring Committee and various institute level committees. All these play significant role in the evolutionary reforms towards positioning the Institute in the preferred list of all stakeholders. The Institute believes in promoting a culture of delegation of powers through strategic policies. The Principal of the Institute is assisted by Director, Vice Principal, HODs, Administrative Head and coordinators of various committees in decision making process. Institute executes strategic planning from time

to time for producing quality engineers and overall growth of the institute. Institute regularly conducts training to staff and faculty members for implementation of quality procedures. External audit by various agencies like AICTE, JNTUK- FFC, AFRC-AP, and internal audit is undertaken periodically to improve institutional activities.

NAAC

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.3	<p>Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years</p> <p>1.1.3.1. Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>6</td><td>3</td><td>2</td><td>2</td><td>1</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>6</td><td>2</td><td>2</td><td>2</td><td>1</td></tr></table>	2017-18	2016-17	2015-16	2014-15	2013-14	6	3	2	2	1	2017-18	2016-17	2015-16	2014-15	2013-14	6	2	2	2	1
2017-18	2016-17	2015-16	2014-15	2013-14																	
6	3	2	2	1																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
6	2	2	2	1																	
2.4.4	<p>Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years</p> <p>2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>3</td><td>3</td><td>3</td><td>1</td><td>1</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>0</td><td>0</td><td>2</td><td>1</td><td>0</td></tr></table>	2017-18	2016-17	2015-16	2014-15	2013-14	3	3	3	1	1	2017-18	2016-17	2015-16	2014-15	2013-14	0	0	2	1	0
2017-18	2016-17	2015-16	2014-15	2013-14																	
3	3	3	1	1																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
0	0	2	1	0																	
3.3.2	<p>The institution provides incentives to teachers who receive state, national and international recognition/awards</p> <p>Answer before DVV Verification : Yes</p> <p>Answer After DVV Verification: No</p>																				
3.3.4	<p>Number of research papers per teacher in the Journals notified on UGC website during the last five years</p> <p>3.3.4.1. Number of research papers in the Journals notified on UGC website during the last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>	2017-18	2016-17	2015-16	2014-15	2013-14															
2017-18	2016-17	2015-16	2014-15	2013-14																	

46	41	53	27	14
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Answer After DVV Verification :

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

Remark : NO link of UGC provided

3.3.5

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
12	9	8	2	2

Answer After DVV Verification :

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

Remark : No E-copies of out jacket/contents page of the books, chapters and papers published are provided

3.4.2

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
9	5	4	4	6

Answer After DVV Verification :

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

3.5.2

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
7	10	2	5	1

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
3	6	4	4	2

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

Answer before DVV Verification : Yes
 Answer After DVV Verification: No
 Remark : Link of e-resources nor any other relevant video or any e remote log in or actual page copy not provided

5.1.3 Number of capability enhancement and development schemes –

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

Answer before DVV Verification : A. 7 or more of the above
 Answer After DVV Verification: E. 3 or less of the above
 Remark : Link has error and unable to open

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

5.1.4.1. Number of students benefited by guidance for competitive examinations and career

counselling offered by the institution year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
396	467	545	525	528

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
395	467	545	525	528

Remark : Error in the link provided. However, accepted based on the SSR document, where circular is attached and duly signed by HoDs

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
901	804	899	932	781

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
42	59	89	49	59

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

Answer before DVV Verification : Yes

Answer After DVV Verification: No

Remark : Reports of incidence and management of grievances is not provided as required

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
89	127	144	149	157

Answer After DVV Verification :

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

89	126	144	149	157
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Remark : The supporting link has error . Accepted claim as per the document attached in the SSR duly signed by Principal and Placement department

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
93	92	73	87	66

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
00	92	73	87	66

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
123	141	105	109	89

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
123	141	105	109	89

Remark : Required pass certificates not provided and clarification from HEI cannot be accepted

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
20	33	16	11	23

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
8	29	8	5	3

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

Answer before DVV Verification : ? 5 Lakhs

Answer After DVV Verification: <1 Lakh

Remark : Required statement of accounts nor any other document in support of the contribution provided

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
23	14	8	8	2

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
22	11	5	8	2

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

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0.495	1.132	2.0516	26.851	2.618

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
0.00	0.00	0.00	0	0.00

Remark : There is not specific mention of the grant received from Dr. RAju

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

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

Answer before DVV Verification:

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

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
2	1	0	0	0

7.1.9

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

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

Answer before DVV Verification : A. 7 and more of the above

Answer After DVV Verification: C. At least 4 of the above

7.1.10

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

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	5	6	6

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
5	3	5	6	6

7.1.17

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

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

Answer before DVV Verification:

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

Answer After DVV Verification :

2017-18	2016-17	2015-16	2014-15	2013-14
7	7	7	7	6

2.Extended Profile Deviations

ID	Extended Questions																				
1.2	<p>Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>306</td><td>306</td><td>306</td><td>306</td><td>297</td></tr></table> <p>Answer After DVV Verification:</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>306</td><td>306</td><td>306</td><td>306</td><td>258</td></tr></table>	2017-18	2016-17	2015-16	2014-15	2013-14	306	306	306	306	297	2017-18	2016-17	2015-16	2014-15	2013-14	306	306	306	306	258
2017-18	2016-17	2015-16	2014-15	2013-14																	
306	306	306	306	297																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
306	306	306	306	258																	
2.2	<p>Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)</p> <p>Answer before DVV Verification:</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>605.26</td><td>804.66</td><td>703.72</td><td>835.89</td><td>775.53</td></tr></table> <p>Answer After DVV Verification:</p> <table><tr><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td><td>2013-14</td></tr><tr><td>605.25</td><td>804.66</td><td>703.72</td><td>835.89</td><td>775.53</td></tr></table>	2017-18	2016-17	2015-16	2014-15	2013-14	605.26	804.66	703.72	835.89	775.53	2017-18	2016-17	2015-16	2014-15	2013-14	605.25	804.66	703.72	835.89	775.53
2017-18	2016-17	2015-16	2014-15	2013-14																	
605.26	804.66	703.72	835.89	775.53																	
2017-18	2016-17	2015-16	2014-15	2013-14																	
605.25	804.66	703.72	835.89	775.53																	