



**INSTITUTIONAL ASSESSMENT AND ACCREDITATION
(Effective from July 2017)**

Accreditation - (Cycle - 1)

**PEER TEAM REPORT ON
INSTITUTIONAL ACCREDITATION OF
DNR COLLEGE OF ENGINEERING AND TECHNOLOGY
C-17920**

**Bhimavaram
Andhra Pradesh
534202**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission
P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA**

Section I:GENERAL INFORMATION

1.Name & Address of the institution:	DNR COLLEGE OF ENGINEERING AND TECHNOLOGY Bhimavaram Andhra Pradesh 534202	
2.Year of Establishment	2010	
3.Current Academic Activities at the Institution(Numbers):		
Faculties/Schools:	2	
Departments/Centres:	7	
Programmes/Course offered:	12	
Permanent Faculty Members:	132	
Permanent Support Staff:	62	
Students:	1654	
4.Three major features in the institutional Context (Asperceived by the Peer Team):	1. Strong and effective leadership 2. Affordable education to rural/semi urban students 3. Financially sound trust run College	
5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	From : 20-07-2023 To : 21-07-2023	
6.Composition of Peer Team which undertook the on site visit:		
	Name	Designation & Organisation Name
Chairperson	DR. ALOK KUMAR CHAKRAWAL	Vice Chancellor,Guru Ghasidas Vishwavidyalaya
Member Co-ordinator:	DR. CHIKKANNA N	Professor,Visvevsvaray Technological University
Member:	DR. C A BABU	FormerProfessor,Cochin University of Science and Technology
NAAC Co - ordinator:	Dr. Devender S Kawday	

Section II: CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrics of the key Indicator under the respective criterion (This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion 1 - Curricular Aspects (Key Indicator and Qualitative Metrics (QIM) in Criterion 1)	
1.1	Curricular Planning and Implementation
1.1.1 QIM	The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment
1.2	Academic Flexibility
1.3	Curriculum Enrichment
1.3.1 QIM	Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum
1.4	Feedback System

Qualitative analysis of Criterion 1

DNR College of Engineering & Technology (DNR CET) is affiliated to the Jawaharlal Nehru Technological University Kakinada (JNTUK) and follows the curriculum prescribed by the University. The Institute is imparting education in 7 UG and 5 P G Programmes. The curriculum is periodically revised by the University. In line with the academic calendar of JNTUK, the institute academic calendar is prepared covering the teaching load distribution, time table, and course files preparation, resource requirements, planning of industrial visits, expert / guest lectures, extracurricular and co-curricular activities. DNR CET attempts to provide quality engineering education through well-defined teaching and learning methodologies to suit the curriculum in a highly disciplined environment. Adequate number of elective courses in the emerging areas and several value-added courses are offered. Students are encouraged to learn and enhance technical skills through their participation in various add-on programmes organized by various departments of the college.

Apart from the conventional teaching-learning methods like lectures and laboratory sessions, DNR CET also conducting several training programs, workshops, expert lectures etc. in different disciplines. Student Chapters of the professional bodies like ISTE and CSI are very active in the campus and regularly conduct technical sessions. Courses related to Professional Ethics and Human Values (PEHV), Gender Sensitization, Environmental Studies, IPR and Patents, various crosscutting issues etc. are offered as the part of curriculum.

Project Work/Field Work and Internships are offered for experimental learning. Feedback system is in place in the institute. Administrative setup exists for academic monitoring through HoDs and IQAC etc. Students are encouraged to take part in life skills programmes organized by various departments of the college, apart from field visits and internships in various reputed industries. Structured feedback on the teaching/learning process is obtained from students, teachers, alumni, and parents. The obtained feedback is analysed, and based on the report generated will be used for further improvement.

Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrics(QIM) in Criterion2)	
2.1	Student Enrollment and Profile
2.2	Student Teacher Ratio
2.3	Teaching- Learning Process
2.3.1 QIM	Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences using ICT tools
2.4	Teacher Profile and Quality
2.5	Evaluation Process and Reforms
2.5.1 QIM	Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient
2.6	Student Performance and Learning Outcomes
2.6.1 QIM	Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated
2.7	Student Satisfaction Survey

Qualitative analysis of Criterion 2

Admissions to various academic programmes offered at DNR CET are in compliance with the guidelines and norms set by the Government of Andhra Pradesh. The Institute implements teaching and learning practises with interactive techniques, incorporating various strategies by giving due consideration to slow learners, through a collaborative learning process, clarifying doubts, revising important concepts etc. The student faculty ratio is maintained as per the AICTE norms. Mentoring system is in place and student centric teaching methods such as experiential learning, participatory learning, and problem-solving methodologies, are used to enhance learning experiences. Remedial classes, motivational classes, study materials, etc. are offered to support the slow learners. Scholarly activities are encouraged for advanced learners to satisfy their learning capabilities. Faculty members are encouraged to use ICT tools and utilise e-resources to enrich teaching and learning methods. Qualified and experienced teachers are recruited based on the requirement as per the norms of JNTUK and AICTE. Facilities like ramps, wheelchairs, lifts, etc. are provided for the differently abled students.

The Institute conducts internal and external exams as per university norms. Each Department has developed CO-PO relationship matrix and monitors the attainment levels. Mechanisms are in place to address the examination related grievances in a transparent and time-bound manner.

Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrics(QIM) in Criterion3)	
3.1	Resource Mobilization for Research
3.2	Innovation Ecosystem
3.2.1 QIM	Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge
3.3	Research Publications and Awards
3.4	Extension Activities
3.4.1 QIM	Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.
3.4.2 QIM	Awards and recognitions received for extension activities from government / government recognised bodies
3.5	Collaboration

Qualitative analysis of Criterion 3

DNRCET has a well-defined vision and mission that focuses on the long-term growth as well as the academic proficiency of the students. The professional development of the faculty members is enhanced by conducting FDP's and training programmes. The faculty members are encouraged to avail funds from external funding agencies for the research work. Two faculty members of the institute are recognized as Research Guides. The institute has taken proactive measures to implement the R&D policy and has well established incubation centre. By giving financial support, the faculty members are encouraged to publish research papers at national/international conferences and journals and attend FDP's. This resulted in significant improvement in the number of publications during the last five years.

Financial assistance is given to the students for innovative projects like the Smart India Hackathon. The institute regularly organizes different extension activities to engage the students in community-oriented activities to develop a sense of social responsibility and work for the holistic development of society. Mechanism is in place to ensure the active participation of the students in NSS activities. The college NSS unit has adopted one village, conducted several extension activities there. They have conducted health camps, tree plantation, digital literacy, awareness creation on personal hygiene and other outreach activities. The Institution has organized several programs like International Yoga day, Swachh Bharath, blood donation camps, health check- up camps, Off-Line/Online electoral registration process campaigns, etc. NSS unit of the college received recognitions from the government and other external agencies. At present, the institute has 21 functional MoUs with national and international institutes and industries over the last five years.

Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrics(QIM) in Criterion4)

4.1	Physical Facilities
4.1.1 QIM	Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution
4.2	Library as a Learning Resource
4.2.1 QIM	Library is automated using Integrated Library Management System (ILMS), subscription to e-resources, amount spent on purchase of books, journals and per day usage of library
4.3	IT Infrastructure
4.3.1 QIM	Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection
4.4	Maintenance of Campus Infrastructure

Qualitative analysis of Criterion 4

The Institute has enough physical facilities such as classrooms, laboratories, seminar halls as per the AICTE norms. It has 43 classrooms with ICT facilities, well equipped laboratories, and 4 seminar halls. Other facilities like departmental libraries, digital library etc., and a 1,000 seated capacity open air auditorium are also available. The institute created several indoor and outdoor sports facilities, which include an indoor sports complex, a playground, a gym, and a yoga centre. A RO water plant has been installed to meet the campus's drinking water needs. Separate hostel facilities are available for boys and girls. Transportation facility is provided to students and staff at a nominal cost.

The Institute has a well-established library which has an impressive collection of 36192 volumes with 7564 titles and subscribing several national and international print journals, magazines, and newspapers. The library

books can be easily accessed through the use of the Online Public Access Catalogue (OPAC), which is fully automated with the integrated library management system "ECAP-LIBMAN" software. The college is equipped with a digital library facility where students can access different e-journals and online resources through DELNET, NDL, NPTEL-SWAYAM, JOURNALTOCS, and SHODHGANGA. The library has its own collection of rare books. Each department maintains a library that consists of the latest books, project reports, and theses for reference by the staff and students.

The IT infrastructure strategies are developed as per the guidelines of AICTE and it is continuously upgraded. The institute has an adequate student computer ratio and equipped with the internet connection by two providers each of 200Mbps of bandwidth. The campus is Wi-Fi enabled, apart from the high-speed LAN system.

Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrics(QIM) in Criterion5)

5.1	Student Support
5.2	Student Progression
5.3	Student Participation and Activities
5.4	Alumni Engagement
5.4.1 QIM	There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Qualitative analysis of Criterion 5

The institute has established a mechanism to award scholarships to deserving and meritorious candidates. Further, with the support of NGOs, actions have been taken to institute scholarships to students of the Institute, based on their merit and financial background. Besides, non-government agencies also offered financial support for the students based on their merit and financial background. Student support systems such as remedial classes, bridge courses, soft skills development, career counselling, and personality enhancement sessions by inviting external experts etc. are provided in the campus. The Training and Placement cell offers career counselling and pre-placement guidance at various levels to prepare students for advancement to higher education, as well as internship programmes and placements. With the support of Training and Placement Cell, majority of the eligible students get placement offers during the final year itself. Co-curricular and extracurricular activities are part and parcel of a student's life in the campus. A large number of students used to participate in intra-college sports, tournaments, and cultural competitions and came out successful every year. The college organises sports and cultural competitions on the occasion of National Sports Day, National Youth Day, Sankranti Sambaralu, and Annual Day.

A strong Women Grievance Redressal System is in place under the Internal Complaints Cell. The institution has a registered Alumni Association, which is working closely with the respective departments, providing guidance, mentorship as well as financial assistance to students. Alumni Meet, "CONNECT", is conducted every year.

Criterion6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrics(QIM) in Criterion6)	
6.1	Institutional Vision and Leadership
6.1.1 QIM	The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance
6.2	Strategy Development and Deployment
6.2.1 QIM	The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc
6.3	Faculty Empowerment Strategies
6.3.1 QIM	The institution has effective welfare measures and Performance Appraisal System for teaching and non-teaching staff
6.4	Financial Management and Resource Mobilization
6.4.1 QIM	Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)
6.5	Internal Quality Assurance System
6.5.1 QIM	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Qualitative analysis of Criterion 6

DNRCET has a decentralised mechanism for effective implementation of decisions taken by its governing body. It follows a hierarchical organisational structure with well-defined roles and responsibilities. The Institute is in the process of creating a paperless environment and has several e-governance initiatives through the Engineering College Automation Package (ECAP). The various bodies, cells, and committees present in the institute work in tandem to achieve the set targets. Several staff welfare policies are operational in the Institute. Financial support is extended to the staff for their professional development and the Institute has organised several professional development programs. Mechanism is in place to carry out the annual performance appraisal for the faculty and staff. The IQAC plays a major role in inculcating a quality culture in the institute, which is functioning effectively and improving the quality level of the institute. IQAC is regularly evaluating the academic performance of the students and taking steps to improve the student-centric Total Quality Management (TQM) on campus. IQAC is active in guiding the faculty to upgrade their skills and delivering the latest developments to the student community. As a whole, IQAC is responsible to streamline the existing procedures, policies and practices, aiming at overall improvement of the Institute.

Criterion7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrics(QIM) in Criterion7)	
7.1	Institutional Values and Social Responsibilities
7.1.1 QIM	Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years
7.1.4 QIM	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic diversity and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)
7.2	Best Practices
7.2.1 QIM	Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual
7.3	Institutional Distinctiveness
7.3.1 QIM	Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Qualitative analysis of Criterion 7

The Institute regularly conducts training programmes on gender equity, professional ethics, safety, security, and personal counselling. CCTV Cameras are incorporated in all the corridors and vulnerable spots to provide safety to the students. Women Internal Complaints Committee has set up to ensure the safety of girl students. The institute has a 100KVA grid-tied roof-top solar plant that can generate 146,000 KWH of green energy per year. Sensor based energy conservation and use of LED Bulbs, water conservation, plastic ban, landscaping with trees and plants are also implemented by DNR CET and more than 52% of campus lighting is provided by LED. In the path towards "Reduce, Reuse, and Recycle," the institute has set up a solid, liquid, and e-waste management system. Rainwater harvesting is also planned through multiple pits. The institute observes most of the national festivals and anniversaries of great Indian personalities with active participation from students and staff.

The institute maintains two best practices, such as student counselling, mentoring and NSS extension activities, which imparts human values, and employability enhancement skills to make them industry-ready. DNR CET has a Technical Skill Development Institute (TSDI) which is used to promote Skill Development & Entrepreneurship in and around the rural areas of DNR CET.

Section III: OVERALL ANALYSIS based on Institutional strengths, Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

Overall Analysis

Strength:

- Eco friendly, noise and pollution free campus
- Qualified and well-educated management with broad vision for academic excellence
- Robust financial base with many student seats filled
- Committed faculty members with good retention ratio (70%) and team spirit
- Well reputed colleges among the engineering colleges affiliated to JNTUK

Weaknesses:

- Located in a rural area
- Limited autonomy in curricular design
- Lack of externally funded research projects
- Weak Industry Institute Interaction
- Lack of NRI student attraction

Opportunities:

- Tapping the knowledge resources of Alumni
- Starting skill based/vocational programmes as per NEP 2020
- Engineering consultancy to local industry
- Offering MOOC Programmes and NPTEL Courses for value addition
- Academic and industrial collaboration

Challenges:

- Attracting reputed companies for placements with Higher packages
- To motivate students for national competitive exams like GATE, GMAT, Civil service exams etc.
- Need for a dynamic curriculum that meets the requirements of the industry
- To boost research and publications of research papers
- Increasing financial burden for operational purposes

Section IV: Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- Cadre ratio needs to be maintained
- Appointment of more regular faculty with Ph D qualification
- Develop more opportunities for the students to interact with outside world
- Create Research environment and encourage faculty to carryout research
- More elective courses need to be offered
- Laboratory facilities to be enhanced and properly utilized
- Financial position needs to be improved
- Mechanism should be evolved for effective student internship
- Certificate courses and value-added courses to be offered as per the needs of Industry
- More emphasis should be given on campus placement

I have gone through the observations of the Peer Team as mentioned in this report

Signature of the Head of the Institution

Seal of the Institution

Sl.No	Name		Signature with date
1	DR. ALOK KUMAR CHAKRAWAL	Chairperson	
2	DR. CHIKKANNA N	Member Co-ordinator	
3	DR. C A BABU	Member	
4	Dr. Devender S Kawday	NAAC Co - ordinator	

Place

Date