



SELF STUDY REPORT

FOR

3rd CYCLE OF ACCREDITATION

VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

VIGNANA JYOTHI NAGAR, PRAGATHI NAGAR, BACHUPALLY (M),
MEDCHAL-MALKAJGIRI (DIST), NIZAMPET (S.O),
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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNRVJIET), an Autonomous institution sponsored by Vignana Jyothi Society, Hyderabad is established in the year 1995 in the State of Telangana.

The institution is affiliated to Jawaharlal Nehru Technological University, Hyderabad and was accorded the status of Autonomous by UGC in 2012 and is extended for next 10 years from 2018 in view of its exemplary performance and contribution to the domain of technical education. The institution is conferred with the honour of “College with Potential for Excellence (CPE)” by UGC in August 2016.

The institute is accredited by NAAC with A Grade-CGPA of 3.21 in 2013 in the 1st cycle and with A++ Grade-CGPA of 3.73 in the 2nd cycle in 2018. The institution is applying for the 3rd Cycle for re-accreditation.

To its credit, National Board of Accreditation (NBA) has accredited 8 UG Programmes: B.Tech-CE and B.Tech-EEE for 6 years and B.Tech-CSE, B.Tech-ECE, B.Tech-EIE, B.Tech-IT, B.Tech-ME, and B.Tech-AE, PG Programmes: M.Tech-STR, M.Tech-PE, M.Tech-SE, and M.Tech-AMS for 3 years.

MHRD has ranked VNRVJIET in the NIRF Engineering category, rank band of 101-150, 109, 127, 135, 113 in the assessment period.

The departments of CE, EEE, ME, ECE & CSE has been recognised as Research Centres by AICTE and JNTUH. The Institute has received 47 projects worth Rs.388.83Lakhs from funding agencies. The Institute has been recognized as Scientific and Industrial Research Organization(SIROs) by DSIR, Government of India.

QS I. Gauge has rated the Institute with overall diamond rating. The NPTEL has rated the institution with AA rating. The Institution is ISO 9001-2015 Certified. The Institute is rated Platinum by AICTE-CII survey. ARIIA 2020 has placed VNRVJIET in rank band of 6 to 25. VNRVJIET has mentored peer institutions for quality improvement and accreditation under AICTE- Margadarshan and UGC- Paramarsh schemes.

The institution with a vision of serving the society through value-based education has been making a mark in the educational map of this region. The institute offers academic programmes with innovative curriculum, advanced research in cutting-edge technologies and societal engagement through outreach activities. The institute has 11 departments and offers 27 academic programmes both at UG and PG. In addition, the institute offers Ph.D. Programmes through NDF-AICTE and JNTUH recognized Research Centres.

Vision

“To be a World Class University providing value-based education, conducting interdisciplinary research in cutting edge technologies leading to sustainable socioeconomic development of the nation”.

Mission

- To produce technically competent and socially responsible engineers, managers and entrepreneurs who will be future ready.
- To involve students and faculty in innovative research projects linked with industry, academic and research institutions in India and abroad.
- To use modern pedagogy for improving the teaching learning process.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Proactive visionary management, leadership and administrative setup.
- Committed, qualified and experienced faculty and Staff.
- Autonomous Institution with a distinction of College with Potential for Excellence (CPE) by UGC.
- NBA Accreditation for 8-UG and 4-PG Programmes notably CE & EEE programs are accredited for 6 Years indicating total adherence to Quality Education and Academic Excellence.
- The Recognition of VNRVJIET as “AICTE Research Centre” under National Doctoral Fellowship scheme and Five Departments – CE, ECE, CSE, EEE and ME as Research Centres by JNTUH empowering the institution to make strides as a research-based teaching learning institute.
- Offering minor degree programs in emerging technologies and track based courses in interdisciplinary domains in line with NEP.
- Teaching Learning process embraced with Hybrid Learning Model promotes personalized and self-paced learning through VJ Differentiators - student centric methodologies viz. Course based projects, WIT & WIL™, POGIL, VNR Lab Protocol™, Story Board, Open House, Show & Tell, Career Vision Approach™ resulted in graduation of 91.63% students.
- Centre for Educational Technology enhanced teaching skills, implementation of Novel Pedagogies & ICT-Tools and has improved students learning to acquire 21st century skills in line with NEP-2020.
- Robust research culture is evident from number of sponsored research projects, consultancy projects, publications, and patents.
- Projects-based learning yielded high package placements, internships, and social outreach activities.
- VNRVJIET has 69 functional MoUs with premier industries and academic institutions fostering collaborative research projects, internships, and placement opportunities.
- Skill based training programs are organized to prepare competent graduates for Industry- 4.0 through Mentoring Training and Placement (MTP) Cell and Competency Development Centre (CDC).
- Well established infrastructure with ICT enabled classrooms, state-of-the-art laboratories, exclusive centres for research, sports, library, IT students’ activity centre, and well-furnished hostels.
- Students are encouraged to participate in extra-curricular and co-curricular activities.
- Imparting value-based education for sustainability through design thinking and providing technical solutions to societal problems.

Institutional Weakness

- Commercialization of Intellectual Property Rights (IPR).
- Attracting faculty and students from within and outside the country.
- International partnerships and collaborations with foreign universities for student and faculty exchange.

Institutional Opportunity

- Starting industry- sponsored post graduate programmes and Ph.D. programmes.
- Offering Executive Development Programmes for Industry.
- Strengthening strategic alliance with international R&D labs to foster innovation, startups and to benefit the Institution and broaden the scientific community.
- Institution's proximity to IITH, IIIT-H, BITS-Hyderabad, Central University (UoH), create an opportunity for interdisciplinary collaborations, sharing of resources, knowledge exchange fostering an impactful research ecosystem.
- VNRVJIET has the potential to transform into a full-fledged university expanding academic offerings and enhancing research capabilities.

Institutional Challenge

- Enhancing industry academia joint products development
- Increasing the number of faculty with Ph.D. from reputed institutions.
- Twinning programmes with foreign universities.
- Mobilization of resources for establishment of industry related research labs.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Institution has tailored its curriculum in tune with the needs of region, state, nation and global. Out of 6 B.Tech. programs introduced-Computer Science and Business System is offered in collaboration with Industry. The other 5 B.Tech. programs in Computer Science and Engineering(Artificial Intelligence and Machine Learning), Computer Science and Engineering(Data Science), Computer Science and Engineering (IOT), Computer Science and Engineering(Cyber Security), Artificial Intelligence and Data Science are introduced in line with NEP 2020 and current trends of the industry.

B.Tech. Minor degree programs in Artificial Intelligence & Machine Learning, Internet of Things, Cyber Security, Data Science, and Innovation & Entrepreneurship are introduced to provide academic flexibility to the students and empower them with digital capabilities.

Curriculum for all 27 B.Tech. and M.Tech. programs was revised based on the local, regional, national, and global development needs. Introduction of around 35% new courses across all the programs during the assessment period demonstrate the efforts of the Institution towards enriching the curriculum based on the need of industry and demands of the stakeholders.

Choice Based Credit System curriculum has been implemented since 2015. Around 20% of the total credits are earmarked for elective courses. Number of open electives are increased from 2 to 4 whereas professional electives are increased from 4 to 6 for each B.Tech. program. Twelve interdisciplinary open elective tracks based on emerging technologies are introduced. Academic flexibility is enhanced by increasing the number of open and professional elective courses from 20 to 79 and 128 to 307 respectively during the assessment period.

Courses on Design Sensitization and Design Thinking are introduced across all programs. Course-based Projects, Internship and Major Project are introduced to promote project-based learning and learning by doing. It is noteworthy to mention that 90% of students undertook course-based projects, internship, mini-project and major project during the academic year 2021-2022.

Credit transfer through NPTEL-SWAYAM for professional elective courses is implemented. Mandatory courses like Environmental Science, Gender Sensitization, Indian Constitution etc. as well as courses on Professional Ethics and Human Values, Research Methodology & IPR, are included in the curriculum.

100% of the courses in the curriculum are focused on employability/ entrepreneurship/skill development. A total of 322 value-added courses were offered for imparting transferable and life skills to the students out of which 86% student got benefitted. Revision of the curriculum has been implemented based on the analysis of the stakeholder's feedback.

Institute strives to update its outcome-based curriculum as well as introduce new academic programs through structured design and review process to make industry ready engineers.

Teaching-learning and Evaluation

VNRVJIET, an autonomous institution affiliated to JNTUH is the most sought-after Engineering Institution in the State. The Institute operates with the due approval of the statutory bodies: AICTE, UGC and Government of Telangana.

VNRVJIET follows the admission process as per the guidelines of the statutory bodies: 70% of the seats are filled through Convenor EAMCET and 30% of the seats are filled by the management as per the guidelines laid down by the Government of Telangana. The institute strictly adheres to the Reservation policy set by the government ensuring fair representation of different categories. On an average 93.9% of seats were filled in UG and PG Programmes.

VNRVJIET adheres to UGC and AICTE guidelines maintaining an average Student Faculty Ratio of 18:1 during the assessment period.

The Institute prioritizes the needs of diverse learners offering personalized mentoring and support to foster growth and development of slow learners, advanced learners, and differently abled students.

VNRVJIET continues to implement Active Teaching-Learning pedagogies which is well appreciated. The strengthened Course based projects, ICT enabled hybrid mode teaching, and integration of course plans into the LMS helped the teachers and students to address the challenges during and after the pandemic and has provided a seamless learning experience.

VNRVJIET implements enriching learning experiences through VJ-Differentiators, hackathons, coding-contests, industry interactions, and alumni involvement with emphasis on problem-solving skills through projects and internships.

During Covid-19 the institution successfully measured the online conduct of classes with periodic monitoring of the online classes and taking steps to reduce the gap between teaching and learning in the online hybrid mode of education.

The Institute has strengthened the mentoring and counselling through automation for effective handling of academic and career challenges.

The Institute has 43.4% faculty members holding Ph.D. qualification and an average experience of about 10 years. VNRVJIET prioritizes quality education and research-oriented teaching.

All examinations activities are automated through integrated Examination Management System(EMS) in line with NEP-2020 reforms such as Digital Lockers and Academic Bank of Credits(ABC).

The COs, POs, and PSOs are well defined for all the programmes, duly validated and assessment of attainment levels reflects the improved graduate outcomes. 91.63% graduated students from the Institute provide testimony of the same.

The institution values student feedback and takes corrective measures to ensure continuous improvement in all aspects of teaching and learning.

Research, Innovations and Extension

VNRVJIET has transformed from Teaching Learning Institute to a Research based Teaching Learning Institute in the post accreditation period indicating a greater focus on integrating research into the teaching and learning process.

The dedicated Research and Consultancy Centre(RCC), supported by a Research Advisory Board promotes and facilitates research activities in the Institute.

VNRVJIET is recognized as a Research centre by AICTE and JNTUH-5 Departments are recognized as research Centres. The Institute is recognized as Scientific and Industrial Research Organization(SIRO) by DSIR, GoI. VNRVJIET offers Ph.D. programs in five disciplines through AICTE-NDF Scheme and JNTUH.

The institute has the state-of-the-art R&D Infrastructure with 8 exclusive R&D labs and 10 centres of research. An amount of Rs.2.98 Crores has been invested on equipment to promote research in thrust areas during the

assessment period.

38 faculty have been recognized as research supervisors and 50 research scholars are enrolled for pursuing research.

The faculty published 2657 research papers in Web of Science, SCI, Scopus indexed journals, conferences, and book chapters. The h- index of the institute is 39 in Scopus and 27 in Web of science. VNRVJIET has 24 granted patents and 85 published patents.

The faculty at VNRVJIET have been granted 47 projects with a total worth of Rs. 388.83 Lakhs. Additionally, the faculty has generated Rs. 144.13 Lakhs through consultancy services.

The Institute granted seed fund of Rs. 128.51 Lakhs for conducting initial research which led to major project proposals.

IIC, IIIC, ED Cell, RCC and VJ Hub conducted 125 events to encourage students towards research, innovation, incubation, invention, and entrepreneurship. Potential start-ups are identified through Big-Idea Competition and are incubated in VJ-Hub. Four Startups have been graduated and 10 Startups are ongoing in VJ-Hub. Open House, the annual Project-Expo showcases the innovative ideas, demonstrations, and projects.

The Institution in collaboration with HEI's, Industries and Research Organizations conducted 323 activities and has 69 functional MOUs mapping with requirements of the industry and academia.

Through NSS, VNRSF and other student professional bodies students and faculty actively participate in extension and outreach activities. A total of 183 such programmes are conducted and an average of 84% of students participate in all these activities. VNRVJIET received 68 awards and recognitions for all these activities. More than 25,000 people are benefitted through these activities.

Infrastructure and Learning Resources

VNRVJIET has a spacious campus of 26.85 Acres, with a built-up area of 76,028 sq.m. which provides a conducive environment for learning, research, and other activities on the campus and is upgraded as per the statutory requirements. VNRVJIET has 113 ICT-enabled classrooms & seminar halls and 128 well-equipped laboratories.

The Institute maintains a student computer ratio of 2:1 and has a fast internet connection with a bandwidth of 2350 Mbps. The campus is Wi-Fi enabled with 155 access points and the Sonic WALL 9200 firewall provides robust cyber security. The Campus Networks Control Centre maintains IT infrastructure, CC cameras, computers in the Institute and hostel.

An amount of Rs.9405.56 Lakhs is spent on infrastructure augmentation during the assessment period. A total of 24 classrooms and 8 laboratories are developed during the assessment period. A total of 20886 Sq.mts built-up area is added to the existing infrastructure. The expenditure on maintenance of physical and academic support facilities during the assessment period is Rs.10829.29 Lakhs excluding salaries.

VNRVJIET has an automated Library & Information Resource Centre with Integrated Library Management System(ILMS), - LIBSYS, and KOHA. An amount of Rs.16.00 Lakhs is spent on automation of the library by

installing RFID scanners. An amount of Rs.218.67 Lakhs is spent for procurement of books and journals during the assessment period. Library has a collection of rare books, 82931 volumes and 17585 titles. The library is a member of DELNET, N-LIST to enable e-learning. Remote access is provided through KNIMBUS and M-Library Mobile App. Digital Library and computer labs provide remote access to learning resources 24/7. Students and faculty utilize the library facilities both in offline and online mode.

E-content development facilities are available in the Institute to enhance the hybrid teaching learning methodologies. Video lectures are recorded using the Media Centre and Lecturer Capturing System. Mixing equipment and open-source software for editing the lectures are available. Audio Visual centre is available in the Institute help the teachers to enhance the learning experience of the students. Standard Operating Procedures (SOP) for the maintenance of physical, academic and support facilities are well defined and circulated among the faculty and staff. During Covid 19, SOP's for "VJ-MEDISCINE" are developed for hygiene and health, and the same practices are shared with the peer institutions.

Student Support and Progression

VNRVJIET has student centred policies and approaches. This approach helps students to improve skills, research competency, lifelong learning, leadership abilities, and critical thinking.

The 17 professional chapters and 16 student clubs in the Institute offers a platform for practical application of knowledge and skills, enhancing students' professional growth through hands-on experiences.

Coding clubs – Turing Hut, Krithomedh, VJ Hackslash, and other clubs Art of Living club, IoT club, Journalism club, Electoral club, Quality Standards Club, IEEE Student branch chapters-SPS, PES, Nano Science, Microwave, CS, and ACM are introduced in the last 5 years.

Around 264 activities on life skills, language and communication skills, soft skills, and technological developments were conducted.

55% of students receive government and institute-sponsored scholarships. An average of 77% of students have been placed in the leading public and private organizations, indicating the effectiveness of the Institute's career guidance provided by Mentoring Training and Placements(MTP), Competency Development Centre(CDC).

During this period, the Institute recorded highest pay packages and median salaries in Telangana. MTP employed video conferencing tools, to assist students to prepare video resumes during and after pandemic. The resilience and adaptability of the students resulted in securing good number of job offers.

The students have opted for higher education abroad by qualifying national and international competitive exams. 85% of students benefitted through the guidance and career counselling of MTP.

To address grievances, the Institute has implemented a robust e-governance system that effectively handles the online grievance mechanisms within a stipulated time. The institution ensures speedy disposal of grievances. Awareness about this mechanism is promoted through posters and the institute's website, ensuring transparency and accountability.

The institute has constituted an Institute Complaint Committee (ICC) in accordance with the guidelines set by UGC.

The students achieved remarkable success in sports and cultural activities, winning a total of 251 awards at national and international levels. Additionally, a total of 255 sports, cultural activities, and competitions were organized over the last five years.

The strong connection between the Institution and its alumni is evident, with 15,987 alumni actively staying connected. Alumni chapters in USA, Australia, Bangalore & Chennai provides a forum for interaction among the alumni. Alumni raised Rs. 31.07 Lakhs to support various activities along with guidance, placement training, mentoring, and knowledge-sharing sessions.

Governance, Leadership and Management

VNRVJIET's organizational structure encompasses decentralized decision making and participatory governance. The roles and responsibilities of statutory and non-statutory bodies are well defined which aids in policy implementation. The institution has an approved strategic plan with clearly stated short-term and long-term goals.

The Strategic plan of the Institution in line with the institute vision, mission and quality policy drives the academic, research, administrative and other activities. The internal and external audits ensure the efficacy of the practices as per the institute quality policy.

VNRVJIET has implemented e-governance in domains of administration, finance & accounts, student admission & support and examinations.

The Institute has spent an amount of Rs.11.33Crores towards welfare measures for teaching and non-teaching staff, avenues for career progression. VNRVJIET takes all the steps to ensure the welfare of the employees.

The Faculty Professional Growth Plan (FPGP) provides, faculty with appropriate planning for Professional development. In addition, the FPGP provides the institute to understand the training requirements of the faculty. The Institute has spent Rs. 65.70 lakhs towards training of the employees.

The Finance Committee plans, mobilizes, and explores the financial resources required for the execution of Institute activities. The internal and external financial audits are conducted regularly.

Students, Faculty, Alumni, Industry Experts, and Staff involve in decision-making processes at various levels fostering a collaborative and inclusive environment. The Institute recognises the value of stakeholder's perspective, ideas, and expertise.

The Institute shares information pertaining to policies, processes and decisions in the institute website fostering transparency, accountability and promoting a culture of open communication.

IQAC at VNRVJIET works with a moto of catalysing the quality initiatives and enhancement of these initiatives. Through integrated regular quality measurement tools and techniques, sustenance and assurance of internal systems and processes are taken care. A total of 141 professional development and administrative programs are conducted for skill enhancement. On an average 72% of the faculty has undergone online/ face to face FDPs. An amount of Rs.66.16 lakhs is spent for sponsoring faculty for advanced training and upskilling.

Along with the other objectives and goals, IQAC has major focus on nurturing academic environment through sustenance and enhancement of teaching-learning process. Institution has well developed teaching-learning methodologies in place and are practiced persistently. Regular monitoring is performed stringently through, Student feedback system, Class Review Committee, Student Satisfaction Survey, Academic and Administrative audits. Regular quarterly meetings are conducted and IQAC committee keeps concrete efforts for internalization and institutionalization.

Institutional Values and Best Practices

VNRVJIET has an inclusive environment that values gender equity and does not discriminate based on gender, caste, language, cultural and socioeconomic disparities. he Institute has 37.3 % girl students and 43% women faculty and more than 50% of administrative positions are held by women. Gender just environment prevails in the institution

VNRVJIET prioritises gender equity with value added programs and courses focused on Gender Sensitization, Human values, and Professional Ethics in the curriculum.

The Institute has solar power plants with installed capacity of 765kWp connected to the grid which results in 50% of reduction in electricity power consumption. In addition, 50% of annual lighting power is saved through the replacement with LED bulbs. These initiatives testify VNRVJIET's commitment to inclusivity and sustainability.

To create an inclusive physical environment the Institute has developed infrastructure to cater the needs of all genders and Divyangjan. The surveillance systems monitor and provides safety and security to stakeholders.

Measures are taken to dispose and recycle various wastes generated in the campus. The institute has MoU for solid waste disposal, recycling of paper and PET bottles. Treated liquid waste from 150KLD capacity STP is utilized for gardening. The Institute has rainwater harvesting pits for ground water recharge. The campus is plastic free and Institutional communication is done through e-media fostering green initiatives. The Institute maintains a significant greenbelt with a canopy of trees and plants for an eco-friendly and bio diversified campus. The Institute is geared up to be carbon free campus by introducing electric vehicles and creating awareness to the stakeholders.

VNRVJIET creates awareness among students and staff on constitutional commitments. The Institute undertook more than 200 initiatives towards societal engagement promoting universal values. Students participated in national festivals and more than 100 events commemorating the lives of great Indian personalities. Transparency is a priority at VNRVJIET maintaining open and accountable practices.

VNRVJIET promotes best practices like “Industry Institute Partnership (IIP), to bridge the gap between Industry and Academia” and “Design thinking and applications of multi-disciplinary knowledge to address global challenges” through Centre for Presencing and Design Thinking” towards a self-reliant India (Aatmanirbhar Bharat).

Institutional Distinctiveness is to prioritise “Sustainable Development through its Emphasis on Quality Education”: ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all. The practice of Education Process Re-engineering - VJ Spectral Pyramid™ resulted notable outcomes for the Institute and in specific to faculty and students.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
Address	Vignana Jyothi Nagar, Pragathi Nagar, Bachupally (M), Medchal-Malkajgiri (Dist), Nizampet (S.O),
City	Hyderabad
State	Telangana
Pin	500090
Website	www.vnrvjiet.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	C. D. Naidu	040-23041517		-	
IQAC / CIQA coordinator	Y. Bhanusree	040-23042956	9849448635	040-2304276 1	iqac@vnrvjiet.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of	18-05-1995

'Autonomy'	
Date of grant of 'Autonomy' to the College by UGC	17-08-2012

University to which the college is affiliated		
State	University name	Document
Telangana	Jawaharlal Nehru Technological University	View Document
Telangana	Jawaharlal Nehru Technological University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	21-05-2010	View Document
12B of UGC	05-11-2012	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	03-07-2022	12	Every year AICTE Issues Extension of Approval EOA
AICTE	View Document	03-07-2022	12	Every year AICTE Issues Extension of Approval EOA
AICTE	View Document	03-07-2022	12	Every year AICTE Issues Extension of Approval EOA
AICTE	View Document	03-07-2022	12	Every year AICTE Issues Extension of Approval EOA
AICTE	View Document	03-07-2022	12	Every year AICTE Issues Extension of Approval EOA

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	Yes
If yes, date of recognition?	23-08-2016
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	National Board of Accreditation NIRF ARIIA
Date of recognition	09-02-2023

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Vignana Jyothi Nagar, Pragathi Nagar, Bachupally (M), Medchal-Malkajgiri (Dist), Nizampet (S.O),	Urban	26.85	76028

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Co course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering, Civil Engineering	48	Intermediate or Equivalent	English	128	106
UG	BTech,Electrical And Electronics Engineering,Electrical and Electronics Engineering	48	Intermediate or Equivalent	English	129	128
UG	BTech,Mechanical Engine	48	Intermediate or Equivalent	English	128	105

	ering,Mechanical Engineering					
UG	BTech,Electronics And Communication Engineering, Electronics and Communication Engineering	48	Intermediate or Equivalent	English	256	254
UG	BTech,Computer Science And Engineering,Computer Science and Business System	48	Intermediate or Equivalent	English	64	64
UG	BTech,Computer Science And Engineering,Computer Science and Engineering	48	Intermediate or Equivalent	English	257	254
UG	BTech,Electronics And Instrumentation Engineering, Electronics and Instrumentation Engineering	48	Intermediate or Equivalent	English	128	128
UG	BTech,Information Technology,Information Technology	48	Intermediate or Equivalent	English	193	193
UG	BTech,Automobile Engineering,Automobile Engineering	48	Intermediate or Equivalent	English	64	44

UG	BTech,Computer Science And Engineering Ds Cs Aids,Computer Science and Engineering Cyber Security	48	UG	Intermediate or Equivalent	English	65	64
UG	BTech,Computer Science And Engineering Ds Cs Aids,Artificial Intelligence and Data Science	48	UG	Intermediate or Equivalent	English	64	63
UG	BTech,Computer Science And Engineering Ds Cs Aids,Computer Science and Engineering Data Science	48	UG	Intermediate or Equivalent	English	128	128
UG	BTech,Computer Science And Engineering Aiml Iot,Computer Science and Engineering IOT	48	UG	Intermediate or Equivalent	English	65	65
UG	BTech,Computer Science And Engineering Aiml Iot,Computer Science and	48	UG	Intermediate or Equivalent	English	193	193

	Engineering Artificial Intelligence and Machine Learning					
PG	Mtech,Civil Engineering, Structural Engineering	24	B.Tech or B.E or Equivalent	English	18	16
PG	Mtech,Civil Engineering, Geotechnical Engineering	24	B.Tech or B.E or Equivalent	English	18	3
PG	Mtech,Civil Engineering, Highway Engineering	24	B.Tech or B.E or Equivalent	English	18	6
PG	Mtech,Electrical And Electronics Engineering,Power Electronics	24	B.Tech or B.E or Equivalent	English	18	1
PG	Mtech,Electrical And Electronics Engineering,Power Systems	24	B.Tech or B.E or Equivalent	English	12	5
PG	Mtech,Mechanical Engineering,CAD CAM	24	B.Tech or B.E or Equivalent	English	12	1
PG	Mtech,Mechanical Engineering,Advanced Manufacturing Systems	24	B.Tech or B.E or Equivalent	English	18	0
PG	Mtech,Electronics And Communication Engineering,	24	B.Tech or B.E or Equivalent	English	18	5

	VLSI System Design					
PG	Mtech,Electronics And Communication Engineering, Embedded Systems	24	B.Tech or B.E or Equivalent	English	18	5
PG	Mtech,Computer Science And Engineering,Software Engineering	24	B.Tech or B.E or Equivalent	English	12	0
PG	Mtech,Computer Science And Engineering,Computer Science and Engineering	24	B.Tech or B.E or Equivalent	English	18	5
PG	Mtech,Electronics And Instrumentation Engineering, Electronics and Instrumentation Engineering	24	B.Tech or B.E or Equivalent	English	12	1
PG	Mtech,Information Technology,Computer Networks and Information Security	24	B.Tech or B.E or Equivalent	English	12	5
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering,Civil Engineering	36	M.Tech or M.E or Equivalent	English	0	0
Doctoral (Ph.D)	PhD or DPhil ,Electrical	36	M.Tech or M.E or	English	0	0

	And Electronics E ngineering,El ectrical and Electronics Engineering		Equivalent			
Doctoral (Ph.D)	PhD or DPhil ,Mechanical Engineering, Mechanical Engineering	36	M.Tech or M.E or Equivalent	English	1	1
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Commu nication Engi neering,Elect ronics and C ommunicatio n Engineering	36	M.Tech or M.E or Equivalent	English	1	1
Doctoral (Ph.D)	PhD or DPhil ,Computer Science And Engineering, Computer Science and Engineering	36	M.Tech or M.E or Equivalent	English	2	2

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	46				51				383			
Recruited	32	14	0	46	45	6	0	51	119	264	0	383
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				81
Recruited	56	25	0	81
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						107
Recruited	82		25		0	107
Yet to Recruit						0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	32	14	0	33	12	0	69	50	0	210
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	5	1	0	133	131	0	270
UG	0	0	0	0	0	0	0	0	0	0

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

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

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	7	0	0	0	7

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

Self Study Report of VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING
AND TECHNOLOGY

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	3986	262	7	0	4255
	Female	2373	167	6	0	2546
	Others	0	0	0	0	0
PG	Male	65	11	0	0	76
	Female	65	2	0	0	67
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	4	0	0	0	4
	Female	5	3	0	0	8
	Others	0	0	0	0	0

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

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	142	133	100	92
	Female	84	68	53	60
	Others	0	0	0	0
ST	Male	73	45	42	31
	Female	29	27	17	19
	Others	0	0	0	0
OBC	Male	554	423	378	349
	Female	292	202	202	182
	Others	0	0	0	0
General	Male	424	462	319	378
	Female	341	275	260	257
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		1939	1635	1371	1368

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Automobile Engineering	View Document
Civil Engineering	View Document
Computer Science And Engineering	View Document
Computer Science And Engineering Aiml Iot	View Document
Computer Science And Engineering Ds Cs Aids	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Electronics And Instrumentation Engineering	View Document
Information Technology	View Document
Mechanical Engineering	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	<p>Vision of the Institute is to be a World Class University providing value-based education, conducting interdisciplinary research in cutting edge technologies leading to sustainable socio-economic development of the nation. Institute is at the forefront to provide an environment for multidisciplinary and holistic development. Institute offers variety of interdisciplinary and multidisciplinary courses to its students of various programmes. Institute is encouraging integration of humanities and science with STEM. This is evident from the offering of Bachelor of Business Administration in Data Analytics as second degree to B.Tech. students. Institute plans to offer more such courses in future. Institute offers flexible curriculum to its students that contain varied courses providing holistic and multi-disciplinary education. All the courses offered are credit-based except for the mandatory courses. Students are provided the option of choosing elective courses (both professional and open) as per their preferences through an online system. Institute also offers minor degree courses in emerging technologies like artificial intelligence and machine learning, data science, internet of things and cyber security. Minor degree on entrepreneurship is also offered to the students to encourage entrepreneurial capabilities</p>
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among them. Institute has also offered the provision to pursue second degree by students i.e., BBA in Data Analytics along with B.Tech. degree. Value-based (credit) courses on Professional Ethics and Human Values and Personality Development and Public Speaking are offered. Mandatory courses on Environmental Science, Gender Sensitization, Ancient Wisdom, Happiness and Wellness are also offered. Students are encouraged to participate in events and project competitions conducted by various clubs and societies related to National Service Scheme (NSS) for their overall development. In line with NEP directives, VNRVJIET has introduced multiple entry and exit provision to the students under R22 academic regulations from the academic year 2022-2023. Some of the examples are given below: Multiple Entry Option: A student is permitted to rejoin B.Tech. degree programme by taking one year break while pursuing four-year B.Tech. regular degree programme i.e., either after completion of B.Tech. IV semester (B.Tech. II year II semester) or B.Tech. VI semester (B.Tech. III year II semester). Exit Option: A student is allowed to exit four-year B.Tech. regular degree program at the end of II year. Student shall be awarded two-year B.Tech. Diploma Certificate in the concerned branch of engineering allotted at the time of admission, upon fulfilling the following conditions: • completes all the minimum academic requirements upto B.Tech. IV semester (B.Tech. II year II semester) and • earns all the 80 credits upto B.Tech. IV semester (B.Tech. II year II semester) within 4 years from the date of admission in B.Tech. I year. Institute has an exclusive Research and Consultancy Centre wherein faculty and researchers from different disciplines work together on various multi-disciplinary and inter-disciplinary projects to achieve solutions to societal problems. • Students of a specific discipline are allowed to choose elective courses of their choice from other disciplines (open elective) through an online system • Minor degree courses in emerging technologies being pursued by students of other disciplines • Credit Transfer through SWAYAM-NPTEL

2. Academic bank of credits (ABC):

Academic Bank of Credits (ABC) initiative under NEP 2020 facilitates the academic mobility of students (multiple entry and exit) with the freedom to study across the Higher Education Institutions in the

country. Academic mobility is gained through credit transfer mechanism from one programme to another thereby leading to attain a Degree/Diploma/PG-diploma etc. Academic credits earned by the students are stored digitally in ABC. Students get the option of pursuing courses of their interest without hindrance. At VNRVJIET, students are pursuing courses through various platforms like NPTEL, SWAYAM, Coursera etc. However, the Institute is yet to complete the registration. Institute is in the process of registering under the ABC and wants its students to be benefitted with ABC implementation. Institute has already implemented credit transfer through NPTEL-SWAYAM for its B.Tech. students. Institute has MoU with National Institute of Technology Warangal and other foreign universities for mutual collaboration. Institute plans to have mutual collaborations with national and foreign institutions for offering joint degrees, twinning programmes and credit transfer facility. Institute follows a structured process for designing the curricula of various programmes. Faculty from a domain is entrusted with the responsibility of framing the curriculum. Course coordinator designs the curriculum of a course based on the inputs received from various stakeholders like students, peers, parents, alumni, industry experts, professional societies, regulatory bodies etc. Course coordinators are encouraged to refer to the curricula of higher educational institutes/reputed universities. They are also encouraged to participate in various workshops and FDPs related to curriculum revision. Course coordinator revises the course curriculum based on the feedback from Program Assessment Committee and Department Academic Committee before being approved by the Board of Studies and subsequently by the Academic Council. Members of the Boards of Studies and Academic Council guides in framing the assessment and evaluation procedures to be followed. In view of the implementation of curriculum based on NEP 2020, faculty have attended many programs conducted by AICTE New Delhi, JNTU Hyderabad etc. Offering of NPTEL-SWAYAM courses as an option to professional elective courses with credit transfer facility.

3. Skill development:

Institute understands the role of life skills and personality development in a student's career

growth. Acquiring these skills would help them take up their future roles confidently. Few courses from the curriculum like Advanced English Language and Communication Skills Lab, Personality Development and Public Speaking showcase the Institute's effort in imparting soft skills to the students. Apart from this, various training programmes are organized regularly for the benefit of students so that soft skills as well as technical and professional skills among the students are developed. Students are also encouraged to take up two mandatory certificate courses of their choice for enhancing their skills are developed through certificate courses, methodology and core subjects. Institute's Competency Development Centre (CDC) and Mentoring Training and Placement Cell organize training programmes on soft skills, personality development, public speaking, etc. Institute is always focused on providing value-based education to its students so that they understand and inculcate the humanistic, ethical, constitutional values. Some of the courses in the curriculum are • Professional Ethics and Human Values • Ancient Wisdom • Happiness and Wellness • Gender Sensitization • Environmental Science • Indian Constitution • Students are encouraged to take up two mandatory certificate courses of their choice before they graduate for enhancing their skills through certificate courses, core and elective subjects and projects. • Industry personnel are invited regularly for conducting various training programmes that enhance the skills of the students to make them industry ready. • In view of the implementation of NEP 2020, it is planned to have more courses that impart skills to the students. • Students are encouraged to take up online certification courses. • Establishment of a Competency Development Centre (CDC) responsible for organizing the skill development programmes • Under the R22 academic regulations, one credit skill development courses have been introduced in B.Tech. and M.Tech. programmes. • Elective course on Entrepreneurship is offered in all the B.Tech. programmes. • Training programmes on Soft skills are conducted every year.

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

India's strong foundation in science and technology has been showcased to the world through Vedic literature available in the ancient Vedas. Institute believes in the importance of ancient Indian

knowledge systems, Indian languages, culture etc. It is essential to make the current generation aware of these. Activities related to literature, languages and art are conducted regularly. Efforts are made to promote and integrate the same into the curriculum of B.Tech. and M.Tech. programmes. Institute plans to include the following in B.Tech. and M.Tech. curricula: • Offline course on Indian Knowledge Systems as a mandatory course • Offline course on Indian Knowledge Systems under open-elective category • Online course on Indian Knowledge Systems • Offline and online courses on different Indian languages like Telugu, Kannada, Tamil, Malyalam, Hindi, Marathi etc. To substantiate this, Institute in its latest academic curriculum under R22 academic regulations has included a mandatory course on Ancient Wisdom emphasizing the importance and application of Indian traditional knowledge in technologies existing then and its current perspectives. Institute has setup a Centre for Educational Technology with an aim to conceptualize the learning and teaching with application of modern educational teaching techniques. It is planned to entrust the centre to conduct capacity building workshops and training programs for faculty for delivery of curriculum bilingually. Centre would be equipped with language translation softwares for better learning. Even though the medium of instruction for all the B.Tech. and M.Tech. programmes offered at VNRVJIET is English, yet the course faculty are given freedom to teach their courses in Telugu language by considering factors like the medium of instruction of students, ease of better understanding of a concept in local language etc. Institute plans to offer Indian classical languages and regional languages under open-elective as part of the implementation of National Education Policy. Institute in its latest academic curriculum under R22 academic regulations has included a mandatory course on 'Ancient Wisdom' emphasizing the importance of Indian traditional knowledge in ancient technologies and its current perspectives. Apart from this, Institute has Arts club which conducts programmes on Indian arts regularly and also publishes Vignana Vahini magazine in which the students showcase their artistic abilities through drawings, poetry in Telugu/Hindi/English languages. Inclusion of a mandatory course on Ancient Wisdom

<p>5. Focus on Outcome based education (OBE):</p>	<p>in B.Tech. and M.Tech. curricula.</p> <p>Institute is diligently practicing Outcome based Education (OBE) framework focusing on imparting engineering knowledge, problem solving abilities, enhancing technical skills, research abilities and employability potential, lifelong learning, sensitization to environment and society etc. Curriculum has been revised four times from 2015-2016 onwards namely under R15, R18, R19 and R22 academic regulations. OBE based curriculum of a program contains the following: • Vision and mission of Institute, • Vision and mission of the department • Program Educational Objectives (PEO) • Program Outcomes (PO) • Program Specific Outcomes (PSO) A typical course curriculum contains the following: • Course title with course code • Course credit hour structure • Course pre-requisites • Course objectives • Course outcomes (CO) • Mapping of course outcomes with program outcomes and program specific outcomes • Course content/syllabus • Reading Materials – Textbooks, References, Online resources To assess student learning outcomes and attainment levels of Course outcomes and program outcomes under OBE, various pedagogical initiatives and assessment strategies are implemented which include application based teaching strategies for critical thinking, skill based learning, learning by doing, project based learning, inquiry based learning, experiential learning, focused group discussions, case studies, use of ICT etc. Skill development as envisaged by the Government of India under NEP is supported by certificate courses. Self-learning is promoted through MOOCs courses. Student learning outcomes i.e., course outcomes are assessed as direct and indirect. Direct assessment through proctored exams is computed for internal as well as semester end assessment. Indirect assessment is computed based on surveys. Attainment levels obtained indicate the areas for improvement. The attainment clearly indicated required improvement in areas of research. Few of the differentiators in practice at Institute are listed below. • WIT & WIL • VNR Lab Protocol • Course Projects • Show & Tell • Open House Online tools used for assessment: • Eduprime Learning Management System • Google Forms • Mentimeter • Implemented Outcome based education framework from 2015 onwards • Mapping</p>
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	<p>of course outcomes and program outcomes on a scientific basis • Use of active teaching-learning methodologies like WIT and WIL, VNR Lab Protocol, Show and Tell, Storyboard etc. for better learning outcomes • Use of Rubrics based assessments in courses like practical, project, internship etc. • In-house campus automation software - ‘Eduprime-Learning Management System’ used for mapping and attainment of Course Outcomes and Program Outcomes • MOOCs to promote lifelong and self-regulated learning • Mandatory certificate courses for enhancing the skills • Value based education through curricular and co-curricular activities • Extensive field activities like Industrial visits etc.</p>
<p>6. Distance education/online education:</p>	<p>At present, Institute does not offer vocational courses. However, it is planned to offer such courses through ODL mode in the near future. COVID-19 pandemic forced the Institute to impart education online. Now post-pandemic, Institute has geared up for Blended learning approach giving equal emphasis on conducting offline and online classes. During the academic year 2021-2022, both online as well as on-campus classes were held for proper and smooth conducting of academic course work efficiently. Online classes are being conducted whenever needed along with on-campus (offline) classes. Timetables for both online and on-campus classes are scheduled. Video conferencing tools like Google Meet/Classroom, Microsoft Teams etc. are used for delivery of course content online. Programming and simulation related laboratories are also being conducted online. Virtual Labs are encouraged for performing web-enabled experiments remotely. Lecture notes, powerpoint presentations, e-books and reading materials of courses are shared to students through email as well as using online video conferencing tools and social media platform like WhatsApp. Recorded videos of experiments that need physical hands-on were shared online. Revision / remedial classes are conducted online for the benefit of slow learners. Class Assessments are conducted online using Campus Automation Management System - Eduprime software. Student feedback is also obtained using Eduprime software. In addition to the above, Course Projects, Internship, Industry Oriented Mini-Project, Technical Seminar,</p>

Comprehensive Viva Voce and Project Work are conducted both in online and on-campus for completion of the program. Apart from these, students are allowed to pursue NPTEL-SWAYAM as part of credit transfer facility as well as other MOOCs for promoting self-learning. Also, all the journals and books available in the Institute library were made accessible to the students for online and remote reading through 'Knimbus' app of VNR Digital Library. Institute has a plan to introduce handheld adaptive computing devices for students that are based on artificial intelligence and machine learning technologies as well as upgrade and enhance the existing digital infrastructure capacity so as to be future ready. • Institute has an active NPTEL local chapter through which they are encouraged to take up online certification courses for their upskilling. • Institute used the opportunity due to COVID-19 pandemic and potential of our faculty and infrastructure in curriculum delivery of courses of B.Tech. and M.Tech. programmes through online platforms for teaching learning activities.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?

Electoral Literacy Club at VNRVJIET is established with the mission of fostering electoral literacy and active citizenship among the student community. The Institution believes that students must be aware, involved, and responsible participants in the democratic system as the elections play a significant role in determining the future course of the country. The club works to provide students the knowledge, abilities, and morals they need to become politically conscious and socially responsible citizens through an array of endeavours and projects. The Electoral Literacy Club's objectives are as follows: 1. Increasing Electoral Awareness: 2. Fostering Active Citizenship: 3. Teaching about Political Systems: 4. Empowering Voters: The goal of the Electoral Literacy Club is to enhance political literacy among students, promote open discourse, and motivate them to act as change agents in their communities. It imagines a student body that is dedicated to defending democratic ideas, involved in civic issues,

and knowledgeable about them. The group attempts to accomplish its purpose through a variety of events, including workshops, seminars, panel discussions, voter registration drives, simulated elections, and community outreach initiatives. In order to give students meaningful experiences and learning opportunities, it tries to engage with election authorities, civil society organisations, and professionals in the field of electoral literacy. The founding of the Electoral Literacy Club at VNRVJIET is a reflection of the institution's dedication to interdisciplinary learning and the creation of socially conscious leaders. The group strives to mould students into responsible citizens who actively contribute to the advancement of society by fostering an understanding of the democratic process and encouraging participation.

2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?

The institute administration is actively involved in the process of selecting student coordinators and faculty coordinators for the Electoral Literacy Club (ELC) at VNRVJIET. Capable students are carefully chosen and appointed by the institute administration to work as ELC coordinators. The student who exhibit leadership skills and a strong interest in promoting electoral literacy are chosen. They are in charge of planning and directing various ELC activities and projects. The institute administration also appoints coordinating faculty members to offer direction and support to the ELC. Coordinators are selected based on their expertise and interest in electoral literacy as well as their willingness to help the clubs grow. They are essential in guiding and mentoring the student coordinators as well as offering the ELC insightful information and expertise. The ELCs at VNRVJIET are intended to be functional, which means that they actively participate in planning events and campaigns for electoral literacy. The combined efforts of the student coordinators, coordinating faculty, and the ELC participants themselves power these clubs. Together, they organise and carry out activities like voter education campaigns, workshops, seminars, debates, and mock elections. Additionally, the VNRVJIET ELCs exhibit characteristics that are typical. This indicates that the clubs' objectives are to represent and include a wide range of students from various backgrounds, academic specialties, and viewpoints. By

	<p>encouraging inclusivity, the ELC makes sure that the activities and discussions cover a wide range of points of view and help the student body develop a deeper understanding of democratic principles. The ELC collaborate closely with the institute administration, coordinating faculty, and student coordinators to develop the ELC's vision, plan its activities, and make sure it runs smoothly. These organisations are essential in promoting a strong democratic culture among institute students, encouraging active citizenship, and promoting electoral literacy.</p>
<p>3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.</p>	<p>At the institution ELC is actively involved in a wide range of initiatives to promote electoral literacy, encourage student involvement in electoral processes on a volunteer basis, and encourage multiculturalism in democratic participation. The club seeks to inform, empower, and raise student awareness of the electoral process through a variety of activities. ELC plans a wide variety of events to advance electoral literacy and involve students in discussions of democratic principles and participation. The ELC engaged in the following activities, which are described below: 1. Ballot Bistro: 147 students participated in the Ballot Bistro event. Students had a platform to discuss elections and voting through simulations and discussions during this interactive activity. Students were able to develop a deeper understanding of political systems, voting procedures, and the value of making informed decisions through group activities and discussions. 2. Rap Battle: The event is conducted at Rattaiyah Square, with 245 students. Students addressed political and social issues while showcasing their rap abilities. The occasion promoted artistic expression while also igniting debates on subjects like democracy, social justice, and electoral responsibility. 3. Photography Contest: 342 students participated in the photography contest, which was held in the PG Block Seminar Hall. Students were encouraged to take pictures that exemplified the democratic ideals, electoral procedures, and civic engagement during this activity. Students demonstrated their creativity through their photographs while promoting democracy and the value of voting. 4. Wall Magazine: 244 students actively participated in the Wall Magazine project. The goal of this initiative was to produce an eye-</p>

	<p>catching display of educational posters, writings, and artwork about electoral literacy. The wall magazine served as a constant presence on campus, giving students access to knowledge about voting rights, the electoral process, and the importance of taking part in civic affairs. The club was able to successfully encourage students to explore and understand the significance of democratic values and their role in electoral processes by fusing various art forms, discussions, and educational displays.</p>
<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>In order to address electoral-related issues, conduct research, surveys, awareness campaigns, create content, and publish materials that support the growth of democratic principles, the institution has undertaken a number of socially pertinent endeavors and initiatives. 1. Electoral Awareness Drives: To inform students, faculty, and the general public about the value of democratic participation, the institute sponsors electoral awareness drives. Workshops, panel discussions, and interactive sessions are all part of these campaigns. Voter registration, moral voting, the role of the media in elections, and comprehension of the electoral process are just a few of the subjects they cover. The institution wants to improve civic engagement and active participation in the electoral process through awareness-building. 2. Content Production: VNRVJIET actively produces content about political issues. This entails creating educational pamphlets, signs, infographics, and audio-visual materials that outline voting procedures, rights, and obligations. Additionally, the institute promotes faculty and student contributions to academic journals and publications that highlight democratic principles, electoral reforms, and civic engagement. 3. Partnerships and Collaborations: To increase its influence on electoral-related issues, VNRVJIET actively collaborates with electoral authorities, civil society organisations, research institutions, and other stakeholders. These partnerships make it easier for people to share knowledge, conduct research together, and carry out projects aimed at enhancing electoral procedures and promoting democratic values. 4. Student-led Initiatives: The institute encourages students to organise initiatives that promote civic engagement and electoral literacy. The Electoral Literacy Club and other student organisations are essential in creating awareness,</p>

	<p>running campaigns, and interacting with local communities to promote electoral literacy. These initiatives show that the student body is actively involved and dedicated to advancing democratic values. VNRVJIET seeks to significantly advance democratic values and encourage participation in electoral processes through these socially relevant projects, initiatives, research projects, awareness campaigns, and collaborations.</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>The Electoral Literacy Club (ELC) at VNRVJIET, in collaboration with the institute administration, undertakes activities to institutionalise mechanisms for registering eligible students as voters. These initiatives aim to raise awareness, provide assistance, and streamline the voter registration process. Voter Registration Drives, Information Sessions and Workshops, Voter Registration Assistance, Collaboration with Election Authorities. Through these activities, surveys, information sessions, and collaborative efforts, the Electoral Literacy Club of VNRVJIET and the institute administration work towards institutionalising mechanisms for registering eligible students as voters. Their goal is to create a culture of active civic engagement, empower students to exercise their democratic rights, and strengthen the democratic process through increased youth participation.</p>

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
27	26	22	21	21
File Description		Document		
Institutional data in prescribed format		View Document		

1.2

Number of departments offering academic programmes

Response: 10

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
6419	5853	5253	5246	5027
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
File Description		Document		
Institutional data in prescribed format		View Document		

2.3

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
6363	5811	5215	5015	4878
File Description		Document		
Institutional data in prescribed format		View Document		

2.4

Number of revaluation applications year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
221	213	148	189	184

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
935	868	758	687	742
File Description		Document		
Institutional data in prescribed format		View Document		

3.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
360	357	338	333	330
File Description		Document		
Institutional data in prescribed format		View Document		

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
362	359	340	335	332
File Description		Document		
Institutional data in prescribed format		View Document		

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3547	2331	2244	2620	2187
File Description		Document		
Institutional data in prescribed format		View Document		

4.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
693	609	525	504	504
File Description		Document		
Institutional data in prescribed format		View Document		

4.3

Total number of classrooms and seminar halls

Response: 113

4.4

Total number of computers in the campus for academic purpose

Response: 2770

4.5

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

2021-22	2020-21	2019-20	2018-19	2017-18
5867.64	2820.30	1810.08	1821.63	4398.81

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1

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

Response:

- VNRVJIET, the premier self-financing institution in Telangana State, offers 14 B.Tech. and 13 M.Tech. programmes besides Ph.D. programmes in 5 disciplines. The curricula of all these programmes are society-driven, technology-based, industry-compliant, and product-inclined as evident from the Programme Educational Objectives which have direct relevance to local, regional national and global development needs. During the assessment period, the institution has introduced 6 programmes in emerging technologies viz. B.Tech. CSE-Artificial Intelligence and Machine Learning, B.Tech. Computer Science and Business Systems, B.Tech. CSE-Data Science, B.Tech. CSE-Internet of Things, B.Tech. CSE-Cyber Security, B.Tech. Artificial Intelligence and Data Science. These programmes are introduced in tandem with the Government of India's mission of Digital India and AatmaNirbhar Bharat Abhiyan. Curricula of various academic programmes conform to the policies and guidelines of the State & Central Government and fulfils the needs of the society and the industry. The curricula not only provide engineering knowledge but also equip the students with desirable attributes and the needed skills. The curricula promote Higher Order Thinking Skills such as analysing, evaluating, and synthesizing. Care is taken to ensure that the curriculum is technology driven.
- For developing all-rounded personality in the students, Institute provides academic flexibility by implementing choice-based credit system curricula as well as by introducing new programmes and courses. Institute is offering Minor degree programmes in Artificial Intelligence & Machine Learning, Internet of Things, Cyber Security, Data Science, and Innovation & Entrepreneurship.
- Curricula of all the programmes are developed in line with graduate attributes to frame Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs). Course syllabi is formulated and revised through structured process based on stakeholder feedback.
- Courses linked to Digital India, Make in India, T-Fiber, Industry 4.0 initiatives such as Big Data Analytics, Artificial Intelligence, Machine Learning, Internet of Things, Augmented Reality and Virtual Reality etc. are also integrated in the curriculum.
- In line with the need of imparting skills to the budding engineers as envisaged in the Make in India, Skill India, FutureSkills Prime initiatives of the government, courses on Design Sensitization, Design Thinking, Computer Aided Design, Robotics, 3D Printing and Design, Embedded Systems, etc. are included in the curriculum.
- Curriculum offers courses in the field of "Cyber Space" such as Cyber Security, Blockchain Technologies, Computer Forensics, Cryptography & network Security which are linked to Government of India's National Cyber Security Policy, Stay Safe Online, Cyber Swachhta Kendra etc.

- Curriculum includes the courses related to “Ujwal Bharat” scheme of Government of India on conservation of energy like Renewable Energy Sources, Energy Storage Technologies, Energy Conservation Systems, Energy Auditing and Management and Alternate Fuels.
- Curriculum emphasizes the importance of sustainable environment through courses like Environmental Studies, Air Pollution Control, Water Supply Engineering, Irrigation Engineering, Hazardous Waste Management, Wastewater Engineering etc. which are mapped to initiatives of state and central government like Haritha Haaram, Mission Kakatiya, National River Conservation Plan, Swachh Bharat Mission, Waste to Wealth Mission, National Afforestation Programme and Jal Shakti Abhiyan.
- Curriculum also includes courses linked to National Smart Cities Mission as well as National Mission on Transformative Mobility and Storage.

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

1.1.2

Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 27

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 27

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.3

Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 100

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..

2021-22	2020-21	2019-20	2018-19	2017-18
935	868	758	687	742

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2 Academic Flexibility

1.2.1

Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 34.52

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

Response: 397

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 1150

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

<p>1.2.2</p> <p>Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).</p> <p>Response: 100</p>	
<p>1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented.</p> <p>Response: 27</p>	
File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3 Curriculum Enrichment

<p>1.3.1</p> <p>Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum</p> <p>Response:</p> <ul style="list-style-type: none"> • The institution integrates cross-cutting issues relevant to gender, environment and sustainability, human values and professional ethics into the curriculum. The institution has made Environmental Studies as the compulsory subject to I year B.Tech. students. Other courses like Renewable Energy Technologies, Environmental Impact Assessment, Air Pollution and Control, Disaster Management, Waste-Water Management, Automotive Pollution and Control and Environmental Engineering Laboratory are offered to the students of B.Tech. programmes with regard to Environment and Sustainability. • Being an institution practicing inclusive approach, VNRVJIET rightly has included a course on Gender Sensitization in all B.Tech. programs. Students are made aware of issues related to gender
--

inequality and violence, fair opportunities for competing, etc.

- Since, education is a holistic development of the personality, the institution offers a course on Professional Ethics and Human Values to B.Tech. students. Courses like Soft Skills and Personality Development, Code of Ethics have built-in aspects of professional ethics. Institution takes care to ensure that value-based education is imparted to students. The engineers emerging out of the portals of the institution are professionals crowned with the best values. Institute implemented Anti-Plagiarism policy from 2017. Theses & publications are accepted with similarity index of 25% or less.
- Few offered courses cater to the needs of security and sustainable environment like Green IT, Cyber Security, etc.
- Sample of courses on cross-cutting issues are listed below.

Cross-Cutting Issues	Courses in Curriculum	Offered to	Regulation
Gender	Gender Sensitization (19MN6HS03)	III B.Tech. I Sem	R19
	Gender Sensitization (18MN6HS03)	III B.Tech. I Sem	R18
Professional Ethics and Human Values	Code of Ethics (5CS11)	I B.Tech. II Sem	R15
	Ethical Hacking and Computer Forensics (18PE1CP03)	I M.Tech. I Sem	R18
	Ethical Hacking (18PE1CN10)	I M.Tech. I Sem	R18
	Research Methodology and IPR	I M.Tech. I Sem	R18
	Professional Ethics and Human Values (18OE1HS01)	III B.Tech. I Sem	R18
	Ethical Hacking (19PC1CS62)	III B.Tech. I Sem	R19
	Ethical Hacking Laboratory (19PC2CS62)	III B.Tech. I Sem	R19
	Ethical Hacking and Computer Forensics (19PE1CS34)	III B.Tech. II Sem	R19
	Personality Development and Public Speaking (19OE1HS03)	IV B.Tech. I Sem	R19
	Environment and Sustainability	Environmental Studies (5CE03)	I B.Tech. I Sem
Environmental Impact Assessment for Highway Projects (HIG12)		I M.Tech. I Sem	R15

Environment and Ecology (GTE13)	I M.Tech. I Sem	R15
Geo-Environmental Engineering (GTE15)	I M.Tech. I Sem	R15
Environmental Engineering (5CE23)	IV B.Tech. I Sem	R15
Environmental Impact Assessment for Highway Projects (18PE1HW05)	I M.Tech. I Sem	R18
Environment and Ecology (18PE1GT08)	I M.Tech. II Sem	R18
Environmental Geotechnology (18PE1GT14)	II M.Tech. I Sem	R18
Environmental Science (18MN6HS02)	II B.Tech. II Sem	R18
Environment Impact Assessment (19PE1CE08)	III B.Tech. II Sem	R19
Environmental Engineering Laboratory (19PC2CE09)	IV B.Tech. I Sem	R19
Disaster Management (5CE71)	III B.Tech. I Sem	R15
Earthquake Resistant Design of Buildings (19PE1CE26)	IV B.Tech. II Sem	R19
Smart Cities Planning and Development (18OE1CE01)	III B.Tech. I Sem	R18
Green Buildings (18PE1CE02)	III B.Tech. II Sem	R18
Smart Materials and Structures (18OE1CE03)	IV B.Tech. I Sem	R18
Intelligent Transportation System (18OE1CE04)	IV B.Tech. II Sem	R18

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document
Any additional information	View Document

1.3.2

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

Response: 248

1.3.2.1 How many new value-added courses are added within the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
47	53	24	60	64

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document

1.3.3

Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 86.52

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

2021-22	2020-21	2019-20	2018-19	2017-18
6212	5732	4090	4695	3547

File Description	Document
List of students enrolled	View Document
Any additional information	View Document

1.3.4

Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 89.83	
1.3.4.1 Number of students undertaking field projects / internships / student projects	
Response: 5766	
File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.4 Feedback System

1.4.1	
Structured feedback for design and review of syllabus – semester-wise / year-wise is received from	
1) Students, 2) Teachers, 3) Employers,	
4) Alumni	
Response: A. All 4 of the above	
File Description	Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
Link for Additional Information	View Document
URL for stakeholder feedback report	View Document

1.4.2	
The feedback system of the Institution comprises of the following :	
Response: A. Feedback collected, analysed and action taken and report made available on website	
File Description	Document
URL for stakeholder feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Average Enrolment percentage (Average of last five years)

Response: 93.9

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

2021-22	2020-21	2019-20	2018-19	2017-18
1939	1635	1371	1368	1379

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2110	1734	1494	1434	1434

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.1.2

Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 95.94

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

2021-22	2020-21	2019-20	2018-19	2017-18
677	600	508	466	475

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.2 Catering to Student Diversity

2.2.1

The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

VNRVJIETs’ Learner Centric Ambience, Curricular Reforms and Extra Curricular Reinventions nurtures different learning levels of the students in preparing all round personalities. The ecosystem of the institution provides equal opportunities and grooms all students of diverse backgrounds, abilities, and learner groups. The Institution follows an established process depicted below for identifying the various learning levels of the students and thereby improving upon them.

Figure: Strategies to Identify and Support Slow Learners and Encourage Advanced Learners

Diagnosing Learners’ Abilities:

- Assessing the learning levels of the students is of prime importance at VNR VJIET.
- The learning abilities of students are identified by conducting diagnostic tests in Mathematics, English and Basic Programming.
- A structured **Mentoring and Training** process is in place and the institute provides faculty mentor for every student.
- Based on the interactions with the students, SWOC(Strengths, Weaknesses, Opportunities, Challenges) regular performance of the students, necessary counselling and training are provided to cater to the needs of slow and advanced learners.
- Through Continuous Internal Evaluation (CIE), course faculty identifies the students with less performance and HoDs with the help of mentors and course faculty, identify slow learners and advanced learners.

Catering to the needs of Advanced Learners:

- Advanced learners are advised to register for Minor and Honors degree programs with additional credits of 18-20 in Emerging Technologies and specialized domains.
- Advanced learners are facilitated to register for Credit Transfer through SWAYAM-NPTEL MOOCs promoting self-learning.

- Additional courses viz., NPTEL/MOOCs, Certifications in AWS, PRIMAVERA, ETABS, Google UX Design, Full Stack Development, FPGA Design, Wind Energy Systems, Self-Driving Cars, 3D Printing, ANSYS, Hyper Mesh, etc. are advised to enhance their skills.
- VJ-Hub, Weekend Projects Laboratory promotes research initiatives and projects in addressing the passion of advanced learners to work in their interested domains.
- Advanced learners are guided and encouraged towards internships in Google, Microsoft, Amazon, Synopsys, Siemens, Hitachi, Deloitte, JP Morgan, HBL, BHEL, TCS, DRDO, NRSA, Hyundai Mobis, L&T etc.
- Participating in various Hackathons, Ideathons, CodeChef, Coding contests, national level competitions, technical symposiums and open house etc improves the competitive skills. Student teams have represented in national-level hardware, software hackathons and received awards.
- Students with research capabilities are involved in R&D, consultancy projects and innovation leading to patents and start-ups.

Catering to the needs of Slow Learners:

- Bridge courses in Programming, Mathematics, and English Communication Skills are conducted for Lateral Entry students to provide confidence and bridge the gap between the Diploma programme and the Undergraduate programme.
- Remedial classes and peer tutorials by course faculty are conducted for the slow learners to overcome their difficulties in the specific course by providing learning resources through LMS Platforms.
- Apart from the above methodologies, activities like Think-Pair-Share, POGIL, Tutorials and worksheets, encourage the slow learners to transform into advanced learners.

The curriculum is compatible to impart Project Based Learning and emerging technologies as track-based courses within the credit structure to team up both slow learners and advanced learners.

Project-based learning is promoting the grouping of slow learners and advanced learners which enables peer learning. This practice is ensuring that learners of various abilities are able to work cohesively and publish research papers.

Thus, the special efforts practiced in the institution help in encouraging the slow learner to transform to an advanced learner and prepare an advanced learner to reach the highest opportunities.

File Description	Document
Any additional information	View Document

2.2.2

Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 17.83

File Description	Document
Any additional information	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:

The teaching-learning process is one of the major objectives and strengths of the institution. VNRVJIET focuses on learner-centric methods in the delivery of curriculum for the all-round development of students which is the essence of Outcome Based Education (OBE). Vibrant teaching-learning process, mostly learner-centric methods viz. WIT & WIL™, Storyboard, VNR Lab Protocol™, Process Oriented Guided Inquiry Learning (POGIL), Learning by Doing, Think-Pair-Share, Course Based Projects, Field visits / Guest lectures, Certificate courses, Project Based Learning. The institution has initiated many novel pedagogical methods and techniques in teaching learning as its differentiators.

Experiential Learning Methodologies:

Experiential learning emphasizes hands-on experiences and active engagement as it involves learning through direct exposure to real life situation. Simulations, demonstrations, case-studies, etc. are practiced in the implementation of experiential learning to enhance the skill set of students. Courses in the curriculum are designed in such a way that students work on course based projects both theory and in laboratory right from freshmen level. The initiatives of the institute which caters experiential learning among students are lined up as:

- VNR Lab Protocol™
- Storyboard
- Internships
- Learning by Doing
- Industry Oriented Mini Projects
- Entrepreneurship and Innovation
- Outdoor education (Camping and Hiking by CSBS students)

Participative Learning Methodologies:

Participative learning activities encourage students to contribute, collaborate and take ownership of their learning with enhanced team spirit. Group discussions, Peer teaching, Debates, Role-Play, Collaborative projects, Think-Pair-Share, Student-led Presentations, Workshops, Hackathons etc. empower the students in fostering deep engagement, critical thinking and development of 21st Century skills in line with NEP-2020. The above mentioned activities are attained through the following differentiators:

- WIT & WIL™ (Why am I Teaching – What I am Teaching from Teacher’s perspective and Why

am I Learning – What I am Learning from Student’s perspective approach)

- Show and Tell
- Open House
- Convergence
- Process Oriented Guided Inquiry Learning (POGIL)
- Flipped Classroom & Blended Learning

Problem Solving Methodologies:

Problem solving activities helps in stimulating creativity, innovative mindset, confidence building, navigate challenges, foster collaboration and teamwork. The problem solving mindset will equip the students in solving complex problems with resilience and contribute positive outcomes in various domains of life. In this context, the institute adopted courses like *Design Sensitization and Design Thinking, Innovation and Entrepreneurship*.

Students in due course of solving problems are taking care of technical, economic, social, environmental, political and demographic feasibility through Mini-projects, Major projects and Course based projects under the following set.

- Brainstorming
- Case Studies
- Course Based Projects
- Project Based Learning
- Hackathons
- Gamification, etc.

The faculty of VNR VJIET have been implementing all the differentiators mentioned above in holistic development of self and students which is evident by the feedback. Journal and conference papers are published on WIT & WIL™ and POGIL by faculty.

File Description	Document
Any additional information	View Document

2.3.2

Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

The prime focus of VNRVJIET has always been imparting quality education through well-defined and up-to-date curriculum and novel teaching-learning methodologies. The use of ICT tools is indispensable to effective teaching. With the fast-growing advancements in the digital technologies, the teaching learning process at VNRVJIET has been realigned so as to make extensive use of ICT enabled tools for promoting and encouraging student-centered learning, higher order thinking, problem solving,

cooperative learning, collaborative learning, social learning , self-paced learning ,and integrated learning.

Some of the ICT tools used for effective teaching and learning process at VNRVJIET are as follows:

- Eduprime Academic & Learning Management System (LMS)
- Google Classroom
- Microsoft Teams
- Virtual Labs
- Smart classroom
- e-Resources

VNRVJIET has developed its Academic & Learning Management System (LMS) called “Eduprime” software and most of the teaching learning process tools have been integrated into it. The Eduprime LMS platform is customized with the following features that facilitate services like

- User Management
- Course Management
- Academic Tracking
- Student Attendance
- Quizzes And Assignments
- Student Feedback
- Course End Survey
- Assessment And Evaluation

Online selection of open elective and professional elective courses in Eduprime software by B.Tech. students reflects the implementation of academic flexibility in digital platforms.

To enrich the teaching and learning with digital resources and integration of latest technological education inventions, Centre for Education Technology is facilitating all the faculty members with training programs on online teaching learning tools, effective utilization of digital platforms for content development and delivery, video content development etc.

Other tools like emails and social media platforms are also utilized for sharing of learning material, NPTEL and YouTube videos as supplementary teaching resources, other MOOC for additional teaching and learning content etc. Faculty members also use Google Classroom, Microsoft Teams etc., for conducting reviews of technical seminars, comprehensive viva-voce and projects.

For effective delivery of curriculum, all the classrooms are equipped with the following:

- LCD projector
- Wi-Fi
- Audio System

Each department has a smart classroom equipped with a Smart Board.

Conferences, Workshops, Training Programs, Guest Lectures etc. are conducted in virtual mode/hybrid mode by connecting remotely with Industry and Academia experts for the enhancement of latest technological developments.

VNRVJIET has a vast collection of online resources which faculty and students can use through digital library software called “KNIMBUS”, which comprises of online journal databases, e-books and e-journals like, Elsevier, Springer, ASME, ASCE, IEEE, DELNET etc.

Integrated Library Management System (ILMS) is in place to access the library collection remotely through KOHA software and also through an inhouse developed M-LIBRARY mobile app which is useful for all students and faculty.

VNRVJIET has tools and systems available for the faculty to develop technical content of their respective courses for efficient content management. Faculty have prepared video lectures of their courses and shared them to the students through LMS, Google Drive and Youtube.

During the challenging times of COVID-19, the institute has regained the teaching learning process at a rapid phase by reiterating the capacity enhancement of all faculty members to switch to online teaching - learning.

Use of ICT and online teaching and learning is depicted in the figure below.

File Description	Document
Any additional information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document

2.3.3

Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 19.1

2.3.3.1 Number of mentors ?????????????? ???????

Response: 336

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Any additional information	View Document
Link for additional information	View Document

2.3.4

Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

Academic Calendar:

The Academic calendar of VNRVJIET outlines the important dates and events for an academic year. The institute Academic calendar for B.Tech. and M.Tech. Programs is prepared by the Academic Coordinator in line with the guidelines of regulatory bodies and inputs from BoS Chairpersons and Deans. The draft Academic calendar is verified by the Dean, Academics and approved by the Principal through Institute Academic Committee (IAC). The Academic Calendar is prepared for two semesters with each semester consisting of 16 weeks of instruction excluding examination period and other holidays. Academic calendar includes the dates of the following in a semester:

- Course registration
- Commencement of classes
- Class review committee meeting
- Student feedback
- Class assessments
- Sessional examinations
- Registration of semester end examination
- Project reviews
- End of classes
- Course end survey
- Internal practical exam
- Semester end examination of theory and practical courses
- Break for internship/mini-project
- Winter break/Summer vacation

Academic Calendar is displayed on the department notice boards and a copy is also available in the Institute Website. The links are:

<http://vnrvjiet.ac.in/bac.php> and <http://vnrvjiet.ac.in/mac.php>

Adherence to Academic Calendar:

Institute takes all the steps to ensure adherence to the dates specified in the academic calendar. Reminders are sent to departments regarding a scheduled activity well in advance through email. Head of the Departments through Class Review Committee Meeting and Principal through Institute Academic Committee with Head of the departments tracks and ensures the adherence of the academic calendar. In case of any deviation, approval of IAC must be taken.

Teaching Plans:

Every faculty prepares the Academic (Teaching) plan in the prescribed format available in “Eduprime” Learning Management System before the commencement of the classwork every semester. The academic plan structure is prepared in line with Outcome Based Education. The contents of the plan include:

- Course prerequisites
- Course objectives and outcomes
- Mapping of course outcomes with program outcomes
- Learning resources
- Delivery methodologies – LBD, WIT&WIL, POGIL etc.
- Assessment methods
- Detailed unit wise lecture plan
- Assignment and tutorial questions
- Model question paper
- Link to video lectures
- Additional information over and above the curriculum

Adherence to the Academic (Teaching) plan:

Adherence to the Teaching plan is followed by the faculty and details are recorded in the Attendance and Evaluation Record. The Class Review Committee meeting of students with HOD and respective faculty of the class; and Department faculty meeting are conducted at regular intervals to monitor the progress of the classes. In addition, the Head of the Departments and Academic Audit Cell audits the academic plans of faculty and the audit reports are submitted to the Head of the departments for necessary action. Eduprime software also assists in gauging the completion of the syllabus as well as adherence to teaching plans.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document

2.4 Teacher Profile and Quality

2.4.1

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

Response: 99.42

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	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. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 43.65

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

2021-22	2020-21	2019-20	2018-19	2017-18
194	159	146	129	125

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.4.3

Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 9.12

2.4.3.1 Total experience of full-time teachers

Response: 3282

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

2.5 Evaluation Process and Reforms

2.5.1

Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 27.15

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
35.73	31.18	21.81	25.82	21.20

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.5.2

Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 3.5

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
221	213	148	189	184

File Description	Document
Number of complaints and total number of students appeared year wise	View Document

2.5.3

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

Response:

The Examination and Evaluation Section has an integrated software which automates the whole activities of the system right from Examination registration to publishing final results. Continuous efforts for processing and streamlining the operations of the Examination and Evaluation System systematically has transformed the conventional examination practices towards IT enabled ones at VNRVJIET.

IT Integration: All the Examination Activities are fully integrated with the Information Technology (IT) in the Examination Management System (EMS) “**Eduprime Examination Module v3.0**”. The major activities carried out through the EMS are Registration for Examinations, Payment of Examination fee, Marks entry by faculty for theory and Laboratory Examinations, Continuous Internal Assessments(CIA) through e-learning platforms, generation of admit cards, D Form entry, decoding of scripts, processing and publishing of results, and result analysis. The Examination Management System is part of the Institute ERP System (EDUPRIME) and fully integrated with other subsystems of ERP like Academics, Admissions and Accounts Sections. Students can login into the Institute ERP portal for 360-degree view of their data like detailed attendance, academic performance, and other activities.

The Key Features of the EMS are listed below.

- Entry, verification and correction of student information; courses and course mapping.
- Examination Seating arrangements and Seating Plans.
- Entry of Timetable - CIA and SEE.
- Admit Card Generation.
- Exam attendance report (D-form) for both CIA and SEE during the examination.
- Publication of Semester Results.
- Submission of applications for revaluation and online fee payment.
- Supports the credit system, grade system and mark system.
- Printing of Semester Grade sheets, Consolidated statement of grades, Transfer Certificate, Provisional Certificate, Transcripts, and Duplicate certificates.
- Supports Revaluation and Challenge Valuation entry of marks to arrive at the final marks.

VNRJIET also implements reforms regarding the Examination and Evaluation procedure through the

integration of IT.

Some of the Key Reforms are:

- Implementation of MOOCs for credit transfer as recommended by UGC/AICTE through online platforms like NPTEL-SWAYAM.
- Implementation of Digi locker facility to store the academic transcripts of the student.
- Credit transfer facility for transfer students from other institutions.
- Plagiarism check for B.Tech / M.Tech Projects.

Impact of IT integration in Examination Management System (EMS):

- Processing of Results improved substantially.
- Encoding and decoding of answer booklets ensures confidentiality and unbiased evaluation.
- Improved reliability, efficiency, security, transparency, confidentiality, and accuracy of the exam process.
- A timely issue of certificates helps final year students towards their placements and higher studies.
- The inclusion of enhanced security features has nullified the chances of manipulation and duplication of certificates.
- Credit transfer facility for the students pursuing the courses through online platforms like NPTEL-SWAYAM.

Outcome Based Education: The evaluation pattern is upgraded to assess the Outcome Based Education (OBE). IT enabled software helps the Institution in terms of assessing different levels of knowledge of the learners based on the Revised Bloom's Taxonomy which is a mandatory reform implemented in both Internal and External Examinations. The tool for measuring Course Outcomes (COs) for all courses are implemented by specifying Cos and Blooms Levels against each Question in CIA and SEE Question papers. It facilitates adopting required changes in the teaching and learning process to know the outcome levels of the learners in the evaluation system.

OMR based Answer booklets for examinations avoids manual coding by adapting barcode to provide error free and increase the Transparency of the system. IT integration has reduced the time taken for declaration of results. Transparent evaluation, hastened fact finding, grievance redressal and stringent norms have reduced student complaints and grievances of students. PC/CMM/Grade sheets with bar code and 16 security features, electronic mode of mark verification and adopting absolute Grading system provides testimony for effective integration of IT into the system.

Transparency: It is a best practice of the Institute which strengthens the credibility of the Examination System. The students are given an opportunity to go through their evaluated answer scripts of the Semester End Examinations through Challenge Evaluation which ensures Transparency in the system. The students grievances with regard to Examination and Evaluation are received offline as well as online (E.mail: examgrievances@vnrvjiet.in) are duly rectified.

Grade Sheets / Memos: Marks entry, Grades, Semester Grade Point Average (SGPA), Cumulative Grade Point Average (CGPA) and analysis of results are fully automated in EMS system. The mark statement of every semester is accessible to the Heads of the Departments, mentors, students and parents to assess the performance of students periodically and mentor them.

Complete processing, compilation and declaration of result is automated in EMS which yielded:

- Fast and error free compilation of results.
- Real time database generation with consistent and accurate data.
- Provides security for the system using SSL certificate integration to the EMS stem.
- Generation of Provisional certificates/Consolidated grade-sheets after publication of results.

The UGC Regulation on “Academic Integrity and Prevention of Plagiarism” is adopted from May,2018 to check plagiarism percentage in manuscripts of research publications of M.Tech / B.Tech theses. Introduction of credit- based MOOC courses for UG students has given special impetus to IT integration with Semester/ CIA evaluation by Examination division. Transfer of credits through NPTEL/ SWAYAM/MOOCs has been implemented.

NEP-2020 Initiatives: The Institute joined hands with National Academic Depository (NAD) for opening account with Digi locker facility, which is a 24X7 online, permanent, and safe to store the Academic awards of the students. The Efforts are on to introduce the Academic Bank of Credits (ABC) for which the formal approval from the University is expected. ABC shall provide a variety of services like credit accumulation, credit redemption, credit verification and credit exchange for the implementation of NEP-2020 which allows multiple entry and exit schemes.

Thus, the reforms of the examination management system of VNRVJIET with IT integration has not only improved the process and procedures of examination and evaluation but also yielded transparent, fair, error & hassle free, quick, and effective evaluation.

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

2.6 Student Performance and Learning Outcomes

2.6.1

Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

VNRVJIET has implemented outcome-based education (OBE), which is a student-centered approach that focuses on measuring student achievement based on specific, predefined outcomes or competencies after they finish the course. It shifts the emphasis from traditional methods of education to a more holistic assessment of skills and knowledge application. In 2013, seven B.Tech. programmes received accreditation under OBE. Programme Specific Outcomes (PSOs), Programme Outcomes (POs), and Course Outcomes (COs) have evolved in accordance with OBE as it aids the student in achieving significant results.

Each department determines the Programme Specific Outcomes (PSOs), Programme Outcomes (POs) in accordance with the Graduate Attributes mandated by NBA. PEOs of the programme are taking into account by taking input from faculty and alumni in cognizance of the latest technology demand, job prospects, societal requirements, and regulatory/professional bodies like AICTE, UGC, ASME, ASCE, CSI, ISOI, IEEE, etc.

The course outcomes for the subjects are formulated by the course coordinator while designing the syllabus to address the higher order thinking among the students.

The Programme Assessment committee formulates and redefines the PEOs, PSOs, POs Course Objectives and Course Outcomes for OBE.

Department Academic Committee (DAC) reviews the PEOs, PSOs, POs Course Objectives and Course Outcomes and submits the same for approval by the Board of Studies (BoS) comprising of experts from academia, Industry and Alumni.

Academic Council of the institute reviews and ratifies the PEOs, PSOs, POs Course Objectives and Course Outcomes of all the departments.

Dissemination:

The dissemination of Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) to students and faculty are carried out through the platforms listed below:

- **Electronic and Print Media:**

- Department website
- Syllabus Books
- Department Brochure

- **Institute and Department Premises:**

- Program Specific Classrooms
- Program Specific Laboratories
- Department Notice Boards

- **Awareness to Stakeholders:**

- Faculty meetings
- Student induction programme
- Alumni meetings
- Parents meetings
- Employer meetings
- Professional Body meetings

- The **Course Outcomes** of all the courses are published through

- Syllabus Books

- Institute Website
- Eduprime LMS

OBE awareness Programmes for faculty and students:

- Training and awareness programme for OBE are conducted to empower the faculty to understand and plan the syllabus in line with the PEOs, PSOs, POs and Cos for effective implementation of the programmes.
- All the Course Coordinators explain the course objectives, course outcomes, academic plan and schedule, evaluation pattern etc. to the students in the first class of the course delivery.

The Institute has well-defined POs & PSOs for all programs and COs for all the courses which are well defined, disseminated and integrated with the teaching-learning and evaluation system.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.2

Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

VNRVJIET has a robust evaluation mechanism to assess the attainment of Course Outcomes, Programme Outcomes (POs) / Programme Specific Outcomes (PSOs) which are approved by PAC, DAC, BOS and AC of the institute. The evaluation of the COs, POs, PSOs reflects the capabilities and skills earned by the students at the time of graduation.

At the end of each programme, the PO/PSO attainment is calculated based on the CO attainment of all curriculum components.

The course offered by the departments provide a defined set of course outcomes and corresponding evaluation criteria. The course outcomes are mapped with the programme outcomes in order to provide the quantitative measurement of the programme outcomes.

Eduprime software facilitates the calculation of CO attainment.

For each course, the level of attainment of each CO is compared with the predefined targets. In an event of non-compliance, the course coordinator takes necessary steps to reach the target levels. The

programme coordinator calculates the PO/PSO attainment by mapping CO against PO/PSO.

CO Attainment:

CO attainment is calculated using both direct and indirect tools.

Direct assessment is calculated through:

- Semester End Examination
- Sessional Examination
- Class Assessment
- Projects or any other instrument used by the faculty

It is computed based on weightages defined for the above in the evaluation criteria.

Indirect Assessment is calculated using:

- Course End Survey

Course End Survey is conducted online through Eduprime for all the courses at the end of semester to obtain formal feedback from students with regards to meeting of course outcomes.

Final CO attainment is computed based on 80% weightage to direct attainment and 20% weightage to indirect attainment.

The level of attainment of each Course Outcome is fixed based on the level attained through class average. Summary of CO attainment of each course is analyzed to find out the reasons for non-attainment and to initiate an action plan.

Attainment of POs/PSOs:

The assessment process uses both direct and indirect attainments.

Direct attainment is obtained based on CO attainment of all the courses.

Programme articulation matrix is prepared based on the CO attainments of all courses and mapping of COs to appropriate POs and PSOs through strength of correlation – 1, 2 and 3.

Averages are used to calculate POs and PSOs based on the course articulation and programme articulation matrices.

Indirect attainment is computed using:

- Graduate Exit Feedback
- Alumni Feedback
- Employer Feedback

- Parent Feedback

The level of attainment of POs is fixed at 70% i.e., 2.1 out of 3. Summary of PO attainment of programme is analyzed to know the non-compliance of attainment of specific POs. Accordingly, BoS/Academic Council recommends improvements in curriculum, its delivery and assessment methods.

File Description	Document
Any additional information	View Document

2.6.3

Pass Percentage of students(Data for the latest completed academic year)

Response: 91.63

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

Response: 1325

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

Response: 1446

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Any additional information	View Document
Link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.57

File Description	Document
Upload database of all currently enrolled students	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1

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

Response:

The Institution places emphasis on research and innovation, recognizing their crucial role in academic excellence and overall success. The commitment of faculty towards research and incubation activities significantly impacts the achievement of its goals. In this regard, institute has well defined policies for Research, Consultancy, IPR and Incubation for promoting research, consultancy and is uploaded in VNRVJIET website. The faculty and students are encouraged to actively participate in various research activities to excel in research and providing quality solutions to the society.

The Institute has established Research and Consultancy Centre (RCC) in the year 2006 for Research and Development in multidisciplinary areas of Engineering and Sciences. Notably, faculty have 47 sponsored research projects worth of Rs. 388.83 lakh during the assessment period sponsored by SERB, DST, UGC, AICTE, DRDO, BIRAC, MeItY, DAE, ISRO, JNTUH(TEQIP-III) and TSCOST. Some of the national level projects carried out are Weapon Locking and Tracking System, Secured Weapon Shooting Information System, Cough and Wheeze Analyzer, Real time water quality monitoring, and Semi Prosthetic Hand. Collaboration with adjunct faculty, professors of practice, industry, and government organizations facilitates sponsored research projects and consultancy.

The Institute has recognized research centres in the department of CSE, ECE, EEE, ME, CE by JNTU Hyderabad and AICTE. 12 fulltime Ph.D. scholars were admitted through AICTE-NDF Scheme and JNTUH. 65 faculty members are recognized as eligible supervisors by JNTUH. Institute has recognized as SIRO by DSIR, which helps in procuring the research equipment with exemptions.

In B.Tech and M.Tech. programmes, project-based learning is introduced to enhance and develop the essential research skills, such as critical thinking, and problem-solving abilities. VNR VJIET maintains state-of-the-art research facilities with 128 academic and research labs equipped with the latest technologies. The institution regularly updates these facilities to ensure relevance and up-to-date resources. The key equipment includes a 100-tonne loading frame, computerized diesel engine, six-axis industrial robot arm, 3D printers, spectrum analyser, PLC and GPU workstations.

The innovation and incubation eco system is in place in the Institute. Encouragement for the innovation starts with “My Big Idea Competition”, where students/faculty present their ideas. Institute encourages the good ideas by providing seed money. Once the idea is realized as prototype, then all such ideas are exhibited in the Open House- A Project Expo. The prototypes which have commercial viability are supported with an initial funding of Rs. 5.00 Lakhs and Incubation space is allotted in VJ Hub which is registered, under Section 8 Company, and located in the campus. Similarly, to encourage the faculty and students towards Innovation, the institute has established Institute Innovation Cell (IIC).

The institution is curious about quality and originality of the research and innovations. In this regard

institute employs software's for plagiarism detection (Turnitin), *Grammarly* for technical writing, *Derwent Innovation* for patentability search and provides access to reputed and renowned online journals.

Faculty are incentivized to engage in research and consulting work to make societal impact projects and drive transdisciplinary initiatives. Furthermore, faculty have been provided an amount of Rs.10,69,870/- towards incentives for presenting research papers at national and international conferences/seminars during the assessment period.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2

The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 25.76

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
57.869	13.580	21.856	27.573	7.9467

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3

Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 3.84

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
10	16	23	8	9

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document
Any additional information	View Document

3.2 Resource Mobilization for Research

3.2.1

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

Response: 375.05

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

2021-22	2020-21	2019-20	2018-19	2017-18
33.61	108.1	91.64	113.27	28.43

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by government and non-government	View Document
Any additional information	View Document

3.2.2

Percentage of teachers having research projects during the last five years

Response: 4.42

3.2.2.1 Number of teachers having research projects during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
15	25	22	8	6

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document

3.2.3

Percentage of teachers recognised as research guides

Response: 10.56

3.2.3.1 Number of teachers recognized as research guides

Response: 38

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document

3.2.4

Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 71.5

3.2.4.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	8	7	5	3

3.2.4.2 Number of departments offering academic programmes

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

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document

3.3 Innovation Ecosystem

3.3.1

Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

The Institution has created an eco-system for research and innovation by setting up Research and

Consultancy Centre (RCC), VJ Hub, Entrepreneurship Development Cell (EDC), Institute Innovation Cell (IIC) and Industry Institute Interaction Cell (IIIC) for creation and transfer of knowledge.

The RCC provides a platform to foster research and consultancy of world class innovations and provide the latest technologies and infrastructure to all the students and faculty with unlimited opportunities. The Institute has 47 ongoing and completed research projects worth of Rs. 388.83 lakh Lakhs funded by SERB, DST, UGC, AICTE, DRDO, BIRAC, MeItY, DAE, ISRO, JNTUH(TEQIP-III) and TSCOST during this assessment period. Other grants-in-aid received is Rs.266.41Lakh for upgradation of Research Labs, development of the infrastructure, enhancement of technical skills of faculty and students, organizing the conferences, etc.

The Research Laboratories and Infrastructure of the Institution which facilitate Research and Development activities includes:

- Virtual Reality and Real Time Computing
- Virtual Instrumentation
- RFID & WSN
- Mobile Vision
- IOT
- 3D Printing

VNRVJIET has established the following *Centres of Research* to catalyse and facilitate, to create, and sustain capabilities and competitiveness in consulting, advice, and research:

- Disaster Mitigation
- Renewable Energy Systems
- Data Science
- Networks and Security
- Internet of Things
- Joining Technology
- Solar Energy Materials
- Micro-Cars
- Nano Science and Technology
- Education Technology

The faculty are working on several research projects in collaboration with National Research Institutions like University of Hyderabad, IIIT-Hyderabad, NIT-Warangal, NIT-Meghalaya, ARCI Hyderabad and PRIST University.

Vignana Jyothi Foundation for Entrepreneurial Excellence (VJ Hub) is a Not-for-Profit Company registered under Section 8 of Companies Act (2013), India and is located at the Campus. VJ Hub offers Pre-incubation, Virtual incubation, Co-incubation, and Physical incubation support to Start-ups. VJ Hub has supported over 25 startups, some of which were founded by students, alumni, and faculty members of VNRVJIET, and 4 startups have been graduated from VJ Hub. VJ Hub has been collaborating at different levels with T-Hub, WE-Hub, Bala Vikasa Centre for Social and Responsible Business, TiE, J-Hub, ALEAP, IIT-Hyderabad's iTIC. It has provided over 60 internships and 10 full-time positions since 2017.

The Institution has established an IPR cell to cater all IP related activities. The Institute funds the entire patent application process. The Cell has procured “Derwent Innovation” software to do the patentability search. The ED Cell of VNRVJIET was established in August 2006 with a grant of 8 lakhs from AICTE. Its mission is to organize various entrepreneurship related activities and to create awareness among the students and faculty on entrepreneurship. The events organized are: Indian School of Business one year Certificate Program on Technology Entrepreneurship - 5, My Big Idea Competitions -8, Expert Talks / seminars - 37, Workshops - 38, Entrepreneurship Fest ECFICIO(E-Week) - 3, Hackathons - 7, Industrial Visits - 23, Entrepreneurship Motivation Programs and Awareness Camps -22, Innovation Fair-1, and World IP Day-4 during the assessment period. A total of 10,483 students have been benefited through these activities during the assessment period.

Industry Institute Interaction (IIC) cell provides a platform for the students and faculty members to be aware of skill sets expected by the industry. IIC facilitates students and faculty to interact with industry in all possible ways such as internships, industrial visits, content delivery, expert lectures, in-plant training, exchange of resource personnel, consultancy, collaborative R&D projects etc. with the spirit of mutual benefit.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.3.2

Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Response: 156

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
28	24	31	31	42

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

3.4 Research Publications and Awards

<p>3.4.1</p> <p>The Institution ensures implementation of its stated Code of Ethics for research through the following:</p> <ol style="list-style-type: none"> 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee <p>Response: A. All of the above</p>	
File Description	Document
Any additional information	View Document
Link for additional information	View Document

<p>3.4.2</p> <p>Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the last five years</p> <p>Response: 1.32</p>	
<p>3.4.2.1 How many Ph.Ds are registered within last 5 years</p> <p>Response: 50</p>	
<p>3.4.2.2 Number of teachers recognized as guides during the last five years</p> <p>Response: 38</p>	
File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

<p>3.4.3</p> <p>Number of research papers per teachers in the Journals notified on UGC website during the last five years</p>

Response: 2.91

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

2021-22	2020-21	2019-20	2018-19	2017-18
291	205	244	144	117

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

3.4.4

Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 3.36

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

2021-22	2020-21	2019-20	2018-19	2017-18
339	302	212	137	163

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

3.4.5

Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response: 4.58

File Description	Document
Bibliometrics of the publications during the last five years	View Document

3.4.6

Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response: 28.5

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

3.5 Consultancy

3.5.1

Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 144.49

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
50.964	34.250	19.795	37.805	1.671

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2

Total amount spent on developing facilities, training teachers and staff for undertaking

consultancy during the last five years (INR in Lakhs).

Response: 254.83

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
77.73	70.34	74.18	23.74	8.837

File Description	Document
List of training programmes, teachers and staff trained for undertaking consultancy	View Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1

Extension activities are carried out in the neighbourhood community,-sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

VNRVJIET Mission is to produce technically competent and socially responsible engineers. With this mission the institution believes that all rounded personality of students is only possible with exploring the students to real time social issues. The students are motivated to be proactive in solving these social issues through empathy and by providing technical solutions through societal impact projects. Some socio technical solution provided by the student are, AI based COVID-19 diagnosis using chest X-ray image, Development of smart seed sowing mechanism for villages, Identification of groundwater recharge potential zones in Pragathi Nagar by using Arc-GIS software etc..

The Institution has a total of 33 clubs and chapters which are active student bodies providing a venue for indulging in co-curricular and extracurricular extension and outreach activities. Among these NSS(National Service Scheme), VNRSF(VNR Student Force), AOL(Art of Living), CSI, TEDx, Literacy clubs and dramatic clubs directly address the extension activities. 85% students' are participated in 183 activities

conducted by all clubs and chapters.

About 200 student volunteers in two NSS units conducted 100 activities of State and Central Govt. programmes like Harithaharam, Swatch Bharath, Clean India, Digital awareness programs, Road safety awareness, Rashtriya Ektha Divas, UBA programs. Free health camps, Blood donation camps, Eye testing camps, Career guidance, etc., 1201 units of blood were donated to Thalassemia patients. Around 1000 plant saplings were distributed and planted. Mr. Anil Kumar got admission in IIT-Khargpur for M.Tech programme and Mr. Mohan joined Sports Authority of India Bengaluru through career guidance program. Under SAARADHI programme events like SOCH- a social idea competition, I am Not a HERO-where unsung heroes of the society were called to explain their journey, were conducted. NSS also has RED Ribbon club under which AIDS awareness campaigns were organized. Under ECHO Club Green-Campus activities were conducted.

VNRSF is an NGO started in collaboration with SF, a Student Force organization which concentrates on youth empowerment with programmes like SPARSH, Dikshuchi, Jagruthi to bring career awareness for school and college students.

Art of Living Club of VNRVJIET started with a motto to develop leadership skills and personality development for students and staff through yoga classes and YES Workshops, and Mind Managing Sessions. FABS(For a Bright Smile) was organized for waste management awareness and tons of e-waste and plastic waste were collected and sent for recycling center. Water purifier worth Rs.50000/- was donated to an orphanage.

CSI and LITERARY CLUBS OF VNRVJIET conducted events like Go green sessions to develop communication skills among students and visited nearby Government schools and taught Basic English language.

During Covid-19 all the social clubs of VNRVJIET participated in Covid relief works like distribution of medicines and groceries, and all the faculty and staff contributed one-day salary to help Covid victims.

The Institution, with the help of IQAC has developed Post Lockdown Restart Manual© as a guidance for re-opening the Institution for all the stakeholders indicating safety measures. The manual is distributed among the Peer Institutions across India and to the State Govt. of Telangana. Appreciation is received for this extension activity.

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

3.6.2

Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 3

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

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	1	1	0

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

3.6.3

Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 102

3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
20	16	20	26	20

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

3.6.4

Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 55.65

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
3226	2097	3015	3064	3838

File Description	Document
Reports of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.7 Collaboration

3.7.1

Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Response: 113.2

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

2021-22	2020-21	2019-20	2018-19	2017-18
251	125	80	65	45

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.7.2

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: 69

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
22	6	13	14	14

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 Institutions etc during the last five years	View Document
Any additional information	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

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

Response:

The VNRVJIET spreads over an area of 26.85 acres, with a built-up area of 76,028 square meters. Every department is well-equipped with the necessary facilities and amenities to create an effective teaching and learning environment. The campus boasts 109 classrooms, 4 seminar halls, 2 auditoriums, 128 academic laboratories, 10 research laboratories, and 3 workshops over and above the statutory bodies specified requirements. Wi-Fi coverage spans the entire campus, facilitating e-learning opportunities. All the laboratories are equipped with the latest equipment to meet the curriculum and research requirements. The campus is adorned with well-maintained greenery, including trees, lawns, and various sculptures.

The institution firmly believes that adequate infrastructural and physical facilities are essential for academic progress among both faculty and students. Since its establishment in 1995, the institution has consistently prioritized infrastructural development, whether it be physical buildings, machinery, software, ICT, library and information resource center or other learning resources. All the classrooms, seminar halls, and laboratories are equipped with ICT facilities, while computer labs are furnished with licensed and open-source software.

The institution provides ample computing facilities for effective teaching and learning processes, to both faculty and students. As of the academic year 2021-2022, the institute possesses 2770 computers and the student-to-computer ratio is maintained at a favorable 2:1. In addition the institution has 106 printers, licensed system software, open-source system software, licensed application software, open-source application software, 1124 Mbps of internet bandwidth, 154 secured Wi-Fi access points, and 24 servers.

The institute has a Library and information resource center, digital library and department libraries equipped with modern facilities. It houses an extensive collection of 82,931 volumes and 17,585 titles. The reference section includes books, encyclopedias, handbooks, and directories for quick reference. The library subscribes to e-journals and it has memberships in professional societies. The institute spent Rs. 218 Lakhs for learning resources during the last five years.

The institute has exclusive hostels for Boys and Girls. The students are accommodated in 12 storied modern buildings with all necessary facilities like Wi-Fi, computer labs, GYM, YOGA room, stationary, cafeteria and play fields to facilitate effective learning and all-round development.

In addition to the hostel facilities, the college operates 30 buses that provide convenient transportation to students and staff from various places in the city. Canteen service is available in different places on the campus premises. It serves nutritious food with hygiene and cleanliness at low cost.

To ensure uninterrupted power supply to laboratories, classrooms and hostels, the institute is equipped with three generators: one with a capacity of 500KVA, 250KVA, and 125KVA. The hostel is also

equipped with two generators, 250KVA and 125KVA. Solar power 765kWp is installed in campus and hostel.

Moreover, the institute provides a range of infrastructure facilities to support academic, co-curricular, and extra-curricular activities. An exclusive "Student Activity Center" hosts all professional and cultural clubs. Additional amenities such as an ATM, dispensary and stationary store are also available on campus, ensuring the convenience and well-being of students and staff.

The institute has spent an amount of Rs.9405.56 Lakhs for infrastructure development and Rs.10,829.30 Lakhs for the maintenance of academic and Physical facilities during the last five years.

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

4.1.2

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

Response:

VNRVJIET's commitment to provide adequate facilities for cultural activities, yoga, games and sports demonstrates its recognition of the holistic development and well-roundedness of individuals. These facilities go beyond academics, allowing students and staff to engage in various activities that contribute to personal growth, exploration of interests, a healthy lifestyle, and the development of essential life skills.

Cultural Activities:

The institution recognizes the importance of cultural activities and provides adequate facilities to promote artistic expression, creativity, and the appreciation of different cultures. These activities play a significant role in enhancing the overall experience and well-being of students and staff.

Various student clubs have been established, including the Literary club, Crescendo-The Music club, Creative arts club, Livewire-The dance club, Dramatics club, Nritya Tarang – The classical dance club, Photography & short film shooting club. Students actively engage in these clubs, practicing and participating in extracurricular activities. They also take part in national-level competitions, where they have achieved success by winning awards and prizes.

Student Activity Centre (SAC) is an exclusive facility with a built-up area of 525sq.m. to host both professional and cultural clubs. The SAC is managed by the students, to design diverse activities under the respective cultural clubs and professional chapters. The institution has spent Rs.166.35 Lakhs to promote cultural and professional activities and infrastructure.

Yoga Centre:

The institution provides a dedicated Yoga Centre with a trained Yoga teacher to guide both students and faculty. Practicing yoga not only promotes physical well-being but also fosters personal transformation. The institution celebrates the International Day of Yoga, on June 21st every year. On that day the institute conducts a special event where all students and faculty actively participate. The best performers are rewarded to encourage further engagement and participation, on account of the International Day of Yoga.

Games and Sports (Indoor & Outdoor)

With the existing games and sports facilities, VNRVJIET organizes All India Inter University Level Tournaments in various sports, including Athletics, Badminton, Basketball, Billiards, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho, Table Tennis, Tennikoit, Tennis, Throwball, Volleyball, and Yoga. The institution has invested Rs.142.2 Lakhs in sports infrastructure and activities to support these endeavors. Qualified trainers provide state-of-the-art training, and students have achieved notable success, winning medals, and accolades in national and international tournaments.

Gymnasium:

An exclusive gymnasium is available at the KODE VENKATADRI CHOWDARY SPORTS COMPLEX (KVC sports complex) for students and faculty. This facility caters to maintain physical fitness and overall health of students and faculty. The Gym is equipped with 21 modern Independent Stations.

Auditorium:

The institute has five auditoriums, out of which one is air conditioned with a seating capacity of 500. The open-air auditorium has a capacity of 10,000 is used to organize Induction program, Cultural Fest, Sports fest etc. The other three are used for showcasing the students’ professional and cultural talents.

File Description	Document
Upload any additional information	View Document
Geotagged pictures	View Document
Paste link for additional information	View Document

4.1.3

Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 113

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document

4.1.4

Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response: 46.17

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
4553.99	879.87	615.19	365.74	2990.77

File Description	Document
Upload Details of Expenditure , excluding salary during the last five years	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated using Integrated Library Management System (ILMS)

Response:

The institution has a well-equipped Library Information Resource Centre(LIRC) with various learning resources enabling the stakeholders to access in physical or online mode. The library has a collection of 82,931 volumes and 17,585 titles. The library is a member of DELNET, N-LIST which helps to provide hassle-free e-learning. The books are shelved as per the Dewey Decimal Classification scheme to facilitate easy location of the books by Open Access System. The institute spent Rs. 218 Lakhs for learning resources during the period 2017-2022. Apart from Central library, Department libraries are also

maintained with latest books as per their requirements.

The library also maintains a Book Bank for SC/ST students which provides an opportunity to own additional books offered by the Social Welfare Department, Govt. of Telangana. So far, 2908 books are issued to SC students and 172 books to ST students. The library maintains an EPS Book bank to issue four additional books for the economically poor students. The library OPAC (Online Public Access Catalogue) provides information of the library collection online. The library OPAC is accessible with the URL <http://vnr-vjietopac.2cqrkoha.com/> . The library has subscription to e-Books of Lakshmi publications, Videeya Books, and N-LIST. The library is under CCTV surveillance.

Integrated Library Management System (ILMS):

The institution library has automation software Libsys (DEC 2006- MAY2022) using barcode technology and KOHA software (JUNE 2022) using RFID technology for Book- issue/renewal, author search, title search. The KOHA software helps to check the availability of book remotely. KOHA software is also accessible on mobile app (M-LIBRARY) from user's smartphone. The students and faculty access the library collection remotely. The students and faculty make use of library facility even after working hours/ holidays. Automation infrastructure with RFID technology has been established with an amount of Rs. 16.5 Lakhs in 2022.

Digital Library

The digital library consists of computers connected with an internet facility. It opens from 8 AM to 8 PM along with the Central Library. In this, the students can access the subscribed online content, NPTEL video lectures, online mock tests, etc.

The library has been subscribing to the following journal packages with an average cost of Rs. 22 Lakhs per annum, to facilitate the students and faculty with contemporary engineering content. The mentioned e- journal packages are accessible through e-library KNIMBUS software and m-library mobile app.

ASCE: <http://ascelibrary.org>

ASME: <http://asmelibrary.org>

IEEE -ASPP-CSDL: <http://ieeexplore.ieee.org/>

Science Direct (Elsevier): <http://sciencedirect.com/>

Springer: <http://link.springer.com/>

Remote access

The library provides remote access to e-Textbooks, e- journals, previous question papers, lecture notes to students and staff through KNIMBUS platform. Rs 2.2 Lakhs is spent every year for maintaining this facility. The students and the faculty can login in with URL: <https://vnrvjiet.knimbus.com>. This facility is availed by doing self-registration with institute's mail ID.

The library encompasses a Reading room and a reference section with reprographic and scanning facility.

The library has subscription to six English and two Telugu daily newspapers which helps the stakeholders to update on the current affairs.

File Description	Document
Upload any additional information	View Document
Paste Link for additional information	View Document

4.2.2

Institution has access to the following:

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases
6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e-ShodhSindhu, Shodhganga Membership etc	View Document

4.2.3

Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 43.49

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
43.44	44.19	38.51	42.83	48.46

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.4

Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response: 15.47

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 1049

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1

Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

Response:

The Campus Network Control Centre (CNCC), in the institution has been established in the year 2008 with a focus on reliability, performance, and cost efficiency of internet. The CNCC, supported by advanced equipment, robust security measures, and comprehensive Wi-Fi connectivity, ensures a reliable and secure network infrastructure within the institute. The DHCP server simplifies IP address assignment, while the FTP server enables efficient file storage and remote access. The implementation of the highly secure Supermassive Sonic WALL 9200 firewall guarantees cybersecurity. The video surveillance system and digital signages contribute to campus safety and effective communication. The

periodical updates and maintenance of these systems are carried out by qualified in-house personnel, ensuring optimal performance and security. An amount of Rs.191 Lakhs is spent for maintenance and upgradation of IT facilities during the last 5 years.

2017-18	<ul style="list-style-type: none"> • Escan Antivirus software • Internet leased line • Increased Surveillance Cameras and DVR • Enhanced the Power backup
2018-19	<ul style="list-style-type: none"> • Increased Surveillance cameras • Upgradation of Switches
2019-20	<ul style="list-style-type: none"> • Upgradation of Switches
2020-21	<ul style="list-style-type: none"> • Sonic Firewall • Enhancement of switches • Aruba Wi-Fi switches • Surveillance cameras • Digital signage
2021-22	<ul style="list-style-type: none"> • Internet bandwidth increased to 1Gbps • Enhanced switches and surveillance

Campus Network Infrastructure:

The IT policy is in place for effective maintenance and upgradation of the network infrastructure. The internet includes 139 CISCO switches, 154 wireless access points, ensuring comprehensive Wi-Fi coverage across the campus. In addition to the network infrastructure, regular updates and maintenance of network are performed by an exclusive team of 8 qualified in-house personnels with CISCO certified team lead, to ensure the firewall's effectiveness and to address emerging security concerns.

Cyber Security:

To ensure robust security, a highly secured Supermassive SonicWALL 9200 firewall has been established and it focuses on cybersecurity. Stringent security measures are in place to protect the systems and data from unauthorized access and potential threats & virus. Different policies are configured based on specific requirements.

Wi-Fi:

Wi-Fi connectivity is available to all students and staff. Intelligent access points - Aruba are installed at various locations throughout the campus. These access points enable seamless wireless connectivity, allowing users to access network resources from anywhere within the campus premises.

DHCP Server:

For efficient IP address assignment, a DHCP server is utilized. This server dynamically assigns IP addresses to end systems, eliminating the need for manual configuration and simplifying network management. It ensures that all devices connected to the network have a unique and valid IP address.

FTP Server:

An FTP (File Transfer Protocol) server is available to facilitate file storage and remote access. This

server serves as a central repository for software and allows authorized users to remotely access and retrieve files as needed. It enhances collaboration and enables convenient sharing of resources across the campus network.

Surveillance System & Digital Signage:

The entire campus is under video surveillance with 425 cameras. This comprehensive surveillance system provides continuous monitoring of critical areas, enhancing campus security and deterring potential security breaches or incidents. Additionally, 17 digital signages placed at major junctions display essential information, including upcoming events, campus news, photographs of recent events organised, and awardee photographs. These signages operate during working hours, keeping the campus community well-informed and engaged.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.3.2

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

Response: 2.32

File Description	Document
Upload any additional information	View Document
Student - computer ratio	View Document

4.3.3

Bandwidth of internet connection in the Institution.

Response: 750 MBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.3.4

Institution has the following Facilities for e-content development

1. Media centre
2. Audio visual centre
3. Lecture Capturing System(LCS)
4. Mixing equipments and softwares for editing

Response: A. All of the above

File Description	Document
Upload Additional information	View Document
Institutional data in prescribed format	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 6.18

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)

2021-22	2020-21	2019-20	2018-19	2017-18
148.24	73.66	84.53	278.67	255.82

File Description	Document
Upload any additional information	View 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:

VNR VJIET Procedure Manual – “Standard Operating Procedures (SOP) Manual” comprises the procedures for maintaining and utilizing physical, academic and support facilities. The manual provides guidance for procurement and maintenance of infrastructure facilities. The institution's academic, research, and administrative infrastructure is maintained up to date in accordance with SOP manual. The SOP manual is updated on a regular basis which includes the following:

- SOP for maintenance of Classrooms, Seminar halls, Auditorium,
- SOP for maintenance of Laboratories, Library.
- SOP for maintenance of Computers and Networking
- SOP for Sports facilities
- SOP for Civil maintenance
- SOP for Mechanical maintenance
- SOP for Electrical equipment maintenance
- SOP for EPABX and telephones
- SOP for Stock verification

The SOP manual for maintaining and utilizing physical, academic and support facilities is made available on the website.

All the classrooms and seminar halls in the institution are ICT enabled. The devices are maintained on a regular basis. The exclusive personnel are recruited to constantly monitor and keep up the usage of the systems. Additional ICT equipment is procured and kept ready for the replacement while the damaged one is sent for repair. The new requirements for classrooms and ICT facilities are identified before the start of academic session. The same are purchased at central level by the section through purchase committee.

Laboratories are well equipped and maintained regularly without interrupting the academic schedules. The in-house maintenance and repairs are addressed by the respective department technical staff. Upgradation and maintenance of the laboratories is identified by the HoDs through lab in charges and lab technicians. The purchase of the laboratory equipment for academic, research and consultancy needs are put forth to the purchase committee and as per the budget allotments and purchase policy, procurement is done. Under Annual maintenance contracts, all the equipment is regularly maintained. Asset insurance is made regularly for all the equipment in departments and sections.

Qualified and trained supporting staff from the CNCC maintain the computers and servers. Campus LAN, Wi-Fi, firewall, CCTVs, digital signage boards, etc., are also maintained by CNCC. The requirement for new computing equipment, networking in labs, etc for academic and research activities are identified by the HoDs, Section heads and is submitted to the CNCC through proper channel. Procurement is made as per the purchase policy of the institution.

Library resources are updated on yearly basis as per the changes in the curriculum. Inputs from the student and faculty are taken in the prescribed format for books, journals to be procured other than suggested readings. Library committee discusses and approves the procurement of learning resources and purchase is initiated as per the institute purchase policy.

The sports, fitness equipment, ground and various courts are supervised and maintained by the Physical Director and trainers of Sports section. Maintenance of the gym and sports equipment is taken up under the supervision of the physical director. The playgrounds, gym, indoor stadium is made ready and kept

up to the mark for all sports activity.

The civil, mechanical, and electrical maintenance are taken care by the exclusive personnels headed by the site engineer appointed in the estate office. Cleaning of the campus including the academic and administrative buildings is done daily in the morning before the regular class work begins and in the evening with the help of the housekeeping team and supervisors.

File Description	Document
Upload any additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

<p>5.1.1</p> <p>Average percentage of students benefited by scholarships and freeships provided by the Government during last five years</p> <p>Response: 50.36</p>											
<p>5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>3280</td> <td>2879</td> <td>2667</td> <td>2725</td> <td>2453</td> </tr> </tbody> </table>		2021-22	2020-21	2019-20	2018-19	2017-18	3280	2879	2667	2725	2453
2021-22	2020-21	2019-20	2018-19	2017-18							
3280	2879	2667	2725	2453							
File Description	Document										
upload self attested letter with the list of students sanctioned scholarships	View Document										
Upload any additional information	View Document										
Institutional data in prescribed format	View Document										
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document										

<p>5.1.2</p> <p>Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years</p> <p>Response: 4.45</p>											
<p>5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>192</td> <td>176</td> <td>207</td> <td>269</td> <td>360</td> </tr> </tbody> </table>		2021-22	2020-21	2019-20	2018-19	2017-18	192	176	207	269	360
2021-22	2020-21	2019-20	2018-19	2017-18							
192	176	207	269	360							

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3

Following Capacity development and skills enhancement activities are organised for improving students capability

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document

5.1.4

Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 85.64

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

2021-22	2020-21	2019-20	2018-19	2017-18
5060	4274	4011	5246	5027

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

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

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

Response: A. All of the above

File Description	Document
Upload any additional information	View 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: 77.07

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

2021-22	2020-21	2019-20	2018-19	2017-18
1088	1038	782	934	813

File Description	Document
Upload any additional information	View 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: 7.4

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 98

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3

Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 100

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

2021-22	2020-21	2019-20	2018-19	2017-18
115	104	41	61	60

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

2021-22	2020-21	2019-20	2018-19	2017-18
115	104	41	61	60

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

5.3 Student Participation and Activities

5.3.1

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

Response: 251

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

2021-22	2020-21	2019-20	2018-19	2017-18
81	14	42	67	47

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

5.3.2

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

Response:

VNRVJIET keeps students as the fulcrum for the design of policies, programmes, and procedures of the institution. The programmes are student-centric and are arranged by the students and for the students through the student representatives. An active Student Council of VNRVJIET plans for the various activities of the institute and student participation in various committees/ bodies add flavour to the decisions taken by the institute for the welfare of the students.

VNRVJIET has various student chapters of prominent national and international professional societies such as ACM, ASME, CSI, Diurnalis, GSDC, ICI, IEEE, IEI, IGBC, ISOI, ISTE, IETE, IUCEE, Kritomedh, SAE, Turing Hut, VSI and student clubs namely CANDLEVES, Creative Arts, Crescendo, Dramatrix, Electoral Literacy Club (ELC), Livewire, Nrithya Tarang, Scintillate, Social Media, Stentorian, Vignana Jyothi Sahithi Vanam, VJ Teatro promoting curricular, co-curricular, and extra-curricular activities to bring out the innate talents of the students. Students, under the guidance of faculty coordinators, manage these Student Chapters and Clubs and contribute to vibrant student life inside the campus.

Student representatives actively contribute through various bodies including IQAC. Student representatives also serve in campus committees including Internal Complaints Committee, Library and Information Resource Committee, Sports Committee, Canteen Committee, Hostel Committee, Fest Organising Committee, Student Discipline Committee, Anti-Ragging Committee, and Anti-Drug Committee, Editorial Boards for Vignana Vahini and Vignana Vartha, and Class Review Committee (CRC).

Over and above, students are enthusiastic to join the social responsibility clubs such as NSS Units, VNRSF, N-Army, TEDx and Art of Living Club to participate in service activities like organising blood donation camps, medical camps and improve awareness of rural health and sanitation, adult education, environmental responsibility in the community and other extension and outreach activities.

Participation in all these committees and taking up leadership roles enable the students to develop organising ability, managerial attitude, people skills, team skills and decision-making skills in critical situations. Many of our alumni are serving as CXOs in leading organisations and hundreds of our alumni are serving in techno-managerial positions in MNCs both in India and abroad, which vouch for the honing of the leadership skills through proactive participation in the Student Council, various Committees, Professional Society chapters and various Student Clubs. Our students are actively participating at National and International level sport activities and brought laurels to the institute. Additionally, over 150 of our alumni have become entrepreneurs, providing employment and services in various sectors. One of our alumni served even as a Member of the Parliament while many of our alumni have been serving in various eminent government organisations and services including the Indian Administrative Services, ISRO, and DRDO labs, contributing for the efficient governance of the country. Some of our alumni are also a part of the entertainment industry in India, becoming film actors, writers, and directors.

File Description	Document
Upload any additional information	View Document

5.3.3

Average number of sports and cultural events / competitions organised by the institution per year

Response: 19

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
24	8	24	25	14

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events / 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 other support services.

Response:

The Alumni Association of VNRVJIET stands as a testament to effective organisation and a high level of activity. With its registered office located on campus, it's convenient for both alumni and the institution to stay connected.

The Executive Committee, consisting of the President, Vice President, General Secretary, and other office bearers, plays a crucial role in managing the affairs of the association. This diverse group ensures that decisions and initiatives are approached from multiple perspectives, fostering inclusivity within the association.

The exclusive portal, www.vnralums.com, serves as a platform for connecting the 15,987 alumni with each other, the faculty, and the current students.

The Alumni Association raised a fund of Rs. 31,07,602/- and non-monetary contributions amounting to Rs. 41,38,000/- demonstrate the association's commitment to the welfare of both alumni and students.

The Alumni Advisory Committee of VNRVJIET actively works to bridge the gap between academia and industry, fosters entrepreneurship and facilitates the professional development of students. Their diverse range of activities aims to provide students with valuable industry exposure, mentorship, and networking opportunities, empowering them to succeed in their chosen careers. The following is the list of activities:

Academic Activities:

- Conducted 39 Sessions of Career vision approach
- 18 alumni are members of the Board of Studies of various departments and support the institute to design industry-relevant courses/curricula.
- Organised 48 technology-specific seminars and workshops

Research Activities:

- VNRVJIET alumni assist the R & D Cell and Departments in the development of ideas for the projects and provide project guidance & execution.

Training/Internships/Employment:

The alumni of the institute support in the following activities

- Competency Development Cell – Training activities
- Centre for Presenting and Design Thinking (CPADT)
- 42 Alumni from different batches mentored students on interview skills and video resume preparation toward Placements.
- Conducted 5 Sessions on Jobs and internships
- Organised 42 Sessions of Mentoring & Knowledge Sharing Sessions
- Conducted 35 Sessions of Placement and Training programmes

Innovation/Entrepreneurship /Incubation Activities:

- Alumni guide and mentor VJ Hub – An Incubation Centre of VNRVJIET to attract start-ups to the campus.
- 16 Alumni startups are incubated at VJ HUB.
- Alumni associate with the activities of
 - Entrepreneurship Development Cell
 - Industry Institute Interaction Cell
 - Institute Innovation Council
 - Ancient Wisdom and Culture & Development of Happiness Index.

Activities:

- Actively guide students in various Extra and Co-curricular activities, like LIVEWIRE, Crescendo, Technical and Cultural events/fests.
- YUGMA –Annual Alumni Home Coming Day is scheduled on the 3rd Saturday of December

every year and 21st Reunion was celebrated on 17th December 2022.

Chapters:

- VNRVJIET Alumni Association has chapters in
 - Bangalore,
 - Chennai,
 - USA,
 - Australia.
- News letters: a monthly e-newsletter and a yearly newsletter are shared with alumni.
- Business Wizards of VNRVJIET: A book containing top 100 alumni entrepreneurs profiles, provides a close view of great leaders whose remarkable success and accomplishments.
- Distinguished Alumni Awards: Incepted in 2019, 25 Distinguished Alumni Awards were bestowed on alumni recognizing their achievements in the field of business and management competencies in the public or private sectors.

The Alumni Association of VNRVJIET is actively engaged in fostering a strong bond between the institution and its alumni, while also contributing to the welfare of current students.

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

5.4.2

Alumni financial contribution during the last five years (in INR).

Response: A. ? 15 Lakhs

File Description	Document
Any additional information	View Document
Link for 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:

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNRVJIET) has a strong governance structure which exemplifies effective leadership that is attuned to the vision and mission of the institution. The Institute has firmly established its Vision, Mission, and Quality Policy, which are outlined below:

Vision:

To be a World Class University providing value-based education, conducting interdisciplinary research in cutting edge technologies leading to sustainable socio-economic development of the nation.

Mission:

- To produce technically competent and socially responsible engineers, managers, and entrepreneurs, who will be future ready.
- To involve students and faculty in innovative research projects linked with industry, academic and research institutions in India and abroad.
- To use modern pedagogy for improving the teaching-learning process.

Quality Policy:

- Impart up-to-date knowledge in the students' chosen fields to make them quality engineers.
- Make the students experience the applications on quality equipment and tools.
- Provide quality environment and services to all stakeholders.
- Provide systems, resources, and opportunities for continuous improvement.
- Maintain global standards in education, training, and services.

VNRVJIET is a self-financing institution run by Vignana Jyothi Society. The society governs the institution with the service motto and contributes to the educational and technological growth in Telangana state and country.

The Principal is the academic head of the institution and responsible for the day-to-day functions. He is ably supported by Directors, Deans, Heads of Departments, Finance Officer, Section Heads, and Chairpersons of various Institute-level Committees. The following Committees oversee the functioning of the Institute: Governing Council (GC), Academic Council and Boards of Studies, Finance Committee (FC), and Finance, Planning and Development Committee (FPDC). Additionally, other entities involved

in governance include the IQAC, Planning, Approvals, Accreditation and Certification (PAAC) Cell, Academics and Admissions (AA), Examinations and Evaluation (EE), Research and Consultancy Centre (RCC).

The Institute's policies, strategies, resources, operations, and quality assurance measures encompass the different dimensions of the institution, namely academics, research, innovation and entrepreneurship, and social responsibility with global vision. The administrative structure and governance framework actively encourage decentralized participative leadership at all levels by engaging diverse stakeholders in the decision-making process.

Through functional committees, faculty members actively participate in curriculum design, determining teaching methodologies, implementing examination reforms, maintaining academic standards, supervising research, consultancy activities and ensuring student welfare. Such participation fosters transparency in governance and encourages teamwork. Students and alumni also contribute to governance through various committees.

The head of the institution drives the resulting policies, strategies, resource allocation, and operations through the Governing Council. The Institute gives utmost importance to develop technical solutions for societal problems and contribute to sustainable socio-economic development.

The vision and mission of the institution, dynamic leadership of the Principal, dedicated faculty, staff, and students contributed for VNRVJIET to emerge as “College with Potential for Excellence” and is accredited by NAAC with “A++” grade, CGPA of 3.73/4 in Cycle-2, and NIRF-2022 Engineering category:113-Rank. The institution has the honor of being the most preferred engineering institution by the stakeholders.

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

6.1.2

The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

The institution demonstrates a decentralized and transparent approach to managerial, administrative, financial, and academic matters. This mechanism delegates appropriate responsibilities from top-level management to the next levels, enabling the top management to focus on policy-making.

The Governing Council serves as the highest decision-making body within the institution. It formulates and amends rules and regulations, delegates powers and responsibilities to various committees, the Principal, Heads of Departments (HoDs), and Heads of Sections.

The constitution of statutory committees such as the Governing Council, Academic Council, Finance Committee, and Board of Studies is carried out systematically, with specified functions and responsibilities aligned with the requirements of regulatory/statutory bodies. Nominees from UGC, State Government and University are also members of these committees. These committees play a crucial role in policymaking, governance, academics, finance, research, teaching-learning, and outreach.

The Principal ensures the smooth functioning of the institution with the support of the Directors and Deans:

- Dean Academics
- Dean Examination & Evaluation
- Dean Administration & Finance
- Dean Student Progression
- Dean Research and Consultancy
- Dean Innovation, Incubation, Entrepreneurship & Globalization
- Various other functional committees

These committees work collaboratively to identify possibilities, plan, organize, implement, and monitor all the activities of the institution.

Participative Roles of Stakeholders

All stakeholders of the institution play participative roles in various decision-making committees. External stakeholders, including nominees from statutory bodies, State government, University, Industry experts, Employees, Educationists, and Scientists, constitute 20% of the committee members. Faculty members occupy 55%, while students and alumni occupy 15% of the committee members. The remaining 10% comprises management representatives.

This signifies that the institution embraces decentralized administration through committees and practices participative management. The institution fosters a democratic approach in the decision-making process, enabling all stakeholders to participate in managerial decisions.

Case Study: Decentralization at Department level for smooth functioning of the Academic and Administrative Setup

Decentralization is evidently present at the department levels. Each department has Program Coordinators at the undergraduate and postgraduate levels who oversee the academic activities of each program. Well-structured committees, such as the Program Assessment Committee (PAC), Department Academic Committee (DAC), Board of Studies, Department Development Committee, and Class Review Committee (CRC), make decisions at the department level for curriculum, teaching and learning

practices.

The other in charges at department level, viz., Budget, Student admissions, Physical resources, CAMS, Attendance, Result Analysis, Project In charges, Internship, Guest lecture, MTP, Library, Self-learning resources, Workshops, Classroom, VNR Differentiators, Professional body, etc. take part in regular academic and administrative operations at decentralized level.

The decentralization practices at departments handle the students’ academic and regular needs, viz., adherence to academic needs, maintenance of infrastructure and laboratories, examination conduction, feedback system, etc. This process helps students in achieving the outcomes at ease. The participative practices of all faculty/staff in charges at department level are persistently visible and are resulting in successful accreditations.

The HoDs are invited to the Governing Council meetings where they interact with the council members and management to develop a roadmap for departmental and institutional development. The senior faculty of the department are part of various institution level committees for decision making and disseminate their responsibilities.

Note: The description and flow chart of sample case are provided in the additional information and link for additional information.

File Description	Document
Any additional informatiom	View Document
Link for additional information	View Document
Link for strategic plan and deployment documents on the website	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional Strategic / Perspective plan is effectively deployed

Response:

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNR VJIET) is an outstanding institution that has consistently pursued academic excellence through unique pathways since its establishment.

Strategic Plan Objectives

The Strategic plan of VNR VJIET is designed with a clear sense of directions for the institution with measurable metrics. The objectives defined in the strategic plan are as follows:

Objective 1: Achieving Academic excellence by curriculum orientation and fostering experiential learning through ICT.

Objective 2: Exploration of Knowledge through Innovation and Research providing inclusiveness to societal needs.

Objective 3: Exponent for Development of a Rounded Personality with Global Vision & Social responsibility.

Objective 4: Relentlessly pursue institutional effectiveness through quality assurance systems.

Activity successfully implemented for achieving Objective 1:

The philosophy of Vignana Jyothi considers education as a process of "Presencing" that offers to one's deepest capacity to perceive and experience the information and activities to change the future, both individually and collectively. It draws on "deeper levels of LEARNING for discovering new possibilities" and is based on a blend of first-hand experience, cutting edge thinking, and ancient wisdom.

During the assessment period institution has started new Academic programs which will be in need of the Industry 4.0 in the emerging areas as per Objective 1 of the strategic plan. 5 Research Centres in CE, EEE, ME, ECE and CSE where full time research scholars have registered, 6 Undergraduate new programs and also 5 Minor Degree Programs are started. The UG Programs are started with MoUs, interaction, training, and collaboration of the experts from relevant industries.

- 1.B.Tech. Computer Science and Business Systems (CSBS) is started in collaboration with Tata Consultancy Services (TCS) in the AY: 2019-20.
- 2.B.Tech. CSE (Artificial Intelligence and Machine Learning) where the curriculum is designed in association with members from NASSCOM and Amazon in the AY: 2020-21.
- 3.B.Tech. CSE (Internet of Things) where is curriculum is designed in association with members from NASSCOM and Amazon in the AY: 2020-21.
- 4.B.Tech. CSE (Data Science) where curriculum is designed in association with members from NASSCOM, TCS, and Microsoft in the AY: 2020-21.
- 5.B.Tech. CSE (Cyber Security) where curriculum is designed in association with members from DSCI, and Microsoft in the AY: 2020-21.
- 6.B.Tech. Artificial Intelligence and Data Science where curriculum is designed in association with members from DSCI, and Microsoft in the AY: 2021-22.

Students from B.Tech. CSBS are successfully graduated in the academic year 2022-23

The following Minor degree programs are offered to enrich the core branches in interdisciplinary domain area for industry readiness and providing solutions to the societal needs.

1. Cyber Security
2. Data Science
3. Artificial Intelligence & Machine Learning
4. Internet of Things
5. Innovation and Entrepreneurship

In addition, the following open elective tracks are offered to the students to enrich the interdisciplinary knowledge and make them proficient in industry 4.0 technologies.

1. Waste management
2. Smart Cities
3. Green Energy
4. 3D Printing & Design
5. Internet of Things
6. Augmented Reality (AR) / Virtual Reality (VR)
7. Artificial Intelligence
8. Blockchain Technologies
9. Robotics
10. Cyber Security
11. Data Sciences / Big Data & Analytics
12. Autonomous Vehicles

The placements of the students in core and emerging industries are evidence of success of this curricular reform.

File Description	Document
Any additional information	View Document
Link for Strategic Plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2.2

The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

Response:

The institute was accorded Autonomous status by UGC in the academic year 2012-13 for a period of 5 years. Further the institution got extension of Autonomous status for 10 Years from 2018-19 onwards.

Administrative setup:

The organization has a well-structured administrative setup governed by Governing Council, Academic Council, Board of Studies, Finance Committee and other functional committees. The statutory bodies are constituted according to the regulations of UGC, Affiliating University. Periodic Meetings are conducted by all the committees.

The Governing Council is the highest decision-making body which formulates the procedures and policies. The decisions taken by the other committees are approved in the Governing council.

The Academic Council reviews the courses, curricula, regulations and syllabi according to the needs of industry and other stakeholders. The Board of studies at department level develops the syllabi with the inputs from industry, academia and alumni.

The Finance Committee approves and monitors the Budget. It also monitors the resource mobilization.

The institute organization chart reflects the decentralization for an effective and efficient functioning of institute activities. The roles and responsibilities for each committee are well defined in the policy manuals.

The institution's administrative setup is provided in the organogram. The functions of various committees are given in the link for additional information.

Service rules, Procedures, Recruitment and Promotion Policies:

- The Institute has a set of well-established recruitment policy, service rules, procedures, and promotion policies within the framework of AICTE, UGC, State Govt. and the affiliating

university, which are approved by the Governing Council of the Institute. The rules and regulations of the institute were first published in November 1997 and are revised periodically.

- The Administrative Manual and policy documents are made available in the institute website, institute library and in all departments to create awareness among the employees and students.

The following are the major policies, manuals and procedures in which all the functional aspects of day-to-day activities are provided:

- Administrative Manual
- Standard Operating Procedures (SOP's):
 - SOP for Civil maintenance
 - SOP for Mechanical maintenance
 - SOP for Electrical equipment maintenance
 - SOP for EPABX and Telephones
 - SOP for maintenance of Computers and Networking
 - SOP for Stock Verification
 - General Maintenance: Engineering Cell, Security Wing
- Institute Autonomous Manual
- Outcome Based Education (OBE) Manual
- Intellectual Property (IP) Policy
- Research Policy
- Consultancy Policy
- Anti-Plagiarism Policy
- Incubation Policy
- Manual for Examination Procedures
- Grievance Redressal, Anti-Ragging, Anti-eve teasing and Anti-drug policy.
- Hostel rules and regulations
- IQAC – Quality Management document
- ISO Manual
- Code of Conduct and Ethics Policy

File Description	Document
Any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Link for additional information	View Document

6.2.3

Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
Institutional data in prescribed format	View Document
ERP (Enterprise Resource Planning) Document	View Document
Any additional information	View Document
Link for additional information	View Document

6.3 Faculty Empowerment Strategies

6.3.1

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

Response:

The institution provides effective welfare measures to both teaching and non-teaching staff, ensuring their well-being and satisfaction. All statutory welfare measures have been implemented, and various monetary and non-monetary initiatives have been undertaken to support the personal and professional growth of employees. Furthermore, the institute has made significant efforts to ensure the safety and welfare of students and staff during COVID-19 pandemic.

Specific Measures Implemented:

1. Implementation of Norms: As per the norms of AICTE, the 7th CPC has been implemented for teaching staff, and the 11th PRC has been implemented for non-teaching staff.
2. Incentives are provided for Ph.D. Completed Faculty.
3. Coverage under Employee Benefits: Employees are provided coverage under EPF, Gratuity, and Medical Insurance schemes.
4. Leave Sanctions: Study, Maternity, Paternity and Medical leaves are sanctioned for the required staff.
5. Loans for Vehicle and Laptops: Both teaching and non-teaching faculty have access to avail loans for vehicles and laptops.
6. Financial Support: The institute provides registration fees, dearness allowance, and travel grants to support faculty attending conferences and workshops.
7. Incentives: Incentives are provided to faculty members for their outstanding research work, publications, and patents. Lucrative consultancy policy is in place with 70% - 80% share to the faculty.
8. Seed Fund: Seed fund is granted to the faculty to encourage preliminary/initial research that leads to major research proposals.
9. Career development: Faculty and staff are encouraged to pursue certification/PG diploma programs in emerging areas from reputed institutions in India and abroad.

10. Faculty are permitted and encouraged to pursue Ph.D. under QIP programs in premier institutions.
11. Non-Teaching staff are encouraged to enhance their qualifications.
12. Ph.D. faculty are encouraged for Post Doctoral Fellowship.
13. ESI Facilities: Non-teaching staff members receive ESI facilities in accordance with the rules.
14. Concession: Concessions are provided on transport and medical facilities for all staff members.
15. Medical Insurance: Faculty and staff are offered subsidized group health medical insurance, with 50% subsidy for faculty and 75% subsidy for staff members.
16. Medical Services: The institution provides full-time medical facilities with qualified doctor and nurse.
17. Fitness: Sports, gym, and yoga facilities are provided for staff members and their families.
18. Creche facility is available on campus for the children of faculty and staff.
19. ATM facilities are conveniently available on the campus.
20. The institute has developed a comprehensive '**Post Lockdown-Restart Manual**', which provides guidance on operating the institute during post lock-down of COVID-19 pandemic to ensure the wellbeing of staff and students.
21. Thermal scanners have been installed across the campus to detect students and staff with high temperatures, ensuring they are isolated and provided with necessary medical procedures.
22. Facial recognition biometric devices have been installed throughout the campus, replacing touch-based attendance systems to minimize contact during the pandemic.
23. Foot-Operated Taps have been installed throughout the institution to minimize multiple touches for students, staff.
24. Provision of Essential Equipment: Vaporizers, pedal-operated sanitizers, and hot water kettles have been provided to all departments during the COVID-19 pandemic.
25. Regular sanitization efforts have been implemented, and provision for oxygen cylinders and antigen swab test kits have been made available to ensure the safety of students and staff during the pandemic.
26. The canteen offers food services at affordable prices to students, staff, and visitors.

An amount of Rs.66.16 lakhs is spent on Avenue for Career Development / Progression and Rs.1067.53 lakhs is spent on Faculty and Staff Welfare.

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

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: 32.59

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

2021-22	2020-21	2019-20	2018-19	2017-18
130	81	84	145	118

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

6.3.3

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

Response: 28.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
23	51	33	19	15

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

6.3.4

Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 72.97

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
213	297	290	220	233

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

6.4 Financial Management and Resource Mobilization

6.4.1

Institution conducts internal and external financial audits regularly

Response:

Financial planning plays a vital role in maintaining the consistency of goals and aligning the growth objectives of the institute with its financial requirements. By following the principle of "To Begin with the End in Mind," the institute diligently plans and accumulates the necessary funds, considering the inputs and requirements from its associated departments.

The institution follows the auditing process regularly. There is an internal audit as well as external audit mechanism for the institute. Internal audit is conducted on a quarterly basis and the external audit is conducted annually. The internal audit and external audit are conducted by two different professional firms.

The suggestions / advice given by the auditors during the course of time are followed / implemented and the same are being verified by the auditors during their subsequent visit. Thus, there are no major audit objections from the audit. The auditors verify the accounting vouchers, supporting documents, processes involved in each area of activity, statutory compliances, and the financial statements.

Efficient Budgeting and Controlled Mechanism

To ensure effective financial planning, the organization exercises budgeting, and controlled mechanisms well in advance. This process involves the active participation of various academic departments and administrative sections within the institute thereby establishing a comprehensive and efficient financial plan.

Periodic Financial Planning and Review

The institute conducts periodic financial planning and review through a statutory Finance Committee.

This committee, led by the Principal and consisting of members such as the Dean of Administration, management nominee, JNTUH nominee, faculty, and account personnel, meets twice a year.

During these meetings, the committee reviews income-expenditure statements and provides suggestions for further action plans. The institute's management, through the Governing Council, carefully examines the income and expenditure patterns and offers pragmatic recommendations.

Structured Financial Section and Recording

A well-structured financial section is established within the institute, ensuring that every financial transaction is recorded using established software. This meticulous recording allows for transparency and accountability in financial operations.

Financial Rules and Transaction System

The institute has implemented financial rules to govern its financial activities. Notably, a "No-Cash" Transaction System is followed, with tuition fee payments being made only through online modes. All financial transactions in the campus are made digitally. By adopting this approach, the institute promotes secure and transparent financial transactions. As per the auditing procedures, TDS and GST are also implemented.

Flexibility in Financial Management

The institute's financial system allows for flexibility in enabling the allocation of funds over and above the approved budget with due consideration by committee. This flexibility ensures addressing of unforeseen expenditures, if any.

Transparency and Reporting

Audited financial statements are made public by publishing them on the institute's website and submitting them to statutory and regulatory bodies. This commitment to transparency and reporting fosters trust and accountability within the institute.

Effective Financial Management for Overall Growth

Through the implementation of an effective financial management system, the institute has experienced overall growth. This system ensures the alignment of financial resources with strategic goals and facilitates prudent decision-making.

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

6.4.2

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

Response: 100

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

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	85.88333	14.11667	0

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Annual statements of accounts	View Document

6.4.3

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

Response:

Mobilization of Funds

- The major source of revenue for the college is the fee collection from students. The annual tuition fee is fixed by the Telangana Admission and Fee Regulatory Committee (TAFRC) for every three years. Thus, the fee collected from the students will be as per the guidelines set by the fee regulatory authority. The fee collected from students is kept in fixed deposits. As per the requirements of the college, the fixed deposits are withdrawn and used for the expenditure of the college. The interest earned on these fixed deposits is also being utilized for the needs of the institution.
- In addition to student fees, funds are mobilized through sponsored projects from various organizations such as DST, FIST, DRDO, AICTE, UGC, as well as industry-sponsored projects and consultancy undertaken by the faculty. These funds are utilized for purchasing equipment, covering travel expenses, providing stipends for research associates, and facilitating consultancy services. These funds are received through PFMS and are spent as per the guidelines of central government and Utilization Certificates are sent on time. The institution also benefits from philanthropic contributions.

Strategies for Optimal Utilization of Financial Resources

- During the budget preparation process, the institution requests academic and section heads to provide their annual budget requirements, taking into consideration the development and updating

of laboratories, computing facilities and softwares, library resources, teaching-learning processes, training programs, extension activities, and research.

- To ensure optimal planning of financial resources, monthly budget plans are invited from all departments and sections within the institution.
- Individual budget estimations are collected, and a comprehensive budget is prepared.
- This budget is then presented to the Finance Committee, which reviews and makes necessary changes to achieve a proper balance between receipts and expenditures. The approved budget is subsequently submitted to the Governing Council for approval.
- The budget is further scrutinized by the Executive Committee of the management. Approved budgets are communicated to the respective departments and sections.
- The institution maintains a close track of the budget and in unforeseen circumstances, non-budgeted amounts may be considered and allocated based on the merit of the case.
- The efficient budgeting and optimal utilization demonstrated by the institution in past years reflect its commitment to financial responsibility and resource management.

File Description	Document
Link for additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)

Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

Internal Quality Assurance Cell at VNRVJIET works with a motto of catalyzing the quality initiatives and enhancement of these initiatives. Through integrated regular quality measurement tools and techniques, sustenance and assurance of internal systems and processes are well taken care. The structure of the IQAC at VNRVJIET is designed as an integrated agile model with coordinators for Quality initiatives and enhancement, Quality sustenance, Quality measurement and Quality assurance. The objectives of the post accreditation of 2nd cycle are discussed in detail and goals are derived.

The distinctiveness of the institution- VJ Spectral Pyramid™ and Strategic plan provides the strategic direction to IQAC for preparing the action plans. The action plans are strategized and implemented with the sense of belongingness and participation of all stakeholders. The following are the specific post accreditation initiatives where concrete efforts are kept by IQAC committee for internalization and institutionalization.

- 1.Enrich curriculum with support of industry and academia and offer credit based online courses.

2. Offer emerging academic programs/courses in relevance to advancements in industry.
3. Research scholars through AICTE-NDF scheme and affiliating University.
4. Improve revenue generation through consultancy activities.
5. Sensitize through research activities leading to high quality publications, research projects, and IPRs.
6. Improve work culture by introducing Faculty Professional Growth Plan, Healthitude and Happtitude activities.
7. Develop Quality circles through mentor-mentee activities with academic institutions.
8. Structured Academic and Administrative audits for monitoring and nurturing the quality across academic departments and administrative sections.

More details on post accreditation initiatives are provided in additional information

Practice 1: Sensitize through research activities leading to high quality publications, research projects, and IPR.

IQAC at VNRVJIET, consistently has taken part a catalyst role in conducting sensitization activities on research and IPR. The following are the initiatives taken by IQAC during the post accreditation period:

- Collaboration activities with Premier institutions, such as NIT Warangal, IIT Hyderabad, IIIT Hyderabad, Central University Hyderabad and JNTUH Hyderabad has increased the Ph. D registrations. 16 % of faculty are pursuing Ph.D. and 14 % of faculty had completed Ph. D from NITs, IITs, and Central Universities. This resulted in improvement in quality publications, patents and collaborative research projects.
- A Series of Sensitization workshops are conducted on “Research methodologies”, “How to conduct Literature review and Identifying the research gap in the identified domains”, “Training on Latex”, Awareness on IPR. Apart from attending workshops outside the institution, a total of 24 events are conducted across the departments.

Details are provided in additional information

Practice 2: Develop Quality Circles through mentor-mentee activities with peer academic institutions.

Institution under AICTE-Margadarshan and UGC- Paramarsh schemes has formed Quality Circles to mentor the institutions and for exchanging the best practices for overall growth. Institution has entered MoUs with peer institutions to enhance quality in teaching, research, and innovations. IQAC has taken initiative and mentored institutions under these schemes.

Eleven institutions are mentored under these schemes and trained in Effective Teaching-Learning and Evaluation Methodologies, inculcate the culture of Research and Innovation among faculty and students.

Also, few more other institutions apart from these institutions are supported through conduction of academic and administrative audits, workshops, and seminars on Quality enhancement. Accreditations and progress in quality initiatives of the institutions is observed through this practice.

Details are provided in additional information

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

6.5.2

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

(For first cycle - Incremental improvements made for the preceding five years with regard to quality

For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

IQAC at VNRVJIET along with the other objectives and goals, has major focus on nurturing academic environment through sustenance and enhancement of teaching-learning process. Institution has well developed Teaching learning methodologies in place and are practiced persistently. Regular monitoring is performed stringently through,

1. **Automatized Student feedback system (twice in semester) in line with AICTE 360°**
2. **Class Review Committee (CRC) meetings (twice in semester)**
3. **Course End survey (once in semester for all courses)**
4. **Annual Stakeholder surveys**
5. **Annual Student Satisfaction Survey (SSS)**
6. **Annual Academic and Administrative audits (AAA)**

In continuation IQAC with directions of Governing Council, Academic Council, Board of Studies, and inputs from IQAC committee the following activities and post accreditation activities are implemented:

1. Annual Academic audit process
2. Collaboration activities with IIT Bombay, NIT Warangal, NIT Patna, NITTR, Bennett University, IUCEE, TCS, POGIL project for training faculty on pedagogies and advanced technologies.
3. Implementing self-developed pedagogical methods successfully, viz., WIT & WIL™, Story board, VNR Lab protocol™, Course based Projects, Show and Tell.
4. Implementing of 3Ps (Premises, People, Processes) policy of VNRVJIET for enhancing and sustaining of Teaching-Learning practices during the Pandemic period.

Other post accreditation activities are provided in additional functions.

Practice 1: Academic audit

The Academic Audit is a regular practice by IQAC at VNRVJIET which ensures the quality of each program run by the Institute. It helps the Department/ Institute to identify its Strengths, Weaknesses, Opportunities and Challenges (SWOC) to provide the directions for the enhancement of the programs.

The Academic Audit Proforma includes the Academic Audit at Course level and Department level. This audit proforma focuses on the Quality parameters. The Assessment of these parameters provides the department academic performance index and helps the departments for the continuous improvement.

Corrective measures for improvement of outcomes are initiated. IQAC in collaboration with academic departments enforces the action taken on the corrective measures through continuous monitoring. The success of the practice is evident through NBA accreditation of programs.

Details are given in additional information.

Practice 2: Implementing of 3Ps (Premises, People, Processes) policy of VNRVJIET for enhancing and sustaining of Teaching-Learning practices during the Pandemic period.

Teaching learning methodologies and practices at VNRVJIET are well designed and implemented and it is one of the biggest strengths of the institution, since the inception. The pandemic situation has provided the institution with a challenge of retaining the quality of teaching, learning and evaluation process during the tough periods.

IQAC has a strong role in adapting quickly the hybrid mode of teaching, measuring and maintenance of the standards. The whole situation during the pandemic is handled through 3Ps in 2 stages.

Stage1: Conducting of online classes effectively during lockdown.

Stage2: Post lockdown restart for conducting hybrid mode of teaching learning and evaluation activities.

Details are given in additional information.

Practice 3: Implementing and practicing VNRVJIET Teaching Learning Differentiators- WIT & WIL™, Course Based Projects, Story Board, VNR Lab protocol™ and Show and Tell.

The VNR VJIET differentiators help students in gaining analytical ability, critical thinking, team building skills, self-learning skills, learn advanced technologies, innovations and formation of ideas leading to patents and startups.

Details are given in additional information.

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

6.5.3

Quality assurance initiatives of the institution include:

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
- 2.Collaborative quality initiatives with other institution(s)**
- 3.Participation in NIRF**
- 4.Any other quality audit recognized by state, national or international agencies (ISO Certification)**

Response: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document
Paste web link of Annual reports of Institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

VNRVJIET always adopts inclusive approach which does not discriminate based on gender, caste, language. The college believes in gender equity and there are 37.3 % girl students and 43 % women faculty and more than 50% of administrative positions such as - Deans, Heads of the Departments, Coordinators of different sections and centres are held by women faculty. Likewise many professional chapters related to students have female students occupying significant positions.

VNRVJIET has included Gender Sensitization as part of the curriculum for all B.Tech students. This subject is basically meant to create gender equity and to sensitize the students about issues related to gender equality. This course is designed to be an experiential learning process. As part of this course, the students participate in several activities such as - role play, group discussion, JAM, poster presentation, short talk, PPTs and so on. At the end of the course, students submit a mini project report based on one of the prescribed topics related to gender equity.

Safety and Security :

Identifying the significance of women in the work force, VNRVJIET has recruited adequate number of women faculty and staff. The college has employed women security guards for better compatibility to the girl students.

The *Prevention of Sexual Harassment cell* was established to address the grievances related to sexual harassment. The students, staff and faculty have the access to complain about any sexual harassment issues in complete confidentiality.

Apart from this, the entire campus is on surveillance through CCTV cameras providing security to all the students and especially to the girl students. This makes the campus a highly secured place, where the students feel safe to stay back after college hours to carry out their academic/research work. The college has created a healthy ecosystem which is free from fear and anxiety shaping their personality and empowering them achieve their goals. The college has created a safe environment for women, a gender just environment free of violence, harassment, exploitation and intimidation. In line with UGC guidelines and the directives of supreme court, college has set up an Internal Complainants Committee (ICC).

Counselling and Common Rooms: Common rooms are provided for girls to relax in between their academic schedules and during their menstrual cycles. The girl's restrooms in the college are equipped with vending machines that supply sanitary pads for the convenience of all women.

The college has also appointed a female counsellor to address all psychological issues concerning women

on campus.

Day care Centre : As young mothers resume their work after delivery need to go through the trouble of taking care of their babies, the college has provided an in-house, well- furnished day care centre.

As a welfare measure, women faculty are given **6 months maternity leave**, for the benefit of taking care of their newly born, retaining their jobs, and also avail **paid leaves**.

File Description	Document
Annual gender sensitization action plan	View Document
Specific facilities provided for women in terms of: a.Safety and security b.Counselling c.Common Rooms d. Day care center for young children e. Any other relevant information	View Document

7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

- 1.Solar energy
- 2.Biogas plant
- 3.Wheeling to the Grid
- 4.Sensor-based energy conservation
- 5.Use of LED bulbs/ power efficient equipment

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

7.1.3

Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management

- **E-waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

1. Solid waste management

- Inspired by Swatch Bharat Mission, Tri-Bin system is used in the Institute to segregate recyclable and biodegradable waste.
- Professional contractors collect the recyclable waste and biodegradable waste.
- Recyclable waste is collected by **Green Wave Enviro Services Pvt.Ltd.**, as per the agreement signed by the MoU.
- Professional contractors (GHMC) collect the bio-degradable waste.
- The used record sheets, notebooks are collected every semester by VNR Student Force and recycled by RECYKAL organization in the form of books. The books generated are donated to the students of neighbouring Government Schools and are also made available to the in- house students in the form of record books. This activity is an exclusive initiative of our students under VNRSF (VNR Student Force).
- Campus is Wi-Fi enabled and hence all communications are made online minimizing paper usage.
- Usage of plastic cups, plates and cutlery are banned in the canteen and food courts.
- Organic waste generated from the canteen, food courts and dry leaves are composted and used as a manure.
- Sanitary incinerators are installed in campus and hostel.

2.Liquid waste management

- Sewage Treatment Plant (STP) is installed and operated with a 150 KLD capacity in the institute and 250 KLD capacity in Hostel.
- The quality of treated water is periodically tested in the Environmental Engineering laboratory of Civil Engineering Department as per the codal standards before using it further.
- The treated water is used for flushing and gardening purpose using sprinklers.

3.Biomedical waste management

- Bio medical waste produced from the college dispensary is collected in a separate bin and disposed as per the guidelines of Biomedical waste Management rules given by CPCB.

4. E-waste management

- Bins are provided across the campus to collect the E-waste from all the departments. The collected material is disposed for recycling through authorized vendors [MoU with Green Wave Enviro services ltd.]
- All Computers, batteries and electronic machinery are purchased under Buy-Back agreement.
- Use of CDs is not permitted to avoid e-waste.
- e-governance is practiced in all institute operations.

5. Waste recycling system

- Poly Ethylene Teraphthalate (PET) bottles are collected in seperate bins and sent for recycling to the agency Green Wave Enviro Services Pvt.Ltd. on regular basis
- Used record sheets and note books are recycled with the help of RECYKAL organization.
- Iron scrap from the workshops are recycled for internal laboratory usages
- Construction and Demolition waste with in the institute is crushed using Jaw crusher in Concrete laboratory and is used for research projects by the students and faculty.

6. Hazardous chemicals and radioactive waste management

- Chemical and hazardous waste from laboratories is disposed as per MSDS (Material Safety Data Sheet).
- Liquid chemicals from Chemistry and Environment Engineering Lab are disposed as per MSDS norms
- Radio active materials are not allowed inside the campus.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geotagged photographs of the facilities	View Document
Any other relevant information	View Document

7.1.4

Water conservation facilities available in the Institution:

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any additional information	View Document

7.1.5

Green campus initiatives include:

- 1.Restricted entry of automobiles**
- 2.Use of Bicycles/ Battery powered vehicles**
- 3.Pedestrian Friendly pathways**
- 4.Ban on use of Plastic**
- 5.landscaping with trees and plants**

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6

Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7

The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.
2. Divyangjan friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: B. 3 of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

Our Logo signifies our commitment towards the development of society focusing on the motto "From Darkness – Lead me to Light".

‘Tamasoma Jyothirgamaya’

With this dictum, we attempt in bringing a change in our surrounding, creating a sense of ownership in what we do and excel in every stage. For this, the Institute plans and conducts a number of events to foster an atmosphere for moral, cultural, and spiritual values among the students and staff in order to create a population with noble thoughts, noble in their attitude and be morally responsible. To strengthen the emotional sentiments as well as to foster a sense of unity and social harmony, the Institute observes various events.

The College cultural fest – Sintillashunz is the largest cultural extravaganza conducted every year. It brings together students from various backgrounds, showcasing their artistic skills through music, dance, drama, etc. fostering a sense of unity and camaraderie. During this three-day fest, students take part in many cultural events such as Ethnic Day, Rangoli Competition, Nail Art, Creative Arts etc.

To promote a sense of unity and inclusion, we observe various regional and cultural days and host events like the Fresher's Day, Teachers' Day, Engineers' Day, Induction Programme, Orientation and Farewell

Programme, Rally, Oath, Plantation Programme, Women's Day, and Yoga Day at the Institute. Ayudh Puja celebrations, Bathukamma festivals, and other regional celebrations are held to promote intergroup harmony.

The institute aims to provide a welcoming environment for everyone with respect to linguistic, cultural, geographical, regional diversity, socioeconomic and other differences. The initiatives seek to promote better education, the economic improvement of the underprivileged, and societal harmony. In this regard, NSS initiates many activities like Fistful of Rice, Clay Ganesha event, Mental Health Awareness Session, Rastriya Ekta Divas (National Unity Day). These events encouraged in not only creating social awareness among the students, but also helped them in realizing the concept that **'Sharing is Caring'**.

The outreach activities at the institute promote a sense of belongingness among the staff and students. Hence, the institute extended the services in testing the drinking water quality at nearby villages and also creating the awareness campaigns regarding anti-drug, road safety etc., The extended activities' purpose is to provide an environment where students can grow holistically.

The institution takes part in regional and cultural events like Constitution Day and the Youth Festival in an effort to instil tolerance and unity among students. The Gender Equality Policy places a strong emphasis on equal rights, opportunities, and access for men and women. All the departments provide a barrier-free environment, appropriate resources, and technical assistance in an ongoing effort to ensure that people with disabilities feel included in all facets of academic life. Lessons on human rights, tolerance, love, compassion, harmony, the growth of social values, environmental awareness, and ethics have been added in the curriculum through the subjects like **'Professional Ethics'** and **'Happiness and Wellbeing'**.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

The Constitution of India lays down the foundation for a democratic and responsible society, emphasizing the importance of values and duties of its citizens. To inculcate these values and promote responsible citizenship, various activities are carried out in the institution. Through a variety of curricular and extracurricular activities, the institution strives to develop its students and workers into better citizens of the country by making them aware of their constitutional commitments regarding values, rights, duties, and responsibilities. The Institute ensures that the staff and students participate very

enthusiastically in all such activities.

The institute took part in Plantation Programme, **HARITHA-HARAM**, an initiative by Telangana Govt. In this regard, the institute promotes a sense of community among the student body through a variety of practises and programmes. Numerous faculties have long been engaged in the practise of planning events that encourage students to engage in diverse behaviours that support the "Unity in Diversity" of our homeland. Activities such as **Live-Streaming of the Indian Parliament Session** was held for students and faculty. Many other activities like **Debate Competition** with the theme "The Constitution of India and the Amendments: Is it helping the country?", **Poster-Making Competition, Slogan-Writing Competition, Pledge on the Fundamental Rights** was taken by students and the faculty.

The faculty members of various departments organised a variety of academic and extracurricular events to promote the fundamental duties and rights of Indian citizens. The students participated in a variety of academic programmes, such as webinars, conferences, expert presentations, bright talks, etc., which helped them become more aware of these issues. **Awareness Webinar** "Know Your Environment towards society" was organized. Their cognitive area has been expanded by the organisation of annual competitions on various legal issues. The organisation is responsible for planning different types of legal aid and legal awareness camps to understand the roles and obligations at a personal level. The Institute participated in **Clean India Programme**, launched by Ministry of Youth Affairs & Sports, **Fist Full of Rice**, an initiative by UBA, to provide raw rice to orphanages and needy. **Blood Donation Camp, AIDS Awareness Campaign, Wall of Kindness, Clay Ganesha event, Mental Health Awareness Session, National Unity Day (Rastriya Ekta Divas)** and many more. The Electoral Literacy Club in the institution conducts awareness programmes on right to vote.

The Institute celebrates the Independence Day & Republic Day vigorously with many other Social Service Programmes: Distribution of Food & Masks to the needy during Covid-19 Pandemic. A **Course on Indian Constitution** (Course-Code: A19MN6HS04) is been offered, that aims to develop students' constitutional awareness, understand democracy at grass root level, familiarize with human rights and duties among students and inculcate responsibilities towards nation building through technology.

In conclusion, these efforts play a crucial role in shaping responsible citizens who can actively participate in the nation's progress and uphold the democratic values enshrined in the Indian Constitution. By promoting education, civic awareness, social service, and constitutional literacy, these activities aim to develop citizens who are aware of their rights and responsibilities, uphold democratic principles, and actively contribute to the well-being of society.

File Description	Document
<ul style="list-style-type: none"> • Details of activities that inculcate values; necessary to render students in to responsible citizens 	View Document
Any other relevant information	View Document

7.1.10

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website**
- 2. There is a committee to monitor adherence to the Code of Conduct**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document
Code of ethics policy document	View Document

7.1.11

Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

The Institute recognizes the importance of celebrating national festivals and commemoration days of great people as an integral part of learning and fostering a strong cultural belief and social responsibility of patriotism. These celebrations provide opportunities for students to embrace their cultural heritage, promote unity and diversity, and develop a sense of belonging. Around 100 events are conducted in the institute with respect to various National Festivals and Commemoration days.

Republic Day is celebrated with great enthusiasm featuring flag hoisting by a Topper in girls followed by cultural performances, and patriotic activities that instil a sense of national pride and unity among students, faculty, and staff. Independence Day is observed with great fervour including flag hoisting by a boy student, patriotic speeches, and cultural performances that ignite a sense of patriotism and gratitude towards the nation.

Teachers' Day is commemorated with joy and gratitude honouring the teachers through various activities, heartfelt messages, and expressions of appreciation. The day recognizes the invaluable role of teachers in shaping the future and fosters a strong bond between students and faculty. Felicitation to the respective department faculty are done in the departments.

Engineers' Day is celebrated honouring the contributions of engineers to society and showcasing the

technical prowess of students through exhibitions, workshops, and innovative projects.

National Technology Day is observed highlighting remarkable advancements and innovations in technology and focusing the significance of technology in driving progress, inspiring students to explore new frontiers and contribute to technological advancements.

International Women's Day is celebrated at VNRVJIET with enthusiasm and empowerment, promoting gender equality comprising inspiring talks, workshops on health and hygiene and cultural programs to foster a supportive and inclusive environment for women.

World Water Day is observed to raise awareness about the importance water conservation, recharging ground water and rain water harvesting. The day is marked by informative sessions, workshops, and initiatives by alumni and experts.

World Environment Day is commemorated to emphasize the significance of environmental conservation and sustainable practices related to SDGs. The day is marked by tree plantations, awareness campaigns, and eco-friendly initiatives to become environmental stewards and work towards a greener future.

International IP Day is recognized highlighting the importance of intellectual property rights in fostering innovation and creativity.

National Mathematics Day is celebrated to commemorate the birth anniversary of renowned mathematician Srinivasa Ramanujan. The day is marked by engaging activities, competitions, and lectures that encourage students to appreciate the beauty and significance of mathematics in various fields of study.

International Yoga Day is observed to promote physical, mental, and spiritual well-being of students and staff. The day includes yoga sessions, meditation and session on the importance of incorporating yoga into daily life for a balanced and healthy lifestyle.

The celebration of international commemorative days, events, and festivals at VNRVJIET plays a vital role in fostering cultural awareness, promoting unity, and nurturing a sense of belonging among students and faculty. These celebrations serve as platforms for learning, appreciation, and reflection, allowing individuals to connect with their heritage, embrace diversity, and develop a global perspective.

File Description	Document
Any other relevant information	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

7.2.1

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

Response:

BEST PRACTICE - I

1. TITLE OF THE PRACTICE:

To foster Design Thinking and application of multi-disciplinary knowledge to address global challenges through Centre for Presencing and Design Thinking (CPADT)

2. OBJECTIVES OF THE PRACTICE:

CPADT is established in 2017 with the Vision “to be an institution that fosters design thinking and applies multi-disciplinary knowledge to address global challenges”.

The Centre is born out of the belief that design must be an integral part of learning for graduating engineers. The Vision, Mission, and Objectives of the Centre are formulated with Society at the core of the ideology and an outlook that all engineering, science, and technology are meant to improve life conditions and sustainability.

Mission

- To empathise students towards understanding and respecting social, economic, and cultural aspects of diversity and devise solutions for the best user satisfaction and user experience
- To enhance engineering, science, and technology skills through integration of design thinking
- To create focused attention among students towards solving real-world problems and contributing to the Society through Direct and Indirect Societal Impact

Objectives:

- To help thinking and doing design related to engineering, science, and technology.
- To hone soft skills along with innovation, entrepreneurial, decision-making, and other managerial skills
- To develop a conscious, confident, and empathetic personality as an engineer while bringing

ethics into one's way of personal as well as professional life.

- To encourage students to develop maximising utility for the Society at large than to exert themselves to a merely satisfying outlook.

3.CONTEXT:

Engineers of the Future need different skills – skills to work in an integrative manner, which requires a convergence of all engineering skills and people skills. Engineering is aimed at designing a better tomorrow and making lives easier. Design Thinking is a bottom-up approach towards understanding and solving problems in the Society.

It's about time that Technology looks back on its path of development and steers clear off negative environmental impact, paving a new path towards Sustainable and Inclusive Development where the Nature and its components receive the benefits of Technology directly and indirectly. It is thus time to act with a vision for the Future. "Presencing" is coined as a portmanteau of "presence" and "sense" but goes beyond these - it is about Being Present, Sensing and Observing the Environment, Experiencing the learning, and Extrapolating it to other times and realms. Presencing is also about bringing the best future possibilities into the present and acting to ensure the Best Future.

4. THE PRACTICE:

The CPADT has been working to build on this culture of ideation and innovation in budding engineers through education. This transformation will not only require teaching new technologies but also teaching new ways to question and ideate. Design Thinking approach focuses on the root of the problem and brings out the human, end-user expression of the problem. Students at VNRVJIET use Design Thinking as one of the many tools to discover, identify, and understand the problem before setting out to solve it. The juxtaposition of Presencing and Design Thinking together close the loop of Being present, Sensing and Observing, Analysing, Ideating and Prototyping solutions to problems at any level and for any context.

The Centre for Presencing and Design Thinking (CPADT) was founded with the purpose of fostering personal, professional, and societal transformation, aiming to cultivate a comprehensive outlook on life and society as a whole.

A. Incorporation of Design Courses in the Curriculum:

- The Institute has integrated Design Appreciation courses from the academic year 2018-19 into the curriculum for I B.Tech and III B.Tech. students, tailoring the content to meet the specific needs

of each branch in collaboration with the respective Boards of Studies and the Academic Council.

- At VNRVJIET, Design classes are conducted in a highly unconventional manner for maximum effectiveness and enjoyment. A team of 3-5 teachers co-teach these classes, encouraging interdisciplinary peer groups with gender diversity. Students are guided to document their learnings through formal reports, slideshows, and physical demonstrations of design models and prototypes.
- The CPADT team has developed a specialized "Happiness and Wellness" course, incorporated as a value-added component in the R-22 curriculum with the approval of the Institute's Academic Council.

I year: Design Sensitisation - 1 Credit

- Design Overview and Motivation
- Understanding Design Process
- Doing Design: Problem Discovery and Definition
- Doing Design: Customer Service Experience
- Communication Skills for Design
- Responsible Innovation and Sustainable Design Approaches
- Design Project (Interdisciplinary)

III year: Design Thinking leading to project – 2 Credits

- Working with Creativity and Empathy
- Design Methods: Developing Products and Services
- Strategy Design
- Design and Sustainability
- Integrative Engineering Design Solutions
- Capstone Project (Interdisciplinary)

The projects are evaluated and assessed by relevant **Industry experts**.

B. Capacity Building of Faculty:

- Seven faculty members received certification in PG Diploma in Innovation and Design Thinking from EMERITUS Institute of Management (Singapore) in collaboration with
 - Massachusetts Institute of Technology (USA)
 - Tuck School of Business (USA)
 - Columbia Business School (USA)
- Seven faculty members were sponsored for the certificate program in design thinking for customer-centric innovation from IIM Kozhikode.

- Faculty members are encouraged to pursue design courses through MOOC platforms.
- Faculty attended the 10-day Certificate Course on "Medical Innovation & Design Thinking" at BITS-Pilani Hyderabad in 2019.
- Faculty is sponsored to attend the foundation program "Leading from the Emerging Future: From Ego to Eco" conducted by the Presencing Institute of MIT in Berlin.
- Faculty participated in a five-day workshop on "Innovation, Design, and Entrepreneurship (IDE)" in Chennai, Tamil Nadu.
- Faculty members were sponsored for the Visual Thinking course by Mr. Piyush Modi's startup and Attended Design Workshops, Seminars at the National Institute of Design (NID), and conferences by the World Design Organisation and Indian School of Business (ISB), Hyderabad.
- Six faculty members completed design courses through the SWAYAM-NPTEL Portal.
- Six faculty members completed the Design Thinking course conducted by IUCEE (Indo Union Collaboration for Engineering Education).
- Some faculty members underwent training through the ATAL portal and ICFAI.
- Three faculty members received training in HAPTITUDE, focusing on enhancing happiness in their work life and improving the happiness index.

C. Training and Awareness Sessions/Workshops:

- Faculty members, both internal and external, are provided training in Design Thinking through workshops and webinars conducted in online and offline modes.
- Workshops are organized for students from other institutes during technical fests.
- Special workshops are conducted for school teachers and children to emphasize the significance of design thinking and innovation.

5. EVIDENCE OF SUCCESS:

By integrating Design Thinking into the curriculum and promoting awareness among faculty and students at various educational levels, from schools to graduation, we have witnessed positive outcomes that contribute to innovation and a *self-reliant India (Aatmanirbhar Bharath)*. The following activities, achievements, and outcomes demonstrate our progress:

- Conducted Design Sensitization workshop for CBSE school teachers, inspiring innovation and contributing to Make in India.
- Implemented Design Thinking principles in multidisciplinary teams, addressing real-life problems and aligning with SDGs.
- Trained 55 VJ Public School teachers in a one-day Design Sensitization session (June 2018).
- Facilitated a three-day Certification Course in Design Thinking for 188 students, delivered by industry experts (March 2018).
- Organized a three-day "Design Appreciation" course by Mr. Jogendra Panghaal, an international faculty at IICD, Jaipur, attended by over 50 students (September 2017).
- Conducted 6-hour Orientation Sessions on Design Sensitization for 200 faculty members from various departments.

Success Stories:

- Design thinking in the curriculum has led to 4 successful start-ups.
- Design thinking projects (III Year) carried out by student teams led to societal Impact.
- M. Tech student published 2 papers in reputed journals/conferences.
- CPADT was instrumental in writing and publication of a book on "**Post-Lockdown Restart Manual**", a Framework for prevention and Mitigation of COVID-19 in August 2020.
- CPADT, driven by an urge towards "**Transformation of the Self and Society**", designs its activities being mindful of the **17 Sustainable Development Goals** identified by the United Nations Organisation.

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED

To address the challenges faced and meet the needs effectively leading to improved outcomes and solutions, the following resources are required:

- Recruitment of qualified and experienced faculty with design specialization.
- Dedicated designed workspaces are essential for incubating design ideas and facilitating the development of innovative technical solutions.

7. NOTES

The CPADT is actively transforming itself into a Center of Social Impact, serving as a guiding light for engineers and managers striving to address societal challenges. In the near future, the center aims to establish itself as a credible professional body, offering guidance and support to academia, industry, and society as a whole.

BEST PRACTICE - 2

1. TITLE OF THE PRACTICE:

To create *collaborative framework for knowledge derived from industry with regard to Curriculum*

Design, Delivery, Evaluation, Research, Employability and Lifelong Learning.

2. OBJECTIVES OF THE PRACTICE:

Institute aims to bridge the gap between the institute and the industry and offer real time exposure on projects and other developments for the students and faculty. The possible interactions are industry support to research, technology development involving some exploratory work, academic intervention in solving industry problems, and laboratory support or utilization by industry.

VNR VJIET to achieve its vision of becoming world class university stated one of its mission statement - *“To involve students and faculty in innovative research projects linked with **industry**, academic and research Institutions in India and abroad”* speaks Institute’s priority on this initiative.

The main objectives of IIP are listed as below:

- Constitution of IIC (Industry Institute Interaction Cell) for creating synergetic partnership with industries.
- Participation of industry in the curriculum design/academic programs /courses and in the delivery of the course contents
- Signing of Memoranda of Understanding (MoU) with industries for mutual areas of interest
- Providing solutions to the challenges faced by specific industries.
- Encouraging Industrial Research Consultancy
- Attracting industry supported laboratories in the Departments.
- Establishment of theme-based Research laboratories to cater to the needs of research problems faced by the industry.
- Establishment of start-up culture and incubate the ideas in collaboration with industry inputs.
- Facilitating internships and placements by establishing partnerships with companies, maintaining a database of job openings, and setting up relevant jobs
- Professional consultancy by the faculty to industries.
- Appointment of **Adjunct Professors** and **Professors of Practice** from the industry.
- Fostering an entrepreneurial mindset and culture by organizing workshops, seminars, and events that motivate students to explore entrepreneurship as a viable career option but also providing support and resources for aspiring entrepreneurs and promoting entrepreneurial activities by the industry.

3. THE CONTEXT:

The trends in the technology are evolving at an accelerating speed and there is a growing skills gap between academia and industry in terms of research and employability skills of the graduates. This is a big challenge for the academia and industry and all stakeholders must work together to address.

VNRVJIET being in the heart of the city, there is a great possibility of the development of such symbiotic relationship by careful understanding of the industry needs such as relevant R&D, cost effectiveness, time bound programmes, technology upgradation etc. by the Institute and, in turn, understanding the capabilities and limitations of the institute by the industry.

4. THE PRACTICE:

The Industry Institute Interaction Cell (IIIC) is established, and the Research Advisory Council is constituted at Institute level with domain related industry experts.

- Relevant **Industry experts** are the **members of Boards of Studies** as approved by the Head of the Institute. Feedback is also collected from the industry experts (apart from BoS members) on the curriculum of the respective academic programs.
- **Industry experts as external examiners** in the UG, PG project evaluation and in the Doctoral Research Committee for the review of Ph.D. scholar's progress.
- **Industry designed academic program:** UG Program, B.Tech - Computer Science and Business Systems (CSBS) is designed and the curriculum is framed by TCS (Tata Consultancy Services).
- **Industry designed courses:** Companies like TCS, Cognizant, PEBS Pennar Industries have designed the elective courses.
- **Courses delivered by Industry experts:** Experts are invited to deliver course contents in core/professional elective courses.
- **Certification courses:** Every department in collaboration with Industry organizes certification programs like Full stack, Mean stack, web technologies, advanced coding skills, domain specific trainings like Project Management, to enhance the skill set required for possible employment in specific Industry.
- **Industry MoUs :** Departments partners with the industry to sign MoUs with the Institute. Total of 69 MoUs are signed for possible collaboration in terms of Internships, field/site visits, hands on training, employability opportunities and in faculty research.
- **Industry Supported Laboratories:** 4 Industries like BLUE STAR, National Instruments, Keerthi Industries, unplatform, have supported equipment /laboratories in Mechanical Engineering, Electronics and Instrumentation Engineering, Civil Engineering departments.
- **Entrepreneur Development (ED Cell) :** It plays a vital role in nurturing and supporting the entrepreneurial aspirations of students. It provides them with the necessary resources, skills and guidance to explore and pursue entrepreneurial ventures thus contributing to the development of a vibrant and dynamic start-up ecosystem within the college and beyond.
- **ECFICIO :** It provides a platform for students to showcase their entrepreneurial ideas, learn from industry experts, network with like-minded individuals and gain valuable insights and experiences.
- **My Big Idea :** An Investor pitching and funding competition is organized by the ED Cell. This competition provides students with the opportunity to present their business ideas or start-up ventures to a panel of investors or judges. This competition aims to simulate real-world investment scenarios and offer students a chance to secure financial support for their entrepreneurial endeavours.
- **Course on Entrepreneurship in the Curriculum:** VNRVJIET is well on its way to creating thinkers of the future. In this regard, an open elective on **Entrepreneurship** is also offered to the students which focusses on developing skills in students to generate business ideas, helping them

convert ideas into opportunities, equipping them with the process of evaluating business opportunities and helping them analyze business models.

- Curriculum offers a Minor Degree in “**Innovation and Entrepreneurship**” with 18 additional credits.

5. EVIDENCE OF SUCCESS:

All the Departments have experts from Industry as Members of the Board of Studies. These members have been providing their valuable inputs in the curriculum Design. Apart from this, feedback on the curriculum revision/design is collected from the specific domain industry experts on the inclusion of latest technologies and skills.

1. **15 Industry experts** are serving as **members of Boards of Studies** in various departments.
2. TCS designed academic program, **B.Tech Computer Science and Business Systems(CSBS)** first batch students have successfully graduated in the year 2023 with Graduate Outcome of 93.93% pass percentage and 86.4 % placements with an average salary of 11.7 lacs with highest salary of 44.15 lacs per annum .
3. About 50 courses are designed by industry and are offered to students.
4. Participation of Industry Experts in academic development of the Department (as DDC members) yielded improvement in the laboratory research facilities and collaborations.
5. Teaching learning pedagogy WIT & WIL™ (Why am I Teaching -What I am Teaching; Why am I Learning -What I am Learning) scenarios of all the courses across the programs are endorsed by relevant Industry experts.
6. A total 4537 number of Industry Oriented Mini projects are done by the students in the assessment period.
7. Total 8 industrial experts are involved in curriculum delivery and mentoring the faculty in research guidance from INAE-DVP scheme, AICTE -DCP, adjunct professor schemes
8. 219 number of guest lectures are delivered by industry experts in the assessment period
9. An amount of Rs. 144.47 lacs is generated from the industrial consultancy in the assessment period
10. VNRVJIET’s emphasis on Entrepreneurship and Innovation is evident from the establishment of VJ Hub, a Section 8 company registered in 2017 under the Companies Act (2013), India, located on the campus itself. VJ Hub offers pre-incubation, virtual incubation, and co-incubation support to start-up and is a part of the regional network of incubators, Telangana Incubators and Enablers Network.
11. Number of students opted for **Entrepreneurship** course as open elective are 1529 in the assessment period.
12. 4 start-ups are graduated from VJ Hub, some of which were founded by students, alumni, and faculty members of VNRVJIET.
13. Students won National / International Awards in Hackathons and Design Contest for solving industry problems.
14. Many National / International conferences / workshops are conducted in collaboration with industry experts for knowledge transfer.

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED

Commonality of goals among the academic and industry researchers need to be aligned with the expected outcome from the problem statement from both academia and industry.

Dedicated secretarial assistance, including computer assistance is required to work with various activities related to linkages, in order to avoid delays in the completion of research studies.

File Description	Document
Best practices in the Institutional web site	View Document

7.3 Institutional Distinctiveness

7.3.1

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

Response:

VNRVJIET is deeply committed to achieve *Sustainable Development through its Emphasis on Quality Education*: “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (SDG-4.0)”. (Source: <https://sdgs.un.org/goals/goal4>). The institution's vision, policies, strategies, and action plans are all geared towards embedding sustainable development principles into the fabric of education.

VNRVJIET embraces a philosophy dedicated to serving society and continually reinventing itself to meet evolving needs. With an integrated approach encompassing teaching, research, innovation, and extension activities, the institution's distinctiveness lies in its philosophy of "**Education Process Re-engineering (EPR)/ VJ Spectral Pyramid**.":

1. Enrichment of Curricular Aspects
2. Strengthening Teaching–Learning
3. Enhancing Evaluation Process
4. Promoting Research and Innovations
5. Focusing on Students Progression
6. Promoting Values and Social Responsibilities

1. Enrichment of Curricular Aspects:

In the pursuit of Quality Education, VNRVJIET places a strong emphasis on the enrichment of curricular aspects, ensuring that the educational content is comprehensive, relevant, and aligned with industry requirements to prepare global graduates. The following initiatives and provisions are implemented to

ensure quality learning experiences for students:

- Regular curriculum revisions, driven by industry needs and stakeholder feedback, with a specific focus on sustainable development.
- Encompassing **NEP initiatives** in R22 Curriculum
- Introduction of **Minor Degrees** in Computer Science allied streams and Innovation and Entrepreneurship from 2021
- Introduction of **open elective tracks** in emerging technologies.
- **General tracks** that enhance employability by focusing on industry-relevant skills.
- Integration of design courses that promote creative problem-solving through experiential learning approaches.
- Inclusion of mandatory **value-added courses**.

2.Strengthening Teaching-Learning:

In pursuit of Quality Education through a robust teaching-learning process at VNRVJIET, the following initiatives are considered integral to achieve this goal:

- Annual academic audits
- Implementation of a well-defined induction program for both students and staff
- Conducting diagnostic tests to analyze training needs and provide mentoring and training support accordingly.
- Incorporation of project-based learning, assigning weightage to course-based projects during Continuous Internal Evaluation (CIE).
- Encouragement of self-learning through MOOCs and credit transfer
- Emphasis on hands-on training utilizing modern tools and technologies, providing practical skills and real-world application opportunities.
- Organization of awareness workshops and seminars to instill a sense of responsibility towards sustainability and environmental consciousness.
- Facilitation of learning through active participation in technical fests, paper presentations, hackathons, coding contests, etc., fostering creativity, innovation, and collaboration among students.

Capacity Building Initiatives to Empower the Faculty:

To achieve the goal of Quality Education through capacity building initiatives, VNRVJIET implements the following action points for faculty development:

- Sponsorship of faculty members to attend workshops and conferences
- Encouragement and support for faculty members to pursue higher qualifications by sponsoring them for higher learning programs through the QIP.
- Promotion of continuous learning through online platforms to acquire new knowledge and skills in emerging technologies and teaching methodologies.
- Training and equipping faculty members with sustainable pedagogies.
- Encouragement of faculty members to engage in basic and applied research.

Gender equity

The institution, implements the following action points to achieve the goal of Quality Education through gender equity:

- Integration of gender sensitization as a dedicated component in the curriculum.
- Promotion of gender equity in key roles within the institution, ensuring equal opportunities and representation for all genders.
- Organizing awareness campaigns, workshops, and seminars.

3. Strengthen the Assessment and Evaluation Process:

The following action points help strengthen the assessment and evaluation process for achieving the goal of Quality Education:

- Automation of the examination section to streamline and expedite the assessment process.
- Implementation of continuous internal assessments.
- Ensuring transparency in the evaluation process, providing clear criteria and feedback to students.
- Establishing provisions for addressing grievances and allowing students to challenge evaluation results if necessary.
- Implementing anti-plagiarism checks, design evaluation patterns with Bloom's Taxonomy and course outcomes
- Regularly monitoring and analyzing students' performance in terms of outcome attainment, enabling targeted interventions and improvements in the teaching-learning process.

4. Promoting Research, Innovation, and Entrepreneurship:

VNRVJIET also actively promotes research and innovation to explore new frontiers, develop critical research skills, and contribute to advancements in various disciplines and to promote “make in India” through start-up culture.

Research:

- Establishment of research centers in each department
- Encouragement and support for faculty and students to engage in high-quality research by providing seed money
- Research Incentives to faculty

Innovation and Entrepreneurship:

- Provision of a platform for business start-ups to develop their ideas into commercially viable products.
- Facilitation of innovative project ideas through the Weekend Labs.
- Establishment of VJHUB as an incubation center, offering seed funding and infrastructure support.
- Engagement of the Entrepreneurship Development (ED) Cell to inspire and nurture the spirit of innovation and entrepreneurship

5. Focus on Student Progression

VNRVJIET emphasize the development of a well-rounded personality with a global vision, achieved through active participation in co-curricular activities (CCA) and extra-curricular activities (ECA) with 35 active student chapters and clubs

- Mentoring Training and Placement (MTP) center & Competency Development Centre to offer structured career guidance, personal counselling, training support to students and skill development.

6. Foster Values of Sustainability and Social Responsibility

VNRVJIET integrates sustainability and social responsibility into its educational framework, fostering values and practices:

- Maintaining an environmentally friendly campus by implementing energy conservation measures.
- Developing and using an institute sustainability dashboard.
- Promoting awareness about employment opportunities, cyber security, and solutions for pollution problems among students and staff.
- Conducting *outreach activities* such as anti-drugs drives, volunteer teaching, blood donation and health camps, surveys, Haritha haram, Swachh Bharat, and Unnat Bharat Abhiyan to contribute to social empowerment.

Few achievements of Excellence in Education are:

- UGC – **College with Potential for Excellence** status
- UGC Autonomous Status (2018-2019 to 2027-2028)
- Global Education Summit- Innovation by Engineering Institute
- NAAC Accredited (A++ with 3.73 CGPA)
- QS I-GAUGE - Diamond Rating & E-LEAD Certificate
- ISO 9001:2015 Certified.
- Received grants worth ₹18.00 cores from various funding agencies.
- ARIIA 2021-Band "PERFORMER" under the category "Colleges/Institutes (Private / Self-Financed) (Technical)"
- ISTE- Best Private Engineering College (47th ISTE National Annual Convention)
- ISTE Best Chapter Award
- 24 Patents are Granted, 85 patents published; 20 copyrights; 7 trademarks and 17 Differentiators.
- SIRO Recognition by Govt. of India.
- 15 Start-Ups are incubated.
- Received Platinum rating in the AICTE-CII Survey 2020.
- Received NPTEL "AA" rating based on performance in NPTEL online certification.
- Korea International Women's Invention Expo- GOLD Prize
- Tutors Pride Ideal Teaching Award- Dr. C.D.Naidu, Technological Principal of the Year

In conclusion, VNRVJIET's commitment to the UN SDG 4 of Quality Education is reflected in its comprehensive roadmap and practice for sustainable development.

File Description	Document
Any other relevant information	View Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information :

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNRVJIET) was established in the year 1995 by the Vignana Jyothi Society as a not-for-profit organization. The Institute is established with the permission of AICTE and State Govt. Institute's accomplishments as on date includes:

- 14 UG programmes, 13 PG programmes and Ph. D programmes through JNTUH, AICTE – NDF.
- Over 480 faculty members out of which, 221 faculty with Ph.D. qualification and 184 faculty pursuing Ph.D.
- Autonomous under UGC since 2012, accorded extension of the status for a period of 10 years (2018-'19 through 2027-'28).
- Recognized under Section 2(f) and 12(B) of UGC Act, 1956.
- 8 UG and 4 PG Courses are accredited by National Board of Accreditation (NBA). B.Tech Civil Engineering & EEE are accredited for 6 years by NBA.
- Accredited by NAAC with 'A++' Grade under the Revised Accreditation Framework, with CGPA 3.73 out of 4.00 in Cycle-II.
- Recognized as a Mentoring Institute under the UGC "PARAMARSH" scheme and AICTE "MARGDARSHAN" scheme
- NIRF-2023: 101-150 Rank band in Engineering.
- Awarded with QS I-Gauge Diamond overall rating and E-Lead certified Institute
- ISO 9001:2015 Certified.
- Received grants worth ₹18.00 crores from various funding agencies.
- ARIIA 2021-Band "PERFORMER" under the category "Colleges/Institutes (Private / Self-Financed) (Technical)"
- 24 Patents are Granted, 85 patents published; 20 copyrights; 7 trademarks and 17 Differentiators.
- 2657 publications in various journals during last 5 years, with 39 h-index in Scopus and 27 h-index in Web of Science
- SIRO Recognition by Govt. of India.
- A wholesome Innovation and Incubation Ecosystem comprising of an Entrepreneurship Development (ED) Cell, Industry-Institute Interaction Cell (IIIC), Competency Development Centre (CDC), Centre for Presenting and Design Thinking (CPADT), Research and Consultancy Centre (RCC), an Institute Innovation Council (IIC), and the in-house incubator, VJ Foundation for Entrepreneurial Excellence (VJ Hub).
- 15 Start-Ups are incubated from VJ Hub till date.
- Received Platinum rating in the AICTE-CII Survey 2020.
- Received NPTEL "AA" rating based on performance in NPTEL online certification, ranked 1st in Telangana and 18th among Top 100 Local Chapters nationwide.
- 15,987 Alumni registered members and Chapters at Hyderabad • Bangalore • Chennai • USA • UK
- Highlights of 2022 Batch Placements
 - 31 students with > Rs.30.00 Lacs per Annum
 - 146 students with Rs. 10.00 to Rs. 30.00 Lacs per Annum
 - 498 students with Rs. 6.00 to Rs. 10.00 Lacs per Annum
 - Average Salary: Rs. 7.67 Lacs per Annum

- Total number of Placements is 2420 with multiple offers

Concluding Remarks :

VNRVJIET has demonstrated a strong commitment by aligning its academic programmes with the needs of the industry and the nation. The adoption of learner centric pedagogies and academic flexibility created with the multi-disciplinary approach to education, created an enriching environment allowing the students to personalize their education path. VNRVJIET's transparent system of evaluation has earned recognition and appreciation. This transparency fosters a sense of trust and confidence in the evaluation process.

VNRVJIET's focus on building state of the art facilities and nurturing student talents creates a conducive learning environment that supports holistic development of students by engaging multidisciplinary research, innovation, and practical application in real world scenarios. The infrastructure at the institute supports ICT based Teaching-Learning, Research, Consultancy, Innovations and Startups.

The faculty and staff dedication towards Teaching Learning, Research, Innovation and Extension activities is visible in all its achievements. VNRVJIET has garnered a significant number of awards and honors further affirming its commitment to academic and research excellence. The increase in the number of Ph.D faculty has increased its research capabilities and enhanced the expertise to mentor students in research endeavors. The significant number of research projects, patents, high-quality publications in Scopus, Web of Science demonstrates the research capability of the faculty.

VNRVJIET established an excellent rapport with the surrounding community emphasizing its commitment to address the local needs, state and the nation through teaching, research, and extension activities. Thereby fostering technological and socio-economic development to society.

The institution exposes the students to multiple dimensions of learning paths. Students are provided with avenues for self learning, experiential and participatory learning. Students are engaged in multiple cocurricular, extracurricular and extension activities to make them ready to real world environment. Institution believes that implementing NEP-2020 creates opportunities for student community to be prepared for Industry 4.0 requirements and develop an emphatical and sustainable society.

The participatory and decentralized system of management at VNRVJIET instils a sense of belongingness and ownership among the stakeholders. The participative management empowers individuals and ensures collective efforts of the stakeholders towards institute's success and growth. VNRVJIET is resolute in its commitment to enhance its contribution to the state and the nation and create a positive impact on society through Engineering Education.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.2	<p>Percentage of Programmes where syllabus revision was carried out during the last five years.</p> <p>1.1.2.1. Number of all Programmes offered by the institution during the last five years. Answer before DVV Verification : 27 Answer after DVV Verification: 27</p> <p>1.1.2.2. How many Programmes were revised out of total number of Programmes offered during the last five years Answer before DVV Verification : 27</p>																				
1.2.1	<p>Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.</p> <p>1.2.1.1. How many new courses are introduced within the last five years Answer before DVV Verification : 397 Answer after DVV Verification: 397</p> <p>1.2.1.2. Number of courses offered by the institution across all programmes during the last five years. Answer before DVV Verification : 1150</p>																				
1.3.2	<p>Number of value-added courses for imparting transferable and life skills offered during last five years.</p> <p>1.3.2.1. How many new value-added courses are added within the last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>78</td> <td>66</td> <td>35</td> <td>79</td> <td>64</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>47</td> <td>53</td> <td>24</td> <td>60</td> <td>64</td> </tr> </tbody> </table> <p>Remark : Values updated as per attachment</p>	2021-22	2020-21	2019-20	2018-19	2017-18	78	66	35	79	64	2021-22	2020-21	2019-20	2018-19	2017-18	47	53	24	60	64
2021-22	2020-21	2019-20	2018-19	2017-18																	
78	66	35	79	64																	
2021-22	2020-21	2019-20	2018-19	2017-18																	
47	53	24	60	64																	
1.3.3	<p>Average Percentage of students enrolled in the courses under 1.3.2 above.</p> <p>1.3.3.1. Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>6228</td> <td>5846</td> <td>4159</td> <td>4573</td> <td>3535</td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18	6228	5846	4159	4573	3535										
2021-22	2020-21	2019-20	2018-19	2017-18																	
6228	5846	4159	4573	3535																	

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
6212	5732	4090	4695	3547

1.3.4 **Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)**

1.3.4.1. **Number of students undertaking field projects / internships / student projects**

Answer before DVV Verification : 5784

Answer after DVV Verification: 5766

2.1.2 **Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)**

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
677	600	508	466	475

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
677	600	508	466	475

2.3.3 **Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)**

2.3.3.1. **Number of mentors ?????????????? ???????**

Answer before DVV Verification : 336

Answer after DVV Verification: 336

2.4.3 **Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)**

2.4.3.1. **Total experience of full-time teachers**

Answer before DVV Verification : 3325

Answer after DVV Verification: 3282

3.1.3 **Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years**

3.1.3.1. **The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
35	10	16	17	10

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
10	16	23	8	9

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
33.61	115.10	91.64	113.27	35.21

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
33.61	108.1	91.64	113.27	28.43

3.3.2 **Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.**

3.3.2.1. **Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
28	24	31	33	42

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
28	24	31	31	42

3.4.3 **Number of research papers per teachers in the Journals notified on UGC website during the last five years**

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
417	304	306	232	245

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
291	205	244	144	117

Remark : Values updated as per attachment

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
339	302	212	137	163

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
339	302	212	137	163

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

3.5.1.1. Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
50.964	34.250	19.795	37.805	1.671

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
50.964	34.250	19.795	37.805	1.671

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

3.5.2.1. Total amount spent on developing facilities, training teachers and staff for

undertaking consultancy during the last five years (INR in Lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
75.11823	72.3851	94.34564	19.727	8.83693

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
77.73	70.34	74.18	23.74	8.837

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
23	4	9	27	4

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	1	1	0

Remark : value updated accordingly as per metric requirement

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

3.6.3.1. Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
45	29	45	36	28

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
20	16	20	26	20

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

3.6.4.1. Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
5971	3522	4737	4763	4601

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
3226	2097	3015	3064	3838

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

3.7.1.1. Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
806	358	142	164	139

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
251	125	80	65	45

3.7.2 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)

3.7.2.1. Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
22	6	13	14	14

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
22	6	13	14	14

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

4.1.4.1. Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4553.99	879.87	615.19	365.74	2990.77

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
4553.99	879.87	615.19	365.74	2990.77

4.3.4 Institution has the following Facilities for e-content development

1. **Media centre**
2. **Audio visual centre**
3. **Lecture Capturing System(LCS)**
4. **Mixing equipments and softwares for editing**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: A. All of the above

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

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)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
2181.1	2545.14	1860.79	2133.64	2108.63

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
148.24	73.66	84.53	278.67	255.82

Remark : Values have been updated as per Expenses incurred on Repair and maintenance

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

5.1.2.1. Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
360	269	207	176	192

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
192	176	207	269	360

5.3.1 **Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/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 won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
81	14	42	67	47

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
81	14	42	67	47

5.3.3 **Average number of sports and cultural events / competitions organised by the institution per year**

5.3.3.1. **Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
71	13	76	49	36

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
24	8	24	25	14

Remark : Updated as per attachment

6.5.3 **Quality assurance initiatives of the institution include:**

	<ol style="list-style-type: none"> Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification) <p>Answer before DVV Verification : All of the above Answer After DVV Verification: All of the above</p>
7.1.7	<p>The Institution has disabled-friendly, barrier free environment</p> <ol style="list-style-type: none"> Built environment with ramps/lifts for easy access to classrooms. Divyangjan friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading <p>Answer before DVV Verification : A. Any 4 or all of the above Answer After DVV Verification: B. 3 of the above</p>
7.1.10	<p>The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.</p> <ol style="list-style-type: none"> The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized <p>Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above</p>

2.Extended Profile Deviations

ID	Extended Questions										
1.2	<p>Number of outgoing / final year students year-wise during last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>1325</td> <td>1324</td> <td>991</td> <td>1216</td> <td>1176</td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18	1325	1324	991	1216	1176
2021-22	2020-21	2019-20	2018-19	2017-18							
1325	1324	991	1216	1176							
2.1	<p>Number of courses in all programs year-wise during last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18					
2021-22	2020-21	2019-20	2018-19	2017-18							

935	868	758	687	742
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Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
935	868	758	687	742

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
362	359	340	335	332

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
360	357	338	333	330

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
693	609	525	504	504

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
693	609	525	504	504

3.4 Total number of computers in the campus for academic purpose

Answer before DVV Verification : 2770

Answer after DVV Verification : 2770

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6778.62	3469.20	2514.40	2542.93	5148.38

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
5867.64	2820.30	1810.08	1821.63	4398.81