

FOR 2nd CYCLE OF ACCREDITATION

NRI INSTITUTE OF TECHNOLOGY

POTHAVARAPPADU (V), AGIRIPALLI (M), KRISHNA DISTRICT 521212 www.nriit.edu.in

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

NRI Institute of Technology (NRIIT) was founded in 2008 by Sri Durga Malleswari Educational Society headed by Dr. R. Venkata Rao at Pothavarappadu village, Agiripalli Mandal, Krishna District, Andhra Pradesh. It is spread across a vast area of 20 acres surrounded by lush greenery of mango groves representing a pleasant environment. The incredible aspect of NRIIT is the state-of-the-art infrastructure provided for both students and faculty in the rural area. The buildings of NRIIT are adorned with fully enhanced and equipped laboratories utilizing the built area of 4,14,000 sft for academic activities, hostels and canteens. The institute is approved by the All India Council for Technical Education (AICTE), New Delhi, permitted by the Government of A.P., and is permanently affiliated to Jawaharlal Nehru Technological University, Kakinada (JNTUK), Andhra Pradesh.

The institution had gone for the first cycle of NAAC accreditation in the year 2017 and was rated as 'A' grade with CGPA of 3.21. Subsequently, the institute received the Autonomous status in the year 2018. The institute offers various undergraduate, postgraduate and research programs in Engineering and MBA. Three Programs namely ECE, CSE & EEE are NBA accredited. Two more programs namely IT and Mechanical engineering completed NBA visit during 29-31 December 2023 and the result is awaited. The college is an ISO 9001: 2015 certified.

The following are some of the achievements of the Institution:

- Academic Excellence Award by Academic Insights.
- Digii 100 award by India Habitat Centre, New Delhi.
- Excellence in Outcome Based Education by OBE Rankings 2023.
- Excellence in Industry-Academia Collaboration Award by Collegedunia.
- Top T-School 2023 by Dataquest.
- HCL Top Achiever Award
- Virtusa Campus Centre of Excellence and preferred partner.
- ATAL Ranking-BAND PERFORMER, MHRD'S Innovation Cell, Govt. of India.
- JNTUK Permanent affiliation.
- UGC 2 (f) & UGC 12 (B)
- Autonomous Status.
- Asia Pacific HRM Congress Award.
- NAAC with 'A' Grade.
- Ranked as A+ best engineering college by EET CRS.
- Rated AA by Career 360.
- Research Centers for CSE, ECE, MECH.
- Ranked among top 200 potential engineering colleges of country by Silicon India.

Vision

To produce Professionally Excellent, Knowledgeable, Globally Competitive and Socially responsible Engineers and Entrepreneurs.

Mission

- M1: Providing quality education through state-of-art Infrastructure, Laboratories, and Committed Staff.
- M2: Establishing a continuous Industry-Institute Interaction, Participation and Collaboration to contribute Skilled Engineers.
- M3: Involving Faculty members and Students in Research and Development to become globally competitive and for the betterment of society.
- M4: Developing Human values, Social values, Entrepreneurship skills and Professional Ethics among the Technocrats.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- A well-defined Vision and Mission with a strong institutional governance and leadership.
- Highly qualified, experienced and dedicated Teaching faculty and Supporting Staff.
- State-of-the art infrastructure in a large built-up area.
- Smart and Gallery Classrooms with air-conditioning.
- Strong working relationship with the corporate world in terms of technical and managerial assistance.
- Safe, secure and harmonious campus with aesthetically pleasing green sprawling environment for pleasant learning.
- Strong mechanism to carry out social outreach programs and Gender sensitization.
- A Resilient Training and Placement Cell with the highest number of placements and pay packages.

Institutional Weakness

- Revenue generation through consultation and funded projects.
- Limited number of students and faculty from other states.
- Limited public funding for infrastructure development.
- Lack of enthusiasm among meritorious students to pursue higher studies and to choose civil services.

Institutional Opportunity

- Scope for developing various systems for agriculture with the help of technologies like IOT and Drone.
- Academia-Industry joint research and product development.
- Preparing students to secure placements in the fast growing new capital region.
- As the modern technology is sprouting up on a regular basis, students are encouraged to pursue NPTEL courses wherein they can have more exposure in the wide-domain of the knowledge.
- Development of online courses and programs.

Institutional Challenge

- Resource mobilization sustainable growth.
- Improving the national and the international rankings.

- Recruitment of additional faculty with a sound knowledge and skills in upcoming technologies.
- Collaboration with foreign universities to start new programs.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

NRIIT has a well-defined curriculum development as per AICTE/JNTUK norms. It is revising the curriculum once in three years to accommodate the latest developments in engineering and technology. The institution has well defined Vision and Mission statements, which are the key indicators for development of the curriculum. Each department defined Vision and Mission statements in line with the institute Vision and Mission, from where Program Educational Objectives have been carefully crafted to form the basis for the graduates adopt themselves to local, regional, national and global environments. POs given by NBA and PSO defined by the institute decide on COs to be required. The syllabus content, Teaching – learning- assessment – evaluation focus on attainment of COs forms the basis for attainment of POs and thus PEOs. The curriculum designed is well balanced while each component has its share.

The institute emphasizes on the academic flexibility and regularly updates its curriculum to meet the demands of industry and society and involves all stakeholders in the process. It supports value-added courses, open electives and interdisciplinary options. The institute focuses on student-centered learning that includes ICT (Information and Communication Technology) tools, MOOCs, internships, projects and fieldwork. The curriculum comprises of various activities such as seminars/workshops, guest lectures, industrial visits and the organization of real-world projects for students to enhance their knowledge. Feedback from alumni, employers, parents and society is regularly sought to encourage continuous improvement of the curriculum.

Summary Report:

- Percentage of new courses introduced out of the total number of courses: 71.79
- Number of new courses introduced during the last five years: 705
- Number of courses offered by the institution across all Programmes (without repeat count): 982
- Number of certificate/value added courses offered by the institutions and online courses of MOOCs, SWAYAM / NPTEL during the last five years: 226
- Percentage of programmes that have components of field projects / research projects / internships: 100
- Programmes that have components of field projects / research projects / internships: 13

Teaching-learning and Evaluation

NRIIT has implemented OBE since the academic year 2015 immediately after NBA of India became a member of Washington Accord in a view of transforming the education from teacher centric to student centric. Since then the Teaching – Learning – Assessment – Evaluation system is transformed to suit the requirement of Outcome Based Education (OBE). Faculty members are well trained in new teaching methodologies by inviting the experts from reputed institutions who are experts in OBE.

To cater the needs of students with various learning capacities, teachers were well trained in cognitive, affirmative and psychometric skills.

Use of ICT tools is increased steadily and transformed the class rooms in to digital class rooms by equipping them with LCD projectors, internet connection and a recent addition of digital boards for effective teaching – learning system.

NRIIT recruitment policy is to choose the best from the market to deliver the best for the betterment of students and better placement opportunities.Regular feed back is taken from students on teaching – learning process followed by immediate corrective actions to improve the effectiveness. Teaching – learning – assessment process is well organized by meticulously planning the semester and releasing the academic calendar much in advance.

In the last five years:

- Enrolment percentage: 81.52
- Percentage of seats filled against reserved categories: 90.43
- Student Full time teacher ratio: 19.4
- Percentage of full time teachers appointed against the number of sanctioned posts: 100
- Percentage of full time teachers with Ph.D.: 69.06
- Number of full time teachers with Ph.D: 212
- Average teaching experience of full time teachers :6.06
- Total teaching experience of full-time teachers as of latest completed academic year: 1279
- Percentage of full time teachers working in the institution: 53.33
- Number of full time teachers worked in the institution throughout: 104
- Average number of days from the date of last semester-end/ yearend examination till the last date of declaration of results: 20.2
- Percentage of student complaints/grievances against total appeared: 0.97
- Previous year pass percentage of students (excluding backlog students): 83.77

Research, Innovations and Extension

At NRIIT research activities are steadily growing over the past five years and seen remarkable growth in a span of just 15 years of its existence. Its eco system is such that majority of the faculty members joining with M. Tech qualification are able to register PhD and complete in stipulated time. It promotes research among faculty by providing required infrastructure, facilities, seed money and administrative support. JNTUK, Kakinada, recognized CSE, ECE and MEC departments as authorised research centres. There are 12 eligible guides out which 6 are guiding the scholars. There are 52 faculty members who have completed their doctorates in different areas of their studies. The academic research work of the institution made a continuous leap, that in the last five years more than 785 international journal publications, 22 books were published. NRIIT has a well-defined research policy and code of research ethics. Detailed statistics of various activities are given below:

In the last five years

- The institution provides seed money to its teachers for research: 21.59
- Percentage of teachers receiving national/international fellowship/financial support: 12.05
- Teachers received national/international fellowship /financial support by various agencies, for advanced studies / research; year-wise: 37

- Grants research funding received by the institution (INR in Lakhs): 43.33
- Number of research projects per teacher: 0.04
- Number of funded research projects: 13
- Percentage of teachers recognised as research guides as in the latest completed academic year: 5.69, 12 in number
- Number of candidates registered for Ph.D: 6, 0.5 per teacher
- Number of research papers published per teacher in the Journals as notified on UGC CARE list: 2.56
- Number of research papers in the Journals notified on UGC CARE list year wise: 785
- Number of books and chapters in edited volumes published per teacher: 0.07, Total Books/ Chapters edited: 22
- Revenue generated from consultancy and corporate training: 55.98
- Number of extension and outreach programs: 83
- Number of functional MoUs/linkages with institutions/ industries in India and abroad: 104

Infrastructure and Learning Resources

NRI Institute of Technology has a well-developed infrastructure that supports the teaching and learning process, research and innovation. Key facilities include:

- ICT enabled classrooms, well equipped laboratories.
- ICT enable computer laboratories with LED panel boards.
- ICT enabled seminar hall with a seating capacity of 400.
- Campus-wide High-speed internet connectivity with 500 mbps network connecting all departments with 1649 systems and 164 laptops with a LAN and WI-FI networks.
- CCTVs are installed at strategic points to monitor the campus activities.
- Power house installed with three Diesel Generators of ratings 500 kVA, two 125 kVA and solar power with an installed capacity of 200 kWp.
- Cafeteria, ATM, Store for Books & Stationery.
- Transport facilities include 60 buses for all students and staff to commute.
- The allocated area of Central library is 600 Sq. metres and a Seating Capacity of 150 and Collection of 23,514 books with 5918 titles, 20 Indian print journals and 10 International print journals are available. E-Journals such as, J GATE, DELNET, are subscribed.
- All computing labs are provided with LAN & Wi Fi facilities.
- Other supporting facilities like playground and gymnasium for girls & boys are provided within the campus.
- Facilities for both indoor and outdoor games to the students are provided. A spacious play ground is available for outdoor games like Cricket, Football, Volleyball, Basketball, Badminton etc. Facilities for playing indoor games like Table Tennis, Chess, Caroms etc. are accessible in the sports centre and Gym with the State -of -the- art equipment and facilities.
- Other amenities like uninterrupted electricity and mineral water supply are available.
- On campus, total hostel accommodation for 700 students (boys and girls separately) is available in well-furnished buildings.

In addition during last five years:

 Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise: 45.24

- Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise: 6.65
- Student Computer ratio (Data for the latest completed academic year): 2.48
- Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component: 39.31

Student Support and Progression

NRI Institute of Technology has a clearly defined student support system that ensures a positive learning experience for students. Counseling on personality and holistic development is regularly followed. Internship, training, entrepreneurship, student-clubs and other activities are constantly done to meet the needs of the students. Mentors identify talents and interests of the students and guide them appropriately. Students are steered towards a professional advancement through the Training and Placement Cell (T&P Cell). The Cell provides students with excellent pre-placement training in technical, communication and soft skills and prepares them for campus placements. It also provides in-house training and external training by the industry experts. They have the opportunity to pursue a career in public or private sector. In addition, students are encouraged to participate in various student groups, societies and cultural events. They are encouraged to showcase their skills in academics and extracurricular activities to ameliorate their creativity, leadership and organizational skills. The institute and its alumni are working together for the welfare of the students. The Evervigilant Anti-Ragging, Grievance Redressal Committee, Women Protection and Grievance Cell, IQAC are always striving to enhance students' standards.

Summary Report:

- 1. Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years: 87.1
- 2. Percentage of placement of outgoing students and students progressing to higher education during the last five years: 82.99
- 3. Percentage of students qualifying in state/ national/ international level examinations out of the graduated students during the last five years: 4.82
- 4. Number of awards/medals for outstanding performance in sports/cultural activities at University/state/national/international Level events during the last five years: 160
- 5. Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution through registered Alumni association: 51.39

Governance, Leadership and Management

The institution has a well-defined organizational structure and administrative rules. The responsibility of the educational institution and the board is to ensure good management and planning of the institution and its further development. The members of the Governing council actively participate in decision-making to maintain and improve the quality of the institution and education. The Institute and its administration are led by members of the Governing Council consisting of senior professors, university nomine, government nomine, other educationalists and industrialists, and the council recommends a five-year strategic plan aimed at realizing the Vision and the Mission of the Institution. The institution involves all stakeholders in the decision-making

process to develop guidelines, rules and regulations that support the smooth and orderly functioning of the institution. The Institution has several committees and sub-committees that regularly review and manage academic and administrative activities.

Academic Council members strive for optimal academic practices and adopt academic policies and procedures. Members of the Board of Studies frame and develop course curriculum suggesting pedagogical techniques accordingly. Faculty are encouraged to participate in faculty development programs, refresher courses, and seminars, and they are financially supported by giving on-duty, travel allowance, and registration fees among other things. Professional development programs are offered to teaching faculty, administrative and supporting staff. The IQAC cell looks after the development of quality system for conscious, consistent programmed action to improve the academic, administrative performance and standards. The institution has been participating regularly in the ranking of higher educational institutions with NIRF and ARIIA.

Summary Report:

- 1. Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fees of professional bodies during the last five years: 42.66
- 2. Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years: 60.99
- 3. Funds / Grants received from government bodies, non-government bodies, and philanthropists during the last five years (not covered in Criterion III and V): 20.91

Institutional Values and Best Practices

- NRIIT possesses a privileged right to promote higher education and to ensure Women's Empowerment through gender equity in education.
- Safe and secure environment is an inevitable pre-condition for quality education.
- The institute arranges regular counseling sessions for all the students. Each faculty is assigned with 20 students for regular mentoring through academics, attendance, gender and other personal issues and regularly keeps in contact with the parents of the mentees and appraises them on the performance and other issues.
- The institute sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties and responsibilities of citizens which enables them to transform as responsible citizens.
- NSS activities of our institution mitigate the socio-economic diversities and progress them towards leading to a tolerant and harmonious living.
- Ban on use of plastic
- Landscape with trees and plants.
- Pedestrian friendly pathways.
- Organizes bridge course classes and remedial programs for slow learners.
- Imparting Problem Solving Skills, Communication Skills, Technical Skills and Soft Skills to every

student.

- The Training and Placement cell organizes mock sessions for GD, HR Interview and Technical Interview. Our faculty members are utilized for the mock sessions.
- Students are encouraged to enroll for online courses from NPTEL.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	NRI INSTITUTE OF TECHNOLOGY
Address	Pothavarappadu (V), Agiripalli (M), Krishna District
City	VIJAYAWADA RURAL
State	Andhra Pradesh
Pin	521212
Website	www.nriit.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	C. NAGA BHASKAR	0866-2469665	8333882444	0866-246966 6	principal@nriit.edu .in
IQAC / CIQA coordinator	R. VIJAY KRISHNA	0866-2469683	8331942954	0866-246968 3	nri.iqac@gmail.co m

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	23-06-2008

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Date of grant of 'Autonomy' to the College by UGC | 10-07-2018

University to which the college is affiliated				
State	University name	Document		
Andhra Pradesh	Jawaharlal Nehru Technological University,Kakinada	View Document		

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	12-01-2015	View Document
12B of UGC	03-05-2018	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Recognition/Appr oval details Instit aution/Department programme Recognition/Appr oval, Month and year(dd-mm-yyyy) Remarks months Remarks					
AICTE	View Document	07-06-2023	12		

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

Location and Area of Campus					
Campus Type	Campus Area in Acres	Built up Area in sq.mts.			
Main campus area	Pothavarappadu (V), Agiripalli (M), Krishna District	Rural	20	38475.8	

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Comp uter Science And Enginee ring,CSE INDIAN LANGUAG E	48	Intermediate	English	60	50
UG	BTech,Comp uter Science And Enginee ring,ARTIFI CIAL INTEL LIGENCE AND MACHINE LEARNING	48	Intermediate	English	120	120
UG	BTech,Comp uter Science And Enginee ring,COMPU TER SCIENCE AND ENGI NEERING	48	Intermediate	English	180	180
UG	BTech,Comp uter Science And Enginee ring,CSE ARTIFICIA L INTELLIG ENCE AND MACHINE LEARNING	48	Intermediate	English	180	180
UG	BTech,Comp uter Science And Enginee ring,CSE DATA SCIENCE	48	Intermediate	English	120	120

UG	BTech,Electr onics And Co mmunication Engineering, ELECTRON ICS AND C OMMUNIC ATION ENG INEERING	48	Intermediate	English	180	180
UG	BTech,Electr ical And Electronics E ngineering,E LECTRICAL AND ELEC TRONICS E NGINEERIN G	48	Intermediate	English	60	55
UG	BTech,Infor mation Tech nology,INFO RMATION TECHNOLO GY	48	Intermediate	English	120	120
UG	BTech,Civil Engineering, CIVIL ENGI NEERING	48	Intermediate	English	60	7
UG	BTech,Mech anical Engine ering,MECH ANICAL EN GINEERING	48	Intermediate	English	120	2
PG	Mtech,Comp uter Science And Enginee ring,COMPU TER SCIENCE AND ENGI NEERING	24	Degree	English	18	13
PG	Mtech,Electr onics And Co mmunication	24	Degree	English	18	0

	Engineering, DIGITAL E LECTRONI CS AND CO MMUNICA TION SYSTEMS					
PG	Mtech,Electri cal And Electronics E ngineering,P OWER ELE CTRONICS AND DRIVES	24	Degree	English	18	3
PG	Mtech,Civil Engineering, STRUCTUR AL ENGINE ERING	24	Degree	English	24	4
PG	Mtech,Mech anical Engine ering,THER MAL ENGI NEERING	24	Degree	English	24	3
PG	MBA,Master Of Business Administrati on,GENERA L MANAGE MENT	24	Degree	English	60	60

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Assoc	Associate Professor			Assis	stant Pro	ofessor	
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	,			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/Soci ety or Other Authorized Bodies	37		63	63			111					
Recruited	30	7	0	37	43	20	0	63	67	44	0	111
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				51						
Recruited	29	22	0	51						
Yet to Recruit				0						

	Technical Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government				0						
Recruited	0	0	0	0						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				31						
Recruited	12	19	0	31						
Yet to Recruit				0						

Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	29	7	0	8	5	0	1	1	0	51	
M.Phil.	0	0	0	3	2	0	0	0	0	5	
PG	1	0	0	33	12	0	62	47	0	155	
UG	0	0	0	0	0	0	0	0	0	0	

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

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

Details of Visting/Guest Faculties							
Number of Visiting/Guest Faculty	Male	Female	Others	Total			
engaged with the college?	1	0	0	1			

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	46	0	0	0	46
	Female	39	0	0	0	39
	Others	0	0	0	0	0
PG	Male	660	0	0	0	660
	Female	437	0	0	0	437
	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	88	78	59	46			
	Female	27	62	77	63			
	Others	0	0	0	0			
ST	Male	3	7	6	1			
	Female	36	8	9	15			
	Others	0	0	0	0			
OBC	Male	280	207	187	136			
	Female	166	187	139	145			
	Others	0	0	0	0			
General	Male	232	190	195	148			
	Female	189	162	40	176			
	Others	0	0	0	0			
Others	Male	40	29	15	21			
	Female	121	38	87	73			
	Others	0	0	0	0			
Total		1182	968	814	824			

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineering	<u>View Document</u>
Computer Science And Engineering	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Information Technology	View Document
Master Of Business Administration	View Document
Mechanical Engineering	View Document

Institutional preparedness for NEP

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1. Multidisc	ınlınarv	/interdisc	ınlınarv
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NRI Institute of Technology has a focus on Multidisciplinary Education • To develop a strong infrastructure for multidisciplinary and interdisciplinary education • To create a variety of multidisciplinary subjects and "Open Electives" • Plans to launch new multidisciplinary programmes. • Students are encouraged to adopt a multidisciplinary approach to learning, creative thinking and critical analysis. • Efforts to develop into a "multidisciplinary institution" in the years to come • Measures are taken to strengthen the teachinglearning relationship to support interdisciplinary and multidisciplinary educational practices • Bridge courses and value-added courses to support interdisciplinary and multidisciplinary education • Flexible curriculum - structure to allow for original subject combinations that result in "multidisciplinary" and "interdisciplinary" programmes • Students are encouraged to take on multidisciplinary "real-world" problems for their project work NRIIT has already adopted a multidisciplinary course approach in the curriculum. Students are encouraged to complete five interdisciplinary elective courses over three semesters from other majors and advanced courses related to their course. The choices are in the third year of study - Semester-one as professional elective -1, in the third year of study- Semester two as professional electives -2 and in the fourth year of study- semester one as professional electives 3, 4, 5. NRI Institute of Technology is committed to providing its students

with an interdisciplinary education that prepares them to succeed in today's world. The institute implements several initiatives to achieve this goal, including developing new interdisciplinary programs, encouraging students to take an interdisciplinary approach to learning and strengthening the relationship between teaching and learning. NRIIT also strives to create a flexible curriculum structure that allows students to choose subjects that are most relevant to their interests and career goals.

2. Academic bank of credits (ABC):

• The institution is in favour of ABC and is waiting for JNTUK to implement it. • The institution will create a bank of transferable, interdisciplinary, and multidisciplinary credits under the NEP. • The institution will initiate an ABC in consultation with statutory bodies. • The institution will make necessary arrangements and amendments in the academic system to support ABC. • The institution is planning to have a dedicated system to promote effective management of ABC. • Efforts will be made to recognize, transfer and redeem credits gained by the students appropriately. • The institution is aware that HEIs with Grade A from NAAC are eligible to register in the ABC and it is working towards registering. • The institution will recognize credits and transcripts from other institutions as part of the consortium on the ABC. • Efforts will be made to allow students from different streams to take up courses in other disciplines, wherever applicable, with the help of bridge courses. • The institution will make necessary arrangements to support the integration of skills into a choice-based credit system by providing wide-ranging options for choosing courses from various LMS platforms. • The institution will adhere to the guidelines of UGC on the establishment and operation of ABC in higher education. • The institute will recognize the following in consultation with statutory bodies: 1. Credits earned through online platforms such as Swayam and Coursera. 2. Credits earned through activities such as NSS, NCC, sports, and fine arts. Overall, NRI Institute of Technology is committed to implementing ABC at the earliest. The institution believes that ABC benefits students by providing flexibility and choice in their education.

3. Skill development:

NRI Institute of Technology is committed to providing its students with the skills they need to

succeed in the workforce. The institute is taking a number of steps to achieve this goal, including skill content curriculum, tying up with government and industry initiatives and training programmes related to various skills. NRIIT is also working to create a culture of innovation and entrepreneurship among its students. • Taking up initiatives envisaged in NEP-2020 towards skill development for students. • Tied up with PMKVY to provide our students with various skills needed for various sectors. • Strengthen the curriculum with adequate skill development content. • Tie-up with State and Central government (APSSDC) initiatives to promote skill development. • Organizing regular training in various departments for specific related topics. • Procuring training infrastructure for the selected areas to provide skill development for the students. • Organizing skill development program and related activities that benefit the students in collaboration with industry for the 2nd and 3rd year students during the summer vacation. • Encouraging students to do internships.

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

NRI Institute of Technology is committed to promoting Indian Knowledge System, culture, and heritage among its students. The institute offers a variety of programs and initiatives to help students learn about and connect with their Indian roots. NRIIT also believes in teaching its students the importance of global thinking and state-of-the-art technological education. • Committed to upholding the value of Indian Knowledge System, Indian culture and heritage. • Yoga classes are regularly arranged. • Constitution of India is taught to disseminate the essentials of Indian values. • Started B. Tech (CSE-Telugu Medium) in the year 2021-2022. Faculty members are free to provide classroom delivery in bilingual mode (English and Telugu). • Promoting Indian languages and traditions through competitions organized during the Annual day celebrations. • Conducting all major Indian Festivals. • Organizes competitions such as essay writing, poetry, speech competition, folk song, folk dance and skit to encourage students to stay connected with their rich Indian culture and heritage.

5. Focus on Outcome based education (OBE):

In NRIIT, the Outcome-Based Education (OBE) has been facilitated and designed in line with the Vision and the Mission of the institute with COs, POs and PEOs since 2014. • OBE is a student-centric

pedagogical model that focuses on what is learned. • All programs and courses are designed in line with OBE principles. • OBE enables the assessment of students at cognitive levels namely Remembering, Understanding, Applying, Analysing, Evaluating and Creating. • NRIIT adopts various Experiential Learning practices and Participative Learning practices to promote OBE. Examples of Experiential Learning practices at NRIIT: • Practicals • Internships • Field Projects • Industry Visits Examples of Participative Learning practices at NRIIT: • Classroom Interaction • Peer Learning • Conferences/ Seminars/ Webinars • Use of Technology Stack (Google Classroom) • Club Activities Outcomes of OBE at NRIIT: • Clarity in teaching and learning goals • Flexibility in curriculum • Alignment with National Education Policy-2020 (NEP-2020) To prepare students to become global engineers, NRI Institute of Technology is committed to implementing OBE in accordance with NBA and Washington Accord.

6. Distance education/online education:

NRI Institute of Technology is committed to providing its students with access to high-quality education, regardless of their location or circumstances. The institute is constantly looking for new avenues to improve its online delivery system. NRIIT is also working to promote self-learning and to provide students with the flexibility to learn at their own pace. • Offered the courses online mode during Covid-19 through Microsoft Teams. • Promoting self -learning through NPTEL, SWAYAM, AICTE -PARAKH other certification elearning platforms. • Offering certain software training through online mode. • Organising regular Bridge-Courses for the newly- admitted students through online mode. • Arranging regular online remedial classes for the students who are Day-Scholars. • Updating digital infrastructure to support digital learning. • Strengthening existing e-learning platforms and encouraging content creation, digital repository, and dissemination. • Promoting the usage of ICT enabled tools in the teaching learning process. • Using Microsoft Teams as LMS and to apply the flipped classroom strategy. • Encouraging students to enrol in courses from MOOCs platforms. • Registered as a SWAYAM-NPTEL Local Chapter.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been The main goal of NRI Institute of Technology's set up in the College? Electoral Literacy Club is to educate the students about democratic rights, which include the motivation to vote in elections. In order to provide experience-based learning on the democratic framework, the ELC holds mock polling exercises, debates, essay writing contests, poster presentations, and other activities that raise understanding of the election procedures. The club organizes various activities on 25th January every year to celebrate National Voter's Day. The Institution has the ELC functional with the 2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and following office bearers Sl.No Name Designation whether the ELCs are functional? Whether the ELCs Functional Role 1 Mr. K. Raga Sai Assistant are representative in character? Professor ELC Coordinator 2 Mr. E. Srinivas Assistant Professor ELC Coordinator 3 Ms. P.Devi III B.Tech Student (Female) Student Representative 4 Mr. O. Bhagavath IV B.Tech Student (Male) Student Representative 3. What innovative programmes and initiatives Activities done by the ELC of NRIIT 1. To educate undertaken by the ELCs? These may include the local villagers (such as kanasanapalli, voluntary contribution by the students in electoral Pothavarappadu), our students take part in voter processes-participation in voter registration of awareness campaigns. 2. To use poster presentations students and communities where they come from, to raise awareness and spark enthusiasm among assisting district election administration in conduct of faculty and students. 3. To demonstrate the targeted poll, voter awareness campaigns, promotion of people about voter registration, the electoral process. 4. To make it easier for voters to become familiar ethical voting, enhancing participation of the under privileged sections of society especially transgender, with EVMs and VVPATs and to learn about their commercial sex workers, disabled persons, senior reliability and the integrity of the election process. 5. To assist the intended stakeholders in exercising their citizens, etc. right to vote in a self- assured, relaxed and morally upright way and in understanding the significance of their votes. 6. To make voter registration easier for the eligible members. 7. NRIIT has organized a Voting Awareness Campaign in association with the local revenue department on the premises of the institution on 29th November 2023 in which government officials including Mandal Thasildhar urged the students to speed up their registration as the voters. On this occasion, a short rally and a humanchain were formed. The students, in large numbers actively participated in the event. 4. Any socially relevant projects/initiatives taken by The ELC undertakes socially relevant projects

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.

pertaining to electoral matters, including awareness campaigns, content creation, and publications that showcase their role in promoting democratic values and voter involvement. 1. To ensure that the target audience exercises their right to vote in a self-assured, comfortable, and morally upright manner by teaching them the importance of voting. 2. To foster a culture of political engagement, increase ethical and informed voting, and adhere to the maxims "Every vote counts" and "No voter to be left behind."

- 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.
- NRIIT has organized a Three- Day Voter Enrollment & Sensitization Program (during 29,30 November and 01 of December, 2023) on its campus, which is an exclusive and first of its kind in the region. The institute, as a social responsibility to inculcate a democratic awareness among the students, encouraged the students to enroll themselves as Voters. The program has been organized in association with Systematic Voters' Education and Electoral Participation (SVEEP), 70-Nuzvid Assembly Constituency, Andhra Pradesh. • On the first day i.e.29/11/2023, a human-chain was formed with as many as 1000 students and in which local Tahsildar along with his technical staff and the administrators of the institute took part. They motivated the students on the importance of getting enrolled as voters. • On the last two days (i.e. 30 November and 01 December 2023) the members of ELC of the institute were vital in encouraging students enrolled. About 96 students enrolled themselves as voters. • Further, ELC provides experience-based learning on the democratic setup; the club holds mock polls, essay writing competitions, poster presentations, debates, and other events to raise general understanding of election procedures. Regular awareness campaigns are arranged to educate the students to register themselves as the Voters.

Extended Profile

1 Students

1.1

Number of students on rolls year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
4094	3539	3110	2903	2891

File Description	Document
Institutional data in the prescribed format (data	<u>View Document</u>

1.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
807	837	740	721	840

File Description			Docume	ent	
Institutional data in the	e prescribed format	(data	View De	ocument	

2 Teachers

2.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
211	210	197	202	195

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

2.2

Total number of full time teachers worked/working in the institution (without repeat count) during last five years:

Response: 307

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

3 Institution

3.1

Total expenditure excluding salary year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21		2019-20	2018-19	
2070.87	1532.56	847.58		1245.45	1368.53	
File Description			Docume	ent		
Provide Links for any other relevant document		View D	<u>ocument</u>			

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, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes(COs) of the Programmes offered by the institution

Response:

In **NRI** INSTITUTE OF TECHNOLOGY (NRIIT) curricula developed/adopted have relevance to the local, national, regional and global developmental needs with well-defined learning objectives and outcomes at program and course level.

- NRIIT follows the guidelines issued by regulatory bodies such as UGC, AICTE, affiliated university JNTUK, and APSCHE the vision and Mission of the Institute while designing the curricula.
- The Curriculum is designed to ensure that the students gain not only the required domain knowledge but also the appropriate skills and attitudes for being globally competitive and workforce-ready.
- An effective implementation of this OBE methodology has ensured that the graduating engineers acquire all the 12 POs as defined by NBA, to be competitive on a global platform, with desired graduate attributes specific to every program.
- The Institute regularly monitors the attainments of COs and POs of all the programs and appropriate actions are taken based on the weaknesses identified through a well-structured Continuous and Comprehensive Evaluation mechanism for accompanying need-based improvement.

Process of Curriculum Design: In NRIIT, Curriculum is designed based on the following steps:

Step-1:

- In line with the Institute's Vision and Mission.
- Feedback collected from stakeholders viz; Recruiters/Industry partners, Alumni, Parents, Academicians, and Students.
- Conclusions drawn from analysis of attainment of COs and POs.
- Guidelines of AICTE/ UGC/APSCHE/Affiliated University JNTUK.
- Standard of designed curriculum against same/ similar program(s) run by leading educational institutions including IITs, NITs and Premier Institutions.

Step-2: Conduct a Board of Studies (BoS) meeting to discuss the curriculum and recommend necessary changes.

Step-3: This curriculum is then placed to the Academic Council and Governing Body for scrutiny,

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suggestions and approval.

Step-4: The finally evolved curriculum is printed as the NRIIT syllabus and disseminated among various stakeholders. It is also displayed on the institute's website.

Relevance to local and regional needs: Students are encouraged to undertake projects in the areas of emerging fields, which offer solutions to societal problems. NSS is included in the curriculum for all disciplines where students visit the surrounding villages, identify local problems for which solutions can be offered. The Institute has adopted Kanasanapalli Village near the college and several NSS activities were organized.

National: Several courses have been introduced in the curriculum considering the National focus on Digital India, Skilling India, Make-in-India and Sustainability programs.

Professional skills and competencies: The curriculum is designed in such a way that the student gets his/her professional proficiency in the subject through the teaching and training. Basic and advanced skills training in labs, industrial visits, fieldwork and student exchange programs are some of the initiatives taken for making the student professionally competent.

Employability:: Innovations in technology have led to spectacular advancement in modern teaching and learning. The curricular aspects mainly focus on understanding emerging technologies in the programs offered. The curriculum is designed by integrating teaching – learning through the usage of computers and ICTs. While designing the curricula, adequate focus is given on the aspects of building domain knowledge, enhanced-communication, leadership and analytical skills which are reflected in outcomes.

File Description	Document
Upload Additional information	<u>View Document</u>

1.1.2

The programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements

Response:

NRIIT focuses on employability, entrepreneurship and skill development in its programs and regularly updates its course syllabi to meet contemporary requirements. This approach is crucial for preparing students for the ever-evolving job market and helping them develop the skills needed for success.

The institute offers a wide range of programs with a strong emphasis on employability, entrepreneurship and skill development. The courses provided by the institute are designed to meet the current demands of the job market and are regularly updated to incorporate contemporary requirements. The institute's primary objective is to equip the students with practical and relevant knowledge that prepares them for successful careers. Recognizing the dynamic nature of industries and the ever-changing job landscape,

the institute takes proactive measures to ensure the course syllabi stay up-to-date and aligned with the latest industry trends and technological advancements.

The programs offered cover various disciplines. Each program is carefully crafted to strike a balance between theoretical concepts and practical applications, thus promoting hands-on learning and problem-solving skills among the students. By nurturing these attributes, the institute aims to produce graduates who can seamlessly transform into the workforce and make valuable contributions to their respective fields. Furthermore, the focus on entrepreneurship is an essential aspect. Students are encouraged to think creatively, develop innovative ideas, understand the intricacies of starting and managing own entrepreneurship. Students interested in entrepreneurship are provided with mentorship, access to resources and opportunities to participate in various entrepreneurial events. Some of the events conducted by Entrepreneurship cell are People Education Program by KVIC, Innovation Ambassadors Training program by foundation cell, E-NLAP in association with KVIC, competitions and incubation programs. Motivated by the programs, our students have become successful entrepreneur for companies like Instacks, Kaamadenun Industry private limited, shiva Enterprises, Bits Technologies, Learning Monkey etc.

Besides curriculum, students are given training on skills required by the industries. Training & Placement cell provides company-specific training to make the students industry-ready. Our Innovation, Incubation, Research and Entrepreneurship cells organize various activities and competitions to inculcate entrepreneurship among the students.

The institution also takes great pride in its dedication to skill development. Recognizing the importance of practical skills in today's world, the Institution has collaborated with industry experts to design specialized skill-oriented courses that cater to the demands of specific sectors. This approach not only enhances the employability of students but also contributes to overall economic growth by producing a skilled workforce. Courses and Workshops on Leadership, Communication, Critical-thinking,

Problem-solving and Teamwork are integrated into the curriculum design to make the Students Industry-worthy and Domain-relevant.

By focusing on practical learning, fostering essential employability skills and encouraging entrepreneurship, the institution plays a crucial role in shaping the future workforce and contributing to the socio-economic growth of the Nation.

File Description	Document
Upload Additional information	<u>View Document</u>

1.2 Academic Flexibility

1.2.1

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

Response: 71.79

1.2.1.1 Number of new courses introduced during the last five years:

Response: 705

1.2.1.2 Consolidated number of courses offered by the institution across all Programmes (without repeat count) during the last five years:

Response: 982

File Description	Document
Subsequent Academic Council meeting extracts endorsing the decision of BOS	View Document
Institutional data in the prescribed format (data template)	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum

Response:

NRIIT explores and integrates the components related to Professional Ethics, Gender-Sensitivity, Human Values, Environment and Sustainability into the Curriculum. Towards this, courses on Professional Ethics, Constitution of India and Environmental Science are offered as a part of the regular curriculum which are in line with NEP 2020. Basing on the overall feedback of the students, faculty and Industry, the Institute assesses the existing curriculum and adds extra topics beyond the syllabus prescribed by the university.

Human Values and Ethics: A study is conducted to find the emerging technologies and societal needs related to Human values. Expert persons also provide inputs related to their requirements during development of course structure which helps in selecting elective courses that match the expected outcomes. Both Male and female students are given equal priority in extracurricular and co-curricular activities along with utmost priority in academics.

Gender: The institute organizes various awareness programs and events by the NSS unit to alert the students about Ethics and Gender awareness. The institute provides equal opportunities to boys and girls in all types of student activities organized. Special programs for girl students are arranged towards achieving Women Empowerment and women safety by Women Protection & Grievance Cell (WPGC). Seminars and workshops are periodically arranged on the subject. WPGC organized several events like Self Defense, Awareness talk on Breast cancer, Will you break the bias.

Environment and Sustainability: Mandatory Environmental Science course was introduced to students to train them on reliable use of natural resources like water and energy. The course on Environmental studies makes students study the world's most pressing challenges. There is a worldwide concern over the availability of clean water, loss of biodiversity and environmental pollution. Practice sessions that relate to a topic are also identified and various workshops, seminars and guest lectures are conducted for better understanding of the contents by the students. The NSS and IQAC organize Seminars on Environmental issues in regular basis to inculcate the essence regarding environment and how to save the earth properly by future generation. Various NSS activities like Self-Employment to Rural Women, Swatch Bharat Campaign, Plantation Program, Women Safety Awareness Program are organized.

Institute places significant emphasis on the Development of Human Values amongst its students. It acknowledges the importance of fostering empathy, integrity and social responsibility. Creative platforms such as the Sports Week, Club Meets and other events provide avenues for students to engage in activities that encourage understanding and appreciation of human values. The celebrations of National and International events including National Unity Day and International Yoga Day instill a sense of pride and cultural sensitivity within the Institute-community.

The commitment to integrate cross-cutting issues extends beyond mere compliance with the external framework. The Institute embraces a culture of continuous improvement by regularly evaluating and updating its curriculum to ensure relevance and responsiveness to the evolving needs of society. It collaborates with Industry Experts, Social Organizations and Policymakers to align its curriculum with the precepts of the Sustainable Development Goals and the National Education Policy 2020.

File Description	Document
Upload Additional information	<u>View Document</u>

1.3.2

Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years.

Response: 226

File Description	Document
List of students and the attendance sheet for the above mentioned programs	<u>View Document</u>
Institutional data in the prescribed format (data template)	View Document

1.3.3

Percentage of programmes that have components of field projects / research projects / internships during the last five years.

Response: 100

1.3.3.1 Total Number of programmes that have components of field projects / research projects / internships (without repeat count) during the last five years

Response: 13

1.3.3.2 Total Number of programmes offered (without repeat count) during the last five years

Response: 13

File Description	Document
Sample Internship completion letter provided by host institutions	View Document
Institutional data in the prescribed format (data template)	View Document

1.4 Feedback System

1.4.1

Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc., and Feedback processes of the institution may be classified as follows:

Response: A. Feedback collected, analysed, action taken & communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 81.52

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
1182	968	814	824	746

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1362	1200	1080	960	960

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Final admission list as published by the HEI and endorsed by the competent authority	View Document

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 90.43

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

2022-23	2021-22	2020-21	2019-20	2018-19
588	489	427	418	365

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

2022-23	2021-22	2020-21	2019-20	2018-19
642	559	502	446	380

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document

2.2 Catering to Student Diversity

2.2.1

The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student

Response:

The institute believes in outcome-based learning process, where students are identified as slow learners and advanced learners based on the prerequisite tests, class interaction and test performances. The performance of slow learners are improved by providing remedial programme which are conducted outside regular classes. Specifically, for difficult subjects like Mathematics, Programming and Problem solving with C, Engineering Drawing, Engineering Mechanics and Basic Electrical Engineering, extra classes are conducted for students who have failed in the exam, where the faculty spares time to sit with those students individually to cope up with the subject.

Through a mentor-mentee system all kinds of support are provided to the slow learners. The strenuous efforts taken by the faculty towards the slow learners have resulted in students' understanding in their chosen domain, improved results and pass percentage. The mentor also identifies other skills and strengths and encourages them to hone, which helps build self confidence resulting in improvement of academic performance. The mentor takes extra effort to understand the socio-economic backgrounds also, which is sometimes a reason for poor performance. All necessary emotional and professional counseling is also provided whenever required. The mentor also connects the slow learners for the subject teachers with whom they are comfortable for extra support. The Institute ensures that a slow learner clears all his courses within stipulated four years of Engineering and also provides extra attention to build additional skills which makes them employable.

Advanced learners are given opportunities to be part of innovative projects and other technical initiatives of the institute. These initiatives teach them to maintain a perfect balance between academics and extra &

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co-curricular activities which goes a long way in achieving success in their professional career. They are given opportunity to participate in Hackathons, Paper Presentations, Project Competitions, Summer Projects, Internships and Honor/Minor programme. They also help slow learners through peer learning. The institute also encourages advanced learners to conduct workshops and seminars to share their knowledge. They are also part of the institute's social responsibility where they support the faculty members by teaching and providing skills to the underprivileged students.

Strategies adopted for slow learners

- 1. Remedial Classes are conducted with an aim to improve the academic performance of the slow learners. This practice helps the struggling learners to improve subject knowledge and helps them catch up into their peers.
- 2. Group Study System is also encouraged with the help of the advanced learners.
- 3. Academic and personal counselling is given to the slow learners.
- 4. Provision of simple and standard lecture notes/course materials

Strategies adopted for Advance learners:

- 1. National & International Exposure
- 2. Participative learning sessions & Experimental learning sessions
- 3. Project-based learning.
- 4. Certification courses through NPTEL, SWAYAM and COURSERA.
- 5. Encouraged to take up competitive exams like IELTS, GRE, TOEFL and GATE.
- 6. Industry-sponsored internships
- 7. Hackathons
- 8. Honour/Minor Programme

File Description	Document
Upload Any additional information	View Document

2.2.2

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

Response: 19.4

File Description	Document
Certified list of full time teachers along with the departmental affiliation in the latest completed	View Document
academic year.	

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 experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

NRIIT adopts Teaching-learning methods implemented by the faculty members, which include Lecture Method, Interactive Method, Project-based Learning, Computer-assisted Learning, Experiential Learning etc.

1. EXPERIENTIAL LEARNING

Summer Internship Project: A large percentage of students of UG Courses attend an Internship program for 2 to 6 weeks in the industry during the summer break between the pre-final and final years of their programme.

Collaborative Laboratories: The Institute collaborated with APSSDC, DASSAULT, IBM, Oracle, Infosys Campus Connect, Microsoft etc.

Industry-Driven National/Global Student Competitions: The institute encourages and prepares the students for competitions conducted by IIT/NIT/IIIT/AICTE institutes at the national/global level.

Field Visits: The Institute gives top priority for technical visits at industries as a value-added learning method for students in every year.

2. PARTICIPATIVE LEARNING

Seminar/Workshops: The institute encourages students to present seminar on contemporary topics as well as state-of-the-art technologies. Students are trained on regular basis in modern trends and innovative technologies by organizing workshops/seminars inviting experts from the industry.

Group Assignments/Mock Interviews: Group discussions/tasks are conducted from second year onwards in soft skills courses. Mock interviews are conducted before the campus placements, to improve confidence levels in the student.

Case studies: The institute implements the case study method which is a participatory, discussion-based way of learning where students gain skills in critical thinking, communication, and group dynamics.

3. PROBLEM SOLVING LEARNING

Project—based Learning: Project work is mandatory for all the programs offered at the institute, where the implementation period spans from one to two semesters. The effective phases of survey, case study, implementation, testing and report writing ensure the required project—based learning among the students.

Developing innovative models: Take up some real-world problems for developing products/models with novelty in perspective of meeting challenges in industry, government and academia. These models are presented at various national/international platforms.

Mini and Major projects: Work done in the earlier semester through field visits and information gathering during Internship is continued for development and implementation.

4. ICT enabled tools:

The Institute encourages intensive use of ICT tools and online resources for effective teaching and learning process.

All classrooms, seminar halls, laboratories, central library and auditoriums are equipped with

- 40 interactive boards
- 40 LCD projectors
- Smart Panels of 75-86 inches
- Computers with internet connection of bandwidth 500 Mbps and campus LAN.

These facilities are used by the student to understand the concepts easily by learning the technology visually. Flipped classroom methodology is also adopted to using licensed Microsoft Teams.

Institute motivates both students and faculty to register and learn courses from various MOOC platforms, over 600 students completed NPTEL certification in the last five years. Faculty also use Learning material developed by SWAYAM, NPTEL, YouTube, Coursera.

Available facilities to strengthen teaching-learning process

- SWAYAMPRABHA DTH Channels.
- A media centre to develop e-learning materials.
- Access to e-resources, e-journal articles, e-books from any place and OPAC to check the catalogue of library resources.

File Description	Document	
Upload any additional information	View Document	

2.3.2

The institution adopts effective Mentor-Mentee Schemes to address academics and studentpsychological issues

Response:

The objective of a professional institute is to train the student with the required knowledge and skills, develop their overall personality and make them employable. Many students of the institute are from rural areas and with diverse socio-economic backgrounds. As they are from rural areas, the environment of the institute is entirely new to them. Hence they face many difficulties both academic and non-academic during their stay in campus. To overcome this situation, the institute has implemented a Mentor-Mentee system to counsel and guide the students in their regular studies as well as on psychological

issues. Mentoring provides students with emotional and instrumental support, guidance, encouragement and a better environment in the institute. A mentor plays a vital role in nurturing students and has a positive impact on students' persistence and academic achievement. A mentee can approach his / her mentor for both educational and personal guidance. This system is helping the students strengthen their varied capabilities and build healthy interpersonal relationships between the faculty and students.

The mentor-mentee system at the institute is a structured programme in which each faculty is assigned the task of mentoring about 20 students. First-year students have mentors from the first-year departments, when they move on to subsequent years they will be detached from the preceding mentors and attached to succeeding faculty from their department who continue as mentors until the student graduates from the institution.

Responsibilities of a Mentor

- Meet the group of students at least twice a month.
- Maintain personal details of the students including their address, contact numbers, overall academic performance and progress. It will help the mentor in monitoring the academic growth of the students.
- Continuously monitor, counsel, guide and motivate the students in all academic matters.
- Advise students regarding choice of electives, projects, summer training, etc.
- Contact parents/guardians if the situation demands e.g. academic irregularities, behavioral changes, interpersonal relations and detrimental activities.
- Advise students in their career development/professional guidance.
- Maintain a detailed progressive record of the student.
- Professional Guidance regarding professional goals, selection of career and higher education.
- Career Advancement regarding self-employment opportunities, entrepreneurship development, morale, honesty and integrity required for career growth
- Course work specific Monitoring attendance and academic performance.
- Personal counseling for the students having psychological issues and problems

Responsibilities of a Mentee:

- Attends meeting regularly
- Fills personal information in a form at the time of joining the Mentor-Mentee system.
- Provide details of attendance, continuous assessment, examination, and co-curricular and extracurricular activities to the mentor whenever asked.
- Repose confidence in the mentor and seek his/her advice both on academic and personal issues.

The role of HOD:

- Meet all mentors of the department at least once a month to review the proper implementation of the system
- Advise mentors whenever necessary.
- Initiate required administrative action on a student on the recommendation of a mentor.

File Description	Document
Upload any additional information	<u>View Document</u>

2.3.3

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

Describe the Preparation and adherence to Academic Calendar and Teaching plans by the institution.

Response:

Preparation and Adherence of Academic Calendar:

The institute prepares the academic calendar every year in advance. The Head of the Institution schedules a meeting with the **College Academic Committee** (**CAC**) members to discuss about the preparation of academic calendars for UG & PG programmes separately. By receiving the first year admission notification from the state government, the committee prepares first year academic calendar for UG & PG programmes according to the university academic schedule. The academic calendar includes commencement of class work, last working day, dates for internal class tests, assignments, subjective exams, online exams and schedule for end examinations. The details of the activities along with their respective dates or probable month of conduction are given at the beginning of each semester. This information is disseminated through institute website and institute/department notice board .

The **CAC** monitors the effective implementation of the calendar for all the programmes in all aspects. The institute strictly adheres to the Academic Calendar prepared by the Committee.

Preparation and Adherence of Teaching Plan:

The course coordinator prepares teaching plan of the course content by taking inputs from the course instructors. The teaching plan includes lecture hours, Prerequisites, Course Objectives, Course Outcomes, Text books references, Web references and Mode of teaching, which is duly approved by Head of the Department. The Head of the Department verifies in all aspects and approves the teaching plans. Any deviations in the teaching plan will be intimated to the course coordinators. Teaching diary is maintained in the attendance registers by the course instructor and monitored by the concerned Head of the Department every fortnight and deviations if any, are clarified with the concerned course instructor. The Head of the Department monitors the progress of each course and ensures timely and effective completion of course in the specified time frame with perfect blend of practical and theoretical inputs.

Review and Monitoring:

- 1. Course coordinators undertake an intense review in relevant courses
- 2. Module coordinators take up a conceptual review related to the delivery and assessment of different courses in tune with the respective modules
- 3. Programme coordinators take up a comprehensive review
- 4. Academic Audit is carried out twice in a semester

- 5. Head of the Department, Director-Academics and IQAC-Coordinator are vested with the authority to seek any clarification from any of the functionaries in the process and suggest any modification at any point in the process and the required modifications are done by the respective faculty members.
- 6. Moreover, at the beginning of academic year, every programme coordinator prepares the calendar of academic events like workshops, conferences, guest lectures, industrial visits, FDPs, seminars and webinars.
- 7. The institute strictly adheres to the academic calendar, except at unforeseen circumstances without prejudice to the overall deadlines and some of the important items as a part of the academic/activity calendar of the college are permitted subject to the approval in the CAC meeting chaired by the Principal.

File Description	Document
Upload any additional information	<u>View Document</u>

2.4 Teacher Profile and Quality

2.4.1

Average percentage of full time teachers appointed against the number of sanctioned posts year wise during the last five years

Response: 100

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

2022-23	2021-22	2020-21	2019-20	2018-19
211	210	197	202	195

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Institutional data in the prescribed format (data template merged with 2.4.3 and 2.4.4)	View Document

2.4.2

Percentage of full time teachers with Ph.D./D.Sc. / D.Litt./ L.L.D during the last five years

Response: 69.06

2.4.2.1 Number of full time teachers with Ph.D./D.Sc. / D.Litt./ L.L.D during the last five years

Response: 212

File Description	Document
List of faculty having Ph.D./D.Sc. / D.Litt./ L.L.D along with particulars of the degree awarding university, subject and the year of award per academic year.	View Document
Institutional data in the prescribed format (data template merged with 3.2.3 and 3.4.2)	View Document

2.4.3

Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)

Response: 6.06

2.4.3.1 Total teaching experience of full-time teachers as of latest completed academic year

Response: 1279

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.4

Percentage of full time teachers working in the institution throughout during the last five years

Response: 53.33

2.4.4.1 Number of full time teachers worked in the institution throughout during the last five years:

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.3)	View Document
Provide Links for any other relevant document to support the claim (if any)	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 last date of declaration of results during the last five years

Response: 20.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
13	21	22	19	26

File Description	Document
Result Sheet with date of publication	View Document
Institutional data in the prescribed format (data template)	View Document

2.5.2

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

Response: 0.97

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

2022-23	2021-22	2020-21	2019-20	2018-19
90	72	58	22	9

2.5.2.2 Number of students appeared in the examination conducted by the institution year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
8944	7362	5066	3171	1353

File Description	Document
List of students who have applied for revaluation/re-totaling program wise certified by the Controller of Examinations year-wise for the assessment period.	View Document

2.5.3

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

Describe the examination reforms with reference to the following within a minimum of 500 words

- Examination procedures
- Processes integrating IT
- Continuous internal assessment system

- The Office of the Controller of Examinations has taken a number of steps to ensure a fair and transparent End Semester Examination.
- All precautions are taken to minimize errors during Question Paper-setting, External Review, printing of question papers, examination conduct, collection of answer books, dummy number allotment, central valuation and posting of marks on answer books, award lists, result processing, declaration and issue of statements of grades, various certificates, including degree certificates. Throughout the assessment process, strict secrecy is maintained.
- NRIIT has implemented a fully automated Examination Management System
- All examination operations, including pre-exam and post-exam procedures (such as result processing, dissemination, and secure generation of mark sheets), are fully automated.
- NRIIT Campus has a Central Valuation Centre for the evaluation of answer books. IT integration throughout all examination processes.
- The NRIIT houses the application server, database server, and backup server. Users of the system can access the system's services by connecting to the server of NRIIT
- Members of the Result Passing Board will give final approval after the evaluation procedure is over.
- The results are published online and are accessible on the Institution's website.
- Exam schedule and results are available on the institution's website.

- Hall ticket with photograph and printed examination schedules are issued.
- The COE approved the opening of the question paper on the same day (from among numerous sets of question paper).
- Students can use revaluation to remove errors in evaluation and result processing.
- Various administrative reforms have been implemented to facilitate the expeditious processing of examination steps, complaints, communication, and the issuance of various certifications.
- To prevent lapses and malpractices in theory and practical examinations, strict supervision and disciplinary measures are implemented.
- Addition of security elements, such as a watermark, an invisible logo, a hologram, and so on, to the statement of marks / grade and the consolidated grade sheet.
- End semester Answer scripts are generated using a system-generated random number.
- Bloom's Model of Examination Reforms is introduced, resulting in a significant component of the examination system.
- To eliminate the possibility of question paper leakage, foolproof security systems are used, which include CCTV cameras and other electronic devices.
- As part of the Reform exercise, the UGC and AICTE Quality Improvement Program (QIP) is being implemented to improve the current examination system.
- Electronic devices are not allowed inside the secure room, and the controller's office's papers are under constant CCTV surveillance.
- There is a uniform system used for reviewing the question papers and evaluating the answer sheets.
- The universities of the State establish and selectively implement a grievance handling and its redressal method and re-evaluation system.
- Pre-Examination, During Examination, and Post Examination are the three sections that introduce the division of Examination process.

File Description	Document
Upload any additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

Response:

In order to measure the Program Outcomes, the institute defines Course Outcomes (CO) for all the courses in all programmes offered. Course outcomes are continuously assessed based on the set parameters and rubrics for each course. Attainment of course outcomes is examined at the end of each semester and corrective actions may be suggested by the course coordinator for the subsequent semester. As the course outcomes are mapped to program outcomes, the partial attainment of program outcomes are assessed at the end of each semester. Complete PO attainment is examined for a batch at the end of

4th year. While assessing the COs and POs both direct and indirect methods of assessment are carried out.

The Program Co-Ordinator along with Programme Assessment Committee (PAC) evaluates the PO attainment of individual students through direct and indirect methods during the course of study and at the end of the programme. All these works have to be done under the guidance of the Department Advisory Committee (DAC). At the end of 4th year of each batch, the PO/PSO assessment is done from the CO attainment of all curriculum components. In each course, the level of attainment of each CO is compared with the predefined targets and it is the course coordinator who takes necessary steps for the improvement to reach the target. With the help of CO against PO/PSO mapping, the PO/PSO attainment is calculated by the programme coordinator.

Assessment and Attainment methods: The various Assessment tools are:

Direct Assessment Tools:

- Class Tests
- Online Exams
- Assignments
- Theory Internal and External Examination
- Day-to-day evaluation in Laboratory
- Internal and external Practical Examination
- Major Project –Internal and External Assessment
- Seminars

Indirect Assessment Tools:

- Course Exit Survey
- Program Exit Survey
- Alumni Survey

Direct CO Attainment for each theory course (DA)= Attainment based on Class Test, Assignment, Subjective Examination, Online Quiz, and End Examinations

Direct CO Attainment for each practical course (DA)= Attainment based on Day to Day Performance, Internal and External Examination.

Indirect CO attainment = Attainment level based on the feed back of the student on the course at the end of the semester.

Overall CO Attainment = 0.8*DA + 0.2* IDA (Course Exit Survey Average), IDA – Indirect Attainments

Total Internal PO attainment (Direct Method) = Average of all Internal PO/PSO Attainments

Final PO/PSO attainment calculation: Final PO Attainment = 0.8* PO/PSO attainment in direct method + 0.2 * PO/PSO attainment in indirect method (Program Exit Survey, Alumni Survey).

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

2.6.2

Pass percentage of students (excluding backlog students) (Data for the latest completed academic year)

Response: 83.77

2.6.2.1 Total number of final year students who passed the examination conducted by Institution during the latest completed academic year:

Response: 676

File Description	Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Certified report from the COE indicating the pass percentage of students of the final year (final semester) eligible for the degree program-wise / year wise	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

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 are well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

NRIIT encourages innovation and research which contribute immensely to the development of key areas of Engineering and Management. The main aim of Research and Development Centre at the institute is to promote Research and Innovation among the faculty and students that can meet the societal needs. The centre of the institute works in three distinct aspects viz. pursuing academic and sponsored research, bringing innovation from engineering and maintaining standards in R&D. The centre helps in developing a co-operative and complimentary research among various departments to explore advanced technologies which helps for publications in National/International Journals and Conferences. The center holds periodical review meetings on the progress of research being carried out by faculty and students. The center provides guidance in completing sanctioned projects successfully. At the department level, the quality assurance, progress evaluation and research outcome are assessed by the Departmental Research Committee (DRC).

Centralized labs/ Design centers headed by faculty members and supported by competent technical staff are made open for students of all programs. It helps student groups(multi disciplinary) work on various innovative projects in these labs, from conceptualizing to designing the prototype. Students' creative thinking is enriched by faculty mentoring, which results in systematic development in processes and products. These research labs help the students build prototypes which enable them to participate in competitions both in National/International. The Institute has three research centers in the departments of CSE, ECE and MECHANICAL recognized by JNTUK, Kakinada. It is an added advantage to the students and faculty to develop their Prototypes. The institute, in the annual budget allocated enough funds for procuring and maintaining the state of the art equipment and instruments. Other than the equipment and instruments, the institute subscribes the Research Journals such as DELNET, JGATE and IEEE. The institute's research policy is uploaded in the website (www.nriit.edu.in).

Institute Initiatives towards promoting research activities.

- Faculty members are permitted to pursue their Ph.D. They can avail study leave to do their PhD course work, to meet the supervisor, attending conferences/seminars and preparing their thesis.
- Financial support is provided to the faculty for presenting technical papers in National/ International conferences/seminars by sponsoring for the registration fee along with on duty leave.
- The faculty are encouraged to apply for research grants to various funding agencies and the Principal investigator/coordinator is given autonomy for executing projects.
- Seed money is granted to faculty members to explore the possibility of research work and to prepare research proposals at NRIIT. During the last five years a total amount of 22 Lakhs of rupees was sanctioned.
- Motivate the faculty members to visit the leading Institutions and consult subject experts to

acquire new ideas in research.

• Industrial experts and Senior academicians are invited to the institution for interaction with faculty and students to promote the academic and industry need based research.

File Description	Document
Upload any additional information	View Document

3.1.2

The institution provides seed money to its teachers for research

Response: 21.59

3.1.2.1 Amount of seed money provided by institution to its teachers for research year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
2.97	3.47	5.94	8.27	0.94

File Description	Document
Sanction letters of seed money to the teachers is mandatory	View Document
Institutional data in the prescribed format (data template)	View Document

3.1.3

Percentage of teachers receiving national/international fellowship/financial support by various agencies for advanced studies/ research during the last five years

Response: 12.05

3.1.3.1 Number of teachers who received national/international fellowship /financial support by various agencies, for advanced studies / research; year-wise during the last five years

File Description	Document
List of teachers who have received the awards along with nature of award, the awarding agency etc.	View Document
Institutional data in the prescribed format (data template)	View Document

3.2 Resource Mobilization for Research

3.2.1

Total Grants research funding received by the institution and its faculties through Government and non-government sources such as industry, corporate houses, international bodies for research project, endowment research chairs during the last five years (INR in Lakhs)

Response: 43.33

File Description	Document
List of Extramural funding received for research, Endowment Research Chairs received during the last five years along with the nature of award, the awarding agency and the amount	View Document
Institutional data in the prescribed format (data template is merged with 3.2.2)	View Document
Copies of the letters of award for research, endowments, Chairs sponsored by non-government sources	View Document

3.2.2

Number of research projects per teacher funded by government, non-government, industry, corporate houses, international bodies during the last five years

Response: 0.04

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

File Description	Document
List of project titles with details of Principal Investigator, amount sanctioned and sanctioning agency etc	View Document
Institutional data in the prescribed format (data template merged with 3.2.1)	View Document

3.2.3

Percentage of teachers recognised as research guides as in the latest completed academic year

Response: 5.69

3.2.3.1 Number of teachers recognised as research guides as in the latest completed academic year:

Response: 12

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.4.2)	View Document

3.3 Innovation Ecosystem

3.3.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

The Institute provides a conducive environment for promotion of Innovation and Incubation. All required facilities are provided and guidance is extended to the students. Students are encouraged to actively involved in the application of Technology for societal needs. Necessary support is provided for Documentation, Publication of Research Papers and also for obtaining patents. Awareness meets, workshops, seminars and guest lectures on Entrepreneurship are organized. Students are provided opportunities to directly interact with outstanding entrepreneurs excelling in their field. Product service training is provided for creating awareness on marketing the products.

The Innovation Eco System works through the following facilities.

• Institution Innovation Council (IIC)

- Entrepreneurship Promotion and Incubation Center (EPIC)
- Intellectual Property Rights Cell(IPRC)

Institution Innovation Council:

The IIC has been established to systematically foster the culture of Innovation in young learning minds. The primary mandate of IIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes. The IIC envisions by encouraging creations, establish to promote innovation in the Institution through infinite modes leading to an invention of upgrading eco-system in the campus. A number of activities are conducted through this Council to motivate and promote creativity and innovation among students and faculty members.

The Council has been awarded 3 star rating during 2022-23, 2 star rating during 2021-22 by Ministry of Education (MoE), Govt of India. Faculty members have been trained as ambassadors in product design, product development, IPR and entrepreneurship. All these have helped in promoting innovative ideas for technology development and commercialization.

Entrepreneurship Promotion and Incubation Center (EPIC)

Entrepreneurship Promotion and Incubation Center at NRIIT believes that entrepreneurship is not just about starting companies, but a pathway towards India's socio-economic development. E.P.I.C also partnered with APSCHE, Govt. of Andhra Pradesh and created a platform for the world of entrepreneurship. Our vision is to make students and faculty, 'entrepreneurial' in every work that they do. NRIIT is not only the institute pioneering with blossoming innovations, but also the swarm of ventures and the impact it has created and it will be creating the innovation and entrepreneurship ecosystem as a whole. Our Alumni have emerged as entrepreneurs, providing their hand in the development to society, economy and employment. To promote an entrepreneurial mindset and to encourage forging a relationship between the industry and the institution, individual department interacts with the industry to ascertain its needs to fill the gap in the curriculum.

Intellectual Property Rights Cell(IPRC)

To promote research, extension and training in the field of intellectual property rights the institute established a centre for Intellectual Property Rights in the year 2021. This centre will incentivize innovative and cutting-edge academic research in the field of IP Laws and conducting various training and extension activities for creating more awareness in the field of IPR. With the continuous and sustained efforts of all the faculty and students and also with collaborative research 30 patents are published.

File Description	Document
Upload any additional information	<u>View Document</u>

3.4 Research Publications and Awards

3.4.1

The Institution ensures implementation of its stated Code of Ethics for research.

The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following:

- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committee (Animal, Chemical, Bio-ethics etc.)
- 3. Plagiarism check through software
- 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Copy of the syllabus of the research methodology course work to indicate if research ethics is included	View Document

3.4.2

Number of candidates registered for Ph.D per teacher during the last five years

Response: 0.5

3.4.2.1 Number of candidates registered for Ph.D during the last 5 years:

Response: 6

File Description	Document
Ph.D. registration letters/Joining reports of candidates.	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.2.3)	View Document

3.4.3

Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

Response: 2.56

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

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Links to the paper published in journals listed in UGC CARE list	View Document

3.4.4

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

Response: 0.07

3.4.4.1 Total Number of books and chapters in edited volumes published during the last five years

Response: 22

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format (data template)	View Document

3.4.5

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

Response: 0

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

File Description	Document
Bibiliometrics 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

Response: 55.98

3.5.1.1 Total Amount generated from consultancy and corporate training year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
10.777	11.8	11.9	10.477	11.022

File Description	Document
Letter from the beneficiary of the consultancy along with details of the consultancy fee	View Document
Institutional data in the prescribed format (data template)	View Document
CA certified copy of statement of accounts as attested by head of the institution	View Document

3.6 Extension Activities

3.6.1

Outcomes of extension activities in the neighbourhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)

Describe the impact of extension activities in sensitising students to social issues and holistic development with four case studies within a maximum of 500 words

Response:

The Institute is actively involved in conducting various extension activities and outreach programs to promote the Institute-Neighborhood community to sensitize the students towards the needs of the community. The Institute believes in promoting societal and community activities which help in shaping the students as responsible citizens of the nation. Faculty members and staff are involved to get a better insight over the society which helps in imparting value-added education to students which is essential for their all-round development in each vertical. A wide spectrum of programs are designed to cater to the

needs of the surrounding village community which include Cleanliness of Surroundings, Green Environment / Tree Plantation, Gender Sensitization, Hygiene, Environment Awareness, Mental Health Awareness, Feed animal drive for stray cows, Road Safety Awareness Campaign, Blood donation camps, Eco Club Activities, Women Development and Empowerment activities and Village Adoption and many more. In addition, the NSS wing conducts National Youth Day Celebrations, International Disability Day and NSS Day Celebrations. Special initiatives by the institute and departments carry out Extension activities.

The institute has a recognized NSS Wing which is organizing community-based events. During the last five years, the institute's NSS Wing has been actively involved in mobilizing and motivating the student community to get closer to society through various community activities. These activities brought the students to have more insights into getting a deeper look at social issues. NSS Wing organized as many as 83 events for the past five years in the form of Blood Donation Camps- 5, Medical Camps - 5 and Service to the temple devotees during festivals. The students have gained a sense of belonging to the community as a means of service to those who are in need.

Swachh Bharat Abhiyan is a cleanliness drive initiated by the Prime Minister, Shri. Narendra Modi. It is aimed to keep the streets, roads and other infrastructure of the nation, clean. Students of the institute have always organized this program with dedication and have striven to maintain the cleanliness of the college campus and outside areas. The institution is organizing the Swachh Bharat Abhiyan program twice in an academic year, one in October and the other in February.

Our responsibility to **protect the environment** and maintain ecological equilibrium is paramount to saving the Earth and living matter. 10 such programs were organized by the NSS Wing during the past 5 years.

• covering a wide range of services.

Outcomes of carrying out these services:

- Exposure to students on several rural issues
- Inculcating service motto among students
- Building leadership qualities, working in groups, improving communication skills, personality development and social awareness.

File Description	Document
Upload any additional information	<u>View Document</u>

3.6.2

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years

3.6.2.1 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years.

2022-23	2021-22	2020-21	2019-20	2018-19
21	19	14	12	17

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document

3.7 Collaboration

3.7.1

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

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc	View Document
Institutional data in the prescribed format (data template)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for

- 1. teaching learning, viz., classrooms, laboratories, computing equipment etc
- 2.ICT enabled facilities such as smart class, LMS etc.
- 3. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.

Response:

NRIIT Campus is spread across vast area of 20 acres surrounded by the Mango groves epitomizing a pleasant environment. The implausible aspect of NRIIT is the State-of-the-art infrastructure provided for Students and Faculty in the rural area. The buildings are adorned with fully enhanced and equipped Laboratories. Moreover, the campus is strengthened with amenities like Open RVR Knowledge centre, plush open spaces and outdoor stages.

The layout is well designed into 9 blocks, namely Dr. RVR Bhavan, Abdul Kalam Bhavan, Albert Einstein Bhavan, Mokshagundam Visvesvaraya Bhavan, Cyber Tower, CSE Data Science Bhavan, IT Bahvan, Aadhya Girls Hostel and Vivekananda Boys Hostel, furnished with necessary facilities providing ideal atmosphere for students and faculty, utilizing 4,14,000 sq. ft for academic activities.

At NRIIT various strategies are implemented to carry teaching-learning process in interactive way encouraging students and faculty involvement in classrooms and laboratories. Also, well-furnished Gallery Classrooms with air conditioners, wide ranging ICT facilities, state-of-the-art laboratories and excellent computing facilities for nurturing teaching-learning and research process are extant.

Name	Availability
Laboratories	70
Classrooms	40+40 (ICT Enabled)
Seminar Halls	10 (with LCD Projectors)
Server Room	Rack Servers and Surveillance equipment
Computer and student ratio	1:2.5
Computers and Laptops	1549 + 100 no's
Internet Bandwidth	500 Mbps

Classrooms: NRIIT has 80 smart AC gallery classrooms catering UG and PG programs. Majority classrooms have Digital boards, Wi-Fi connectivity and equipped with smart boards together with white boards. A few classrooms have LCD facility, Wi-Fi connectivity ensuring Multimedia Presentation enabling lecture capturing.

Teaching and Research Laboratories: NRIIT has 75 Well-equipped laboratories and 5 of them are meant for research purpose. Under AICTE scheme (MODROBS) Data Structures and Algorithms

Laboratory was updated with fund of Rs.18,17,255.

Sports and Cultural Activities: Our students are groomed to have a holistic personality. The Institute has adequate facilities for games, sports (Indoor and Outdoor), cultural activities and yoga. The state-of-the-art facilities with magnificent Air-Conditioned Gymnasium, Playground, Indoor courts as well as centres for physical education and sports help students stay as fit as fiddle, developing sportsmanship.

Outdoor sports Facilities:

S. No	Description of Sports/Games	Courts
1	300 mtrs Track and Field	1
2	Cricket Net Practice	2
3	Badminton for women	3
4	Badminton for men	3
5	Basketball Court	1
6	Hand Ball Court	1
7	Volleyball Court	4
8	Throw Ball Court	1
9	High jump	1
10	Long Jump	1
11	Short put	1
12 Coco		1
13	Table Tennis	1
14	Gymnasium for Men	1
15	Gymnasium for Women	1

In NRIIT, a sense of community and continuity is enhanced through cultural activities with the inclusion of education and entertainment. Diverse activities like Dance, Painting, Music, Festival celebrations and photography, progresses the overall development of the students.

Yoga and Meditation: To focus attention and improve the ability to concentrate on studies, the practice of Yoga and Meditation is initiated in NRIIT to the students in Air-conditioned halls and open-air facilities.

File Description	Document	
Upload any additional information	<u>View Document</u>	

4.1.2

Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years

Response: 45.24

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
1023.99	414.80	434.38	641.16	681.52

File Description	Document
Institutional data in the prescribed format (data template is merged with 4.2.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

Central Library was established in the year 2008. The main objective of the central library is to provide seamless access to information to users in a networked environment and to become a premier Learning Resource Centre. The Central Library has a rich collection of Textbooks, Reference Books, and Handbooks in a form of hard copies, CDs, journals, magazines and e-books.

The library is established in 600 sq. m with 150 seating capacity. The institute's central library is functioning under the Open Access System and has a total collection of 23,514 volumes of books with 5,918 titles. The library's scientific media resource consists of a remarkable collection of around 1,138 audio and video CDs. The Central Library has a separate Digital Library equipped with 30 nos. of computers. The Institute has a Membership in National Digital Library of India (NDLI), which provides online access to various learning resources such as audio-visual and text resources. In addition to this, the Institute has subscribed to IEEE, DELNET, J-GATE, NDL, N-LIST and MAT Journals.

Automation of Library:

NRIIT Central Library began the process of automation in the year 2008, with barcode technology used for issue and return of books. Later, it was upgraded to a fully automated process with OPAC and Ez. This fully automated online public access catalogue (OPAC) provides ease in searching for information based on Author, Subject, Title, ISBN, Keywords, etc to know the status or availability of the books and check user holdings, request for reservations, etc.

Timings:

Working Days: 09:20 am to 09:00 pm.

Holidays: 09:20 am to 04:20 pm.

All the Students, Faculty Members and employees of the Institute are entitled to the membership of the Library. Books are issued to Students and Staff as per the Library Rules given below.

S. No	Category	No. of Books	Loan Period
1	Faculty	10	One Semester
2	Staff	02	One Semester
3	UG Students	02	10 days
4	PG Students	02	10 days

File Description	Document
Upload any additional information	View Document

4.2.2

Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years

Response: 6.65

4.2.2.1 Expenditure for purchase of books / e-books and subscription to journals/e-journals year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
117.47	108.92	83.94	76.01	83.47

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for purchase of books/ e-books and subscription to journals/e-journals should be clearly highlighted)	View Document

4.3 IT Infrastructure

4.3.1

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

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

NRIIT maintains well organized futuristic IT infrastructure and facilities to embark students involvement in digitally globalized world. The college allocates surplus amount of budget for annual maintenance to cater the needs of students as well as Faculty. The campus provides Internet with 500 Mbps single mode fiber optic backbone network supplemented with Wi-Fi to support various services such as website, Campus Management Software, Library Information System, MOOCS courses, CCTVs, biometric devices, Learning Management System (LMS), Online Assessments, access to online learning resources and so on with 24 hours power backup. The college appoints technical staff for the sound maintenance of hardware and IT infrastructure.

The institute updates the IT facilities regularly. The departments also make use of up-to-date technological innovations like PPT, Microsoft Teams, Google Classrooms, YouTube, WhatsApp etc. for effective conduct of classes. The operating systems of the computers are well maintained with office automation packages like MS office and antivirus. Back-up is taken for the systems at regular intervals and the operating systems are updated regularly. During the Pandemic all classes were conducted online through Microsoft Teams, ZOOM, Google Meet, Google classroom etc. There are different WhatsApp groups among the students, faculties and office staff through which office information and study materials are circulated. The whole campus of the institution including the girls hostel and the library is under surveillance through CCTV cameras.

The library of the Institute is automated with the software "Ez". The library has subscriptions of e-books and e-journals. The college website is regularly updated by the website in-charge, the faculty members and the Departments update their respective parts in the websites regularly for information sharing.

The details of up gradation that has taken place over the last five years (2018-2023) are shown below:

- 1. Procured MATLAB software in 2019 with 30 user licenses for campus wide usage.
- 2. Replaced existing biometric attendance system (Bio-enable) in 2021 with 30 devices of Matrix make with licensed reporting software.
- 3. The institute has smart labs equipped with smart interactive boards.
- 4. Procured 550 desktop computers in the last five years with latest core i5 processor,
- 5. Updated 126 systems with 250 GB SSD and 12 GB RAM
- 6. Other major resources like 5 servers were procured.
- 7. Replaced 14 D-link switches, with 17 new D-link switches.
- 8. Upgraded internet bandwidth of 100 Mbps to 250 Mbps in 2020 and to 500 Mbps in 2022.
- 9. Procured IBM Rational Rose online, Microsoft, Kavan softwares.
- 10. Upgraded RAM from 4 GB to 12 GB for 125 number of desktops.
- 11. Electronic surveillance system with 256 cameras was deployed in the campus in 2018.

12. The college website nriit.edu.in was upgraded with latest WordPress CSS (Cascading Style Sheets) which is used for developing college website, PHP is used for Examination Data Backup, JS is used for developing website and to facilitate updating of Examination information.

File Description	Document
Upload any additional information	<u>View Document</u>

4.3.2

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

Response: 2.48

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

Response: 1649

File Description

Document

Purchased Bills/Copies highlighting the number of computers purchased

View Document

4.3.3

Institution has dedicated audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development

Response:

e-teaching is an essential prerequisite for e-learning. Implementation of E-learning is a part of digitalizing the higher education system. Lecture capture describes the technology that allows faculty to record their lectures and make them available online. In this connection, a Media Centre has been set up on the campus to develop and provide in-house E-Content. Preparation Facility enables quality Video-lectures for our students. Faculty is encouraged to develop E-content in their respective modules and specializations. This Centre helps the faculty create high-quality Video Lectures and E contents. Advanced hardware and software tools are provided to support the Centre.

The equipment available in the media center to record lecture videos are

- 1. Camera Cannon EOS1500D
- 2. Tripod Stand XT-02
- 3. Projector Vivitek
- 4. Audio System FandD 1500W
- 5. Color mike Studiomaster

6. Whiteboard - Candypop

The recorded videos are edited and mixed by using Open Broadcast Software (OBS), filmora, Premiere Pro-open software. Students are provided with the flexibility to access the recorded lectures from any location, whenever they like. The ability to easily access course content online anytime is incredibly beneficial for learners. LCS Facilitates blended learning course delivery.

They combine more than one type of learning method into a program, such as combining traditional face-to-face course delivery with online learning. This hybrid program entices students and educators by adding much-valued flexibility to course delivery. Students can watch the missed/completed classroom recordings – anytime and anywhere. Lecture capture also offers new flexibility for students to pursue interdisciplinary research and to understand their subject better. For example, students can access content from other disciplines to support their coursework or research, and faculty can also collaborate with colleagues to plan multidisciplinary courses.

File Description	Document
Upload any additional information	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

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

Response: 39.31

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities of DDE and total expenditure excluding salary, year - wise, over the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
813.30	682.21	269.19	460.59	551.86

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.2.2)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for maintenance of physical facilities and academic support facilities should be clearly highlighted)	View Document

4.4.2

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

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

Response:

The Institute has defined procedures for maintaining physical, academic and support facilities as per the maintenance policy.

NRIIT has a centralized maintenance wing headed by a Maintenance Engineer and supported technicians to maintain infrastructural facilities. The section receives maintenance requirements from the departments via letter/email and undertakes the necessary work following internal operating procedures. A Technician is deputed to resolve the problem. In case of any material requirement, it is received from the maintenance section through an indent. If the material is to be purchased, permission is to be obtained from In-charge/Principal.

1. Physical Facilities

- **A)** Electrical Maintenance: Monitoring of electrical equipment such as generator, UPS and batteries is done. For major problems suppliers/service providers are approached. For replacement, quotations are invited, procured as per the centralized purchase procedure. Annual inspection of all electrical equipment is done.
- **B) Building Maintenance:** A Civil Engineer and supervisors are responsible for new constructions. Civil and Pest control maintenance is done periodically. Annual inspection is done for Fire Safety by AP state Disaster Response and Fire Service Department.
- **C)** Furniture Maintenance: The Mechanical Engineering department maintains the central workshop facility, caters fabrication of desks, installation of doors and windows and regular maintenance.
- **D)** Network / Wi-Fi Maintenance: The college intranet and internet facilities are maintained by the hardware technicians and Network Administrator. Issues related to Telephone and Intercom are serviced

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by Electrical maintenance department.

2. Academic Facilities:

- **A) Library:** Central library supports textbooks, reference books, journals and periodicals for issue to students, staff and faculty. Utilization of Digital library within the library and campus with proper user credentials is permitted. Library committee with a Professor In-charge monitors the functioning of library services
- **B)** Laboratories: Laboratory equipment maintenance (regular-basis) and repairs are addressed by the respective department technicians. For major problems and repairs consultation with suppliers following the central purchase procedure is done.
- C) Classrooms: Every Department has a Faculty In-charge to monitor classroom/laboratory amenities like benches, chairs, digital boards, black boards, fans, lights and LCD's.
- **D)** Computer Facilities: Around 1549 desktops, 100 laptops, 44 printers and Photo Copier machines are available for the staff and students. Computers and software in the laboratories are maintained by technicians under the supervision of faculty.

3. Supporting Facilities:

- **A) Sports/Yoga:** The Yoga Centre, Playground, Walking Track, Sporting Equipment and Gym are available for boys and girls separately and are supervised by the Physical Director.
- **4. Other Facilities:** The Institute has the following facilities maintained by a dedicated team
 - RO plant (7 Nos)
 - 7 (200 litres) Water Coolers
 - Transport facility (60 busses)
 - Surveillance cameras (256)
 - Each Block consists of Washrooms for boys, girls and staff
 - Reprographic facilities
 - · Qualified Doctor
 - Canteen, Food court, Soda Hub, PaniPuri, Bakery Etc.
 - ATM centre
 - Solar power unit (200 KvA)
 - Generator (500kV-1, 125kV -(2)Nos)
 - Book stores
 - Dr R.V.R Knowledge Centre (Open Air theater)
 - Ladies Waiting Hall
 - FM Radio

File Description	Document
Upload any additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 87.1

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
3397	2967	2890	2585	2565

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Institutional data in the prescribed format (data template)	View Document

5.1.2

Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years

Response:

NRI Institute of Technology strives for the success of students by providing Training, Guidance and Placements. The Institute understands the importance and need of current market and imports accordingly the Training and Guidance to its students. It helps the students in deciding Career through various counselling sessions. These sessions prove to be helpful in excelling their skills and knowledge and boosts the confidence in them to choose certain Career path.

The Institute offers free Coaching and Training programs to make students potential enough to reach their goal. It also initiates Motivational Programs for Personality Development. It even includes Awareness Programs to pass on the information needed for their Career Plan. It also enhances students in developing Soft Skills, Communication Skills, Logical Skills and Employment Skills.

The following activities are organised:

- Workshops, Training Programs and Webinars: The Institute often organises various workshops, Seminars, Webinars to make student confident in planning Career of his/her interest.
- Guest Lectures on Career Planning are organised in Virtual and Physical Mode: Resource persons from various Industries, Consultancies and Colleges are invited to provide certain understanding to have a better future.
- Awareness programs are organised on Industry needs, abroad education and trends in respective field: The Institute organizes numerous awareness programs inviting consultancy professionals. The awareness creates a visualization of the process for abroad education
- Training: The Institute strategies sturdy Training focusing on improving the capacity building and enhancing skills of the students. This helps the students to build technical and leadership qualities. The industry experts provide insight to understand the requirement to reach the goal. The professional training helps the student to face assessment, practical interaction and placements. Guidance for the competitive exams is focused by providing guest lectures and training on GATE. The institute often provides students access to certain portals to boost their skills for their jobs. The Institute provides e-counselling using in this effort it plans to provide training for competitive exams, higher education and core exams. Other than this, it also concentrates on training for skill enhancement like Soft Skills, Language and Communication Skills and Technical skills. The institute even provides training through online platforms.
- Webinars relating to opportunities to study abroad are organised.

Outcomes:

Students secured many jobs offers in various companies during the Campus Placements. In the past five years, many students have shown their skills by getting placements in high-package companies like TOPPER (2018-19), VALUE LABZ (2019-20), CISCO (2020-21), FUTURENCE TECHNOLOGIES (2021-22) and GALAX E SOLUTIONS (2022-23). The packages varied from 10 LPA to 23.5 LPA. The institute has shown many opportunities even during the pandemic.

The effort of the institute has made many students to get qualified in various tests like TOEFL, GRE and IELTS. Some of them pursued higher education. Henceforth, the institute has effectively strived for the development of students through Career Counselling and Guidance.

File Description	Document
Upload any additional information	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, self-employment and entrepreneurial skills)
- 4. Awareness of trends in technology

Response: A. All of the above		
File Description	Document	
Report with photographs on programmes conducted for awareness of trends in technology	<u>View Document</u>	
Institutional data in the prescribed format (data template)	View Document	

5.1.4

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
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document

5.2 Student Progression

5.2.1

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

Response: 82.99

5.2.1.1 Number of outgoing students placed and progressed to higher education during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
674	704	613	593	690

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

Percentage of students qualifying in state/ national/ international level examinations out of the graduated students during the last five years

(eg: NET/SLET/ Civil Services/State government examinations etc.)

Response: 4.82

5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/Civil Services/State government examinations etc.) year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
125	40	18	03	04

File Description	Document
List of students qualified year wise with details of examination and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format (data template)	<u>View Document</u>

5.3 Student Participation and Activities

5.3.1

Number of awards/medals for outstanding performance in sports/cultural activities at University / state /national / international Level events during the last five years

Response: 160

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

2022-23	2021-22	2020-21	2019-20	2018-19
34	29	24	26	47

File Description	Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format (data template)	View Document

5.3.2

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

Describe the Student Council activity and students' role in academic & administrative bodies within a maximum of 500 words

Response:

NRI Institute of Technology is well known for student progression. It aims at taking advantage of every opportunity for nurturing its graduates in fullness to the path of excellence. To make it possible, NRIIT has various committees representing student representatives to participate in a wide range of academic and non-academic bodies inculcating a sense of responsibility.

There are several committees constituted for curricular, co-curricular and extra-curricular activities. The details are as follows:

1. Academic Committees:

Anti Ragging Committee: This committee members look through the prevention and curbing of ragging activities within the institute. The committee members assure the campus to be a complete ragging-free zone. All the HoDs conduct department-wise individual programs, which create a greater impact on students. The senior students of the committee contribute through their efforts to make the campus free from ragging.

Disciplinary Committee: It makes active student participation to curb in-disciplinary activities in the campus. The Student Representatives play active role in maintaining discipline in programs conducted by the institute.

Internal Quality Assurance Cell: Student representatives provide feedback, helping to bridge the curriculum gap. This feedback helps in many ways viz. attainment of COs, POs, better training and placement activities.

Library Committee: Students representing the library committee ensure to give feedback about the facilities provided in the library.

2. Administrative Committees

Canteen/Mess Committee: Student feedback on quality and hygiene is considered for improvement and better service. Any issue is resolved with certain input taken by the student and committee members.

Hostel Committee: Regular feedback on hygiene and other amenities of both girls and boys hostels enables monitoring and facilitating timely redressal where needed.

Transport Committee: Students observation enable monitoring of the facilities besides solving grievances of commuters.

3. Other Committees:

Women Protection and Grievances Cell: Nominated female students of all branches participate in key resolutions for women's protection. Awareness and Motivation Programs are conducted to develop self-confidence and wisdom among girl students.

Grievances Redressal Cell: The institute's students freely express grievances through proper channels for suitable solutions, where solution is given by the administration with direct involvement. The student representatives are active in bringing the issue to the notice of the administration.

Student Welfare Committee: The Student Welfare Committee aims at the overall development of the students through support and guidance fostering in them a sense of positivity. focuses on the physical and mental well-being of the students. The student representatives of the committee are encouraged to play an active role in providing suggestions for improving any facility.

National Service Scheme: The student representatives of the institute's NSS wing motivate students by involving them in organizing blood donation, rural health & sanitation, adult education and environmental awareness camps in neighbouring areas.

Sports Committee: The active participation of the students is seen in inter and intra-college activities and winning many prizes. This is made possible by student representatives of the committee.

File Description	Document
Upload any additional information	<u>View Document</u>

5.3.3

The institution conducts / organizes following activities:

- 1. Sports competitions/events
- 2. Cultural competitions/events

3. Technical fest/Academic fest

4. Any other events through Active clubs and forums

Response: A. All four of the above

File Description	Document
Report on Sports, Cultural competitions/events, Technical/academic fests, Any other events through active clubs and forums along with photographs appropriately dated and captioned (whichever is applicable)	View Document
Institutional data in the prescribed format (data template)	View Document

5.4 Alumni Engagement

5.4.1

Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution through registered Alumni association:

Response: 51.39

5.4.1.1 Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution year wise through registered Alumni association:

2022-23	2021-22	2020-21	2019-20	2018-19
15.64	4.41	1.70	13.92	15.72

File Description	Document
List of alumnus/alumni with the amount contributed year-wise	View Document
Annual audited statements of accounts of the HEI highlighting the Alumni contribution duly certified by the Chartered Accountant/Finance Officer	View Document

5.4.2

Alumni contributes and engages significantly to the development of institution through academic and other support system

Describe the alumni contributions and engagements within a maximum of 500 words

Response:

The NRIIT is truly proud of its brilliant Alumni who are currently positioned all over the globe and have distinguished themselves in all spheres of high-end engineering and technology.

The main aim of the Alumni Association NRIIT is to coordinate the networking of all the NRIIT alumni and to create a single global NRIIT Community. The Alumni Association NRIIT is an official unit of the institute with the primary objective of facilitating the pleasant and friendly interface to all the NRIIT alumni/alumnae.

Alumni is a generic term that describes all those who have spent time studying at a particular institute. It is a lifetime relationship with continued interest, interaction and involvement with one's Alma mater. Alumni of NRIIT stand strong for the development of the institute.

The development is through mentoring, guest lectures, workshops and seminars by the passed out to the current students. During these sessions, Alumni interact about the required skills in Industry like Communication and Soft Skills. The industry expertise provided by the Alumni creates a sense of clarity in choosing the career path and develop confidence.

NRIIT has held Alumni Meet since 2013 every year to maintain a rapport among passed out students, present students and faculty. Most of the Alumni are invited in college events like Success Meet, Techfest and Annual Day Program. The invited alumni interact about the support provided by the institute to reach their desired goal. Many students shared their opinion that the institute provides strong training to make its students excel. They even shared their experience about the warm attention and concentration received by the institute to make them successful. They expressed themselves to be proud to get graduated at NRI Institute of Technology.

During the meet many students extend financial assistance by contributing fund to the institute. These funds are received as a token of gratitude and are utilized for physical and academic facilities of the students.

File Description	Document
Upload any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

Institute Vision:

To produce professionally Excellent, Knowledgeable, Globally Competitive and Socially responsible Engineers and Entrepreneurs

Institute Mission:

- Providing Quality Education through state-of-art Infrastructure, Laboratories and Committed Staff
- Establishing a continuous Industry Institute Interaction, Participation and Collaboration to contribute Skilled Engineers.
- Involving Faculty members and Students in Research and Development to become globally competitive and for the betterment of the Society.
- Developing Human values, social values, Entrepreneurship skills and Professional Ethics among the Technocrats.

The success of NRI Institute of Technology can be attributed to the well-defined Vision and Mission of the Institution and effective governance and leadership. The key contributors for attaining the Institution's Vision through attainment of various components given in well-defined Mission statements are decentralization, structured institutional governance, meticulous planning for sustained growth and flexibility in the system, adopt to new changes in education environment viz National Educational Policy (NEP) and its' implementation.

The institution has decentralized the authorities at all stages for effective implementation of policies for the benefit of the students and sustainable growth. Any delay in implementation of new policy proposed by the Central/ state governments or affiliating University or AICTE may adversely affect student progression. To assist the principal, Director- Academics and Director – Administration were created by assigning the specific responsibilities to each for effective implementation of policies, to measure the effectiveness of implementation and to fine tune the system to meet the student requirement. HoDs implement the various strategies proposed by the university and AICTE through the directions of the principal. Deans constituted in various departments look after research activities, consultancy and testing services and guide the faculty members to secure funds from various governmental and non-governmental agencies.

The student's admission over the years reflects the reputation of the institution and thus strong demand

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for Institute's programs. New programs such as B.Tech in Artificial Intelligence and Machine Learning (AIML), B. Tech in CSE-Data Science, B. Tech in CSE-AIML, B. Tech CSE(Regional language Telugu) were introduced. The curriculum is updated every three years after considering feedback from stake holders and is aligned with technological advancements and in tune with Institution Vision and Mission. The institute has well qualified faculty members with advanced degrees and research expertise. There is a steady growth in research publications, patents, obtaining research grants and funding over the years. The campus infrastructure is enhanced. Smart classrooms with modern teaching aids are also implemented. The students achieving higher pass percentages. A consistent placement record is evident. The institute is progressing with gradual increase in industry tie-ups, internships and opportunities for students to gain practical experience and exposure. A healthy financial position with a balanced budget represents consistent revenue growth. B.Tech – CSE, ECE and EEE programs are accredited by NBA twice and B. Tech in MECH and IT have completed NBA Accreditation visit and waiting for the outcome. The institute engages the local community through outreach programs. The quality of growth is assessed through feedback mechanisms, program reviews and strategic planning.

File Description	Document
Upload any additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

NRIIT has paramount importance in effective deployment and functioning of institutional bodies. The success of NRIIT depends on academic excellence, administrative efficiency, policies, appointment procedures and service rules. The institutional effectiveness lies in its framework that encompasses academic, administrative, financial and governance policies that guide the growth and development, aligning it with vision and mission. The administrative set up plays a pivotal role in day to day operations and overall institutional governance.

A well-defined appointment procedure is followed to ensure that the best talent is selected, taking into account academic qualification, personal experience and the ability to contribute to the institution's objectives. The institution is always striving hard to recruit young and talented faculty who not only deliver the content as per new OBE procedures but also actively involved in research and developmental activities. The entire faculty recruited through institutional interview by experts will be presented to university for ratification at the earliest possible time. The service rules and procedures related to attendance, leaves, evaluation and professional development are strictly adhered to, by faculty members, staff and management. The administrative set-up of the institution is modified to implement the perspective plan and strategies effectively and efficiently. Two new director posts were created to assist the principal in academics and administration, an academic coordinator position created at college level

to monitor teaching- learning activities, and dean's positions are created at department level to promote R&D activities. The performance of faculty is assessed through regular feedbacks, achievements and the areas that require improvement are addressed. This helps in motivating faculty and staff for overall excellence of the institute.

The institute conducts regular reviews and assesses policies, administrative processes and academic committees for continuous improvement. This proactive approach ensures that the institute remains adaptable and responsive to the evolving needs of its stakeholders

The institute's perspective plan helps in setting strategic direction. It outlines the short and long term goals, vision, mission, providing a clear roadmap for where the institution intends to be in the future. All objectives and initiatives are aligned with the plan. The allocation of resources for funding, manpower and infrastructure are effectively deployed. The progress of departments and staff are observed to assign new targets. The quality is enhanced by improving the services such as academic programs, research and administrative operations. Training and placement division is strengthened by recruiting additional staff and by providing coordinators from each department to assist the placement division during training sessions and placements. A comprehensive training plan is prepared where students from 2nd years onwards are put in intensive training in aptitude, reasoning and communication skills in addition to regular domain specific training. All departments are equipped with e-class rooms with either LCD projector or digital board to facilitate the faculty members to adapt to modern teaching methodologies using power point presentations, teaching the content using audio files, pictures and video clips. The success of the institution is measured through Performance Indicators.

File Description	Document
Institutional perspective Plan and deployment documents on the website	View Document

6.2.2

Institution implements e-governance in its operations. e-governance is implemented covering the following areas of operations:

- 1. Administration including complaint management
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examinations

Response: A. All of the above

File Description	Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document

6.3 Faculty Empowerment Strategies

6.3.1

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

Response:

NRIIT is committed to fostering a prospering educational environment for our students, faculty and staff. The institute established a comprehensive framework that encompasses a Performance Appraisal System, effective welfare measures, and opportunities for career development and progression.

Performance Appraisal System:

The institute implements a fair and objective process that considers both qualitative and quantitative metrics to assess an individual's performance that include classroom observations, research contributions, administrative roles and feedback from students. Faculty and staff receive regular feedback, enabling them to understand their strengths and areas for improvement. This iterative process help faculty grow continuously and excel in their roles. Based on the appraisal, a personalized development plan is discussed with faculty, outlining areas for growth and opportunities for skill enhancement. Exceptional performance is recognized and rewarded through promotions, additional increments and other incentives.

Academic qualifications, Curriculum delivery- Assessment – Evaluation methods, teaching experience, feedback from students, research activities and training, research projects and consultancy, attendance at Seminars/ Conferences/ Symposia/Workshops, number of publications/products/patents, and communication skills are used to evaluate teaching staff performance. In addition teaching innovations are evaluated based on contributions to curriculum design, teaching methods, laboratory experiments, evaluation methods, resource material preparation (including books and reading materials), laboratory manuals, remedial teaching and student counseling. Each faculty member is to submit the self-appraisal on his/her performance during the past 12 months at the end of each academic year. The self- appraisal consists of all the components mentioned above with weightage to each component. The performance based self-assessed documents are further verified and assessed by the independent experts from outside of the institution. This forms the basis for awards/ rewards and increments. These performance appraisal's outcomes are also considered for promotions into higher cadre, in addition to their qualification and experience.

Effective Welfare Measures:

NRIIT considers staff well-being as a cornerstone for the success of the institution. The institute implemented a range of welfare measures to ensure their comfort and satisfaction which include healthcare benefits, financial security, work-life balance and professional development opportunities. We believe career growth to be a persistent journey and provide a multitude of avenues for career development and progression. Regular training sessions and workshops are organized to keep faculty updated on the latest pedagogical and administrative techniques. Faculty are encouraged to engage in research activities, publish their findings and fostering a culture of innovation. Clear Promotions are

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offered to staff providing opportunity to ascend professional hierarchy. Faculty are offered leadership programs to prepare them for managerial and administrative rolls.

Welfare measures taken up by NRIIT for teaching and non-teaching staff include

- 1. Medical Insurance,
- 2. Provident Fund,
- 3. Maternity benefits as per government norms,
- 4. All the non-doctoral staff members are encouraged to get enrolled for part-time Ph.D. program,
- 5. Subsidized food,
- 6. Free Transport facility,
- 7. Salary advance for needy,
- 8. Gym facility.

In addition to the above welfare measures, the institution is also providing financial assistance for the faculty members to attend National and International Conferences and Sponsored Faculty Development Programs organized by other institutions.

File Description	Document
Upload any additional information	View Document

6.3.2

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

Response: 42.66

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

2022-23	2021-22	2020-21	2019-20	2018-19
107	75	64	86	101

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format (data template)	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences/workshops and towards membership fee for professional bodies	View Document

6.3.3

Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years

Response: 60.99

6.3.3.1 Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
134	123	125	118	119

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources

Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words

Response:

Optimal Utilization of Resources: NRIIT entails a comprehensive approach to gather, manage and utilize various resources for the effective functioning of the institution. This approach ensures smooth operation of academic and non-academic activities, research initiatives, infrastructural development and overall growth of the institution. The institute follows the procedures listed below for resource mobilization.

Identifying the necessity of resources: The institute identifies specific requirements namely financial needs, infrastructural development, faculty and staff requirements, and research funding and technological advancements.

Budget planning and allocation: Based on the needs and their priority, the governing council formulates a detailed budget plan that outlines the estimated costs and allocation of resources for various departments and projects considering the existing funds, projected revenue and potential sources of external funding

Fundraising and grants: The financial support is gained by donations from alumni and other potential donors. The institute also actively pursues grants from governmental organizations, private foundations and research agencies to fund research projects, infrastructural development and other specific programs. Faculty members are encouraged to apply for funded projects and for various other grants from funding agencies. They are also provided with certain amount of seed money.

Collaborations & Consultancy: The establishment of collaborations with industry, educational institutions provide significant avenue for the institution. The institute is working with a mission of mobilizing the financial resources through consultancy activities by faculty members of various departments who have both academic excellence and industry exposure. This activity is slowly picking up and over 50 lakhs amount was earned during the last five years.

The institute believes in a policy of optimum utilization of existing resources is as good as mobilization of additional resources. Hence, it focuses on various critical areas where the institute can save the huge amounts.

The major monthly expenditure other than salary head is power bills. By installing a 200 kWp roof top solar power system, the institute is saving Rs 40 lakhs in a year. In addition, energy efficient LED lamps are placed in class room and in other amenities areas to reduce the power consumption.

All 60 buses used for transportation of students and staff are maintained to run for highest mileage per liter of diesel with strict preventive maintenance schedules. Solar water heaters are installed in hostels for students' use. Efficient kitchen equipment and quality control reduces the cost of preparation of food items. Institution is slowly transforming to paperless institution by using the technologies like messaging, social media and e-mail services.

File Description	Document
Upload any additional information	<u>View Document</u>

6.4.2

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

Response: 20.91

6.4.2.1 Total Grants received from government/non-government bodies, philanthropists year wise during last five years (not covered in Criterion III and V) (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
0.92	00	0	19.99	0

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Copy of the sanction letters received from government/ non government bodies and philanthropists	View Document
Annual audited statements of accounts highlighting the grants received	View Document

6.4.3

Institution regularly conducts internal and external financial audits regularly

Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words

Response:

The institute has a strong external audit mechanism of its financial transactions every year. At the end of each financial year, evidences of all financial transactions are submitted to external auditors firm M/S Suresh and Babu Chartered Accountants, FRN: 0042548 where they carry out the audit as per the norms and submit the report to institute. Auditing is done separately to society, sister institution and the NRIIT. It is to note that there are no audit objections for the institution from the external auditors as on date, which shows the stringent financial procedures followed at institution level. It is evident from Form No. 10B that every year there were no observations/ qualifications. NRIIT is managed by Sri Durga Malleswari Education Society, a 'not to profit' philanthropic trust registered under societies act and hence exempted from the income tax. The society submits income tx returns to Income tax department at the end of each financial year along with audited financial statements. Cash based audit system is followed for regular auditing. Study growth of gross income for the institution is evident from the attached from the past five years income and expenditure statements and balance sheets. Increase in gross income is due to increase in number of seats year after year. For self-sustainability of the institute sufficient number of seats should be available as per demand. NRIIT is focusing on self-reliance, without

borrowing additional funds for its operations from the society. Andhra Pradesh state government controls the tuition fee of all private self-financing engineering colleges once in three years.

An institution to become self- sustained, either it has to increase the tuition fee or increase the number of seats in courses having high demand. NRIIT, by following the all the regulations of AICTE, securing additional sections in various demand driven courses of engineering. That was the reason why the financial statements showing increase in trend of gross income year after year. However, it is found some inconsistency in increase in revenue, which is due to unscheduled release of fee from government of Andhra Pradesh to be reimbursed for the candidates joined under fee reimbursement category. As NRIIT is having a fleet of over 55 buses covering four districts, their income is shown on in the balance sheet but the expenditure is distributed over different heads; vehicle maintenance, salaries, depreciation, provident fund etc. This balance sheet is the basis for the fee fixation committee of Andhra Pradesh

File Description	Document
Upload any additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals

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)

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words

Response:

IQAC Initiative– 1:

Automation in Examination Process (Structures & methodologies of operations)

Examinations are the major determinant of the quality of an Institution. The credibility of examinations conducted and the promptness in publishing the results are the clear indicators of the efficiency of the institution. Before 2017 the institute was under JNTUK affiliation, later in the year 2018 institute was

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awarded autonomous status. Post autonomous status, the institute has adopted best practices in the examination system. Examination Process is made Hassle-free, Transparent and trust worthy for students, starting from applying for examinations to declaration of results with the spirit and sense of competency in students. Notices pertinent to examination schedules of regular and supplementary exams are published online in institute examination Website. Examinations are conducted under CCTV surveillance. In addition, a flying squad constituted by the Principal is also highly vigilant with zero tolerance. Unique bar codes are assigned to answer books; evaluation of answer books is done in confidential environment and further re-scrutinized by supporting staff for any inadvertent omissions left out by evaluators. Final result is published online on the Institute Website within an average time of 15 to 30 days. For results database of regular and supplementary exams, printing of marks memorandum, examination section procured the software which possesses pre & post examination modules to automate tasks.

IQAC Initiative- 2:

Industry oriented Coding Practice (Teaching-learning process)

In ever-evolving landscape of the 21st century, technology has become an inseparable part of our lives. In this digital era, Coding emerges as fundamental skill that holds immense importance for not only for the graduates of Computer Science but also to core engineering graduates to develop applications and/or to customize he applications to suit their requirement. To bridge the gap between institute and industry, students are empowered with coding sessions in tune with current industry needs and job requirements. Students ought to develop their academic, technical and presentation skills coping with such a dynamic environment. Attempts are being made to understand industry needs and address them at undergraduate level. This practice is helpful for securing a suitable job position as well as the sustainability in taken position. In view of imparting the above skills provision is made in the Time-Table to slot in regular sessions covering various topics. There are no lecturers in these sessions, faculty play the role of advisor. In each semester starting from second year – second semester to fourth year – first semester's topics to be covered are decided by the experts. Data sets covering various topics, hundreds of problems are compiled by subject's experts. Sessions are self- learning nature where students can interact among themselves and obtain solutions to all the problems before end of semester. With the result each student understands and learns from their peers and become expert in the given domain. In each semester, questions related to separate domains are given as exercises, there by students gain expertise in all domains, one after other. C and Data structures, JAVA, Python and Databases are taken for this purpose.

Assessment of Outcomes (Learning outcomes)

For every course, CO & PO Attainments are evaluated following OBE and outcomes are confirmed through periodical audits and accreditations like NBA, ISO, etc., As fact of evidence, CSE, ECE & EEE Departments got NBA accreditation and NBA inspection was completed for ME and IT departments and awaiting for result.

File Description	Document
Upload any additional information	<u>View Document</u>

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

Describe any two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC within a maximum of 500 words each.

Response:

As a central body within the college, IQAC monitors and reviews the teaching-learning process, structures and methodologies of operations, and learning outcomes.

Implementation of teaching learning reforms

The Institute takes University Academic Calendar as reference and prepares the academic calendar well in advance at the start of the academic year with ample time for regular teaching-learning process. Curricular and Co-curricular events are also organized for overall development of the students. Lesson plan is prepared by the faculty for all the courses in a particular semester. Institution has a feedback system to understand the problems of students. Regular evaluation of teachers by the students is done through feedback on teaching methodologies, course delivery; difficulties faced in the subject give a clear idea about problems faced by the students. HoD will take online feedback and takes appropriate corrective actions. Institute has a mechanism to assess and analyze course outcomes for each course at the end of each semester. Various inputs to estimate course outcomes are class tests, assignments, Midterm examinations, Semester End examination and course end survey are used to evaluate the CO attainment. CO attainment and partial PO attainment values are assessed at the end of each semester. Institute maintains an effective internal examination and evaluation system. If, the result of the students in any subject is not found up to the mark, necessary steps are taken to identify the reasons and the appropriate measures are initiated which include counseling faculty concerned, review of content, analysis of student feedback on course.

Review of quality through ISO audit and AAA:

Academic audit is conducted to monitor the quality of teaching-learning along with other academic-related activities. Senior faculty conducts Internal Audit and Experts from reputed academic institution conduct External Audit. The institution has uniqueness of combining ISO and AAA audit to ensure quality improvement of the Institution. The academic audit has been practiced since 2012 adopting ISO 9001:2015 certification regularly to uphold the quality standards. Audits includes verification of teaching-learning process in the view of assessment of teaching process in classrooms through the feedback mechanism, Innovative teaching methods, verification of course files, student performance calculation on the basis of minimum attendance, marks obtained in the internal examinations and grades obtained in external examinations. Student counseling /mentoring mechanism is in place for the betterment of academic performance as well as general behavior. Best student projects, evaluation of innovative mini and major student projects, training programs conducted for students are reviewed for betterment. Seminars, workshops, guest lecturers and self-learning through certificate courses / Online courses are the additional advantage steps taken for enhancing overall quality improvement of the institute. Activities of students in professional bodies and co-curricular activities are also reviewed. Audit report observations are taken in to consideration and corrective actions initiated for the improvement of quality

aspects in each department.

File Description	Document
Upload any additional information	View Document

6.5.3

Institution has adopted the following for Quality assurance:

- 1. Academic and Administrative Audit (AAA) and follow up action taken
- 2. Conferences, Seminars, Workshops on quality conducted
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Orientation programme on quality issues for teachers and students
- 5. Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc
- 6. Any other quality audit recognized by state, national or international agencies

Response: A. Any 5 or more of the above

File Description	Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

- 1. Annual gender sensitization action plan
- 2. Specific facilities provided for women in terms of:
 - 1. Safety and security
 - 2. Counselling Any other relevant information

Gender Audit Details:

Gender wise Details of Students in the Institute

S.NO	YEAR	TOTAL	MALE	FEMALE	%MALE	%FEMAL
						\mathbf{E}
1	2018-19	2891	1734	1157	59.97	40.03
2	2019-20	2903	1743	1160	60.04	39.96
3	2020-21	3110	1857	1253	59.72	40.28
4	2021-22	3539	2020	1519	57.08	42.92
5	2022-23	4094	2418	1676	59.07	40.93

Gender wise Details of Faculty in the Institute

S.NO	YEAR	TOTAL	MALE	FEMALE	%MALE	%FEMAL
						E
1	2018-19	206	132	74	64%	35%
2	2019-20	206	123	83	64%	40%
3	2020-21	235	144	91	61%	39%
4	2021-22	199	124	75	62%	38%
5	2022-23	219	138	81	63%	37%

Annual gender sensitization action plan:

Objective:

1. To promote inclusiveness, tolerance, harmony and women's empowerment among the students a

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nd staff.

- 2. Promoting activities related to health, nutrition, self-defence and entrepreneurship among the female students.
- 3. Conduct workshops that promote diversity and gender-sensitive communication for students and staff alike.
- 4. Mentorship in Institute to be provided where faculty and students can approach in matters of gender-related issues.
- 5. Monitoring and evaluation mechanisms for implementation and their follow-ups.
- 6. Conducting regular awareness-raising activities among students and staff.

Specific facilities provided for women in terms of:

- 1. Safety and security
- 2. Counselling

Response:

Number of gender equity promotion programs organized by the institution year wise during last five year s.. In 2018 2 programs, 2019-20 2 program, 2020-21 1 program, 2021-22 2 programs, 2022-23 7 programs.

Safety and Security:

NRIIT possesses a privileged right to promote higher education and to ensure women empowerment through gender equity in education. Safe and secure environment is an inevitable precondition for quality education.

- 1. Security guards are deployed at main gate to allow the students with valid identity cards.
- 2. The Institute campus is under surveillance of high end CC cameras installed at prominent location s.
- 3.A complaint box is arranged to receive grievances or suggestions from the students which are addressed by respective committees.
- 4. To eliminate the affliction of ragging, anti-ragging posters have been displayed.
- 5. Girls waiting halls are provided in each block in the campus with required facilities along with sa nitary pad vending machine.
- 6. The Institute provides healthcare center with medical expert.

- 7. Girl students have been encouraged to undertake their physical fitness by joining (separate for girls and boys) gym facility provided by the institute.
- 8. Separate Hostel facility provided for girl students.

Counselling and mentoring:

NRIIT arranges regular counselling sessions for all the students. Each faculty is assigned with 20 student s for regular mentoring through academics, attendance, gender and other personal issues.

Women Protection Cell

is established in our Institute for women staff and students to enhance understanding of issues related to women.

Objectives:

- 1. Institute celebrates Women's Day in grand manner and presents success stories of famous wome n to inspire the girl students and organized programs related to self-defense for the girl students and arranged various seminars / webinars
- 2. Women faculty has given equal opportunity in all academic and administrative roles, such as deans, heads of the departments and conveners of various committees.
- 3. Separate canteen facility for hostel boys and girls.

File Description	Document
Upload any additional information	<u>View Document</u>

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
- 6. Wind mill or any other clean green energy

Response: A. Any 4 or more of the above

File Description	Document
Permission document for connecting to the grid from the Government/ Electricity authority	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:

NRIIT is implementing methods for the management of waste generated in the campus using the basic waste management strategy of 3R's: Reduce, Reuse and Recycle i.e., Reduce the amount of waste generated, Reuse everything to its maximum after proper segregation and cleaning and keeping things which can be Recycled aside and handed over to appropriate agencies. The waste generated in the campus includes biodegradable and non-biodegradable solid waste, liquid waste and minute amount of chemical waste. No classified hazardous waste is generated in the campus. The environmental policy of the institute is to achieve zero discharge and complete utilization of waste with well-designed strategies to make campus clean, hygienic and healthy. The waste generated is classified into the following types:

Solid waste management:

The waste is generated by all sorts of routine activities carried out in the institute that including paper, plastics, glass, metals, food, etc. The waste is segregated at each level and source. The administrative supervisor in each block ensures that the waste in each floor is collected at designated time intervals. The block safai workers in each floor collect, clean, segregate and compile the waste in the dustbins (Green and Blue) provided at each floor. The filled dustbins are emptied by placing the waste in compost pits of size 5x2x2 m for its decomposition. The decomposed organic matter is further used for NRI plantation. The non-biodegradable waste is handed over to an authorized vendor, who collects the waste from the designated place for its disposal. All the dead UPS batteries and others are disposed through buy back mechanism to authorized vendors.

Liquid waste management:

Wastewater generated from the laboratories is very small in quantity, hence it is channelled to the trees. NRI Institute has an RO system to supply drinking water to all its stakeholders. In the RO process wastewater generated is combined with canteen wastewater/fresh water and used for watering plants and trees etc. The proper drainage system is arranged for all the buildings of the campus. Wastewater is properly drained out to maintain the greenery in the campus and to maintain an ecologically exquisite environment. The liquid waste produced from the canteen is allowed to go to the nearby trees. No harmful chemicals are there in that water. The chemical waste generated in the chemistry lab is very little, however, it is neutralized before disposal.

E-waste management:

The E-waste includes electric and electronic and electrical equipment including, connecting power plugs, cables and batteries which are regularly collected from source points, and are sent to the e-waste storage area. The e-waste includes out-of-order equipment or obsolete items like lab instruments, circuits, desktops, etc. All such equipment which cannot be reused or recycled is being disposed of through an authorized vendor to whom agreement is made.

File Description	Document
Geo-tagged photographs of the facilities	View Document
Any other relevant information	View Document
Relevant documents like agreements/MoUs with Government and other approved agencies	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 more of the above

File Description	Document
Green audit reports on water conservation by recognised bodies	View Document

7.1.5

Green campus initiatives include

Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles, Pedestrian Friendly pathways, Ban on use of Plastic, landscaping with trees and plants etc in 500 words

Response:

RESTRICTED ENTRY OF AUTOMOBILES: The institute restricts the entry of vehicles inside the campus as well as discourage student and faculty to use own vehicles. The Institute operates a fleet of 60 buses covering in and around Vijayawada and to expedite the students and staff, it facilitates their safety, security, fuel conservation and to reduce environmental pollution. The Institute buses are checked for pollution by the authorized agency. For two wheelers or four wheelers, security measures are mandatory.

Only the fraternity of Institute can enter with their vehicles.

USE OF BICYCLES: Students and security staff coming from nearby villages prefer bicycle as a mode of transport for attending the Institute. It is environment friendly and prevents pollution. Institute encourages and allows bicycles into the campus.

PEDESTRIAN FRIENDLY PATHWAYS: Vehicle parking space is provided at the main entrance of the Institute. As the campus is vehicle free with some exceptions, students and staff experience comfort walking through the pedestrian friendly pathways. The internal roads are lined with trees and lights, and they are properly maintained by the campus maintenance committee.

BAN ON USE OF PLASTIC: To restrict the use of plastic, measures have been taken to replace plastic teacups and glasses with steel glasses and plates in the canteen. Single-use plastic items such as plastic bottles, bags below 120 microns, spoons, straws and cups are banned completely and awareness is created among staff and students through orientation programmes and boards are displayed in the premises. The staff and students are informed to use stainless steel or copper water bottles instead of plastic bottles.

LANDSCAPING WITH TREES AND PLANTS: Landscaping of the Institute is worth seeing and reflects artistic sense. The institute has velarium of trees {mango, sandal, red sandal and teak} and plants to make the environment pollution free to safeguard the health of all inmates. Utmost care is taken to develop and maintain green landscaping by trained gardeners and supervisor. The lawns and the trees provide shade and beautiful ambience. The construction and maintenance committee constituted in the institute looks after the development and maintenance of the greenery in the campus. Landscaping of the campus is done keeping in mind the green campus initiative and to promote the concept of eco-diversity and increasing the flora and fauna present on the campus.

File Description	Document
Policy document on the green campus/plastic free campus	View Document

7.1.6

Quality audits on environment and energy are regularly undertaken by the institution

The institutional environment and energy initiatives are confirmed through the following

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

Response: A. All of the above

File Description	Document
Report on environmental promotion and sustainability activities conducted beyond the campus with geo-tagged photographs with caption and date.	View Document

7.1.7

The Institution has Differently-abled (Divyangjan) friendly, barrier free environment

Write description covering the various components of barrier free environment in your institution in maximum of 500 words

- 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

Response:

In the institute, the administration and faculty members ensure appropriate accommodation for each person with a disability and favours to resolve problems. The campus is barrier free and accessible for persons with differently abled.

Right of Persons with Disabilities Act, 2016 forbid discrimination against individuals with physical and mental disabilities. NRIIT is against all kinds of discrimination on any grounds including disability. The institute aims to design its programs, administration and activities accessible to all the students. All the authorities of the institute are striving in order to extend a helping hand towards the differently abled so as to make sure, the benefits of ground programs, administration and activities are reached to the students.

- To provide counselling for the students with disabilities in order to encourage them to pursue higher education.
- To assess the educational needs of persons with disabilities enrolled in the higher education.

The institute provides various provisions in creating a disabled friendly campus. The campus should be barrier free and accessible for persons with differently abled.

Facilities available for Employee and students

• Staff are trained to assist persons with disabilities, including persons with learning disabilities.

- All UG and PG program students with disability are given access to activities to build confidence.
- Provision of access textbooks and study materials to all students with disabilities.

Divyangjan friendly facilities

Divyangjan friendly facilities to students with disabilities aim to ensure a comfortable and fulfilling stay for students on the Institute. These include ramps, lifts, tactile paths, lights, and signboards. These facilities help disabled aware of their rights, dignity. Disabled-friendly washrooms on the ground floor of different buildings, comfortable teaching learning environment for the disabled persons.

Signage including tactile path, lights, display boards and signposts.

Inside the NRIIT campus there are several signage and display to direct the building or department or the facilities available in the institute. At in the road sufficient light is also available to walk freely in the campus.

File Description	Document
Upload any additional 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 such other diversities (within 500 words).

Response:

- **NRIIT** provides attractive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities.
- Moreover, institute provides equal opportunities to the students in various activities conducted throughout the session irrespective of their caste, creed, religion, and region.
- Efforts have been made by the institution for providing a healthy environment promoting harmony and tolerance among the students. Right from the enrollment, there is no biasness as the enrollment is purely transparent and is merit based.
- Different sports and cultural activities organized inside the college promote harmony towards each other. The events include Sankranthi sambaraalu, along with important days like Women's Day and Yoga Day along with many regional festivals like Janamashtami, Navrathri and Diwali. This establishes a positive interaction among people of different races and cultural backgrounds.
- To maintain this harmony, our college management jointly celebrate and organize social, cultural and religious festivals, like Induction Program,Fest, Teacher's Day, Rally for a Social/National Cause, Constitutional Oath,etc. are collectively celebrated formally and informally.
- Various cultures are represented during the fests which depict sense of respect towards all the cultures. There is no segregation of students on the basis of their lingual background.
- Institute has code of ethics for the students and a separate code of ethics for the teachers and other employees which are followed by each one of them irrespective of their cultural, regional,

- linguistic, communal socioeconomic and other diversities.
- Students are safe and secure at the institute, not because of locks, and security guards, but because they know that the institution has physical, emotional, and spiritual safety.
- Anti-ragging cell acts as key factor in maintaining tolerance and harmony among students. For the last decade there is not a single incident of ragging in the campus.
- Every year "Constitution Day" is organized by the institution to spread the Constitutional values and ideals among students.
- Our institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion and regions are studying in college without any discrimination.
- During national festivals and other events of the college, eminent personalities are invited to emphasize the importance of tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities.
- Industrial visits expose students to the practical challenges and also make the students from different backgrounds adapt to one another to create a tolerance and harmony.
- NSS activities of our institution mitigate the socioeconomic diversities and progress them towards leading to a tolerant and harmonious living.
- Cultural and Literary committee, through various clubs organizes plays, skits, competitions and invited lectures, educates the students and makes them aware of their social responsibilities and understand the implications of their actions.
- Students are involved and encouraged to participate in various co-curricular and extracurricular activities to make them mingle with one another and share their opinions and disagreements in a harmonious manner.

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	<u>View Document</u>

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

Response:

India is an ample country with many languages, cultures, religions and ethnic diversities governed and guided by the Constitution irrespective of caste, religion, race sex. NRIIT sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties and responsibilities of citizens which enables them to conduct as a

responsible citizen. The vision of the institute is "To produce professionally excellent, knowledgeable, globally competitive and socially responsible Engineers and Entrepreneurs". These elements are inculcated in the value system of the college community.

Institute has organized many activities to sensitize students and employees to the constitutional obligation: Values, Rights, Duties and responsibilities of the citizens. Every year, on Republic day and Independence Day, all to remember the struggle of freedom and respect the National Flag and National Anthem. Our constitution provides for human dignity, equality, social justice, human rights and freedom, rule of law, equity and respect and superiority of constitution in the national life. The whole country is governed on the basis of the rights and duties preserved in the Constitution of India.

The annual cultural fest is also promoting the awareness towards rights and duties of citizens are based on different themes. The Institute has incorporated courses / modules on the constitution of India and civil responsibilities in many of its programs. Co-curricular activities are also organized to sensitize students and staff to their citizenship roles. The values are inculcated through courses in the curriculum, namely Value Education, Universal Human Values: Understanding Harmony and Professional Ethics & Human values. The objective of these courses are to spread awareness and imbibe the constitutional values in the conduct of students.

NSS activities of our institution have the affinity for Philanthropic initiatives which include donation of time to the charities and organizations at local, national levels to help victims during natural disasters. Institution conducted awareness programs and rallies on ban on plastic, cleanliness, Swachh Bharat etc. involving students. On Orientation Day, reputed persons from the police department and legal cell authorities are invited to speak about duties and responsibilities of citizens and consequences of ragging. A New Voter Enrollment program is conducted in the college to encourage young adults to register as voters which improves the voting percentage. The Institution ensures that students participate enthusiastically in all the above-stated activities which facilitate an inclusive environment.

The alumni achievers in various fields are invited for guest lectures, seminars and to provide a motivational talk and they have shared their experience. These series of lectures have made students to be positive and to have a responsibility to revert back to the society at their later stages of life.

File Description	Document
Details of activities that inculcate values necessary to nurture students to become 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 institutional Code of Conduct principles are displayed on the website
- 2. There is a committee to monitor adherence to the institutional Code of Conduct principles
- 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
Document showing the Code of Conduct for students, teachers, governing body and administration as approved by the competent authority.	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 1:

1. Title of the Best Practice: PRERANA-SAMARDYAM

2. Objectives of the Practice:

The slow learners are not labelled as poor achievers or problem students in the class or department. So that their motivation and their interest are not negatively affected. This can also make them more stressed, and introvert in the class.

- The Department and individual teachers help the slow learners by giving proper guidance and support to them.
- Organize bridge classes and remedial programmes for them.
- Slow learners are specially advised and counselled by a teacher guardian and the subject expert.
- Bilingual explanation and discussions are imparted to the slow learners after the class hours for better understanding.
- Wards with unsatisfactory performances in the regular class tests and day to day responses besides inhibition to open-up are identified.
- A proper plan of action is finalized for their assured improvement.
- Regular monitoring by Heads of the respective departments is done.
- Getting the support of the advanced learners to the slow learners in making their learning process more participatory and interesting.
- Encouraging the group learning activities and practical will be useful to the slow learners.

- 3. The Context: It's universally acknowledged across the institutions that there will be some students who will not follow, respond and perform up to the required expectations. Students undergo various problems of stress- personal, academic, physical, mental. Students are new to professional Institute life. It creates a lot of stress, especially to hostel students who are away from family for the first time. Students from educationally weak background feel complex and hesitations in class and unable to perform well due to inhibitions. Hence for quality improvement, Special Remedial Classes are planned for the students' overall development. Statistics reveal increasing number of suicides and dropouts. Considering the student-teacher ratio in classrooms, it is difficult at times to give personal attention to students in class. One solution therefore is a 'Mentor' who can form the bond with students in the true sense. Mentoring is required for students to achieve emotional stability and to promote clarity in thinking and decision making for overall progress.
- **4. The Practice:** Students who have not been performing up to satisfaction levels are segregated in separate classrooms. The respective subject teacher is given the sole responsibility to revise the concepts that are difficult and less understood. Revising important questions done phase- wise enables learning of the concepts thoroughly. Regular tests check their keenness and participation.
 - Each teacher is assigned around 10-15 students for the complete duration of their study.
 - They meet at least once a month to discuss, clarify and share various problems which may be personal or academic, etc.
 - The mentors encourage the students to participate in co-curricular and extracurricular activities and sports.
 - Their academic performance and other activities are all recorded.
 - The mentors also counsel the students in need of emotional problems.
 - When the students have any problem in any department either with the staff or with work completion the mentors speak with the respective staff and sorts out the problem.
 - Students' problems are discussed with the departmental heads, other faculty and necessary action taken to solve it.
- **5. Evidence of Success:** These remedial classes thus met with the expectation that's clearly noted in the following results. Evidence of success of the practice includes university ranks, better results in the examinations, improved attendance, less dropouts, increased participation in co-curricular and extracurricular activities, better discipline on campus and respectful relationship between teachers and students. The students are more relaxed and have a healthy relationship with the staffs.
- **6. Problems Encountered and Resources Required:** This practice requires committed teaching staff who has the sire to help students beyond teaching hours. There are no limitations or constraints faced during implementing the program.

Best Practice 2:

- 1. Title of the Practice: EKALAVYA NAIPUNYAM (SELF LEARNING)
- 2. Objectives of the Practice:
 - To make effective use of ICT in Education
 - To enhance the employability skills
 - To impart knowledge on diverse areas of Technology

- To encourage self-learning
- All class teachers are instructed to register students to the NPTEL courses.
- Students will be benefitted by this self-learning process.
- This online course enables toppers to get direct contact with recruitment companies.
- It enables them to self-assess their understanding.
- Students will get access to distinguished faculty from IITs.
- **3.** The Context: To enable the student to attain the graduate attributes, self-learning has to be encouraged and Learner Centric environment is to be created. The student needs to acquaint himself with the emerging areas of Technology. Value addition is to be done by introducing various courses that replenish the knowledge. It's well-known fact that students with hands on experience will have an edge over others in recruitment processes during campus placements. Hence students' enthusiasm for self-learning and skill enhancement is the prime requirement. To promote success rate of both academics and placements, the institution promotes students' active participation in courses like NPTEL.
- **4. The Practice:** Students who aim at improving their command on subject and practical knowledge in various topics other than their subjects of learning are made to register for NPTEL, self- learning module created and supported by AICTE. The expert lectures they listen in the process give them out of the box experience. Periodical assessments and evaluations alert them on their weaknesses providing them an opportunity to improve.

5. Evidence of Success

- NPTEL courses enable students to perform well in recruitment tests besides proving their efficiency in other competitive exams.
- Additional expertise and skills beyond the curriculum are imparted to the students.
- The knowledge gaps that exist in the curriculum are bridged.
- Students gained proficiency in the cutting-edge technologies.
- Students are endowed with employability skills.
- Certificates are awarded to the successful candidates.
- Scholarship is offered to those who successfully complete the course.
- Innovative ability of the students is increased.

6. Problems Encountered and Resources Required

- Retaining the interest in the student
- Making the students to regularly attend the video lectures.
- Submission of assignments on time

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:

The vision of our NRIIT is to produce Professionally Excellent, Knowledgeable, Globally Competitive and Socially Responsible Engineers and Entrepreneurs. It is committed to meeting the needs of all its Stakeholders, continually improving the effectiveness of quality education to students and training faculty in the field of Technical Education to achieve international recognition. Institute has taken Utmost care to maintain all types of Accreditations and awards to maintain excellent standards.

NRIIT Points of Pride (Achievements)

S1.	Institute's Achievement Issuing authority year		
No			
2	Academic Insights The Academic Insights 2023		
	Education Excellence		
	Award		
3	Digii 100 (recognizing India Habitat Centre, New 2023 the top 100 Higher-Ed Delhi pioneering Digital		
	Transformation)		
4	Certificate of Excellence OBE Rankings 2023 in 2023		
	R World Institutional		
	outcome based Ranking		
	education (Ranked in the		
	Gold Bank with A Grade)		
5	Excellence in Industry-College dunia-Connect2023 Academia Collaboration Chapter-3.0		
6	62nd in 2022-70th rank in Centre of Excellence 2023		
	2023 DQ- CMR Survey(COE) WITH Top MNCs		
	Top T-school 2023 by		
	DATAQUEST		
	DATEQUEST		
7	One among threeEXCELR 2023		
'	colleges in India for a		
	National Faculty		
	Development (NFDP)		
	Programme on Chat GPT		
	and		
	Prompt Engineering for 10 hours		
7	HCL certificate of HCL 2022		
ľ	appreciation in		
	developing talent		
	as reloping talont		

	TOP ACHIEVER	
8	AWARD Certificate of PartnershipVIRTUSA for securing Virtusa Campus Centre of Excellence for the	2022
9		vation2021
	ARIIA-2021 ATAL Cell, Govt. of India ranking of institutions on Innovation Achievements BAND PERFORMER	
10	Global Talent Track as aCEO, Global raining and Track skilling partner for enabling youth to become employable	Talent2020
11	JNTUK PermanentJNTUK affiliation	2017
12	UGC 12 (B) UGC	2018
13	Autonomous Institution UGC	2018
14	Excellence in Wipro Recruitment Drives	2015
15	Preferred Placement Virtusa Partner	2015
16	UGC 2(f) UGC	2015
17	Awarded A-Grade by Govt. of AP Department of Technical Education, based on "Key Performance Indications"	2015
18	Asia Pacific HRMAcademic Excellen Congress award Institute Interface	ce in2014
19	TCS ION Centre for TCS conducting online exams for govt.	
20	sector exams Ranked as A+ bestEET CRS engineering college of the country	2013
21	Rated AA Career 360	2013
21 22	Ranked among top 200Silicon India potential	2013

1	engineering colleges of	
	the country	
23	52nd best engineering Competition Success college of the	2013
	Review	
24	Gold Medal (UniversityJNTUK first rank) JNTUK 2012 Department of Computer	2012
	Science	
25	Research Centers CSE,JNTUK ECE, MECH	2023,2020 respectively
26	NAAC Accreditation "A"NAAC Grade with	2017
 27	3.21 points NBA Accreditation NBA	2018
<i>-</i>	CSE, EEE, ECE (UG Programs)	2010
28	ISO 9001: 2008ISO certification	2012
	ISO 9001:2015	& 2016
	Certified Institute	

INSTITUTE TO INDUSTRY

The industry always looks for students who are vibrant, energetic individuals, ready to accept challenges, attentive, fast learners, open to learning even at work and more importantly with a good academic background and good communication skills. Industries today make use of unique techniques during recruitment to make certain that those hired will meet its requirements. The Training & Placement Cell recognizes these techniques by interacting with the industry and prepares students for them.

The uniqueness of our Training & Placement Cell is to ensure that the recruitment process is a successful journey for the students of NRIIT. It puts high emphasis on technical and non-technical pre-placement training, which will train students to excel at interviews and recruitment processes.

It is often seen that engineering fresher do not meet all these requirements to get immediately hired across the industries.

The Specific Objective of the Placement Training Cell is to train and expertise the students to meet the industrial needs.

- To prepare students to face campus interviews through arranging training in aptitude, group discussions, technical and HR interviews by trainers.
- To encourage career guidance and employment opportunities by organizing guidance lectures by corporate personnel and most importantly by the immediately placed senior students.

• To enhance employability skills, career competency, nurture life skills to all students and develop Industry readiness by imparting necessary training and thus bridging the gap between Industry and Academia.

Every year we are conducting Success Meet for the outgoing students. On behalf of their parents, we are appreciating them for achieving jobs in different companies.

NRIIT looks to develop its students from industrial perspective. For this, we give training to impart Problem Solving Skills, Communication Skills, Technical Skills, and Soft Skills to every student. Further, technical skills training is given to all the students that make them perfect in cracking technical interview rounds in the campus interviews. Soft Skills Development classes for the second- and third-year students. Apart from the internal trainers, external trainers are also used to give training for the students. The Career guidance cell organizes seminars, guest lectures and mock sessions for GD, HR Interview and Technical Interview. Our faculty members are utilized for the mock sessions. Besides, value added courses are offered by the respective departments on emerging technologies. We also promote students to visit various industries pertaining to their disciplines so that they get the right exposure. Faculty members encouraged students to attend various Programmes to update and train themselves with new evolving technologies and strengthen their abilities.

The students are assessed through various online testing methodologies so that the right set of students is channelized towards the right profile. To train and assess the programming & aptitude skills of the students. To provide additional learner centric graded skill oriented technical training, with the primary objective of improving the employability skills of the students, Students are encouraged to do online courses. Huge improvement has been witnessed in the personal and technical skills of the students after the pre-placement training. Also, massive difference is observed in their communication skills, their attitude in facing the interviews and confidence levels of individuals. Placement Readiness Programme is a high priority practice in NRIIT. To strengthen this practice, the Institute makes the faculty members competent with updated soft skills and technical skills to train the students and assist in pre-placement training.

In addition, a strong mentoring and counselling system is employed by training the faculty on counselling and handling the students. It is believed that making students placed in well renowned companies is the real success of the Institute. It is made possible in the recent years by scheduling a plenty of training programmes, conducting more numbers of assessments, and bringing reputed companies to the campus.

File Description	Document
Appropriate webpage in the Institutional website	<u>View Document</u>
Any other relevant information	View Document

5. CONCLUSION

Additional Information:

The institution strives to achieve excellence in teaching and learning by recruiting highly qualified and dedicated teachers and also maintains a good retention ratio. Teaching-learning is primarily about focusing on realizing the vision, through the attainment of COs, POs, PSOs and PEOs in general and of the individual departments. The institution has a continuous evaluation system. The internal evaluation will be conducted as per the guidelines of the Autonomous Institution. The student is continuously assessed. The class counselors inform the parents about internal marks and attendance during counseling. The same marks are also uploaded on NRIIT examination portal. Class Tests are organized and academically weak students are given extra support and guidance. Student-tutoring and counseling are healthy practices that help faculty to build relationships with students and connect with them accordingly. The Student Grievance Redressal Cell is functioning effectively in the campus. The institute has a well-equipped English language laboratory to help students improve their Listening, Speaking, Reading and Writing skills. NRIIT is a 15-year-old institution and its growth is fast. The increase, in the number of campus placements is rising. This is a proud moment for stakeholders. A huge number of placements speak about the training offered in our institution. During the last five years, there have been 3947 offers for 2951 students.

Concluding Remarks:

NRIIT has made it an uncompromising policy in rendering invaluable educational support to the students. The objective of the institute is to bring technical education closer to the students who hail from the rural areas of Hence, the founders of the institute with a well-defined vision, have taken it as a personal responsibility in providing State-of-the-art infrastructure and all the amenities needed for learning in a serene rural environment. Accordingly, the institute has adequate infrastructure such as air-conditioned smart gallery classrooms, well-equipped laboratories, spacious canteens, hygienic washrooms, home-like-hostels, excellent transportation with 60 buses, LAN & Wi-Fi, Microsoft Teams for online teaching, library with internet connection, reading rooms, playgrounds, back-up power sources - both conventional and solar, modernized gymnasiums for girls, boys and faculty etc... The notable aspect is the mentoring system where teachers help students through personal counselling. The examination system helps students to assess their learning capability. The institute encourages students to participate in various co-curricular, educational, cultural and social out-reach activities. Students have won laurels in various competitions at university, state, regional and national level. A Sports Day is organized every year where students are awarded certificates and medals for their performance in competitions. Outdoor games like cricket, football, volleyball, basketball, badminton and kabaddi are played in the spacious playground. In the academic year 2021-22, many out-reach programs like Covid Vaccination, Road Safety Information Camp, Special Camps at Kanasanapalli Village, Anti-Drug Seminars and Vegetable Distribution at Pothavarpadu village were organized. The teaching faculty, who are all well-qualified and experienced are an asset to the institute. There is a continuous support to the faculty to excel in their profession either in pursuing research or doing their projects. The institution and its faculty have developed effective teaching methods and approaches using Blooms Taxonomy (BTL). In NRIIT, the Outcome-Based Education (OBE) has been facilitated and designed in line with the Vision and the Mission of the institute with COs, POs and PEOs. Finally, NRI Institute of Technology always continues its Journey Towards Excellence.