SELF STUDY REPORT

FOR

1ˢᵗ CYCLE OF ACCREDITATION

GURU NANAK INSTITUTE OF TECHNOLOGY

GURU NANAK INSTITUTE OF TECHNOLOGY, KHANAPUR VILLAGE, MANCHAL MANDAL, IBRAHIMPATNAM, DIST RANGA REDDY 501506
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BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Guru Nanak Institute of Technology (GNIT), Khanapur Village, Manchal Mandal, Ibrahimpatnam, Telangana State was established in the year 2008 sponsored by Barah Moula Educational Society. The institute was earlier functioning in the name of JSN institution of Engineering and Technology at Adilabad, A.P. since 1999 and later shifted to Ibrahimpatnam and renamed as Guru Nanak Institute of Technology with the approval of AICTE and Govt. of Andhra Pradesh. The Institution has been extended its approval by AICTE for the academic year 2019-20 and affiliated to Jawaharlal Nehru Technological University Hyderabad (JNTUH) for the year 2019-20. The institution is accredited by NBA for Computer Science and Engineering, Electronics and Communication Engineering and Mechanical Engineering departments.

The sole objective of the institution is to provide a perfect platform for the students in the field of Technology and Management applications for their academic and overall personality development. GNIT is located on the outskirts of Hyderabad. The campus is spread over 10.38 acres of scenic land. The Institution has a rich tradition of soaring high with the academic excellence of highly qualified faculty members and the overall personal growth of the students.

Guru Nanak Institute of Technology (GNIT) offers B. Tech degree in Computer Science & Engineering (CSE), Electronics & Communication Engineering (ECE), Electrical & Electronics Engineering (EEE), Information Technology (IT), Mechanical Engineering (ME) and Civil Engineering (CE), M.Tech in Computer Science & Engineering (CSE) and Master Business Administration (MBA). It was established for imparting engineering education and for promoting technological research to generate technical manpower in various areas of engineering and technology.

The institution continues to prosper as a result of the keenness and hard work of the faculty, students and the administrative staff of the institution. Several outstanding personalities bestowed their blessings and beautified the institution by contributing their skills and abilities to develop each and every field.

As a result of its quality education and state of the infrastructure, it is our pride to state that the institution stands in one of the top 15 engineering colleges in admissions in Telangana state.

Vision

To be a world-class educational and research institution in the service of humanity by promoting high-quality Engineering and Management Education.

As the vision of the institution is to be a world-class educational and research institution, it provides a quality technical education coupled with strong fundamentals along with practical perspectives and global standards through which our students would enable to excel in their respective field of study.

Mission

- Imbibe soft skills and technical skills.
- Develop the faculty to reach international standards.
- Maintain high academic standards and teaching quality that promotes analytical thinking and independent judgment.
- Promote research, innovation and Product development by collaboration with reputed foreign universities.
- Offer collaborative industry programs in emerging areas and spirit of enterprise.

To meet its mission, the institution tunes its policies and objectives periodically with the consultation of Governing body members.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- **Educational Excellence Award** recipient institution.
- Visionary management with a mission to escalate academic heights.
- Affiliated to Jawaharlal Nehru Technological University, Hyderabad.
- CSE, ECE, and ME programs are accredited by National Board of Accreditation.
- Recognized by UGC under section 2(f) of UGC act 1956.
- Well qualified, experienced and dedicated faculty
- State of the art Advanced Research centers to promote research and consultancy activities in all departments.
- MOUs with reputed industrial and research organizations.
- MOUs with Foreign Universities
- Adobe Creative Technology Academy/Red Hat Academy Add-on Programs
- IQAC has been established for Quality Audit.
- Excellent infrastructure facilities
- Wi-Fi enabled campus including hostels.
- Well stacked library with a good number of National and International journals.
- Ragging-free Campus.
- Explicit Training & Placement Cell to provide continuous training for students.
- Explicit Entrepreneurial Development Cell (EDC) to promote Entrepreneurial spirit in the students.
- Mentoring on a one-to-one student basis as required.
- Establishment of professional chapters.
- Active student participation through various Cells/Clubs/Committees.
- Student participation in community development programs through NSS
- Active registered Alumni Association.
- Well-connected with roads, as the college is located on a state highway.

Institutional Weakness

- Delayed release of scholarship funds by the state government.
- Industry collaboration towards patents and advanced research is limited.
- The dearth of senior faculty with industrial research experience.
- Being a self-financed institution, government funding is conservative.

- Potential research proposals in allied and thrust areas.

Institutional Opportunity

- Global demand for technical manpower is ever-growing.
- State Government is providing financial aid to the students' from the weaker section.
- Engineering education at an affordable cost.
- Many of the neighboring state students are opting for education in Telangana state.
- Academic programs in association with professional bodies & industry associations.
- Collaborative student-projects with industries.
- Strong alumni base to further strengthen industry links.
- Several core and software companies within the vicinity.
- Facility to groom entrepreneurial skills.

Institutional Challenge

- Consultancy assignment from industries.
- The majority of admissions are from rural areas causing concern for improvement in communication skills.
- Zero drop-out rate & attendance detentions.
- Motivating students towards research.
- Linking the research outcome to industry applications.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Guru Nanak Institute of Technology follows the curriculum designed by JNTUH and effectively delivers the curriculum according to the academic calendar of the University. Add-on programs, Certificate Courses, and Value-added courses are offered in addition to the prescribed curriculum to fill up the gap identified between the curriculum and industry need.

Student-centric learning methods are used by the faculties to impart curriculum in a better way. The performance of the students is continuously monitored to assess the attainment of COs. The institution is focused on the holistic development of the students. In view of this, the institution organizes various other activities such as workshops, seminars, inviting guest faculties, NSS programs, extension activities in the neighborhood community, etc. The courses, such as Environmental Studies, Disaster Management, and renewable energy sources enables the students to know about nature and the ways to preserve it. There are different committees such as the anti-ragging committee and internal complaint committee to uphold human values, morality, and ethics.

Different value added courses imparting life skills are designed and organized for different levels of the students. All the students are encouraged to enroll themselves at least in any one of the courses designed for

that particular year. More than 65% of the final year students undergo field projects/ internships every year. To sustain the effective teaching-learning practice, constructive feedback system is imposed. Every year feedbacks relating to the syllabus are taken from all the stakeholders such as students, parents, Alumni, faculties, and staff and analyzed. After a thorough analysis, appropriate action is taken for the improvement of the curriculum.

Teaching-learning and Evaluation

GNIT strictly adopts the JNTUH norms, apart from convener and management quota admissions; it also considers the admission of the Non-Resident Indian (foreign) students. 85% of the seats were filled during admission in the last five years. The institute provides admission based on two grading factors: one is the percentage marks scored in Intermediate/+2 level and other Rank secured in the EAMCET examination. The organization conducts Bridge Course and Orientation Programmes after the admission to bridge the gap between the students and to cover the basics of all the subjects of the I- Year B Tech program.

The faculty member employs students' centric methods such as experiential method, participative learning, and problem-solving etc in order to enhance the learning experiences of the students. ICT facilities are effectively used by the teachers with Learning Management Systems, E-Learning resources, etc. The teacher as a facilitator encourages the students to take part in different activities such as technical competitions, seminars, projects, etc. Students are encouraged to work in groups and give them an opportunity to get hands-on experience.

Teaching Faculty is appointed as mentors to counsel students for their academic enhancement. The slow and the advanced learners are identified by the subject teachers as well as the class mentor and according to their level and given more attention in following up their academics and creating exposure to new technologies available in the market.

Research, Innovations and Extension

GNIT has good infrastructure with advanced research centers and computational facilities to carry out research and development activities. The department of CSE, ECE, EEE, IT and MECH have strong research foundation and 5 faculty members are recognized as research supervisors by various universities. Under their guidance and supervision, 7 candidates have completed their Ph.D. and 30 are pursuing Ph.D. under JNTUH and several other universities. The central library has a collection of rare books, 102 subscriptions for hard copies and e-journals to facilitate research.

The institution has received sponsored research projects worth Rupees 40 lakh from various funding agencies such as AICTE, and private agencies, etc. The institution provided up to Rs.1 Lakh per department to present research work at national and international conferences. Faculties have published around 500 research papers in UGC/Web of Science journals during the last five years. Faculties have published 9 books in reputed publishers.

The institution has organized several workshops/seminars towards Industry-Academia innovative practices and Intellectual Property Rights. An IPR cell is established to guide faculty and students for patent filing and so far 10 patents have been filed. The Institution has a stated code of ethics to check malpractices and plagiarism in research. The institution encourages the promotion of community services through setting-up of various forums. In the past 5 years, a good number of extension and outreach programs were conducted through NSS, IPR cell, etc.

The institution has several collaborative works in the form of internship, field-trip and research activities through department collaborations with industries and professional bodies. The institution has signed MOUs with organizations like Iqbri Telecomm Private Limited, Cyient Limited, Hyderabad, Mikron Instrument Industries, Campbellsville University(USA), Federation University(Australia), Southern Illinois University, *New York Institute of Technology*(USA), etc which spread an ecosystem for innovation and other initiatives for creation and transfer of knowledge.

Infrastructure and Learning Resources

GNIT is committed to providing a conducive learning environment with state of the art infrastructure and learning resources. Its hi-tech environment and facilities have made the institution on par with the premier institutions at the national and international levels. ICT enabled classrooms and laboratories leads to fast adoption to corporate culture during the transition of the students from campus to corporate. Library resources available in the central library stimulate the life-long learning skill of the students and also fulfill the needs of the faculty and students for their advanced studies and action research. The institute has adopted the digital platforms for learning resources such as e-journals, e-books, NPTEL, digital videos, PowerPoint presentation and various databases available from leading publication houses relevant to the engineering programs. All e-resources of the central library can be easily accessible remotely by the students and faculty members. The contemporary infrastructural facilities and learning resources available at the institution have made it as one of the prominent institutions in Hyderabad in providing quality education.

Student Support and Progression

GNIT conducts a number of student support activities such as academic, co-curricular and extracurricular activities for academic excellence to ensure students' progression to higher education and employment.

In addition to the scholarship provided by the government of Telangana and the institution also extends its financial support to the financially deprived students.

The institution provides support to students to appear for competitive exams such as GATE, GRE and GMAT, etc by providing guidance. More than 300 students have availed guidance for competitive exams every year. Career counseling is offered to the students for their overall development. Special care is taken towards slow learners by conducting remedial classes. They are also encouraged, motivated personally and academically counseled. Soft skills training and advanced communication skills training is offered to the students so that they become strong professionally.

Pre-placement training which includes technical, aptitude, group discussion, and interview skills are conducted every year with reputed training agencies to enhance the competency of the students. Students' Grievance Redressal Committee, Anti-Ragging Committee, and Prevention of Sexual Harassment Committee have a transparent mechanism for timely redressal of their grievances. GNI conducts Alumni Association meets every year and avails the guidance and suggestions of alumni to the students. The alumni contribute a lot to the skill development of students by delivering guest lectures, conducting workshops, seminars, and symposiums every year.

Governance, Leadership and Management

The governing body of the institution had taken over 2 years of consultations for conceptualizing the infrastructural and other resources, such as vision and mission, study programs, human resource requirements, networking, fundraising, etc. Teaching-learning practices, administrative activities and committees/cells are oriented towards achieving the Vision and Mission of the institution.

The institution has made all the courses at UG and PG levels in perfect alignment with the objectives of higher education to achieve academic excellence, employability skills and equips every student to be a responsible citizen.

The institution has a clearly defined Organizational Structure and hierarchy to decentralize the activities on academic matters and administration as well as to track and implement plans and policies effectively. The standard operating procedure is formulated for every activity, utilization of resources, committees/cells, IQAC, and periodic audits.

Feedbacks received from the stakeholders are plowed back for upgrading the academic environment of the institution. The institute is maintaining an Up-to-date internal and external audited financial statement as per GOI norms. For sustaining the Quality of the institution, experts from Industry and Academia are involved as members in the IQAC cell.

Academic Council and other committees such IQAC Committee meet regularly to track academic / infrastructure practices and to effectively implement the management committee's plans and policies to achieve their wider goals and objectives.

Faculty members are encouraged to contribute and write research papers, books and attending workshops, conferences, seminars, and FDPs, etc. The institution is organizing workshops, conferences, FDPs, etc., for the development of faculty members. The institution has active and vibrant Governance and Leadership policies which are pivotal for promoting and upholding the standards and quality of the institution.

Institutional Values and Best Practices

Institutional Values:

GNIT is very keen in upholding the foundational parameters such as : management of water resources, promotion of green practices, use of alternate energy, effective utilization of existing energy resources, promotion of human values, gender sensitivity and equity, and professional ethics, patriotism and a sense of pride in the nation, Waste management, eco-consciousness, etc.

The institution has installed Solar and LED to optimize energy consumption. In the total power requirement of 1,90,894 Kwh / Yr, 1,50,385Kwh / Yr power is generated and the same is used as renewable energy sources. The Institute executes many environment-friendly policies which include plantation, waste management, water harvesting, and renewable energy sources.

Being located on the outskirts of Hyderabad, the institution has taken certain techno-social initiatives such as Cyber-Crime and Road-Safety Awareness. Students and staff also participate in the camps and rallies for the social awareness organized through NSS such as Swatch Bharath, women's day, save the environment, etc.

Best Practices:

The institution has implemented several best practices for the holistic development of students, among which Pre-Placement training and Add-on Certification Courses are the highly notable best practices since both the practices are very crucial in fostering the students' career and make them industry-ready.

The institution is distinctive in providing research and development facilities to meet its vision, priority, and thrust. In view of this, several advanced centres, such as Drone Technologies, Cloud computing, AR/VR Gaming, AI/ML, ARD, VLSI and Embedded systems, Robotics, e-Yantra, Automotives, 3D Printing, Geometrics, Solar Applications and Computational Civil Engineering are established to foster research and development activities on various cutting-edge technologies.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	GURU NANAK INSTITUTE OF TECHNOLOGY
Address	Guru Nanak Institute of Technology, Khanapur Village, Manchal Mandal, Ibrahimpatnam, Dist Ranga Reddy
City	Hyderabad
State	Telangana
Pin	501506
Website	www.gnithyd.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Professor	B. Kedarnath	8414-202173	8096609829	8414-223344	hodece.gnit@gniindia.org
Principal	Dr. Sreenatha Reddy Sakam	08414-202123	8096609821	08414-223344	principal.gnit@gniindia.org

Status of the Institution	
Institution Status	Private

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	17-02-1999

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

State	University name	Document
Telangana	Jawaharlal Nehru Technological University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	26-07-2019	View Document
12B of UGC		

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

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	25-04-2019	12	

Details of autonomy

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

Recognitions

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

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	Guru Nanak Institute of Technology, Khanapur Village, Manchal Mandal, Ibrahimpatnam, Dist Ranga Reddy	Rural	10.38	20480

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Intermediate or equivalent	English	120	116
UG	BTech,Electrical And Electronics Engineering	48	Intermediate or equivalent	English	60	57
UG	BTech,Mechanical Engineering	48	Intermediate or equivalent	English	120	113
UG	BTech,Electronics And Communication Engineering	48	Intermediate or equivalent	English	120	117
UG	BTech,Computer Science And Engineering	48	Intermediate or equivalent	English	180	180
UG	BTech,Information Technology	48	Intermediate or equivalent	English	60	60
PG	Mtech,Computer Science And Engineering	24	B.Tech or B.E. or equivalent	English	18	0
PG	MBA,Masters In Business Administration	24	Under Graduation	English	60	33

Position Details of Faculty & Staff in the College

Teaching Faculty											
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Society or Other Authorized Bodies				29				26				128
Recruited	24	5	0	29	22	4	0	26	83	45	0	128
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				53
Recruited	33	20	0	53
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				28
Recruited	23	5	0	28
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	22	5	0	1	3	0	3	0	0	34
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	2	0	0	19	3	0	80	45	0	149

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

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	460	15	0	3	478
	Female	162	2	0	1	165
	Others	0	0	0	0	0
PG	Male	15	1	0	0	16
	Female	16	1	0	0	17
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	56	53	62	60
	Female	18	23	24	29
	Others	0	0	0	0
ST	Male	30	30	24	28
	Female	10	11	10	11
	Others	0	0	0	0
OBC	Male	212	208	248	245
	Female	74	75	97	92
	Others	0	0	0	0
General	Male	160	145	179	167
	Female	88	67	79	77
	Others	0	0	0	0
Others	Male	14	1	35	8
	Female	0	19	0	1
	Others	0	0	0	0
Total		662	632	758	718

3. Extended Profile

3.1 Program

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

Response: 1402

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
8	10	12	12	12

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2935	3003	2979	2611	2569

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
368	359	398	368	444

File Description	Document
Institutional data in prescribed format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
641	587	449	593	547

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

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

2018-19	2017-18	2016-17	2015-16	2014-15
182	202	214	213	176

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
182	202	214	213	176

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 55

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

2018-19	2017-18	2016-17	2015-16	2014-15
585.68	458.48	406.56	483.54	489.86

Number of computers

Response: 964

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

Being an affiliated institution, Guru Nanak Institute of Technology (GNIT) adopts the curriculum designed by Jawaharlal Nehru Technological University (JNTUH), Hyderabad.

For effective delivery of the curriculum, the following process is developed and deployed.

- At the outset, Academic calendar provided by the University is taken as the base for making curriculum delivery plan. The academic calendar provides the date of commencement of the academic session, submission of mid-term exam marks, Parent Teachers meeting, the duration of the semester, the period of internal assessment tests, practical exam schedule, preparation holidays, final semester examinations etc. The University also declares the list of general and optional holidays to affiliated colleges.

- The Head of the institution conducts meetings with the Head of the departments for developing a detailed academic calendar for the effective implementation of the curriculum immediately after the release of academic calendar of JNTUH.

- A well-structured academic calendar which is in-line with the academic calendar JNTUH is prepared by the Head of the departments with the due approval of the head of the institution. An action plan for conducting co-curricular, extra-curricular activities, to enrich the curriculum will also be included in the detailed academic calendar.

- The Head of the Department allocates the courses to the faculty members as per their expertise and option. Class wise and Course wise time tables will be prepared for effective planning and delivery of courses.

- Each faculty prepares course outcome, a micro level course plan, course notes and course handout, for executing day to day academic activities and the same is circulated to the students on the day of commencement of Instruction. A clear plan to fill up the Curricular Gaps either by teaching content beyond the syllabus, invited lectures, workshops or add-on programs are included in the course plan.

- Teachers are encouraged to impart the curriculum through student centric learning methods, such as presentations, assignments, peer learning, brainstorming, NPTEL lectures, group discussions, workshops, quiz, role-play, seminars, projects, industrial visits, etc., and innovative teaching methods such as Google classroom, QR codes, etc. besides the regular/traditional chalk and talk methods.

- The Head of the Department monitors the academic activities on a regular basis by verifying monthly syllabus coverage report to ensure the execution of effective teaching learning process as per the academic calendar, and finds the gap, if any. The IQAC performs academic audit twice in a semester to ensure the effective delivery of the curriculum.

- The academic performance of students is continuously and meticulously monitored by conducting special tests, Mid Term exams, during the semester to assess the attainment of Course Outcomes (COs). As the attainment of COs is the base for achieving the attainment of Program Outcomes, Program Specific outcome and by which Vision and Mission of the institution, the institution takes all the possible measures to ensure the effective delivery of curriculum and attainment of COs for all the courses.
- Class committee meetings are conducted at regular intervals to ensure the effective delivery of the curriculum.

File Description	Document
Any additional information	[View Document](#)

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

Response: 62

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

2018-19	2017-18	2016-17	2015-16	2014-15
19	14	12	9	8

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

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

Response: 16.72

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

2018-19	2017-18	2016-17	2015-16	2014-15
8	7	6	6	6

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

1.2 Academic Flexibility

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

Response: 64.98

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

Response: 911

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

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

Response: 100

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

Response: 8

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

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years

Response: 45.54

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

2018-19	2017-18	2016-17	2015-16	2014-15
1746	1562	1238	1053	882

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

1.3 Curriculum Enrichment

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

Response:

The institution strongly believes that addressing crosscutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics have a direct impact on achieving the sustainable development of the nation. So the institution takes a continuous effort in integrating cross-cutting issues to be an integral part of the curriculum to achieve holistic development of the students and to create a positive vibration on their study and societal commitment.

The institution offers courses that integrate crosscutting issues as part of the curriculum prescribed by JNTUH. As a supplement of this endeavor, the institution also organizes various activities such as seminars, invited lectures, workshops, awareness programs etc, throughout the year as part of the curriculum that helps in integrating cross-cutting issues.

Category	Name of the Course	Relevance
Gender	Gender Sensitization Lab	• The course emphasizes the basic value system of Indian culture, instills in the young minds, not only gender equity but also the traditional honor and pride bestowed on women in accordance to Indian Ethos, and develops a sense of appreciation of women in all walks of life.

		• Apart from this course, the institution upholds gender equity by providing equal opportunities for both the genders in terms of admission, training programs, co-curricular and extra-curricular activities. The institution provides equal opportunities for women faculty to become members in various forums and encourages them to participate in women empowerment events. The Institution has formulated Women Empowerment and Anti-Sexual Harassment Cell which is focused on promoting social respect, safety, dignity, rights, comfort in the workplace and overall development of women students and faculty.
Environmental and Sustainability	• Environmental studies • Disaster management • Renewable Energy Sources	
Human values and Professional Ethics	• Professional Ethics • Management and Organizational Behavior	• These courses impart a set of ethical standards and basic values for the

	• Business Law and Ethics • Human Resource Management Entrepreneurship	harmonious existence of humanity. These courses also teach the standard for professional practice, propose appropriate technologies and management patterns to create harmony in professional and personal life. • Apart from this, the institution also has the Anti-Ragging Committee and Internal Complaint Committee to uphold human values, morality, and ethics.

File Description	Document
Any Additional Information	[View Document](#)

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

Response: 27

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

Response: 27

File Description	Document
Details of the value-added courses imparting transferable and life skills	[View Document](#)
Brochure or any other document relating to value added courses.	[View Document](#)
Any additional information	[View Document](#)

1.3.3 Percentage of students undertaking field projects / internships

Response: 41.23

1.3.3.1 Number of students undertaking field projects or internships

Response: 1210

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

1.4 Feedback System

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

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

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

1.4.2 Feedback processes of the institution may be classified as follows:
A. Feedback collected, analysed and action taken and feedback available on website

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

Response: B. Feedback collected, analysed and action has been taken

File Description	Document
Any additional information	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

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

Response: 4.44

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

2018-19	2017-18	2016-17	2015-16	2014-15
188	181	129	84	57

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

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 91.09

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

2018-19	2017-18	2016-17	2015-16	2014-15
662	632	758	718	761

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

2018-19	2017-18	2016-17	2015-16	2014-15
738	720	798	738	888

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

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

Response: 89.64

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

2018-19	2017-18	2016-17	2015-16	2014-15
328	312	367	339	390

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The institution pays more attention to the students after admission to cater to diversity among them as they are coming from diverse socio-economic backgrounds and medium of instruction in schoolings. Based on their background, language proficiency, confidence level, competency, learning level, etc., also varies. To bridge the gap between the students and to provide a common learning platform, the institution assesses the learning level of the student based on the score obtained in Intermediate/+2 and rank in EAMCET, entrance examination conducted by the government of Telangana for admission to the first engineering programs.

The institution conducts the following special programs after admission:

Bridge course:

Bridge course is conducted for the one-week duration before the commencement of curriculum delivery to bridge the gap between the school curriculum and the first-year engineering curriculum. During the bridge course, the discussion is made on the prerequisites of basic sciences and engineering courses.

Induction Program:

The institution actively organizes the Induction program for two weeks as per the norms of AICTE and JNTUH. The induction program report which includes resource persons from various organizations, schedules, activities, and competitions conducted are communicated to JNUTH at the end of the Induction

Programme. Eminent speakers are invited to deliver motivational and career guidance Talk.

Campus Visit:

Also, after the admission, visit prominent locations inside the campus such as Bus office, Bank, ATM centers, Account Office, Hostel, Canteen, Gymnasium, Library, Grievance Redressal Cell, Anti Ragging Committee, etc., is arranged to familiarize the students with the campus

Freshers Day:

Freshers Day is conducted each year with many colorful events to create a friendly atmosphere with senior students and to create confidence in the minds of freshers and to uplift their understanding level.

Counseling System:

Counseling is not very actively immediately after admission to monitor, guide and counsel the students. A mentor is allocated to for every 15 students to counsel, motivate and guide them towards better progress.

Classification of students

In order to provide a different level of attention, students are classified into advanced and slow learners based on their performance in the classroom activities, marks obtained in tests, regularity in the submission of assignments, regularity in the class, etc.,

Slow learners:

- Special coaching and compensatory classes are conducted for slow learners wherein individually focused attention is bestowed on slow learners
- Mentors keenly observe the academic performance to assist the student by resolving their issues that affect their ability to learn or impede their academic success.
- Poor performance and frequent absenteeism are informed to parent through phone calls, SMS, Whatsapp, and Letters.
- Animated videos, PPTs, simplified learning materials, are provided especially to easily the learning of students.

Advanced Learners:

- Advanced learners are encouraged to take active participation in extracurricular and co-curricular events conducted by various institutions.
- They are encouraged to learn new technologies, develop projects, carry out research activities, internships, training programs & competitions, National and International Paper Presentations, etc.
- They are also guided to take up additional courses viz. NPTEL courses, MOOCs, ORACLE certification, Microsoft certification.

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

2.2.2 Student - Full time teacher ratio

Response: 16.13

File Description	Document
Any additional information	[View Document](#)

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0

2.2.3.1 Number of differently abled students on rolls

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

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

GNIT ensures that student-centric methods are effectively used in regular academic practices as it makes the students more self-reliant and self-motivated, and learning as interesting and effective. Instead of teacher-centric conventional teaching methods, the institution strongly believes that student-centric learning methods enhance the lifelong learning skills of students.

During course plan development, Faculty members plan for suitable student-centric learning methods for enhancing the learning experiences of the students. Learning by practice, experiments, case studies, project development, etc., has a direct impact on improving the understanding level, communication skills, problem-solving skills, listening skills, etc. Faculty members take more effort into making the learning activity more interactive by adopting the below-mentioned student-centric methods.

Experiential Learning:

The institution imparts the following experiential learning practices to enhance creativity and cognitive level of the students

- Laboratory Sessions with advanced experiments
- Internship to expand the knowledge on market trends
- Add-on Courses on latest technologies
- Case Studies, Prototype Model Making, Visual Aids usage
- Project development

Participatory Learning:

- Tech Fest/Project Expo
- Group Discussion, Debate, Role Play, Quiz
- Technical Seminar Presentation
- Periodical Industrial Visit to get insight into the internal working atmosphere of industries
- Co-curricular & Extra-Curricular activities/contests to trigger self-confidence of the students
- NSS and extension activities

Problem-solving methods:

- Practical Sessions to get Hands-on experience
- Tutorial Sessions
- Brain Storming sessions
- Special Assignments
- Technical Seminar on contemporary topics cum group discussion
- Peer Group Teaching
- Quiz Sessions

The institution is very keen on implementing innovative methods such as Google Classroom, QR codes to make the learning experience more effective and interesting. To nurture the student-centric practices, the institution has created many advanced centers like E-Yantra, Go-Kart, Advanced Centre for Artificial Intelligence & Machine Learning, etc., Students are highly motivated to take part in inter-collegiate, state level and national contests, value-added courses, Add-on programs, vocational education courses, and extension activities for their holistic development.

The institution takes significant efforts to explore flipped classrooms with ICT tools and e-resources, such as NPTEL videos, e-books, PPTs, etc which helps to easily transform conventional teaching process to student-centric process.

File Description	Document
Any additional information	[View Document](#)

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

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 182

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

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

Response: 16.13

2.3.3.1 Number of mentors

Response: 182

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

GNIT imparts innovation and creativity in regular teaching-learning pedagogical methods. The faculty members deliver curriculum content using innovative and creative tools such as ICT tools with e-resources, NPTEL videos, PPT, QR codes, etc in order to cater the attention, interest, curiosity, and passion in their learning activity. Innovative and creative academic practices adopted by the institution are listed below:

Lecture Management System

The faculty members have adopted the lecture management systems such as Google-classroom for sharing their course material, to share lecture videos, google docs, collecting feedback, to allocate assignments, conduct Quiz and collaborate with each other. As all classrooms are availed with ICT tools, LMS is effectively used to cultivate Innovation and creativity in the teaching-learning process.

- **QR – Codes**

As nowadays smartphones are used almost by all Students, QR-codes are effectively used in teaching-learning practice to share the study material and to engage the student better in academic activities.

- **Brainstorming/Group Discussion**

Brain Storming and Group discussions are conducted in the classroom to explore the innovative & creative thoughts of students.

- **Industrial Visit/Study Tour**

The institution arranges Industrial Visit/Study tour periodically to get insight into Industry culture and trend.

- **e-Yantra:-**

The institution encourages the students to participate in the Robotics and Embedded System contest conducted by e-Yantra by establishing an advanced center with state of the art facilities to facilitate innovative project development. Under the guidance of highly qualified faculty members, students are trained to develop coding for robotic model development.

- **Tech Fest**

The institution ensures creativity and innovation of the students by providing the platform, Tech fest every year, which includes activities such as technical quiz, project expo, technical presentation, Hands-on project development, website development contest, etc. In order to promote innovative and creative project works, the institution has established a Centre for Innovation, Incubation, Research, and Development(CIIRD).

- Faculty members also update their skills by undertaking online courses (such as Swayam MOOCs through NPTEL, etc.,) and competitive exams such as Cambridge Business English Certificates (BEC-Vantage), NET Exam, GATE to stay updated and remain competitive with contemporary technologies and advanced teaching process.
- The institution is highly focused on providing state of the art education by adopting the latest innovative academic practices to make the students attain educational proficiencies.

File Description	Document
Any additional information	[View Document](#)

2.4 Teacher Profile and Quality

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

Response: 100

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

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

Response: 14.59

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

2018-19	2017-18	2016-17	2015-16	2014-15
36	33	28	24	22

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

2.4.3 Teaching experience per full time teacher in number of years

Response: 8.16

2.4.3.1 Total experience of full-time teachers

Response: 1486

File Description	Document
Any additional information	<u>View Document</u>

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

Response: 3.04

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

2018-19	2017-18	2016-17	2015-16	2014-15
1	3	2	0	0

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

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

Response: 35.77

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

2018-19	2017-18	2016-17	2015-16	2014-15
66	80	76	82	51

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

2.5 Evaluation Process and Reforms

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

Response:

Continuous Internal Evaluation plays a very important role in deciding the quality of the education system. The institution strictly adheres to the rules and academic calendar of JNTUH. The institution conducts two CIE (Mid-Term Exams) for all theory and laboratory courses during each semester as per the schedule and pattern of JNTUH. In addition to this, the institution has made significant measures to enhance and evaluate the performance of students by framing significant reforms in CIE at the institute level.

The major reforms are given as follows:

- In order to assess the learning levels of the students, course outcomes are well defined as per revised Bloom's taxonomy and mapped with POs and PSOs of the program before the commencement of the semester. Subsequently, an unambiguous lesson plan is charted out by the faculty member concerned in which appropriate content delivery and assessment tools are included in order to meet the defined course outcomes at the end of the semester and ultimately POs & PSOs of the program.
- The institution communicates the defined course outcomes, Program Outcomes and Program Specific Outcomes to its stakeholders in all the possible ways.
- As the institution has adopted Outcome Based Education, it is keenly focused on practicing student-centered learning practices such as experiential learning, participative learning, and problem-solving methodologies to assess the learning level of the students.
- Question papers for internal examinations are framed to evaluate the different cognitive learning levels of the students using different direct and indirect assessment tools instead of merely checking simple memory recall practice of the conventional evaluation system.
- The institution provides conducts several activities and programs to showcase their talents in Co-curricular and Extra-curricular activities.
- The institution actively involves the students in NSS activities and other extension activities to

understand human values and ethics.
* Special attention is given to separately to slow learners and advanced learners in order to uplift their skills and learning levels.
* For every 15-20 students, a mentor is allotted to motivate and resolve the issues faced by the students
* The development-Inducing feedback system has been effectively practiced by the institution. Thrice in semester feedback is collected from students on each course to evaluate the effectiveness of the regular academic practices.
* In addition to this, feedback from various stakeholders such as faculty, employer, alumni, and parents is collected to evaluate and enhance the teaching-learning and infrastructural facilities.
* The institution encourages the faculty members to undertake online courses in Massive Open Online Courses (MOOCs) through SWAYAM, Cambridge Business English Certificate (BEC), FDPs, and other professional development activities to make them remain competitive, contemporary and adopt innovative methodologies in teaching-learning practice. A dedicated MOOCs institutional level coordinator has been allotted to encourage and ensure the registration and progress of faculty in online courses and other professional development activities.
* In view of cultivating, promoting and attaining cognitive, affective, and behavioral learning levels of the students, the institution continuously evaluates the system to ensure its effectiveness.

File Description	Document
Any additional information	[View Document](#)

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

Response:

The institution maintains high transparency and robustness in conducting internal assessment exams by adopting several effective mechanisms as given below:

* Schedule of Internal assessment test, syllabus and question paper pattern adhered to the academic calendar and regulations of JNTUH are displayed well in advance before the commencement of the academic session.

* Internal Assessment exams are conducted as per the JNTUH academic calendar. Two different sets of question papers are prepared to maintain the confidentiality and quality of the evaluation system.

* The evaluated answer scripts are made accessible to the students within a week to maintain transparency in the evaluation system. Before distributing the papers to students, answer keys are discussed in the classroom for each course. The issues related to awarding of fewer marks, the discrepancy in counting, etc., are resolved by the respective faculty members immediately. Subsequently, marks are displayed on the notice board to maintain high transparency.
* Assignments are given on each unit of the course and suggestions to improve their performance are given after evaluation.
* Attendance report for every fortnight is displayed and uploaded in the JNTUH web portal and the same is communicated to the parents through letters.

- In a technical seminar which is included as part of their curriculum for final years, the students are encouraged to give a presentation on recent and innovative topics. The technical seminar presentation is assessed based on the following parameters:
    - Novelty in Topic
    - Presentation
    - Report preparation
- Internal marks are awarded based on the presentation in mini and major projects and suggestions to improve their presentation are given by the review committee consisting of project guide, project coordinator and head of the department.
- Their performance is assessed on various parameters such as presentation skills, technical skills, communication skills, and viva-voce. Internal marks are displayed immediately after the evaluation.
- The information about the internal assessment evaluation process is communicated to students during the orientation program for first-year students.

File Description	Document
Link for Additional Information	**View Document**

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

Response:

The institution takes high concern in addressing the issues related to examinations as it determines the direct outcome in outcome-based education.

- Examinations are conducted in two ways namely, internal and external examinations.

The mechanism to resolve internal examination grievances

- In general, the issues related to internal exams are resolved by the respective faculty. When the student is not satisfied with the response from the faculty, they can approach the HOD through their mentor. Even if the issue is resolved, they can approach Grievance Redressal Cell.

Grievance Redressal Cell

Grievance Redressal Cell takes utmost care in resolving exam related issues. This cell actively resolves the issues, such as awarding of less mark in answer scripts, seminar, assignment, counting mistakes, poor evaluation answer scripts and assignments, out of syllabus question paper, etc.

Time-Bound

Internal grievances are resolved within the time-bound as given below:

- Internal Assessment in 5-7 days
- Communication to Students in 7 – 8 days
- Grievance resolution within 2 days
- Uploading of Internal marks in JNTUH web portal within 10 days as per the notification

Impact

- Grievances received by Grievance Redressal Cell will be addressed within a day.

External Examination

Mechanisms/Authority to resolve external exam related issues

- Department Examination Cell Coordinator
- Examination Cell Officer In-charge

The Examination Coordinator of each department helps the students in addressing their issues after the release of examination results such as result withheld, change of marks, application of photocopy, revaluation, etc. Students' grievances are addressed at the earliest for the betterment of the student with active involvement and support of Exam Cell Coordinator of each department and Examination Cell Officer In-charge of the institution. Also, The Examination Cell Officer In-charge brings notable grievances immediately to the notice of the Chief Superintendent for necessary action.

File Description	Document
Any additional information	[View Document](#)

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

Response:

The institution strictly adheres to the academic calendar published by JNTUH for conducting Continuous Internal Evaluation exams. The academic calendar provides the date of commencement of the academic session, submission of mid-term exam marks, Parent-Teachers meeting, the duration of the semester, the period of internal assessment tests, practical exam schedule, preparation holidays, final semester examinations, etc.

The institution makes effective planning for conducting CIE adhered to the academic calendar of JNTUH. This allows the teachers and the students to space out their teaching and learning practice and evaluation process.

The institution conducts two CIE (Mid-Term Exams) for Theory and Laboratory courses during each semester.

CIE for Theory Courses

- For theory courses, CIE is conducted for 25 marks with three components, such as descriptive, objective and assignments. The descriptive component is marked out of 10 marks. The objective component is marked out of 10 marks. The assignment is marked out of 5 marks. These tests are conducted in evenly spaced out intervals as scheduled in the academic calendar of JNTUH for the convenience and effective preparation of the students.
- For conducting CIE, 2 different sets of question papers are prepared, as per Revised Blooms Taxonomy by faculty members with due approval of HODs to maintain the confidentiality and quality of the CIE process.

CIE for LAB Courses

- For Lab courses, CIE is conducted with two components for 25 marks, such as performance in internal practical examinations and day-to-day performance in the regular laboratory sessions. Marks for each experiment are marked in the lab register based on their attendance, observation, and performance. The independent learning level of the students and a practical approach to the real-time applications are tested by viva voce of laboratory courses.
- For Project courses, internal marks are awarded by the Project Review Committee based on various parameters. The final examination for the laboratory courses and projects are conducted with internal and external examiners from other affiliated Institutions of JNTUH as per the schedule of the University.

Mid-Term Exams marks for both theory and lab courses are uploaded to the JNTUH web portal within the stipulated period as scheduled in the academic calendar of JNTUH. Final CIE marks are taken from the average of the two mid-term examinations.

File Description	Document
Any additional information	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

The Institution has clearly stated Program Outcomes, Program Specific Outcomes, and Course Outcomes. The following mechanism is followed by the institution to communicate/disseminate outcomes to the teachers and students.

- College website: http://www.gnithyd.ac.in
- Department website: http://gnithyd.ac.in/cse/departmentoverview.html
- Department Notice Board
- Director/Principal/Vice-Principal/HOD chamber and all central facilities

- Student e-Hand Books
- All Laboratories
- College prospectus
- Department magazine/Department Newsletter
- Display at the Prominent Locations of the Campus
- Building entrances

Course instructor defines Course Outcomes for all the courses using revised Bloom's Taxonomy. The Department Advisory Committee and the Head of the Department review and approve the Course Outcomes (CO).

Each Course Outcome is mapped to Program Outcomes and Program Specific Outcomes in terms of their correlation. Three levels of correlations are used for mapping COs with POs and PSOs, where, 1 is used for indicating low, 2 for medium and 3 for a high level of correlation. The contribution of a course to each PO/PSO is expressed in terms of the average relevance of COs mapped to that particular PO/PSO.

Course Outcomes of all courses, Program Outcomes and Program Specific Outcomes of all programs are listed in attachments.

File Description	Document
COs for all courses (exemplars from Glossary)	[View Document](#)
Any additional information	[View Document](#)

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

Response:

GNIT has adopted Outcome Based Education which focuses on measuring student performance through outcomes. Course Outcomes, Program Outcomes, and Program Specific Outcomes are evaluated to measure the knowledge, skills, and behavior of students for the continuous quality improvement of each Course and Programs using the below-mentioned procedure.

- Initially, Course Outcomes are formulated as per Bloom taxonomy for all the courses.
- Then CO-PO and CO-PSO correlation matrix are set for all the courses in the program.
- Target Attainment Level is set for each Course Outcomes.

Course Outcomes	Target attainment		
	3	**2**	**1**
CO1	>= 75%	75-60%	60-50%
CO2	>= 75%	75-60%	60-50%
CO3	>= 75%	75-60%	60-50%
CO4	>= 75%	75-60%	60-50%

CO5	>= 75%	75-60%	60-50%
CO6	>= 75%	75-60%	60-50%

- Attainment of Course Outcomes is measured using Direct and Indirect methods.
- For direct attainment, marks of Continuous Internal Evaluation Tests, assignment (other special components such as Quiz, mini-projects, case studies, seminar presentation, etc.) and University results are taken as input parameters.

- For measuring direct attainment level, Question papers for CIE are set based on the assessment pattern of University and Bloom's Cognitive level.
- For Indirect attainment, the Course Exit survey conducted at the completion of each course is used as an important tool. Using the weighted average score obtained in a Course Exit survey, indirect attainment level for each course outcome is measured.

- After measuring the CO attainment of each course, recommendations are put forth to the respective course to practice from the next academic year to improve the teaching-learning process.
- Program Outcomes and Program Specific Outcomes are measured using Direct and Indirect method
- For Direct Attainment of POs and PSOs, the average value of CO's of all the courses are taken as the input parameter
- For Indirect Attainment of POs and PSOs, the following tools are used as input parameters

1. Program Exit survey (Collected from passing out batch of students)
2. Alumni Survey (Collected after one year of graduation)
3. Employer Survey (Collected from Employer from industry survey)

- Evaluation CO, PO and PSO attainment help faculty members to ensure outcomes are being reached, monitor the students' performance in upcoming sessions, and improving teaching efficiency.

File Description	Document
Any additional information	[View Document]

2.6.3 Average pass percentage of Students

Response: 84.79

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

Response: 641

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

Response: 756

File Description	Document
Institutional data in prescribed format	[View Document]

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 44.49

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

2018-19	2017-18	2016-17	2015-16	2014-15
15.6	7.5	8.6	2.19	10.6

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

3.1.2 Percentage of teachers recognised as research guides at present

Response: 2.75

3.1.2.1 Number of teachers recognised as research guides

Response: 5

File Description	Document
Any additional information	[View Document](#)

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

Response: 0.17

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

Response: 33

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

Response: 987

File Description	Document
Supporting document from Funding Agency	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

The institution has set up an innovation ecosystem to foster a culture of innovation among the young talents in the campus. The institution keeps up the ecosystem more vibrant and conducive with state of the art infrastructure and suitable scholarly human resources.

To propel innovations in engineering field, the institution has established the active incubation centre, Entrepreneurship Incubation Centre.

Institution's Innovation Council(IIC) Membership

The institution has become an active member in Institution's Innovation Council under the aegis of MHRD's Innovation Cell to promote innovation through multitudinous modes leading to an innovation promotion eco-system in the campuses.

- IIC team members are very active to conduct various innovation and entrepreneurship-related activities, identify and reward innovations, arrange seminars/ workshops/ interactions with investors, entrepreneurs, researchers, scientists and other professionals, network with peers and entrepreneurship development organizations, and organize Hackathons, e-yantra, Go Kart, etc.

Initiatives for the creation of knowledge

In addition to Incubation centres, the institution has created the following Advanced Research Centres with state of the art equipment to foster research activities:

- Advanced Centre for Innovations in Drone Technologies(CIDT)
- Centre of Innovations in Robotics and Industrial Applications
- Advanced centre for Artificial Intelligence and Machine learning
- Advanced Centre for Solar Applications
- Non-destructive Testing and Evaluation
- Centre for Geomatics
- Centre for Computational Civil Engineering
- Centre for Nondestructive Testing
- Centre for 3D Printing
- Centre for Big Data

- Centre for Mobile Application Development
- Centre for Software Development
- Centre for VLSI to design
- Centre for Embedded systems

The above-advanced centres are created with the objective of nurturing and training the students to provide practical solutions to real-world problems. these centers are run under **GNIT-CIIRD (Center For Innovation, Incubation, Research & Development)** focused on empowering Innovation, Technology Business Incubation, Entrepreneurship activities.

Initiatives for Transfer of Knowledge

The institution has the following journals to facilitate the transfer of knowledge through its publications

- Journal of Innovation in Electronics & Communication Engineering (JIECE)
- Journal of Innovation in Computer Science and Engineering (JICSE)
- Journal of Innovation in Information Technology (JIIT)
- Journal of Innovation in Mechanical Engineering (JIME)
- Journal of Innovation in Electrical Engineering (JIEE)

Indo Universal Collaboration for Engineering Education (IUCEE)

The institution conducts webinars, interaction with professors from universities of USA in collaboration with IUCEE Student Chapter.

Research Committee

Research committee consisting of highly qualified and experienced professors encourages faculty members to submit research proposals to various funding agencies. It guides and motivates faculty and students to publish/present their research work in reputed journals /various national and international conferences. Research Committee monitors and ensures the innovation ecosystem of the institution stays updated and contemporary.

Intellectual Property Rights (IPR) Cell

IPR cell in the institution conducts several IPR related programmes to educate and train them on IPR & filing patents.

Library Resources

The institution has a subscription to IEEE, ASME, ASCE, and J-GATE, International Membership of DELNET, e-Journals and 235 Indian Journals/magazines to promote research and development activities in the campus.

File Description	Document
Any additional information	[View Document](#)

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

Response: 51

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

2018-19	2017-18	2016-17	2015-16	2014-15
11	11	12	8	9

File Description	Document
Report of the event	[View Document](#)
List of workshops/seminars during the last 5 years	[View Document](#)
Any additional information	[View Document](#)

3.3 Research Publications and Awards

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

Response: Yes

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

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

Response: Yes

File Description	Document
e- copies of the letters of awards	[View Document](#)
Any additional information	[View Document](#)

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

Response: 1.2

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 6

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

Response: 5

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

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

Response: 2.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
126	130	107	103	86

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

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

Response: 0.76

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

2018-19	2017-18	2016-17	2015-16	2014-15
41	40	22	18	30

File Description	Document
List books and chapters in edited volumes / books published	[View Document](#)
Any additional information	[View Document](#)

3.4 Extension Activities

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

Response:

The institution fosters holistic education that makes the students intellectually, socially, emotionally and ethically strong. In order to nurture them with social values and responsibilities, the institution encourages the maximum number of students for active participation in extension activities and outreach programs.

National Service Scheme (NSS)

NSS unit of our institution conducts many extension activities for the betterment of the neighborhood communities in addressing their social issues. NSS Unit has received a number of awards and appreciations for their well-organized efforts made by GNIT – NSS volunteers and Program Officer in the programs, such as

- Blood Donation Camp
- Village Adoption for development (Khanapur)
- Harithaharam
- Swacch Bharat in collaboration with HMDA
- Youth conclave
- Orphanage Programme
- Water conservation
- Health Awareness Programmes(Such as AIDS, sanitation, spread of seasonal diseases, Rallys, Eye Donation, etc)
- Kill Cancer programs
- Anti –Drugs Campaign
- Special Camp in Medipally Village

In the Special Camp at Medipally Village, GNIT – NSS volunteers have created awareness on child labor issues and counseled & guided them to continue their studies. As a part of this special camp, bags and books were also distributed to encourage the financially deprived students. A team of doctors and GNIT – NSS volunteers organized health camps to prevent and eradicate vulnerable diseases that spread due to sanitation and cleanliness issues. Students had actively involved in this camp and cleaned the village to create cleanliness awareness among the locale.

Collaborative Extension Activities

We encourage the students to involve in outreach programs conducted in collaboration with local police,

doctors of Government Hospital, Election Commission of Telangana and Hyderabad Metropolitan Development Authority (*HMDA*). We feel very proud that many of our students involved in electoral literacy campaigns and electoral booths to facilitate the polling process.

Fit India Movement

Our students have participated in Fit India Movement which is aimed at encouraging people to give priority to sports and fitness. Our students have conducted a live stream of cricket tournaments to promote fit India movement in youth. They were awarded a memento and a pair of shoes by the cricket teams for the live stream.

The institution motivates the faculty and students to participate in need-based, participatory initiatives with local communities, and that range from infrastructure development, health, sanitation, education, women's empowerment and enabling access of the marginalized to entitlements provided under diverse schemes. The participation of the students sensitizes them towards the social issues and challenges faced by the weaker section of the locality; enables them to develop an empathetic understanding of the same and facilitate their initiation in civic engagement

File Description	Document
Any additional information	[View Document](#)

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

Response: 31

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

2018-19	2017-18	2016-17	2015-16	2014-15
16	4	4	4	3

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

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

the last five years

Response: 63

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

2018-19	2017-18	2016-17	2015-16	2014-15
10	12	10	14	17

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

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

Response: 82.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
2494	2459	2510	2150	2069

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

3.5 Collaboration

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

Response: 116

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

2018-19	2017-18	2016-17	2015-16	2014-15
45	26	14	15	16

File Description	Document
Number of Collaborative activities for research, faculty etc	[View Document]
Copies of collaboration	[View Document]

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

Response: 39

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

2018-19	2017-18	2016-17	2015-16	2014-15
10	10	11	4	4

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

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Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The institution is provided with good and modern infrastructure facilities for better teaching learning process.

- The policy of the institution is to provide world class infrastructure which includes well ventilated class rooms, state of the art laboratories, library, E- class rooms, seminar halls etc., so as to give a conducive environment to facilitate teaching learning process.
- As per the policy, the Institution has provided all state of the art facilities which include Technology enabled class rooms (smart class rooms). Apart from this, all class rooms are provided with black boards, printers, white boards, projectors and ICT tools to improve the skills of students.
- All Laboratories are well equipped with state of the art components and other resources to meet the requirements of JNTUH, AICTE and industrial trends.
- There are 5 seminars halls and one Indoor auditorium (AC & ICT enabled) situated in E block to conduct Guest lectures, seminars and student activities.

- Innovation and research center is available in the campus. The campus has residential facility to meet the expectations of NRIs, so that it would facilitate for them to stay in the campus itself.
- The campus is provided with excellent physical infrastructural facilities spread over **10.38 acres** of land to support the teaching-learning process and a separate block is allotted to each department.
- The institution has an administration area of **1781 sqm**, total circulation area of **4040 sqm**, amenities area of **2306 Sqm.**
- The Institution is provided with spacious seminar/conference halls, adequate number of classrooms, well equipped laboratories, tutorial rooms, Innovation Centre, staff rooms, and seminar halls to facilitate the academic programs.
- The Institute has well developed Computing resources and equipments like desktops, servers, printers, CD writers, firewall, laptops, and accessories, which are used for a various purposes like data entry, research activities, storing files, running an application etc.
- For effective way of teaching and learning process projectors and its accessories are installed in all the class rooms and for the purpose of better surveillance **CCTVs** are installed at all corners of campus to cover the maximum area.

File Description	Document
Any additional information	[View Document](#)

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

Response:

The institution has adequate facilities to support sports, games and cultural activities. A wide and diversified range of extracurricular activities is conducted in the campus frequently. Sports and cultural committees ensure the frequency and quality of extracurricular activities.

Extracurricular activities:

Sports facilities:

The institution is focused on enhancing Sports activities to make the students physically and mentally fit.

- The Institution has always created a niche for itself in the field of sports and gives importance for both indoor and outdoor games.
- Our students are trained in outdoor games like volleyball, cricket, basketball, throwball and indoor games like chess, caroms, table tennis, and badminton.
- The Institution encourages the students to participate in various, intra and inter-collegiate level, university level, state level, and national level competitions.
- The physical director takes the utmost care in training the students.
- Students can practice and avail of the facilities even after the regular college timings. Sports facilities for outdoor and indoor games are easily accessible whenever required.
- The physical director ensures the health fitness of the students through the medical test before sending them for participation in inter-collegiate, intra-collegiate, state, and national level competitions.

Indoor Games

Indoor Games facilities are given below:

S. No.	Name of the game	No. of grounds
1	Badminton	4
2	Table tennis	4
3	Chess	10
4	Caroms	6

Outdoor Games

Outdoor Games facilities are given below:

S.No.	Name of the Game	No. of grounds
1	Cricket	2
2	Volleyball	2
3	Kabaddi	2

4	Throwball	2
5	Basketball	1
6	Football	1

Cultural activities:

- The institution gives importance to cultural activities like Singing, dancing, skits, playing musical instruments, mono-act, elocution, mime etc. and also provides facilities such as venue for practice with all the necessary equipment to enrich the cultural activities.

- In order to provide a platform to explore the talents of students, the Institution conducts Traditional day and Annual day.

- At the departmental level, each department encourages the students to perform cultural activities during various occasions such as Farewell day, Freshers' day, Engineers' day, etc.

Gymnasium

The Institution's Gym is equipped with a range of free weights and aerobic equipment treadmill with 2 cross trainers and many other bodybuilding and fitness equipments. The Gym is kept open after college hours from 4 to 6 p.m. on all working days.

Gymnasium facilities are given below:

S. No.	Name of equipment	Purpose

1	Treadmill	Running
2	Dumbbell	Arm work out shoulder
3	Bicycle	Increased muscle strength and flexibility
4	Bench press	Maximum overload the chest muscles
5	Butterfly machine	Also known as a chest fly, involves extending arms to the side and bringing them back to the middle of the chest
6	Multi-station (machine)	* Strengthen upper body muscles, *Improves flexibility *Provides a full-body workout *Helps lower bad cholesterol and prevent diabetes
7	Leg press machine	* It can be used to break through plateaus * It can be used to build awesome quad strength

File Description	Document
Any additional information	View Document

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 55

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

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

Response: 7.08

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

2018-19	2017-18	2016-17	2015-16	2014-15
60	40	25	25	25

File Description	Document
Details of budget allocation, excluding salary during the last five years	[View Document](#)
Audited utilization statements	[View Document](#)

4.2 Library as a Learning Resource

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

Response:

Library is automated using SOUL Software, Integrated Library Management System.

Library Automation:

- The central Library had been automated using SOUL Software (College Version 2.0). The automation is useful to improve and streamline the library operations in a more effective and efficient manner.
- There is an Open Access Catalog for students and staff.
- The reading room is well furnished to accommodate students.
- Web OPAC (Online Public Access Catalog) facility is made available through SOUL Software to know the bibliographical details about the collection.
- One separate node is made available in the Central Library for OPAC facility. As it is a Web OPAC, user from any location can search the library collection by giving Title, Author, and domain.
- Exclusive reference section is available in the library.
- New arrivals of books and journals are displayed on separate stands and racks. Stock maintenance is done effectively using SOUL software.
- CCTV cameras are installed in the library for strict surveillance.

Electronic Resource Management package for e-journals

- The library subscribes to IEEE All-Society Periodicals package. In addition to that, link to scholarly open access journals/database is also available on the Library webpage.

Digital Library

- A well-equipped Digital Library with 18 nodes having Internet connectivity is housed in the Central Library for access to E-Resources.
- As the access facility to e-journals is multi-user and IP address-based, students can access the E-Resources from anywhere in the campus.
- The faculty and students are issued library cards, which are used for well management of circulation of books and journals.
- The e-Resources of the Central Library can be accessed remotely using the IP given below:

Library WebOpac Link:

The library committee which includes Chairman, Secretary and members from different departments plays an effective role to run the library efficiently.

File Description	Document
Any additional information	[View Document](#)

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

Response:

The Central Library constantly strives to upkeep its resources and it has a rich collection of Text Books, Reference Books, competitive Exam books, dictionaries, motivational books, autobiographies, manuscripts and rare book collections for knowledge enrichment of students and faculty community.

The special and rare collection in diverse areas in the library is very useful for students and faculty members to meet their academic demands.

The library advisory committee conducts a meeting on various aspects, such as the addition of books, subscriptions to periodicals and journals, and other facilities.

Rare Books collection available in the library is listed below:

S.No.	Acc No.	Author	Title	Edition	Publication	Year
1	26472	Gonen, Turan	Electric Power Distribution Engineering	3rd	CRC Press	2014
2	26651	Ross Sheldon M	Introduction to Probability and Statistics for Engineers and Scientists	4th	Elsevier	2013
3	28414	Cook Robert D at	Concept and	4th	Wiley Publication	2014

		al	Application and Conditioning			
4	35562	Mundrey J S	Railway Track Engineering	4th	Mc Graw Hill	2014
5	36329	Rogers Gordon	Engineering Thermodynamics	4th	Pearson	2017
6	35906	Jensen John R	Remote Sensing of Environment	2nd	Pearson	2017
7	35606	Spong Mark W	Robot Dynamics and Control		Wiley Publication	2014
8	35604	Mohan Ned	Power Electronics	3rd	Wiley Publication	2017
9	35564	Ponnuswamy S	Bridge Engineering	3rd	Mc Graw Hill	2017
10	41222	Madsen David A & Madsen David P	Engineering Drawing & Design	6th	Cengage Learning	2018
11	41190	Robinett Richard W	Quantum Mechanics	2nd	Oxford University Press	2019
12	41149	Sood Vijay	HVDC and FACTS Controllers		Kluwer Acodemic	2013
13	41148	Acha Enrique at al	FACTS Modelling and Simulation in Power Networks		Wiley Publication	2012
14	40193	Kumar Meta P and Monteiro Paulo J M	Concrete Microstructure Properties and Materials	4th	Mc Graw Hill	2017
15	39565	Ghatak Ajoy	Optics	6th	Mc Graw Hill	2017
16	39085	Furniss Brian S	Textbook of Practical Organic Chemistry	5th	Pearson	2012
17	40179	O'Connell Michal J	Carbon nanotubes Properties and Applications		Taylor & Francis	2006
18	43810	Chua Chee kai & Leong Fai Kah	Rapid Prototyping	5th	World scientific	2019
19	28588	Gevorkian Peter	Large - Scale Solar Power System Design		Mc Graw Hill	2011
20	37034	Godbole Nina & Belapure	Cyber Security		Wiley Publication	2017
21	37536	Bhavikatti SS	Theory of Plates and	3rd	New Age	2017

			Shells		International	
22	31748	Murty VVN & Jha Madan K	Land and Water Management Engineering	6th	Kalyani Publishers	2015
23	22288	Sukhatme Suhas P & Nayak JK	Solar Energy	3rd	Tata Mc Graw Hill	2012
24	40655	Acharya Seema & Chellappan Subhashini	Big Data and Analytics		Wiley Publication	2018
25	26013	Kuffel Zeangle E	High Voltage Engineering: Fundamentals	2nd	Elsevier	2014
26	35550	Asada Haruhiko	Robot Analysis and Control		Wiley Publication	2013
27	31220	Challoner Jack	1001 Inventions that changed the World		Cassellustrated Publi	2015
28	31228		Answer Book 10001 Fast Facts About our world		National Geographic	2016
29	31221		Ultimate Family Visual Dictionary		D.K. Penguin Ramdam House	2016

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

4.2.3 Does the institution have the following:

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	

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

Response: 21.73

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

2018-19	2017-18	2016-17	2015-16	2014-15
22.57	32.28	23.76	18.16	11.88

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

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

Response: Yes

File Description	Document
Any additional information	

4.2.6 Percentage per day usage of library by teachers and students

Response: 33.53

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

Response: 1045

File Description	Document
Any additional information	

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Our Institution is very keen on updating IT facilities such as internet bandwidth, the configuration of computers, laptops, LCD projectors, ICT facilities, etc., to provide state of the art infrastructure for the teaching-learning process. The institution gives top priority to the state of the art infrastructural facility to enrich and facilitate effective teaching-learning practice.

At the beginning of the academic year, the requirement for replacement and updating of existing IT accessories and the purchase of new equipment is collected from each department. The institute is very keen on upgrading internet bandwidth from time to time. Currently, internet bandwidth is increased to 450 Mbps to provide fast internet access. WiFi facility is provided to all HODs and faculty cabins. It is to be notable that a proposal to increase the bandwidth to 600Mbps is under process.

At present, the institute has 964 systems in various laboratories to meet the requirements of curriculum and content beyond the curriculum to make them contemporary and industry-ready. Currently, the configuration of computers is upgraded significantly, where out of 964 systems, 250 number of systems are upgraded to i3 and 250 number of systems are upgraded to i5 configuration to meet the technological advancements. In addition to this, all CRT monitors are completely replaced with LCD monitors. In order to provide security from unauthorized users, we are using the Sophos firewall to prevent illegal access to the internet.

All departments have scanners cum printers. The Exam branch has a high-speed multi tray scanner cum printer. A scanner cum printer is available in Principal, Vice-Principal, all HODs, and other higher administrative officials. A laser printer is available in all the departments to take printouts. Computer labs with the latest software and Internet facility are available to the students. Hardware and software updation is in line with the demand of the latest syllabus as well as students' feedback.

Aadhar enabled Bio-metric Attendance System has been effectively implemented in the institution. CCTV cameras have been installed in all the prominent and required venues to achieve 24x7 campus surveillance. Since the IT field is continuously evolving at a fast pace, the dedicated Network team is focused on upgrading the IT facilities so as to provide the best of the facility to the students.

The maintenance of computers, and installation of software are done by programmers whereas, hardware and internet related issues are handled by hardware and networking professionals.

File Description	Document
Any additional information	[View Document](#)

4.3.2 Student - Computer ratio

Response: 3.04

File Description	Document
Any additional information	[View Document](#)

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)
>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	[View Document](#)

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	[View Document](#)

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 58.22

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

2018-19	2017-18	2016-17	2015-16	2014-15
438.95	295.47	199.09	252.69	247.22

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	[View Document](#)
Audited statements of accounts.	[View Document](#)

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

Response:

The institution has always been placing the students at the Centre of the teaching-learning process. The vision and the mission of the institution are to provide holistic knowledge to students.

Laboratories

All laboratories are effectively used by the students as per their time table during the college hours and can also be availed even after the college hours. Lab Attendance register, stock register, Invoice files and purchase bills are maintained for each lab.

The entry register is maintained to ensure the effective utilization of equipment. Lab Assistants and supporting faculties are responsible for maintaining lab equipment.

Computers and IT facilities

System Administrator is responsible for the maintenance of computers and IT facilities. They resolve the issues related to IT facilities such as, hardware troubleshooting, software installation & updation, maintaining biometric devices, ICT facilities, printers, anti-virus installation, website maintenance, and other network-related issues. The complaints posted through E-mail are addressed and resolved immediately by System Administrator. Lab assistants under the supervision of system administrator upkeep the efficiency of computers and IT accessories in the institution. LAN and WiFi are regularly checked by the network team. All the IT facilities are maintained by the Annual Maintenance Contract (AMC).

Library

Librarian collects the requirement for a list of books, journals and other resources from all HoDs during the commencement of each academic year. The list is duly verified and approved by the Principal. Every year at the beginning of the session, students are motivated to get membership in different Journals. A suggestion box is installed inside the library to collect the opinion and suggestion from users to enrich the library resources. 'No dues' clearance from the library is made mandatory for the students before appearing in the exam in view of stock verification of books. Entry register for visitors (students and staff) is maintained to ensure the effective utilization of library resources. Other issues such as weeding out of old titles, collecting rare books, maintaining torn books are resolved with the help of the library committee.

Sports Facility Maintenance

Physical Director maintains the sports facilities available in the institution. Stock Register and Issue Register are maintained to ensure the proper handling of the sports equipment. Stock verification is done on sports equipment at the commencement of each semester. The playground is maintained regularly under the supervision of the Physical Director with the supporting faculty.

Classrooms

At the beginning of each semester the readiness of the classrooms, ICT facilities and furniture are verified by the Administrative Officer. Also, all the classroom amenities are verified and maintained periodically to uphold effective teaching-learning practice.

Electrical Maintenance

HOD of EEE is responsible for the maintenance of electrical equipment such as generators, UPS, and Batteries. The Contractor of Sure Energy Systems Pvt. Ltd analyzes, maintains and resolves the issues in electrical equipments at regular intervals.

Maintenance of other Infrastructural facilities

Administrative Officer of the institution oversees the maintenance of buildings, classrooms, and Laboratories. He works with a group of dedicated supporting staff to upkeep the facilities in good condition. He also looks after the maintenance of other infrastructural facilities such as a playground, drinking water, parking areas, lawns, gardens, sewage treatment plants, whitewashing, restrooms, keeping campus maps and direction board, etc.

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 51.34

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

2018-19	2017-18	2016-17	2015-16	2014-15
1468	1478	1468	1427	1375

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

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

Response: 0.55

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

2018-19	2017-18	2016-17	2015-16	2014-15
36	16	9	9	9

File Description	Document
Any additional information	[View Document](#)

5.1.3 Number of capability enhancement and development schemes –

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

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	[View Document]()
Link to Institutional website	[View Document]()

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

Response: 92.88

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

2018-19	2017-18	2016-17	2015-16	2014-15
2789	2725	2687	2550	2332

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

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

Response: 7.06

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

2018-19	2017-18	2016-17	2015-16	2014-15
197	195	187	227	183

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

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

Response: Yes

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

5.2 Student Progression

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

Response: 63.07

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

2018-19	2017-18	2016-17	2015-16	2014-15
471	385	302	331	291

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

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

Response: 6.08

5.2.2.1 Number of outgoing students progressing to higher education

Response: 39

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

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

Response: 70.65

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

2018-19	2017-18	2016-17	2015-16	2014-15
39	34	20	22	20

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

2018-19	2017-18	2016-17	2015-16	2014-15
65	50	25	28	30

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

5.3 Student Participation and Activities

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

Response: 74

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

2018-19	2017-18	2016-17	2015-16	2014-15
17	13	20	14	10

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

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

Response:

Students' Council:

Students' Council of our institution is the representative body of the entire student community. The mission of the Student Council is to organize various activities under the guidance of faculty members, develop and enhance various skills, such as leadership quality, social awareness and a sense of social responsibility for the betterment of the students.

The student council takes an active involvement in conducting various events like IGNITE, tech fest, fresher's day, engineers' day, farewell day, Seminars, Workshops, Symposium, International Conference, and so on.

This council encourages and ensures the involvement of students in various academic and administrative committees. The objective of involving students in various committees is to give importance to the views of students thereby improving their confidence, leadership skills, and decision-making skills.

Internal Quality Assurance Cell:

IQAC cell involves student representatives in the development of quality culture in academic and other areas for the betterment of the students and institution.

Class Committee:

The class committee consists of student representatives and faculty representatives. The class committee meeting discusses resolving various issues and better prospects as given below:

- Result analysis of continuous internal assessment test and end semester results
- The evaluation process for theory and practical courses
- Syllabus for cycle tests
- Feedback on teaching performance of faculty
- Arranging Industrial visits and other departmental activities

Department Advisory Committee: Student representatives actively participate in department advisory committee meetings while framing academic plans, conducting value added courses, add-on programs, and other curricular & extracurricular activities.

Anti- Ragging Cell:

Student representatives in this cell create awareness about Anti Ragging and ensure a friendly environment between juniors and seniors.

Library Advisory Committee:

Student representatives provide their input for empowering the library resources and process.

NSS Committee: It aims to involve the maximum number of students in NSS activities.

Sports & Cultural Committee: Student representatives of this committee encourage and promote various sports and cultural activities.

Student Grievance Redressal Cell:

Student Grievance Redressal Cell involves student representatives in resolving issues and grievances of students

Editorial Committee:

Student representatives in this committee are responsible for publishing the institutional events in the college magazines.

Anti-Sexual Harassment Cell:

The student representative in this committee helps to sustain a healthy and congenial atmosphere to all the female students and staff members.

SC/ST Cell, Minority Cell, OBC cell:

Student representatives in these cells bring the issues and avenues for empowerment of their communities into the notice of higher officials.

Discipline Committee: Student representatives of this Committee helps to ensure a calm and peaceful academic atmosphere on the campus and to avoid physical confrontation among students.

In addition to the above committees, student representatives are included in the Hostel Committee, Canteen Committee and Transport Committee to ensure its effective functioning and resolving issues if any. Active involvement of the students in various committees significantly leads to their holistic development.

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

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

Response: 29.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
35	32	30	27	25

File Description	Document
Report of the event	[View Document](#)
Number of sports and cultural activities / competitions organised per year	[View Document](#)
Any additional information	[View Document](#)

5.4 Alumni Engagement

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

Response:

It is a matter of pride that alumni of GNIT have a strong placement record which explains that our former students occupy various key positions and have a strong eminent history in the different walks of their life.

The Institution has a registered Alumni association to strengthen the camaraderie and network among the alumni, faculty and the management.

It conducts formal Alumni association meetings every year to reunite with their friends, faculty members, and management, revitalize their memories and share market trends & needs to the prospective graduates.

The institution gives high regard to the suggestions of alumni and utilizes the services for the development of the institution in all the possible ways. The institution has included our alumni as a significant part of many of the notable academic and administrative bodies such as Internal Quality Assurance Cell, Department Advisory Committee, etc.

The institution gives high priority to make the Alumni association very active as engaged alumni are the Brand Ambassadors and loyal supporters to keep abreast of the institution.

Our Alumni play a significant role in

- Provide Career guidance, training services, and invited talk,
- Promote R & D activities, projects, and consultancy
- Facilitating internships, industrial visit, campus interviews for students
- Extend the network of professional contacts.
- Promotion of the institute's reputation in society.
- Get real insight into the growth of the institution

Apart from formal alumni association meetings, the institution also engages the alumni support in many ways such as collecting suggestions, feedback on existing curriculum, updates on emerging trends, etc through various networking platforms like LinkedIn, Face book, Twitter, Whatsapp, etc.

File Description	Document
Any additional information	[View Document](#)

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

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

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

Response: 5

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

2018-19	2017-18	2016-17	2015-16	2014-15
1	1	1	1	1

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

Vision

To be a world-class educational and research institution in the service of humanity by promoting high-quality Engineering and Management Education.

GNIT believes in providing a quality technical education coupled with strong fundamentals along with practical perspectives and global standards through which our students would enable to excel in their respective field of study. We also empower students to perform better at their workplace and become a better citizen.

Mission

- Imbibe soft skills and technical skills.
- Develop the faculty to reach international standards.
- Maintain high academic standards and teaching quality that promotes analytical thinking and independent judgment.
- Promote research, innovation and Product development by collaboration with reputed foreign universities.
- Offer collaborative industry programs in emerging areas and spirit of enterprise.

The mission of GURU NANAK INSTITUTE OF TECHNOLOGY is tuning the policies and objectives of Higher Education by maintaining academics with global standards and ethics. The institution maintains qualified and experienced faculty in every department, with an intended faculty-student ratio, to make the students technically strong, compete globally and serve the Nation. Also, the Institution has a Placement Cell which strives for a good number of placements in reputed MNCs. Individual departments conduct International Conferences every year to enrich and promote research activities. All the departments have Advanced Centers and state of the art laboratories for enhancing Engineering and Research skills. The curriculum and mode of training are in tune with the needs of the students and current technologies. Humanistic values in education are upheld in the classroom & college activities.

Nature of Governance

The Governance and Leadership of the Institution ensure that its Higher Education operations are functioning well by nurturing the Decentralization and Participative decision-making process as the key factors. The governing body provides guidelines through the academic council to maintain high standards in imparting education by setting objectives relevant to policy, hiring quality professionals, rewarding the achievers, provide infrastructure, facilities and encouraging the best utilization of the resources. Principal along with overall administration motivates faculty, supporting staff and students to maintain a competitive and conducive academic environment.

Perspective Plans

The Institution focuses its Perspective Plans for the upcoming academic years based on Quality in Higher Education. Accordingly, decision-making process and quality planning are articulated keeping in view of Vision and Mission. The Principal and faculty design calendar of activities and the top management monitors its implementation providing the necessary support. The principal monitors the implementation of the following functionalities;

- Improve the performance of students in University Examinations
- Participation of students and staff in National or International seminars and conferences
- Develop Industry-Institute partnership & R&D activities

Participation of Teachers

Teachers play a major role in the decision-making, planning, implementation, perform the academic and administrative functions in various committees of the Institution. IQAC collects inputs of faculty from these committees while making strategic academic planning as the teacher is the key executor of it. Teacher also holds responsibility for examining and assessing the students in a transparent way and in time with adherence to regulation.

File Description	Document
Any additional information	[View Document](#)

6.1.2 The institution practices decentralization and participative management

Response:

The College promotes a culture of participative management by involving faculty members

To take part in college –local community relationships.

- To take part in college-level activities.
- To have a rapport with management to solve problems and encourage individuals to express their views.
- To coordinate with committees at institute level under different designations

The budget proposal from departmental levels is submitted to the Principal through IQAC. The proposed budget is forwarded to the Chairman for approval. The approved budget is then communicated to all heads and in-charges through IQAC. Through effective decentralization, the institution practices successful delegation and enhances the productivity of the college. This style of participative management ensures complete and constructive delivery of financial activities.

The Institution has a culture of decentralized governance system with well-defined inter-relationships. Institute delegates adequate authority to the departments to work and there are various committees involving faculty which are constituted to manage different institutional activities. Committees are formed

for the various curricular, co-curricular and extracurricular activities to be conducted during the academic year. The departments are encouraged to arrange various activities with the support of Management for the benefit of Students and Faculty; also, the management has extended enough financial powers to Head of the Institute and Department Heads.

A Case study: Conference Budget Proposal, Approval and Allocation

Guru Nanak Institute of Technology organizes an international conference with an aim to provide a platform for researchers, scientists, technocrats, academicians and engineers to exchange their innovative ideas in the field of Engineering. The conference will boost excellent innovations in terms of day to day life and academics. Budget planning for the conference starts in the month of February every year. The Department Heads and the administrative in- charges are instructed to plan the budget for the forthcoming conference. They are invited to submit their carefully proposed budget for the event.

The HOD instructs the Department conference in-charges to prepare the budget proposal for various activities like brochures, website development, publicity, Expert talks, kits, etc. The conference in-charges then coordinates with all other teaching and non-teaching staff to form a different committee with their in-charges like conference brochures and website design and development committee, Publicity committee, publication committee, hospitality committee, stage and decoration committee, technical committee, transportation committee, etc. Then these committee in-charges come up with a budget proposal of their requirements. The final budget proposal is prepared after scrutinizing at the department level by the concerned heads.

File Description	Document
Any additional information	[View Document](#)

6.2 Strategy Development and Deployment

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

Response:

The strategic plan is made by the institution to fulfill requirements of industry and society by providing quality education with well-established infrastructure which leads students' progression towards technical and social excellence.

Deployment Activity Example:

Our institution has the following strategic plans such as

- To establish Women Empowerment & Anti-Sexual Harassment Cell.
- To develop highly effective teaching-learning practices like FDP, guest lectures, workshops, and technical fest.
- To engage with student training and development programs etc.

Women Empowerment Cell (WEC) has been constituted to empower and safeguard the rights of female members; faculty staff and students of College. The WEC works to promote gender sensitivity in the college and conduct diverse programs to educate, sensitize both male and female members and produce a harmonious atmosphere on the campus.

The Principal nominates the members of WEC.

SNo	Committee	Designation	Roles
1	Dr. P Sudha Rani	Professor Civil	Coordinator
2	Prof. S Madhan Mohan	HOD Civil	Member
3	Mrs.S Vasanthi	Asst. Professor ECE	Member

Given below is the constitution of Women's welfare committee:

- The committee coordinator is requested to prepare the guidelines for the working of committees and get approved from the Principal.
- The college will recognize the members for their outstanding services/performance for working in the interest department and college a certificate of merit/award may be given.
- The committee members may meet once in two weeks to discuss the progress. Minutes of committee meetings may be recorded with the signatures form members attending the meeting, minutes may be put up to the principal for approval and perusal

Preview of the committee:

- To listen to grievances, problems, and complaints of students and provide satisfying solutions.
- To listen to grievances, problems of faculty members and provide satisfying solutions to problems.
- To identify the grievances and problems of the student themselves and provide/suggest a solution at department, administration.
- To identify the grievances and problems of faculty and staff and provide/suggest at department, administration and principal/college level.

Complaint and Redressal mechanism:

- After knowing the grievance of students, class Mentor discusses it with the HOD and then an appropriate solution is found out. If not solved at this level then the grievance is taken up to the Principal through WEC.
- The outcome will be informed to the complainant and to the administration/management.

The Committee shall investigate reported cases of commission of acts of sexual harassment of women, if any and submit its report to the Principal recommending action to be taken against the accused employees.

Activity successfully implemented:

The action was taken on the complaints received from faculty, Dr. Tulasi Assoc.Prof. S&H on 18.8.19.

With reference to the inconvenience faced in buses, the following action has been initiated:

1. Discussed with management and they are planning to provide a big bus.

The Strategic Plan ensures that the plans achieved through the accountability process comprising of review, evaluation, reporting and, where necessary, re-planning. The Strategic Plan 2012-17 was reviewed in May-June 2017 for developing a Five Year Strategic Plan for 2017-22.

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

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

Response:

1. The college has a clearly defined organizational hierarchy and structure to support decision-making processes that are clear and consistent with its purposes and supports effective decision making. The organizational structure lends itself to sustaining institutional capacity and educational effectiveness through the involvement of external members in various Committees/ Boards.

2. The Principal, and HODs, with the help of faculty members, review the progress achieved and problems faced by various committees. The management has always welcomed the views and suggestions expressed by the faculties in taking institution ahead. The presence of the faculty can be found in all the following committees.

1. Governing Council
2. Academic Council
3. IQAC
4. Department Advisory Committee(Department wise)
5. Student Council
6. Student Grievance Redressal Cell (Internal Complaint Committee)
7. Women Empowerment & Anti-Sexual Harassment Cell
8. Anti-Ragging committee
9. NSS
10. Library Advisory Committee
11. Alumni Association
12. Yoga/Meditation Center
13. SC/ST Committee
14. Minority Cell
15. OBC Cell
16. Hostel Committee
17. Canteen Committee & Transport Committee

18. Sports & Cultural Committee
19. Discipline Committee
20. Class committee (Department wise)

Such other authorities as may be declared by the Statutes to be authorities of the Institution.

3. External members are part of Governing Bodies for enhancing the broader base and bringing transparency and fairness in the system.

4. The institution has a number of students and faculty committees for decentralized management activities/ affairs for better functioning and effective learning of the students.

5. The major functions of various bodies are well defined in order to ensure role clarity and accountability. The details of the roles and responsibilities of various committees and leadership are given in the additional information as in the links.

6. Service Rules, Promotion Policies, Employee Satisfaction, Welfare Schemes, and Grievance Redressal Mechanism are in place. Achievements of faculty and staff are recognized with financial and non-financial incentives.

7. The Grievances of the faculty and staff are redressed timely to keep their motivation all time for their performance efficiency and satisfaction.

File Description	Document
Any additional information	[View Document](#)

6.2.3 Implementation of e-governance in areas of operation

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

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	[View Document](#)
ERP Document	[View Document](#)
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	[View Document](#)
Any additional information	[View Document](#)

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

Response:

The committees or bodies formed for the specific purpose works effectively and transparently and are evident through the meetings.

An example of activity that successfully implemented:

National Service Scheme Committee:

The National Service Scheme (NSS) is an Indian government-sponsored public service program conducted by the Ministry of Youth Affairs and Sports of the Government of India popularly known as NSS.

Activities in NSS are:

1. Cleaning
2. Afforestation.
3. Stage shows or a procession creating awareness of such issues as social problems, education, and cleanliness.
4. Awareness Rallies.
5. Inviting doctors for health camps.
6. Blood donation camps.
7. Awareness of Health care.

Objectives:

- Understand the community in which they work
- Identify the needs and problems of the community and involve them in problem-solving
- Develop among themselves a sense of social and civic responsibility
- Utilize their knowledge in finding practical solutions to individual and community problems
- Develop competence required for group-living and sharing of responsibilities
- Gain skills in mobilizing community participation
- Acquire leadership qualities and democratic attitudes
- Develop the capacity to meet emergencies and natural disasters

- Practice national integration and social harmony

Responsibilities:

- To enable the students to understand the community in which they work.
- To understand themselves in relation to their community.
- To identify the needs and problems in the community in the solution of which they can be involved.
- To develop among themselves a sense of social and civic responsibility.
- To apply education- find practical solutions to individual& community problems.
- To develop competence required for group living and sharing responsibilities.
- Gain skills in mobilizing community participation.
- To acquire leadership qualities and democratic attitude.
- To develop the capacity to meet emergencies and national disasters
- To practice national integration.

Activities successful:

- Awareness program on health care and gender sensitization
- Blood Donation camp and dental camp.
- Community participation by involving a member of the adopted villages for Swachh Bharat
- Blood Donation Camp
- Economic support to physically challenged student
- Visits to orphanages/Old age homes/ Blind schools.
- Celebrating International Yoga Day.
- Distribution of Clothes to mentally challenged students.
- Creation of awareness of Water Conservation and Rain Water Harvesting
- Mass tree plantation (one student one tree) Telangana Haritha haram.

Some Events Organized:

i. An awareness program on Water conservation activities on 30th July 2019.

Themes:

- Water conservation and rainwater harvesting.
- Renovation of traditional and other water bodies/tanks.
- Reuse borewell recharge structures.
- Watershed development.
- Intensive afforestation.

ii. Organized Kashmiri Youth Exchange Program on 14th December 2018.

iii. Organized Tree plantation program under "Telangana Haritha Haram" 13th July 16.

iv. Organized Blood Donation under Sanjivini Blood bank camp on 28th November 2015.

1. The various Authorities/ Bodies/ Committees of the Institute stating their major functions, periodicity of the meetings and the custodian of the minutes of the meetings of such Authorities/

Bodies/ Committees are given in detail as a link.

2. The frequency of the meetings of various Statutory Authorities, Bodies, and Committees is given as additional information. The minutes of the meeting of all the meetings are maintained at the office of Principal/ Dean in the appropriate department/ office.

File Description	Document
Any additional information	[View Document](#)

6.3 Faculty Empowerment Strategies

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

Response:

The institution is taking many welfare measures for all the teaching & non-teaching staff as they are the backbone of the institution. Few of the welfare measures are listed below:

* Subsidized bus facilities for the staff members from all parts of Hyderabad.
* Subsidized accommodation (staff quarters) inside the campus.
* Provident fund facility is provided to eligible faculty members of the institution.
* Resident Nursing Facility for faculties inside the campus.
* Insurance for employees.
* Insurance for drivers.
* Financial assistance to meet emergency medical expenses of staff & family members.
* Medical leaves for the hospitalized staff members.
* The short term advance loan
* Maternity benefits for the staff members.
* Paternity leaves
* Medical leaves
* Bereavement Leave
* Sponsorship and Leave for faculties for doing higher studies and attending conferences, development programs, seminars, etc.
* Free mobile facility for eligible selective staff members.
* Loan facility provided to teaching and non-teaching staff through Bank

Some other facilities are also available like

* Gym facility inside the campus.
* Yoga facility (regularly yoga meet for staff to reduce the stress).
* Bank facility in the campus

Apart from all the above things many other welfare measures also taken by the management. Faculties are getting the TSL (Training and Study Leave) for their carrier advancement like the doctoral program. Staff is provided with the study leave while doing their Post-Graduation. Grievance Redressal cell is there for solving all the faculty concerns. Many types of leaves are given to the staff like summer vacation leaves

etc.

File Description	Document
Any additional information	

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

Response: 29.55

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

2018-19	2017-18	2016-17	2015-16	2014-15
83	72	63	39	33

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	
Any additional information	

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

Response: 20.6

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

2018-19	2017-18	2016-17	2015-16	2014-15
24	21	20	20	18

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

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

Response: 53.23

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

2018-19	2017-18	2016-17	2015-16	2014-15
138	127	98	88	71

File Description	Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document

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

Response:

Guru Nanak Institute of Technology has the performance appraisal system to assess the progress and potential of staff members. The self-appraisal form is filled by the staff member concerned for the appraisal. It is further assessed by HOD/reporting authority, Vice Principal and Principal based on the below-given Performance Indicators:

S. No.	Performance Indicator (PI)
1	Result Analysis
2	Student's Feedback
3	Conferences / Workshops attended
4	Research Areas
5	Contribution to the college
6	Contribution to the dept.
7	Project Guided etc.

These are the parameters that are helping the college management to evaluate the teaching staff for the appraisal system which is done every year by the faculty member.

Non-teaching staffs performance is assessed using the below-given Performance Indicators for their yearly appraisals.

S. No.	Performance Indicator (PI)
1	Knowledge of work
2	Communication
3	Team Work
4	Decision Making/Problem Solving
5	Punctuality
6	Leadership
7	Change Management and Improvement
8	Responsiveness
9	Dependability
10	Code of Conduct
11	Monitoring the cleanliness of laboratory
12	Maintenance of Lab equipment
13	Updating of stock registers

Based on the above PIs, the score for an overall appraisal is calculated as outstanding/Very Good/Good/Poor based on which increments and incentives are decided.

File Description	Document
Any additional information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The college has a mechanism for internal and external financial audits. Monitoring financial management practices is a significant process in the internal audit. An internal audit is carried out by the Finance Committee. Budget and statement of expenses are reviewed every quarter by the Finance Committee. The accounts of college are audited each year by the External Qualified Chartered Accountant appointed by the Barah Moula Educational Society. The Audited Report by the External CA is placed before the governing body for wetting and rectification if any. The qualified remarks given by the auditors are taken into consideration in the forthcoming years.

File Description	Document
Any additional information	[View Document](#)

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

Response: 0.93

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

2018-19	2017-18	2016-17	2015-16	2014-15
0.425	0.25	0.25	0	0

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	[View Document](#)
Any additional information	[View Document](#)
Annual statements of accounts	[View Document](#)

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

Response:

The mobilization of funds is an important aspect to maintain quality education in the institution. The majority of the financial needs of the institution will be fulfilled by tuition fees paid by the students. The mere tuition fee from the students is not sufficient to meet the standards. The management takes initiative to fill this financial gap. Faculty members actively involved in generating funds by submitting their research proposals to various funding agencies and by undertaking the consultancy services. These funds are utilized for developing research laboratories and upgrading the facilities.

The institution follows a well-defined mechanism for monitoring the effective utilization of the financial resources for academic process and infrastructure development. The budget for every year is proposed by the finance committee after taking into consideration the requirement of each department. After getting approval from the principal and governing body on the proposed budget, the finance committee will ensure the effective utilization of the allocated funds.

Optimal Utilization of funds can be done as follows:

- Conducive academic ambience.
- Constant encouragement for professional development.
- Thrust for research and publication and various staff welfare schemes.
- Environment-friendly campus with facility for rainwater harvest, segregation of wastes and diverse flora promotes natural resources conversation.

- Preparation of budget for every project enables the institution in the effective use of allotted funds and avoids the mismanagement of funds.
- Conducting various training programs for faculty and students, academic activities and fests.

File Description	Document
Any additional information	[View Document](#)

6.5 Internal Quality Assurance System

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

Response:

The Internal Quality Assurance Cell was started in the year *2013* to monitor the quality of services being provided by the institution to its stakeholders. An IQAC committee is formed and approved by the governing body to take care of Quality assurance strategies and processes. The Institute's existing policies on academic and administrative systems are in respect of the process of teaching-learning and evaluation system, academic performance, faculty recruitment and training/qualification enhancement, are initiatives of IQAC. IQAC has contributed significantly to continually improve the infrastructure, enhance the faculty competencies, and empower the students to become employable.

Two examples of best practices institutionalized as a result of IQAC initiatives are

1. **Faculty Development Programs**

FDP is one of the initiatives of IQAC for improving the quality of the faculty in various aspects. Faculty development is a process to improve their skills in the following areas: (1) Teaching and Learning, (2) Out Come Based Education, (3) Research and Development, and (4) Personality Development. Institute has been organizing Faculty Development Programs (FDPs) throughout the academic year in two levels, i.e. first one at institute level common FDPs for **all the department** faculty members and the second one is at department level FDPs for department faculty members on their specific areas. Faculty Development programs help to strengthen the professional and administrative skills of the faculty members which leads to quality enhancement of the institute.

1. **Pre Placement Training (PPT)**

 Pre Placement Training is also one of the notable initiatives of IQAC, to enhance and improve the employability skills of students. As part of PPT, all the students have been trained in various skills such as communication skills, Aptitude skills, Reasoning skills, Leadership skills, and technical skills.

This institution offers a long term Pre-Placement Training (PPT) to all 2nd year 1st sem to 3rd year 2nd sem students from the beginning during their regular classes where 2 hours' time is allotted for training in a week. For final year students, special advanced Pre Placement Training (PPT) is provided for 2 weeks in semester vacations which help them to gain confidence in the upcoming placements.

The objective of PPT Training:

To bridges the gap between corporate requirements and student's knowledge and skillsets. To guide and provide right module of training that meets the industry needs and improve their employability skills.

The outcome of PPT Trainings

- The ability to communicate effectively with co-workers, employers, clients and customers.
- The Training & Placement Cell of GNIT strives hard to provide adequate training and finally place them in industry.
- The Cell ensures that all our students are placed in reputed companies – both software & core, with handsome packages.
- The Placement cell along with the Training Department organizes sessions and workshops with industry experts that help the students get an insight into the demands and needs of the market.
- Top Recruiters like IBM, Amazon,TechMahindra,Paytm, Velosio, Yellow Messenger, Syscon, EdWisor, Indian Navy, Decathlon, Value Labs, CtrlS, Virtusa, TCS, etc. have visited our campus for selecting candidates.

File Description	Document
Any additional information	[View Document](#)

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

Response:

The institution reviews its teaching-learning process, structures & methodologies of operations through Academic Departments. The IQAC is responsible for developing, coordinating and monitoring academic assessment activities to effect improvement in student learning. All the heads of the departments, deans and nominated teachers are members of the Institute Academic Committee and are chaired by the head, IQAC

The roles and responsibilities of the IQAC are too.

1. Plan, monitor and control the academic functioning of all the Departments.
2. Introduce innovation in Teaching, Learning and Evaluation practices.
3. Advised for industry-oriented projects and internships, Suggested other technical training activities related to enhancing the employability skills

A constant review mechanism is done by IQAC in the college which guarantees the smooth functioning of the quality teaching-learning process. Some of them are as follows:

Methodologies –

- A teaching-learning **plan** and a course schedule along with the academic calendar will be given to

the faculty member well before the commencement of the semester. This is done under the guidance of the HOD.

- The class coordinator periodically reports to the HOD about the syllabus coverage and the number of classes taken by the faculty.
- Guest lecturers will be conducted for the subject who is difficult to understand.
- The individual course schedules, plans, and related information/ materials are issued to the students at the commencement of the semester.
- IQAC also ensures the Counseling given to slow learners and Parents meet of such students is done with their respective Mentor if required.

Outcome –

IQAC periodically ensures the attainment of learning outcomes of each course and program.

Two examples of institutional reviews and implementation of teaching-learning reforms initiated by the IQAC

1.Course Files

Course files or planning documents of every course are used to bring objectivity and strategize the course of teaching and learning for every topic. The Faculty go through the syllabus and ensure that all the students fulfill the pre-requisites of the course. Upon cross-checking pre-requisites the faculty starts their event schedule that they plan at the beginning of the year. A proper plan for each topic and its delivery is made by the Faculty. The mapping of the course outcome is done along with the program outcome. Course files have proven to be great guiding tools that provide the faculty direction and a sense of clarity while teaching.

1.Students Feedback on Faculty, Teaching-Learning Process &Evaluation

There are two different forms of feedback, verbal feedback, and summative feedback. Verbal feedback is acknowledged given at the beginning and/or throughout the course, used to instruct your teaching and allow you to make appropriate alterations along the way. A "continuous Improvement philosophy" is recommended with verbal feedback.

Students' feedback significantly showcases the actual quality of the teaching-learning process.

The IQAC has brought several changes in the Students feedback process like

- No faculty members will be involved in the students' feedback process.
- Only students having attendance above 75% will be allowed to give feedback on faculty, teaching-learning process & Evaluation.

Minimum 60% students of each department will be present at the time of feedback

File Description	Document
Any additional information	[View Document](#)

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

Response: 22.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
33	26	28	13	11

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

6.5.4 Quality assurance initiatives of the institution include:

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

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

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

Response:

Incremental continuous improvement is an ongoing effort in the GNIT to improve our systems and processes. The observation given by the external agencies is followed up rigorously. Major incremental improvements during the preceding five years are as under:-

- Increased interaction with alumni by giving them representations on various committees and boards and in the convocation procession. Organizing alumni meet.
- The GNIT has increased its research profile and allotted Directories of Research in every Domain to promote the research culture among faculties.

- **Teaching Innovations**: The IQAC has conducted faculty development programs to enhance quality in many areas. Organizing seminars/Workshops.
- **Standardization:** The IQAC has standardized various processing such as reporting formats, Feedback forms, Assessment of Learning Levels at the Entry Level, Teaching Plans , Evaluation of POs, PEOs, Cos etc bringing about uniformity which is a prerequisite for monitoring quality and thereby enhancing it.
- **Teaching Plans**: The IQAC designed the Teaching plans with a focus on Teaching inputs and teaching methodologies especially student-centric methodologies adopted, with an objective to monitor and enhance the teaching-learning process.
- **The shift from conventional to ICT enabled classroom:** Information and Communication Technology has been made an integral part of the teaching-learning process by converting some of the conventional classrooms into ICT enabled classrooms. These rooms have been equipped with LCD projectors and audio systems
- **Purchase & Installation of Generator, New Canteen facilities, Use of renewable energy –** Installation of Solar Power Plant Infrastructure on the campus may be strengthened and upgraded to avoid its obsolescence & meet the 21st-century expectations of faculty/students
- **Wi-Fi connectivity throughout the Campus** College installed Wireless Access Points throughout the campus and the campus was made Wi-Fi enabled. Backup connection for emergency work.
- **Principal's chamber, Auditorium, New Canteen facilities** have undergone extensive renovation and up-gradation to facilitate administrative and academic work respectively.
- **Lab Manuals**: To ensure a structured methodology for students, the IQAC ensured the preparation of Lab Manuals by all Departments.
- **Meetings and Reports from Committees, Centers, and Cells**: The IQAC monitors the functioning of the committees, Cells, and centers through conducting meetings and monitoring the reports they submit.
- **Weekly reports on Teaching:** The IQAC introduced weekly reporting by HoDs on monitoring teaching quality with a focus on the teaching methods employed. A structured format has been designed for the purpose.
- **Establishment of Centers:** The IQAC established center and cells: Entrepreneurship Development Cell (EDC) to create awareness and motivate students towards self-employment
- **Reports from Laboratories:** Monitoring the laboratory equipment and maintenance through Submission of Reports by the Head of the respective Department

During the placement of students by external recruiting agencies like MNCs, the requirements of the recruitment companies are provided to the students in the form of training and other practices. Academic Performance in the form of cut-off marks for being eligible for the interview is maintained and students are regularly advised about the requirements. The above requirements classes maintained by Senior Faculty, Heads of Departments and Principal. The composition of IQAC is furnished

File Description	Document
Any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response: 20

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

2018-19	2017-18	2016-17	2015-16	2014-15
5	5	4	3	3

File Description	Document
Report of the event	[View Document](#)
List of gender equity promotion programs organized by the institution	[View Document](#)

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:
  1. **Safety and Security**
  2. **Counselling**
  3. **Common Room**

Response:

GNIT gives the highest priority on ascertaining the safety and security of the female students, faculty and other employees. It also provides facilities like common room and counseling services as it believes supportive, safe and conducive environments are critical to one's growth.

Safety & Security:

The institute has taken the following safety & security measures

- Security Guards at the main gate allows the persons only if they have proper ID proof and reason. In addition, security guards around the campus keep a vigilant eye to ensure the safety and security of the students.
- Constitutional committees like Anti-ragging committee, Grievance Redressal Committee and Anti sexual harassment committee are constituted and as per the guidelines and there have been functioning actively to ensure the safety and security of the students.
- In the campus, CCTV Cameras are installed at different locations to ensure the safety and security

of the students.

- Do's and Don'ts are displayed in each laboratory and students are briefed on safety precautions to.
- Separate hostels for girls and boys with good security are provided.
- Seating for girls and boys inside the classroom and college buses are made separately.
- Separate Sick room for girl students with required facilities.
- Precautions are taken during transport, in the campus, canteen, library, sports area to monitor the movement of students and ensure safety of the students.
- Security checkpoints at all campus entries and exits and round the clock security at Main Gates.
- In all Industrial visits, excursions, study tours, female teachers accompany the girl students and take care of them very affectionately.
- Students are counseled on stress and anger management.

Counselling:

- Active counseling system followed in the institution provide effective counseling to the students, including gender sensitive issues.
- The girls are encouraged through counseling to participate in various activities like Cultural events, NSS, Sports, training sessions, etc. as per their comfort and interests.
- The Institution has a well defined student mentoring system for all the programs starting from the first semester. The main objective of mentoring is to help each student in taking right decisions for their academic and personal growth. In addition, mentoring will help to boost student's morale and improve their learning abilities. Each faculty who mentors the student tries to help the individual regarding their academic and personal issues.
- The Women's Empowerment Cell conducts many Women's development programs to encourage and boost the confidence of the girls students.

Common Room:

- Common Rooms facility for Boys' and Girls' are available. Separate sick rooms are available. Girl's common room is available with essential facilities like first aid box, bed, wash basin, etc.

File Description	Document
Any additional information	[View Document](#)

7.1.3 Alternate Energy initiatives such as:

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

Response: 80

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

Response: 152712

7.1.3.2 Total annual power requirement (in KWH)

Response: 190894

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

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 53.7

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

Response: 60970

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 113530

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

7.1.5 Waste Management steps including:
- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

GNIT is conscious about its responsibilities towards the environment and works on the principles of three "R" model to maintain Eco-Friendly campus.

- Reduce
- Re-use
- Re-Cycle

Solid waste management:

- The solid waste generated in the campus includes plastics, food wastes, cardboard materials, paper wastes, metals, wood etc.
- Dustbins are provided in the institute at convenient locations. The staff room and office has two separate dust bins to bifurcate the dry and wet waste.
- The single side papers are re-used for writing and printing circulars in all departments.
- This segregated waste is collected by municipal workers.
- The waste which is fit to recycle given to recycler and the damaged books are given for binding and are further brought to use again.
- Metal and wooden waste is stored and given to authorized agent for further processing.

Liquid waste management:

- Liquid waste mainly consists of waste water from kitchens, wash rooms and mess. This waste water is transported through sewerage system of underground pipes. The waste is finally collected in the underground tank through GRIT chamber to remove the solid waste. Then the waste is supplied through feeding pump to ionizer, E-cell, mixer, back filter, clarifier, sand filter and carbon filter. The outlet is connected to carbon filter. The treated water is used for several other purposes like watering to plants and trees, cleaning and etc.
- It works on Passing of electrical current through water has proven very effective way in the removal of contaminants from water by destabilizing and electro-coagulating suspended organic and in-organic in sewage
- This unique electro-chemical sewage treatment system is noiseless, clean and significantly reduces COD, BOD, TURBIDITY, SUSPENDED SOLIDS, COLOR, ODOR and pathogenic bacteria count. Our e-STP comprises the process of Electro coagulation, Electro oxidation, Electro chlorination, and filtration.

- Periodic checkup of plumbing lines is undertaken to ensure minimal loss of water due to leakage.

E-waste management:

- The e-waste obtained in the institute comprises of batteries, ups, discarded input devices like mouse, key boards, wires and cables. The e-waste is re-used in case of re-parable and brought to make use of them again.
- The discarded e-waste is exchanged with vendors to get new products at discount, which helps in saving money to great extent and also provides with safe disposals process.
- Most of the new electronic instruments, computers and peripherals are purchased under 'Buy Back Scheme' so that we do not accumulate e-waste.
- All electronic equipment used in the campus are regularly maintained and repaired to ensure Minimum e - waste.
- UPS Batteries are recharged and repaired by the suppliers.

File Description	Document
Any additional information	[View Document](#)

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

- Rain water harvesting is done effectively in Guru Nanak Institute of Technology. Several rain water harvesting pits are constructed in and around the campus.
- The rain water is diverted through wide shallow channels spread over the entire campus, thus ensuring the conservation of rainwater.
- To sustain the ground water availability, the institution has adopted rain water harvesting system.
- All open terraces are fitted with collection pipes to route rain water and sent to the ground through designed drains. Drain connected from all the building flow towards lower level through external drain.
- The institute ensures that the water wastage is minimized through regular check and corrective measures taken on leaky taps and pipes overflow from overhead tanks etc.
- To increase infiltration of rain water in the sub-soil which has decreased drastically and improvement in the ground water quality by dilution, and also to improve the ecology of the area by increasing the vegetation cover, etc.
- As per his statement due to harvesting of rain and recharging ground water, there is no scope for drought as floods in the area.
- Reference from Telangana Today newspaper on 26th April 2019 Edition, there is rise in ground water level of 46.40m in Ibrahimpatnam Mandal R.R District. We feel the efforts made towards underground water recharge is nearly successful and its continuous effort to maintain good vegetation in and around surrounding vicinity.

File Description	Document
Any additional information	[View Document](#)

7.1.7 Green Practices
- **Students, staff using**
a) **Bicycles**
b) **Public Transport**
c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

a) Bicycles

In GNIT, Staff and students use the bicycles to move around the campus.

Staff and Students who are near by the college are encouraged to come by bicycles.

b) Public Transport

GNIT encourages the students to avail public transports, TSRTC. Many of the students have TSRTC bus pass with the support of institution. Two RTC buses are available exclusively to GNIT Campus from Ibrahimpatnam. Tha students can easily access public transports as the institution is situated on the highway.

GNIT encourages mass transport by providing around 75 buses for student and staff across the city to ply in different areas.The college buses are regularly serviced and checked for pollution control norms. Few of our staff and students come by car-sharing.

c) Pedestrian friendly roads

Mostly the vehicle movements are avoided in the campus, the foot path roads are used by pedestrians which are available in the campus at all required places.

Separate roads and routes are there for vehicles to move and park in particular area.

This reflects the safe way of transport system in campus to avoid any accidents that may occur.

Plastic Free Campus

GNIT has motivated the students and faculty towards reducing and avoiding the plastic inside of the campus and restricting the usage by

- In the campus, "**No Plastic Sign Boards**" are placed in all the prominent areas.
- GNIT took an inititaive to reduce plastic usage in campus by using polythene free plates and cups in cateen.

Paperless office

The instituion has taken an initiative to reduce the usage of paper in all possible areas

- Circulars and other communications are done using E-mails and social networks
- The important data of accounts/office and academic information is saved and maintained through systems.
- ERP Software is used to reduce the paper usage and time.
- The complete campus is Wi-Fi enabled, making it much easier for paper less activities.

Green landscaping with trees and plan:

The entire campus has landscaping with green grass, ornamental plants and shady trees making the campus green and beautiful. The campus is also covered with tall trees for shady purpose and to protect the environment from pollutants. Carbon dioxide neutrality is maintained on the campus by planting different varieties of trees and plants Haritharam is conduct every year in the campus and local areas by students and staff for awareness of planting and growing trees.

Through NSS, students are encouraged and motivated to plant sapling in the college as well as at the selected places outside the campus

Major Green Campus Initiatives

1. Green audit of the institute is conducted annually.
2. Tree Plantation is done every year through NSS.
3. Recycled water is utilized for maintaining green campus.
4. Rain water harvesting and solid waste management.
5. The college has nurtured number of trees of different variety.

File Description	Document
Any additional information	View Document

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

Response: 4.45

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

2018-19	2017-18	2016-17	2015-16	2014-15
28.99	20.25	18.25	21.5	19.35

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

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

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

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: B. At least 6 of the above

File Description	Document
Resources available in the institution for Divyangjan	
Any additional information	

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

Response: 24

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

2018-19	2017-18	2016-17	2015-16	2014-15
6	5	5	4	4

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

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

Response: 15

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

2018-19	2017-18	2016-17	2015-16	2014-15
5	4	2	2	2

File Description	Document
Report of the event	
Any additional information	

7.1.12

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

Response: Yes

File Description	Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	[View Document](#)

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

Response: Yes

File Description	Document
Any additional information	[View Document](#)
Provide URL of website that displays core values	[View Document](#)

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

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	[View Document](#)
Any additional information	[View Document](#)

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	[View Document](#)

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

Response: Yes

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

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

Response: 18

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

2018-19	2017-18	2016-17	2015-16	2014-15
3	4	4	4	3

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

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

Response:

GNIT organizes National Festivals, Birth and Death Anniversaries of great Indian Personalities to promote national unity, integrity and patriotism among the young minds. Thoughts of great Indian personalities sowed into the minds of students through the programs conducted on these days. Staff and students get to know the importance of national integrity in the country in general and their role in it in particular.

Keeping in view of this, the following are the programmes conducted for the holistic development of students

- **15th August Independence Day**
- **26th January Republic Day**
- **14th April B. R. Ambedkar Jayanthi**
- **15th September Engineers' day**

- **5th September Teachers' Day**
- **Ganesha Chaturthi**
- **Dussehra**
- **Holi**
- **Christmas**
- **Shri Guru Nanak Dev Jii**

Independence Day: The institution celebrates Independence Day every year by a simple and elegant flag hoisting ceremony with the presence of invited Chief Guest, who unfurls the national flag followed by a beaming patriotism outshined during the singing of National Anthem.

Republic Day: The Republic Day is celebrated with gaiety and patriotic fervor at GNIT. On this privileged occasion, celebrations starts with the vibrant and elegant National Flag hoisting ceremony and the heartfelt renditions of patriotic songs arises feelings of love and brotherhood among everyone.

B. R. Ambedkar Jayanthi (Birth anniversary of Dr. Bhimrao Ambedkar) - Ambedkar Janmotsav Samiti is celebrated on the birth anniversary of Dr. B.R. Ambedkar with various processions and 'shobhayatra' across the country. The 'shobhayatra' focused on women rights, superstitions and save daughter issues.

Engineers day (Birth Anniversary of Sir M. Visvesvaraya) –The institution celebrates this day on 15th September consistently as an exceptional tribute to the best Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya.

Teachers Day: The institution celebrates Teachers day to commemorate the birth anniversary of the second President of India, Dr. Sarvepalli Radhakrishnan, a great teacher and a staunch believer of education, on 5 September 1888.

Dussehra - In the season of Navratri, the institution organizes a Garba Night. Garba is a form of Gujarati folk dance characterized by fluid movements and rhythmic variations. Students and staff members dress up in traditional clothing and dance to Gujarati garba music which enhances unity and integrity.

Holi – Holi, the festival of colors is very significant for our lives and body in various other ways than providing fun and the joy. Keeping this in mind, the institution celebrates this event with students, staff and other team members.

Ganesha Chaturthi – The institution celebrates Ganesha Chaturthi. "Lord Ganesha" as the God of New Beginnings and the Remover of Obstacles as well as the god of wisdom and intelligence.

Christmas- The institution celebrates Christmas in the college campus every year, to set a perfect example of secularism.

Shri Guru Nanak Dev Jii -"Suni Pukaar Dataar Prabh, Guru Nanak Jag Maahe Pathaya, Sri Guru Nanak Dev Ji's Prakash Purab" is celebrated at GNIT on 22nd November.

File Description	Document
Any additional information	[View Document](#)

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

Response:

Transparency and openness are ensured by conducting proceedings by Governing Council and finance committee in planning, monitoring and controlling allocation of funds and its optimum utilization. GNIT has quarterly internal and external audit system by Chartered Accountants and submit quarterly audit report and necessary compliance. External Audit / Statutory Audit done every year. The college has uploaded RTI (http://gnithyd.ac.in/pdf/RTI-GUIDELINES-ECE-GNIT.pdf), Audit statement (http://gnithyd.ac.in/audit_statement.html) committee to maintain transparency. Vacancy positions are widely publicized through newspaper media and website time to time. The Institution maintains well defined transparency in all documents in administration and auxiliary functions.

Transparency in academic and administrative functions

The functions of the institution and its academic and administrative units are followed high level transparency. Formulation of development objectives, directives and guidelines with specific plans for implementation by aligning the academic and administrative aspects improves the overall quality of the institutional provisions. Effective leadership by setting values and participative decision-making process is done not only to achieve the vision, mission and goals of the institution, but also in building the organizational culture. The formal and informal arrangements in the institution to co-ordinate the academic and administrative planning and implementation reflects the institutional transparency.

Transparency in financial functions

The institution has developed strategies for mobilizing resources and ensures transparency in financial management of the institution. Budgeting and optimum utilization of finance as well as mobilization of resources are the key issues handled by the Management. There are established procedures and processes for planning and allocation of financial resources which leads to effective & efficient use of financial resources. The Budget Process which is an inclusive and collaborative process is as follows: Departmental Budget Templates are circulated to collect the Budget Requirements for the forthcoming year. The respective HODs of the departments then submit the requirements in the Standardized format which are consolidated. The various heads of the budget include the department capital requirements, manpower plan, student & faculty related expenses, event expenses, research & development, administrative expenses including lab consumables, repairs & maintenance & other infrastructure related expenses, etc.

Transparency in auxiliary functions

Auxiliary functions are conducted in a transparent way. Recruitment of faculty & all necessary procedures are practiced as per the guidelines given by AICTE and JNTUH University. All circulars regarding, students, teaching staff & non teaching staff are circulated & displayed on the notice boards. Planning & execution of different auxiliary functions are discussed in the Academic Council meetings. For this

purpose, decisions are taken in Academic council meetings. The minutes of the academic council meeting is circulated to all the staff members through e-mail. All circulars regarding, students, teaching staff & non teaching staff are circulated, read in all the classes & displayed on the notice boards. In addition e-mail is sent to all the staff and students. Student's internal marks are sent to the parents as SMS.

File Description	Document
Any additional information	[View Document](#)

7.2 Best Practices

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

Response:

Practice-I

Title: Pre Placement Training to enhance the Aptitude, Soft Skills and Technical Skills for an under gratitude student.

Objectives :

The Specific Objective of the Pre Placement Training is to Train and Expertise the students to meet the present day requirement in the market for the Survival. This includes the Personality Development; Resume writing, Communication Skills, Aptitude, Personal Interview and Group Discussion.

The pre-placement training for the student groups aims to develop into complete professionals. It provides Personality development, communication skills, resume preparation, aptitude test, interview skills, and group discussion.

- To prepare students to face campus interviews through arranging training in Aptitude, group discussions, technical and HR interviews by professional trainers.
- To encourage career counseling by organizing guidance lectures by senior corporate personnel and most importantly by the immediately placed senior students.
- To maintain regular interaction with the industry through seminars, guest lectures, corporate meets etc
- To develop the best learning process using a comprehensive understanding of industry's best practices

Context :

The industry is always on the lookout for students who are vibrant, energetic individuals and ready to accept challenges, attentive, a good academic background, fast learners, open to learning even at work and more importantly, good communication skills. A good score sheet and technical ground rules are only one phase of the recruitment process.

Organizations today make use of unique techniques during recruitment to make certain that those hired will meet its requirements. The pre placement cell recognizes these techniques by interacting with the industry and prepares students for them. Hence there is a need to establish the vital link between students and prospective employers to facilitate the training and placement of students as they begin their career after graduation. In this age of liberalization, privatization, and globalization, there is an ever increasing industry requirement for professionals who have high employability index and required competencies with an inquisitive mindset for innovations.

Personality Development is one of the most important aspects is to groom the students so that they can deal with the challenging situations at work place. Since Pre Placement training time can be quite daunting, these sessions also help in motivating the students by conducting various workshops on how to increase their Self-Esteem.

One of the most crucial steps to get hired by a dream company to excel in the final rounds of personal interviews. The Pre-Placement Training train the students on important interview skills related to Dress Code, Confidence, Creativity, Ability to react and respond, and handle to stress

Hence out pre placement activities focuses on the personality development to make the students reliable, with a positive attitude and right decision making.

The Practice:

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

Students are constantly motivated through counseling, to increase their morale. Students are also informed and advised on the importance of maintaining good academic scores as these play a major role during recruitment. The cell helps students improve their academic scores trough a series of programs and workshops.

GNIT looks to develop its students from industrial perspective. For this we have designed training modules to impart technical, logical, analytical, behavioral and managerial skills in every student. Apart from the regular academics each student is trained for more than 200 hours on varied skills. We also promote students to visit various industries pertaining to their disciplines so that they get the right exposure. We are also assessing the students through various online testing methodologies so that the right set of students is channelized towards the right profile.

The following training programmes are conducted for the students by proper planning prior the academic start.

Soft Skill Training Programme:

This helps students develop effective communication skills and presentation capabilities in academic and professional settings. These interactive activities focus on work environment and real life situations. Individual attention is given and even shy students are encouraged and empowered to develop their public speaking, interactive and interpersonal skills. The students are trained in the skills needed in delivering efficient and appealing presentations to a variety of audiences. These skills cover a multiple of areas such

as the structure of the presentation, the design of slides, the tone of voice and the body language used.

This includes the enhancement of following skills

- Presentation Skills
- Group Discussion
- Resume Preparation
- Interview Preparation
- Just a Minute
- Leadership Qualities
- Goal Setting
- Time Management
- Assertiveness
- Team Player, etc.

Aptitude Skill Trainings: It includes to increase the following abilities in the students

- Reasoning
- Data Interpretation
- Logical
- Analytical

Key Concepts on time, speed and distance, Work, Pipes and Cisterns, permutation and combination, probability, profit and loss, calendars, etc.

Technical Skill Trainings: The students are trained in advanced techniques of the following languages and technologies and make them application oriented.

- C/C++
- Java
- Solar Engineering
- Robotics
- Testing
- Mobile Apps
- 3D Printing

Evidence of success :

We have witnessed   huge improvement in the personal and technical skills in the students after the pre placement training. We observed a huge difference in their communication skills, their attitude in facing the interviews and confidence levels of individuals. Mainly our students stood different from the group by developing the following distinguishable qualities such as

- Out Of The Box Thinker
- Leadership Skills
- Effective Team Player
- Strong Technical Skills
- High IQ Level

- Ability To Balance Work And Life
- Good Citizen
- Best Fitment For Various Roles Available In The Market

Along with good numeric and quantitative aptitude , good techniques and logical data interpretation,logical ,resoning and analytical ability and confidence in facing competitive examinations for jobs and higher studies, and also good decision making and problem solving skills

Many employers have given excellent testimony for our placement support for making the students industry ready

Many parents have also given good testimonials for suppoting their wards through out their journey to good placements and training them to being a responsible citizen.

Year by year we observe an considerable increase in the placement and also the recruitments in reputed companies with a very good package.

Problems encountered and Resources Required:

Pre placement training is a high priority practice in GNIT , Still it faces certain problems which the management strives to solve Competent faculty with updated soft skills and technical skills are needed to train the students and assist in pre placement training.

The students also lack commitment and out tracked, hence a close monitoring and mentoring by faculty is required. For this a strong mentoring and counseling system is employed by training the faculty on counseling and handling the students

Student from rural background may have good technical skills but may lack communication and other required skills, so special classes are provided to such students to boost their confidence levels and face the challenges of the world.

Faculty Development programmes are conducted to update the faculty with new evolving technologies so that they are prepared to train the students.

Practice-II

Title: Add-on Certification Courses

Objectives :

- To offer and add-on specialization along with the B.Tech degree. It would help students to gain cutting edge skills that are in demand in today's global job market.
- To skill the students in multi-stack UI/UX and IOT technologies and bridge the skills gap among students in the field of UI/UX and IOT.
- To Create industry ready professionals to meet the problems in the real time with certification in Adobe.

- To give practical, hands-on and industry ready training by world class efficient trainers.
- To provide Internships to the meritorious students.
- To help the students of GNIT to secure high paying quality jobs in best of MNC's.

The context:

The high demand in today's competitive job world seeks the all round development of the students apart from academic knowledge. Keeping the present requirements of various industries we design suitable training programs in various departments to train our students in various technologies and areas with the help of reputed training institutions along with certification from reputed institutions .They enable our students to stand in competent zone in the recruitment process, nurture their confidence levels and improve their focus in right direction of serving the society.

According to LinkedIn, there are 3800+ Job Categories Available in the Cloud Computing Market

- Cloud Computing Market Projected to Reach $411 Billion by year 2020
- Cloud Computing were the Top in-Demand IT Job & Skills for year 2018
- Cloud Computing to help Generate 11 lakh Job in India by the year 2022
- 43% of Indian Businesses Fully Implemented Cloud Strategies
- Hybrid Cloud is one of the Highest Paying IT Certifications in 2018-19

The Practice:

GNIT follows a meticulous planning in conducting various certification courses in collaboration with eminent industries. The GNIT has signed an agreement with Adobe Ireland to provide specialization courses to the students of Engineering. GNI happens to be the first institution in the TS & AP to offer Adobe UI/UX, IOT along with Cloud Computing through RED HAT ACADEMY. Adobe offers the Highest average salary for the entry level jobs for the students under training. By using ACT,GNI will skill the students in multi-stack UI/UX and IOT Technologies. This will help to bridge the skills gap among students in the field of UI/UX and IOT. It will create industry ready professionals with certification in Adobe. The Adobe company has 12-13 such academies in India. Of them, only 2-3 were set up in Engineering Colleges. GNI is one among them, "providing IOT technology to the GNI by the Adobe is the first of its kind in the world. The company is not extending such facility anywhere in the globe. GNIT is the only engineering college in India which has integrated B.Tech programme with the Adobe. The duration of course would be for two years.

The following training courses are conducted to the students by proper planning prior the academic start.

The aim of ADOBE training is to explain the UX/UI design process when creating an effective peer to peer financial platform. User experience (UX) and user interface (UI) are important elements for creating successful digital products, where the user experiences positive emotions in interacting with the product. The aim is that the user would like to experience the interaction again or share their experience with others. This also covers the challenges that are faced during the design process and how they were resolved.

The goal of this training is to design a peer-to-peer platform that would directly connect creditworthy borrowers with responsible lenders. The benefits of this kind of platform are a minimum risk and maximum reward for both borrowers and lenders.

Red Hat Center Of Excellence In Cloud Technologies aims at State-of-the-Art Hybrid Cloud Computing In-Campus Lab, Hands-on Multi-Cloud Experience, Co-branded Certification Program, and Sessions with Industry Experts.

The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. The "Internet of things" (IoT) is becoming an increasingly growing topic of conversation both in the workplace and outside of it. It's a concept that not only has the potential to impact how we live but also how we work. But what exactly is the "Internet of things" and what impact is it going to have on us, if any? There are a lot of complexities around the "Internet of things" but the students are able to discuss all these things in the session of Internet of Things.

Evidence of success:

We have witnessed huge improvement in the students in the UX/UI design process when creating an effective peer to peer financial platform. Our students are able to design successful digital products by User experience (UX) and user interface (UI) elements for creating, where the user experiences positive emotions in interacting with the product. Mainly our students stood different from the group by developing the Add-on certification courses. Our students are able to identify the importance of IOT and application of IOT in real time problems. They are able to design various equipment which makes the day to day life secure, easy and comfortable. Students are able to design smart sensors, smart speakers, toys, wearable and smart appliances, smart meters, commercial security systems. Students are developed for the right mindset to expand the cloud computing knowledge. They are able to develop cloud application, or cloud app software program where cloud-based and local components work together. This model relies on remote servers for processing logic that is accessed through a web browser with a continual internet connection. They are in a position to develop software distribution model in which a third-party provider hosts applications and makes them available to customers over the Internet.

Problems encountered and resources required :

Even though, we have highly celebrated practices across in our campus, still it encountered some inherent bottle necks which are well optimized and managed with our expertise.

- The constant urge of the student to learn UX/UI , IOT and cloud computing in training and competitive performances leads to maximum focus on the Add-on courses.
- To make the skill based training system more effective , training needs to be imparted to the faculty members on both the design processing and technical skills .

The Institution has established several Centers for Excellences to accommodate the students to complete their courses. These centers of Excellence are provided with required softwares and the supporting equipment to complete the courses effectively .These trainings give exposure and participation of faculty and students to research activities through these centers. It enables the students to teach and learn from a higher platform, acquisition of knowledge in newer fields, create specialized product development and testing laboratories with leading edge technologies

- Centre of Innovation for Drone Technologies
- Advanced centre for Augment Reality/Virtual Reality(AR /VR) Gaming

- Advance centre for Artificial Intelligence and Machine learning(AI/ML)
- Centre for Automatic Research and Development (ARD)
- e-Yantra- Embedded systems and Robotics lab

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Any additional information	[View Document](#)

7.3 Institutional Distinctiveness

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

Response:

The vision of GNIT is to be a world-class educational and research institution in the service of humanity by promoting high-quality Engineering and Management Education. In-line with the vision, mission and thrust, the institution provides consistent support and state of the art educational infrastructure and innovation eco system to enrich both academic and research practices.

The radiant ambiance of the institution is highly conducive for the academic excellence and holistic development of the students, which are envisaged through

- Very good University Results
- High Admission rate
- Remarkable Placements records in Top Notch companies

As providing world-class education is one of the long term goals of the institution, it has adopted student centric and innovative teaching methodologies for academic practices in order cater the attention and involvement of the students. In order to make the students as industry ready, the institution takes several significant measures such as Pre placement training, add-on courses, value added courses, internships and industrial visits.

The Institution is distinctive in providing state of the infrastructure and platform to participate in competitions like e-Yantra, Go-Kart, Project Expo, Hakathon, etc.,. The conducive infrastructural facilities available in the institution instill the students to conceptualise the ideas, design, fabricate and develop the models.

Keeping in view to promote research activities, GNIT has established several advanced centers to foster research and development activities in the institution.

In order to carry out cutting edge research in various contemporary technologies, the following are the

Advanced Research Centres established in GNIT.

- Advanced Centre For Innovation, Incubation, Research And Development(CIIRD) which aims to inculcate a spirit of innovation, provide support for startups ideas and foster entrepreneurial skills among the students.
- Advanced Centre for Innovations in Drone Technologies(CIDT) aims to create innovative projects using drone technologies for agriculture, public safety & security, surveying, construction and military applications
- e-Yantra – Embedded systems and Robotics Lab which aims to create the next generation of embedded systems engineers with a practical outlook to help provide practical solutions to real world problems.
- Centre of Innovations in Robotics and Industrial Applications to culminate multidisciplinary ideas to promote innovative developments in Robotics.
- Advanced centre for Artificial Intelligence and Machine learning to promote the research works on the creation and deployment of machine learning models with artificial intelligence technologies.
- Advanced Centre for Solar Applications to instill innovative project developments on improving and optimizing the design of solar power systems.
- Advanced centre for Augment Reality/Virtual Reality to foster training in the technologies that have redefined new-age entertainment.
- Centre for Geomatics to boost research, knowledge transfer and dissemination activities in geomatics field.
- Centre for Computational Civil Engineering to train the students on STAAD about construction practices, Mix design, RR masonry and CR masonry, Brickwall, RCC tests, 2D&3D frame modeling, analysis and design of circular dooms, 3D frames, etc.,
- Centre for Nondestructive Testing to train the students in the field of Testing the Properties of Materials and evaluating the structural integrity of materials.
- Centre for 3D Printing to strengthen project development activities in the field of 3D applications, such as medical, automotives, etc., using CAD model in 3D printing machine.
- Centre for Big Data to provide knowledge and skills to shape the emerging field of data science using latest softwares and tools.
- Centre for Mobile Application Development to provide an opportunity to develop projects using various **mobile application development** frameworks.
- Centre for Software Development to carry out advanced research and project developments on latest software technologies
- Centre for VLSI to design, formulate and realize the intelligent electronics circuit systems, FPGA based VLSI Design and embedded systems for industrial applications
- Centre for Embedded systems to provide practical skills to students and train them on microcontroller and microprocessor based projects to satisfy the present needs of Embedded System based Industries.

Centre of Excellence - Automotives

Our Vision is to enhance the critical Engineering skills of our students by providing hands-on Practice in Automotives and to produce them the world's best engineers.

We feel proud to state that this centre of excellence received the "**Best Centre of Excellence Award for Go karting"** in Telangana from Elets in 9th Higher Education Human Resource Global Education Fair.

Hands-on experience in Automotives builds the students to standout in national level and international level competitions. It provides a vibrant platform to learn the art of the management and teamwork, which

are essential skills required for 'real-world' and industry. It provides support, facilities and state of the art environment to build new vehicles from the scratch.

It has lead to the outstanding achievements in different levels of competitions; few of the notable achievements of our students are listed below:

- Bagged **Championship Award** at Go Kart Design Challenge contest(GKDC) organized by ISNEE in 2016, at Coimbatore.
- Bagged 5th position in Quad Bike Design Challenge contest(QBDC) organized by FMAE in 2016, at Coimbatore.
- Participated in **Formula Bharat international level competition**, where the contestants from all over the world had showcased their fabricated formula type cars.
- Stood as Runner Ups in GKDC and Student Kart Design Challenge contest(SKDC) held at Coimbatore and Hyderabad, respectively.
- Stood as Runner Up in SKDC in the year 2019.

These advanced centers and Centre of Excellence lead to the development of multi-disciplinary projects and win & work solutions to cater funds for research projects.

S.No	Our Sponsors and contributors	Official person
1)	Information & Public Relations, Dept. Govt of Telangana	Sri.Navin Mittal,IAS Commissioner,I&PR Dept.
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5. CONCLUSION

Additional Information :

- One among the top 15 engineering colleges in admission ranking

Notable Awards received by GNIT:

- Educational Excellence Award   - Institution
- **Excellent Campus Recruitment award in the State**   - Institution
  - *"BEST PLACE TO INNOVATE"*
- Educational Excellence Award   - Sardar Gagandeep Singh Kohli
- Excellent Innovation Institute Award   - Dr. Harvinder Singh Saini
- The Best Administrator award   - Dr. Sreenatha Reddy
- The CSE & IT, EEE, ECE, and ME departments of the institution conducts Scopus indexed Springer series conferences every year.

The institution has the following journals to promote research activities through its publications

- Journal of Innovation in Electronics & Communication Engineering (JIECE)
- Journal of Innovation in Computer Science and Engineering (JICSE)
- Journal of Innovation in Information Technology (JIIT)
- Journal of Innovation in Mechanical Engineering (JIME)
- Journal of Innovation in Electrical Engineering (JIEE)

The institution has received three star rating from MHRD for the active participation in Institution's Innovation Council activities and to promote the innovation eco-system in the campus. Our Students have achieved "Class A Awards" in e-Yantra Task Based Training(TBT).

Under the Centre for Innovation, Incubation, Research, and Development (CIIRD), GNIT has established various Advanced Centres to promote research, innovation, and incubation. The centre provides a platform to implement the innovative ideas of budding engineering minds into reality.

- Adobe Creative Technology Academy/Red Hat Academy
- Advanced Centre for Innovations in Drone Technologies(CIDT)
- e-Yantra
- Centre of Innovations in Robotics and Industrial Applications
- Advanced centre for Artificial Intelligence and Machine learning
- Advanced Centre for Solar Applications
- Advanced centre for Augment Reality/Virtual Reality
- Centre for Geomatics
- Centre for Computational Civil Engineering
- Centre for Nondestructive Testing
- Centre for 3D Printing
- Centre for Big Data
- Centre for Mobile Application Development
- Centre for Software Development

- Centre for VLSI
- Centre for Embedded systems
- Centre of Excellence - Automotives

More than 50 faculty members have successfully cleared the online certification courses in MOOCS through NPTEL.

Concluding Remarks :

The process of preparation of the Self Study Report of GNIT for NAAC inspection has given an opportunity to assess the quality of academic and administrative practices followed in the institution and to perform SWOC analysis. This SWOC analysis will help us to uphold the existing systems and procedures to meet the standards of higher education. The utmost cooperation and camaraderie extended by the faculty of all levels for collecting documentary evidence and data have strengthened and proven the team spirit. The contribution of the NAAC steering team, IQAC cell, and all the faculty members who have helped directly or indirectly in developing the SSR is gratefully acknowledged.

The institution strives hard to fine-tune the existing systems and processes by benchmarking with the best in the world to achieve high-quality outcomes. The relentless effort and support towards nurturing the holistic development of the students is evident through its admission ranking in Telangana state and the **award for Excellent Campus Recruitment in the State -** *"BEST PLACE TO INNOVATE"*.

The institution is looking forward to the NAAC peer team visit not only to showcase our educational excellence but also to receive suggestions to further tune up the system.