



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

NAVODAYA INSTITUTE OF TECHNOLOGY

**NAVODAYA NAGAR, MANTRALAYAM ROAD, RAICHUR
584103**

<https://engineering.navodaya.edu.in/>

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

August 2020

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Navodaya Institute of Technology (NIT) was started in 2008 by Navodaya Educational Trust (NET) which was established in the year 1992 by the Educationalist and Philanthropist Shri. S. R. Reddy. NET is a premier education service provider in Karnataka, which promotes and provide primary and higher education in the country, having 12 institutions and 5000 students offering 20 academic programs. Aims at developing Navodaya Institute of Technology (NIT) as the most respected and sought after technical institution of higher learning in Karnataka. The institute started with six B.E. courses approved by AICTE viz. Civil Engineering (CE); Computer Science Engineering (CSE); Electrical & Electronics Engineering (EEE); Electronics & Communication Engineering (ECE); Information & Science Engineering (ISE) and Mechanical Engineering (ME). In the year 2014 two PG programs viz. M. Tech. in Thermal Power Engineering and Digital Communication & Networking were also started. All these courses are approved by AICTE, Govt. of India and affiliated to Visveswaraya Technological University (VTU), Belagavi, and Karnataka. Presently the intake of the institute in UG program is 300 with 60 seats each in CE, CSE, EEE, ECE, and ME, and the PG remains the same.

The institute is located in a district headquarter of Raichur in the North Karnataka region, well connected by road and railway and the nearest International Airport is in Hyderabad. The institute is surrounded by a green environment and a hill, away from pollution. The entire campus is maintained green powered by solar energy. The institute is now in its twelfth year of dedicated service.

The institute is headed by Prof. Dr. M. Venkata. Mallikarjuna an eminent educationist. He worked in various capacities such as HOD and Vice Principal in esteemed institutions in India.



The institute strives to improve the socio-economic status of the economically weak and backward section by providing opportunities for engineering and technical education at an affordable cost. The institute has the best physical and intellectual infrastructure compared to any other institute in the North Karnataka region. NIT is committed to providing value-based technical education by continually improving the services to produce qualified and competent technocrats.

Vision

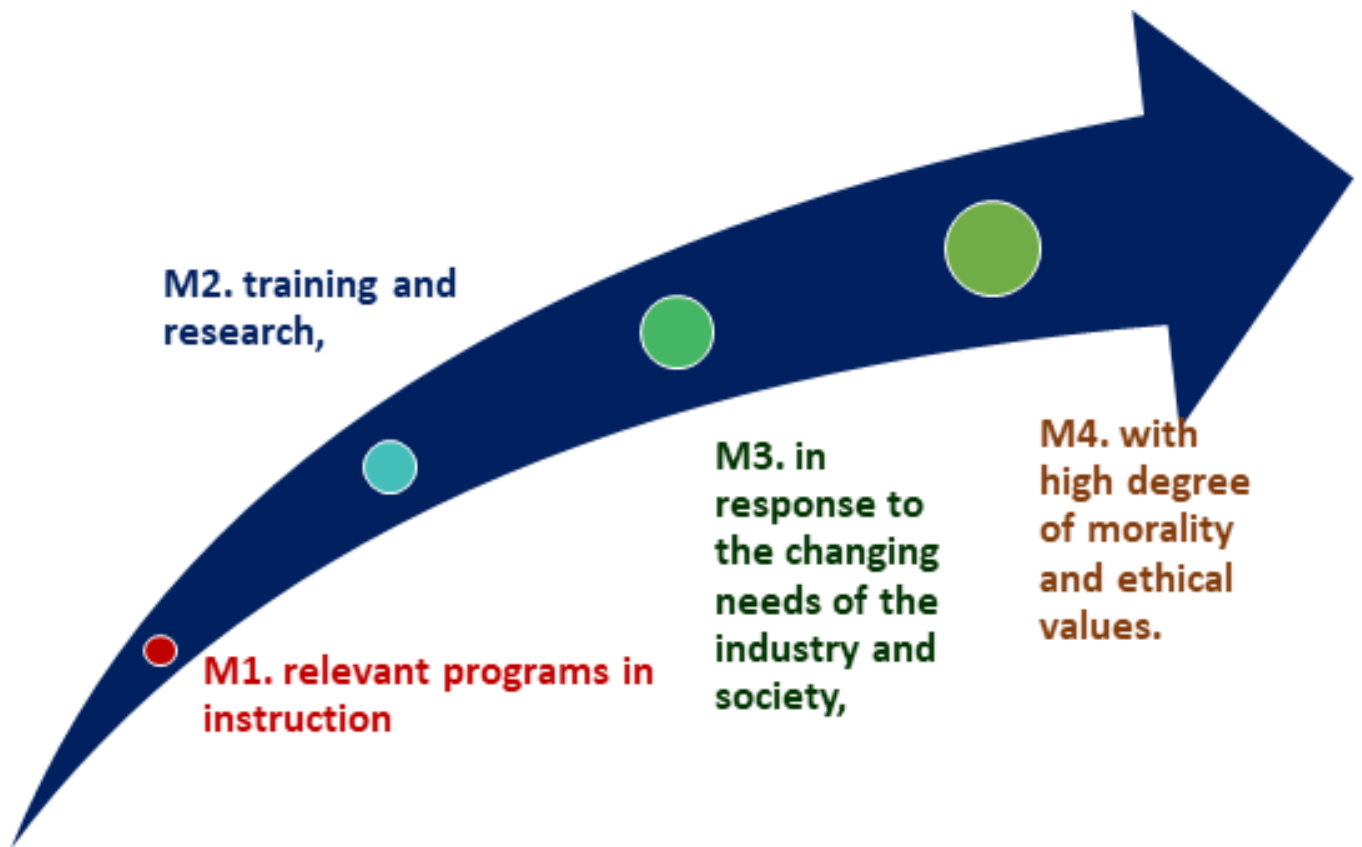


"Aims at developing the most respected institution of higher learning, renowned for its excellence in technology and for its commitment to producing high-quality engineers who are versatile, innovative and globally competitive."

Mission

To provide high-quality education in major engineering disciplines at the graduation level with a creative balance of academic, professional and extra-curricular activities through

- M1.** relevant programs in instruction,
- M2.** training and research,
- M3.** in response to the changing needs of the industry and society,
- M4.** with high degree of morality and ethical values.



1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength



- Visionary and committed management.

- ISO 9001: 2015 Certified Institution
- Excellent Infrastructure with state of art laboratories, ICT enabled classrooms, Modern Learning Sources
- Conducive Environment for the overall development of the students and Faculty.
- English Language Lab with latest learning software.
- Implementation of CBCS and Outcome Based Education.
- Eminent and Experienced faculty.
- Active Placement Cell
- Dynamic Mentoring system for students.
- Promoting E-learning through NPTEL, NDL, Swayam platforms.
- Encourage students towards project based learning / innovative thinking skills.
- Industry- Institute -Interaction-Cell Providing a platform for student's practical training in terms of projects, internship, Industrial Visits etc.
- Central Auditorium with modern facilities.
- Ragging free campus.
- Active student participation in community welfare programmes.
- Democratic governance through decentralization of responsibilities and participative management.
- Back Log Reduction Program for weak students.
- Uninterrupted power and Internet facility
- Safety and Security: The Entire Campus is under CCTV surveillance.

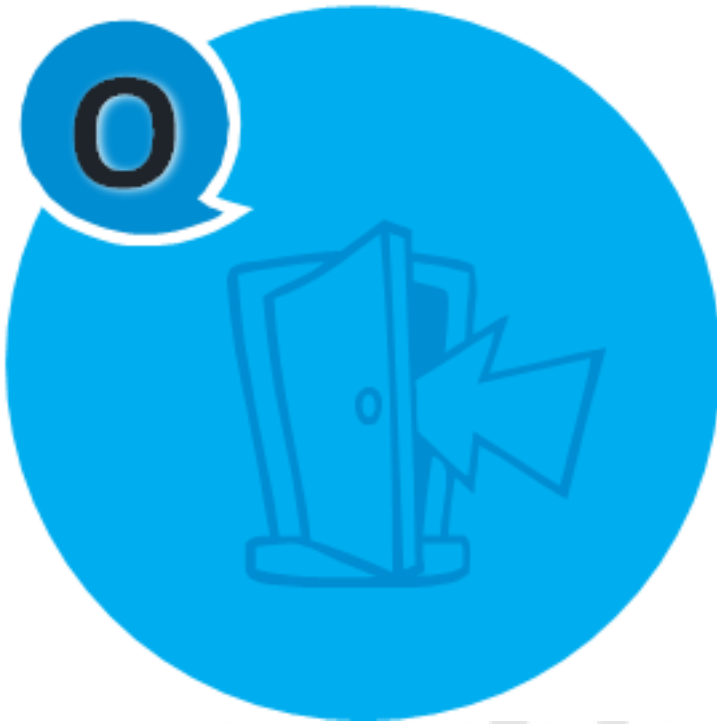
Institutional Weakness



- Funding / Grants for research activities from AICTE, DST and other agencies are not appreciable.
- Alumni Contributions need improvement.
- Limited placement from core companies.

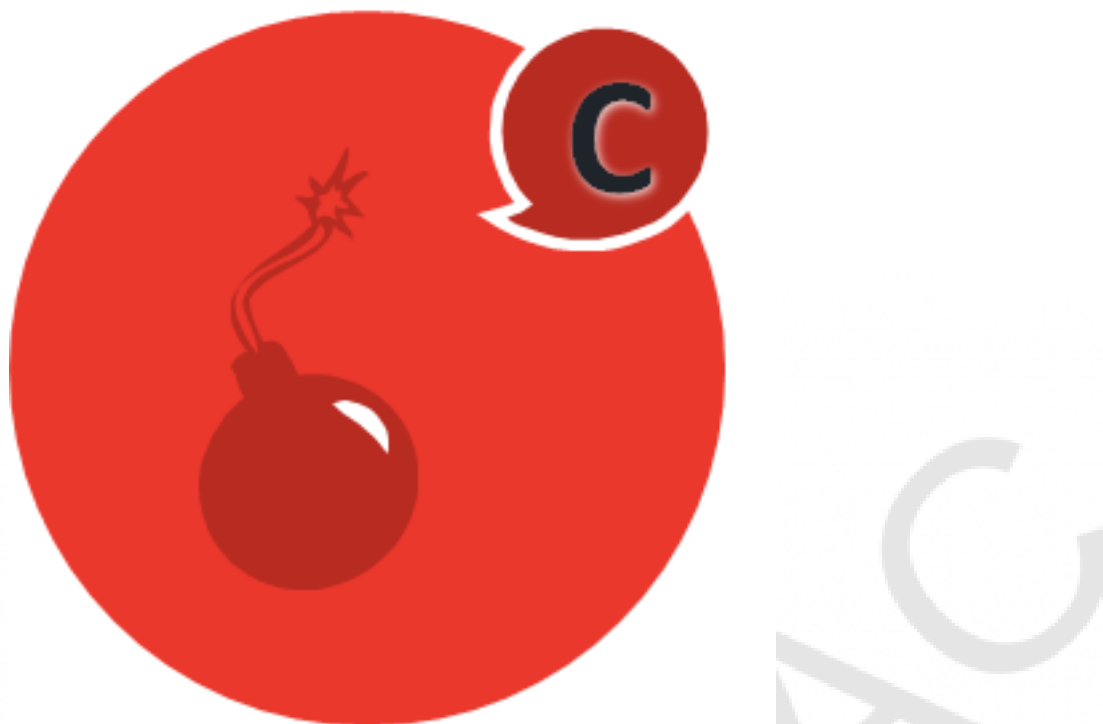
- Less number of admissions.
- Lack of industries nearby.

Institutional Opportunity



- Expanding e-learning resources to enhance the knowledge of students and faculty.
- Accreditation and autonomous status from statutory bodies.
- Establishment of Centers of Excellence in all departments.
- Enrichment of research activities at department level.

Institutional Challenge



- Encouraging students towards engineering education.
- Enriching the Communication skill of the Students who hail from rural areas.
- Getting highly reputed companies for on-campus placements.
- Carrying out interdisciplinary research activities.
- The College is located in the region designated as most backward area as per Article 371 J.

1.3 CRITERIA WISE SUMMARY

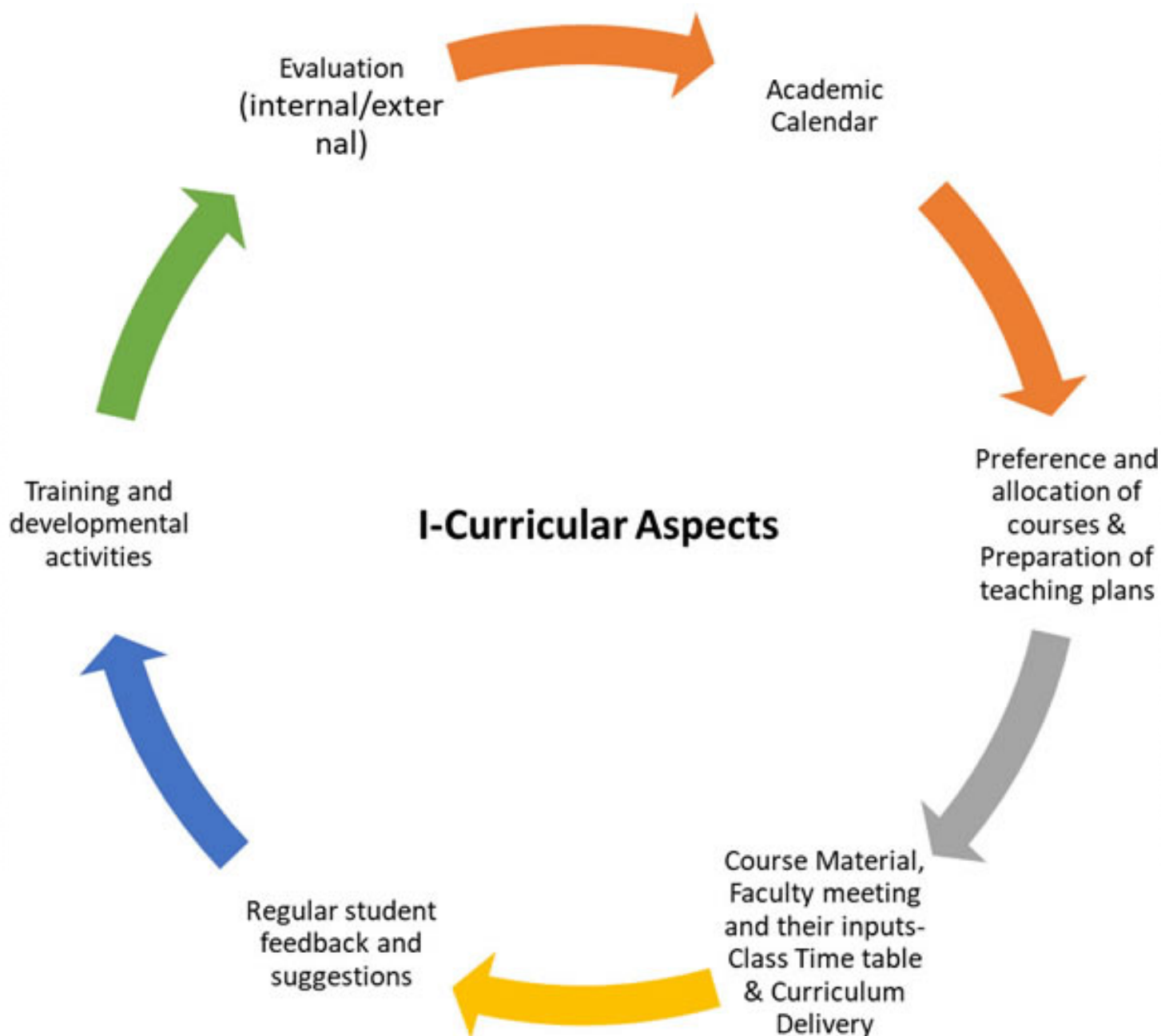
Curricular Aspects

The institution was established in 2008 and is affiliated to Visvesvariah Technological University Belgaum. The institution strictly adheres to rules and regulations of the affiliating university. The institution ensures effective curriculum delivery through a well planned and documented process. IQAC ensures the quality education transformation through its continuous monitoring. The university curriculum is well structured with the academic elements which mainly focuses skill based.

The university introduced Choice Based Credit System (CBCS) in 2017 and also adopted Outcome Based Education (OBE) subsequently as per the direction of the regulatory bodies. The institution at its level analyses the curriculum and identify the gaps which could be addressed by conducting add-on programmes. The curriculum composed of cross cutting issues relevant to professional ethics, gender, human values, environment and sustainability along with core to graduate the student globally competent.

The curriculum was structured in such a way that various learning mechanisms could be practiced progressively from first year to final year. The curriculum changes are made by the university after collecting the inputs from various colleges/stakeholders. Whereas at college level the curriculum feedback from stake holder's like students, teachers, alumni, employers etc. is taken and suitable programmes are planned to address the inputs given by the stakeholders.

For effective delivery of the contents there is a structured approach in administering the course by the faculty. On receiving the university academic calendar various co-curricular and extra-curricular events are incorporated and the finalized academic calendar is distributed to all the departments for effective implementation.



Teaching-learning and Evaluation

The institution is situated in the back ward area designated by central government under the article number 371J. The management establish the institution with the motto of serving to the society with low cost education. The institution well realized that making the students academically strong will uplift their families and nation. Hence the institution gives the top priority to the teaching-learning domain. To ensure this the human power (STR 20:1) required and infrastructure needed are well placed. The institution has state-of-art laboratories, stand alone buildings and well furnished admin and amenity areas. The academic infrastructure

like ICT, enabled class rooms, communication skill labs, learning sources digital library, 100 MBPS internet band width, well equipped auditorium, facilities are the assets for the T-L-P to carry more effectively. Nearly 40-50% of students who gets admitted belong to SC/ST/OBC categories. The TLP adapts student centric methods such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences. The teachers are wellversed in using ICT enabled tools. During prepaion of session plans itself mode of delivery of the content will be decided. (BB, ICT, PPT, Lab, IV)

The NITR established IQAC from 2017-18 academic year onwards to ensure effective planning and monitoring the acad3emics and related activates. The Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE) are conducted as per the guidelines given by the affiliating university without any deviation. The IQAC monitors syllabus coverage and attendance every fortnight and actions to be taken are discussed in the principal meet and necessary actions will be initiated and mentoring plays a vital role in this regard.

The course file is the heart of administering the course of a particular semester. The course file contains the vital elements like List Of PEOs, POs and Cos. Session Plan, Session Execution Log, Assignment Questions, Mid Exam Question Papers, Identification Of Slow Learners, Identification Of High Potential Students, academically high potential students, Remedial Classes Schedule For Slow Learners, Slow Learners Performance In MID Exam, Content Beyond Syllabus Taught etc.



**Dedicated & work
committed Staff**



NPTEL CERTIFICATION



Periodical Academic Audits



**Implementation of advanced
teaching-learning
methodologies**



**Excellency in academic
performance of the students**



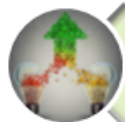
**Student Centric Active
Learning**



**Continuous student
Mentoring & Monitoring**



**Special Remedial classes
scheduled for weak learners**



**Regular industry – academic
interaction**



**Outcome Based examination
Reformation and Assessemnt**

Research, Innovations and Extension

The institution recognizes the need of research activity timely along with academic component. To encourage the research among the students and faculty a research and development cell is established at institutional level

being all doctorates as members in the cell. The objectives and functions of the committee are made clear. These are set inline with the VTU R&D Guidelines. Almost all Doctorates are acting as recognized research supervisors by the affiliating University. The R&D cell of the institute has the practice of organizing R&D related programmes like research methodology, IPR and Patents, guidelines to write the papers etc. the institution also promotes the paper publications in reputed journals by assisting financially to some extent. It is the policy of the institute to encourage PG holders to enroll for Ph.D course. Special leaves are granted for faculties who are pursuing Ph.D and attending for various academic fulfillment of the course. Also the faculty will be permitted to attend the research related workshops or seminars organizing outside the campus. The students are driven by their guides towards innovative/creative thoughts based on the contemporary problems facing by the society/nation. The faculty and students drive the technology to the society as needed. Particularly in this region there is scope for development of automated equipment for agriculture sector.

The institution is also well aware of extensions activities to be carried out in the neighborhood community. There is NSS unit recognized by the affiliating university and also the institution is a member of YRC which helps to organize the events related to NSS and YRC in a structured manner. The institution is getting financial help from the affiliating university for carrying out these activities. Many national/international importance days are also organized to make the minds of the student and faculty service oriented.

The institution by establishing MoUs with the institution and industries carry out the collaborative activities of research and others. The R&D cell also carries out consultancy works being nearby industrialists as customers.

Infrastructure and Learning Resources

The institution has adequate infrastructure and physical facilitates for teaching-learning. Viz., classroom, laboratories, computing equipment etc. also having facilities for cultural activities, sports games, gymnasium, yoga etc. Each classroom is of adequate size and has enough lighting, air ventilation and good ambience. Class rooms are equipped with LCD projectors to facilitate the teachers to adopt varied teaching methods. The infrastructure is also made available to conduct various technical activities. The Institute has five Engineering and one S&H Departments with **30** classrooms & **35** Laboratories.

All laboratories are operational, and well maintained. Tutorial rooms are available to conduct tutorial classes to address the personal level doubts and queries of the students. The Institute has well equipped seminar halls. Nearly 250 to 300 people can be accommodated in the seminar halls. Institute has sufficient Computing facilities with total **371** computers for staff and students. All computers are equipped with high speed internet of 100 Mbps speed. NIT-R running under the umbrella of Navodaya Education Trust (NET), the institution has adequate facilities to promote extracurricular activities like cultural events, sports, games, gymnasium and yoga.

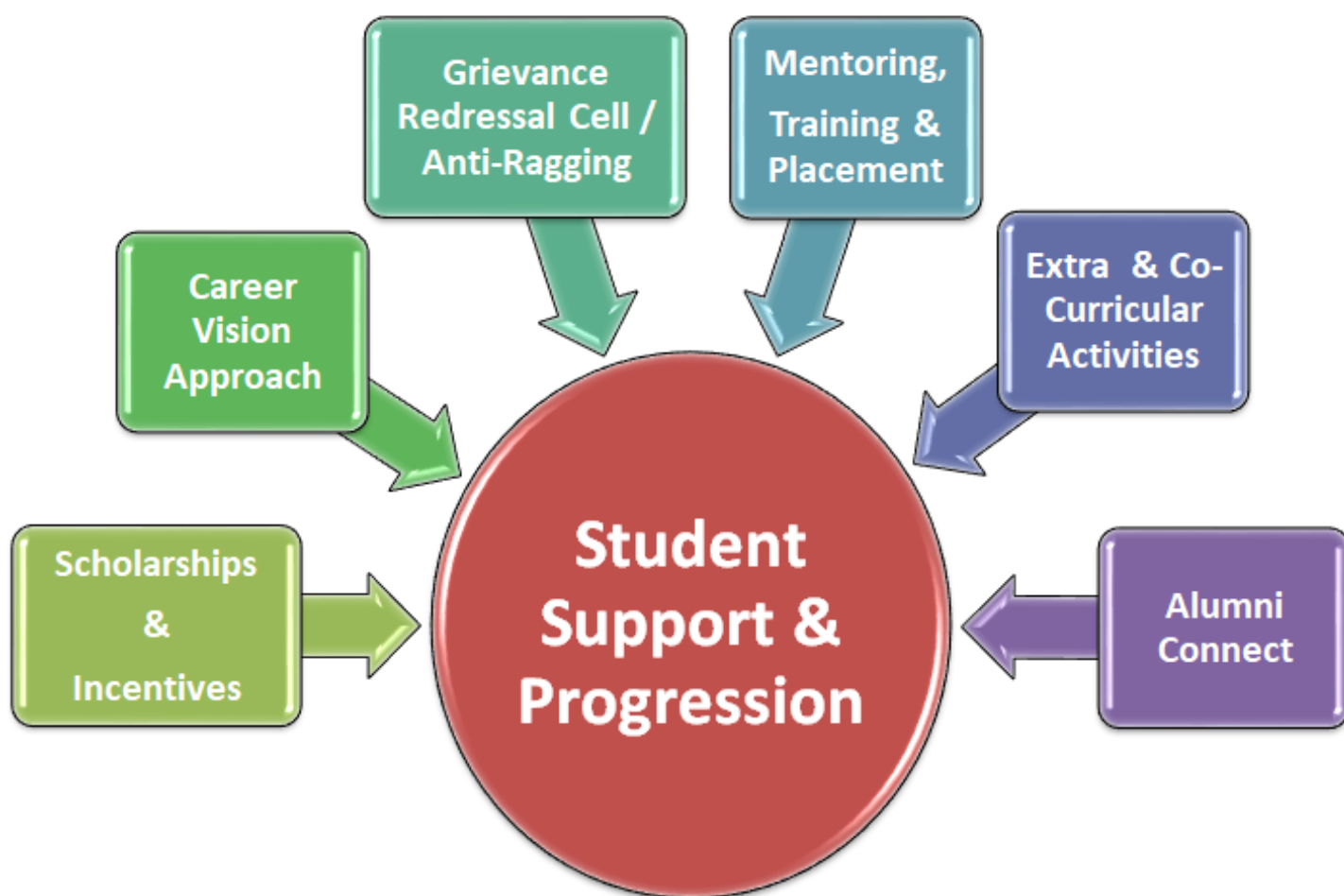
Student Support and Progression

The institution is of more concern of welfare of the students particularly. The management in view of promoting the admissions with meritorious students offers scholarships and freeships every year. Apart from the scholarships providing by the government of Karnataka. Even management offers seats under management quota less than the amount fixed by the Karnataka Examination Authority. The underlying motto is to give an opportunity to more number of students to get educated in this backward region. Students are encouraged to learn various set of skills like soft, language and communication, life, computing etc. the institution trains the

students through skill development center for competitive examinations and carrier counseling programmes are organized. The institution also having a transparent mechanism for timely addressing the student grievances including sexual harassments and ragging cases.

Online grievance redressal portal is made available for all the stake holders. The job oriented trainings are organized by the training and placements cell. 35-40% of eligible students are getting placed in small to enlarge scale industries. Good number of students also progress in higher education. Some students are clearing the government competitive examinations and getting absorbed to PSU.

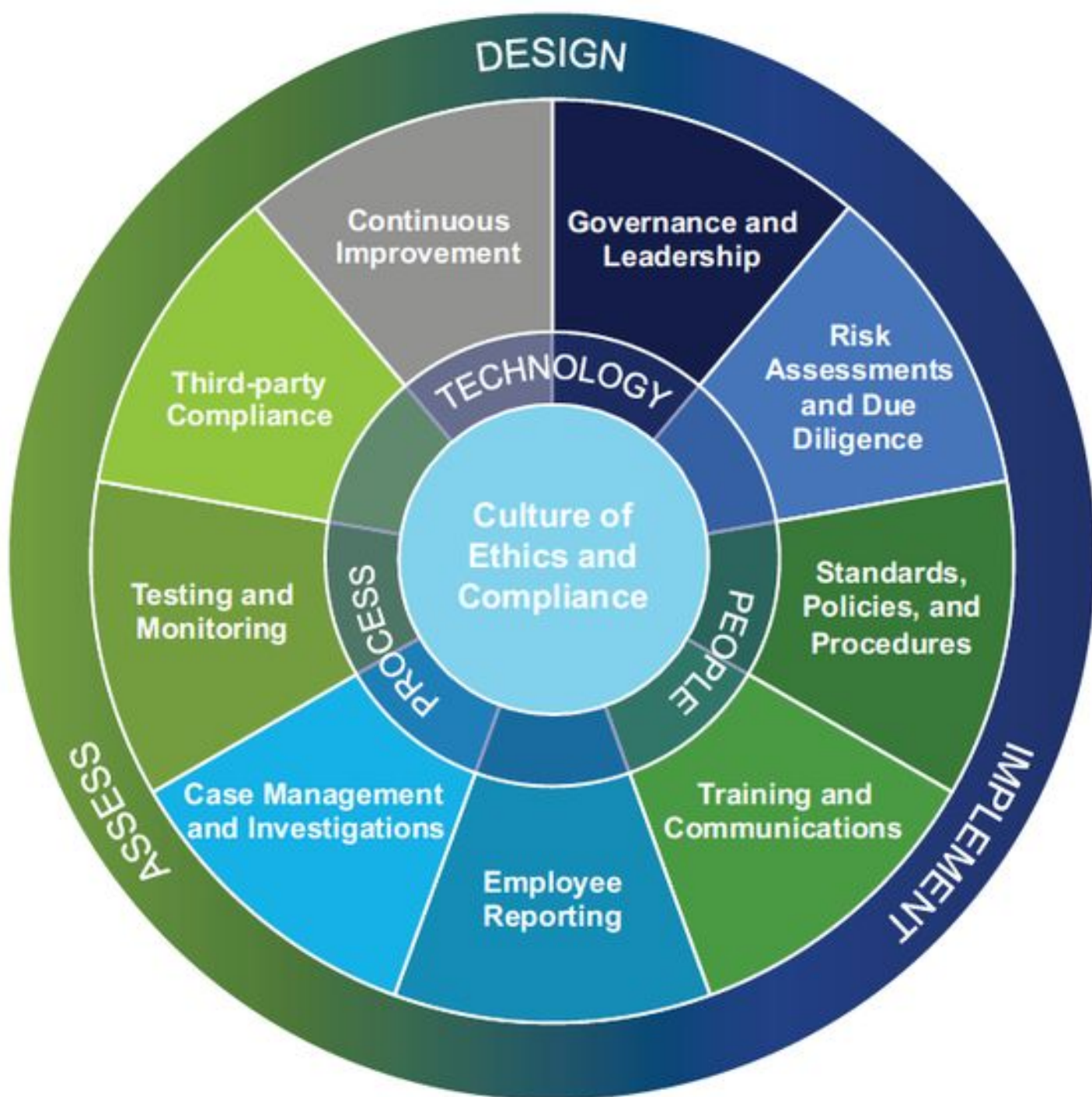
The students are encouraged to participate in sports/cultural activities at university/state/national/international level. The students are given an opportunity to represent in various committees at institutional level which make them to learn managerial skills. The alumini interactive sessions are also arranged with the objective of bringing awareness among the students regarding latest trends in technology. There is a small contribution of alumini for helping a few poor students viz. donating books etc.



Governance, Leadership and Management

The governance of the institution is structure to reflect the vision and mission of the institute. The effective leadership is visible in various institutional practices such as decentralization and participative management.

The students are allowed to be members of various committees at institutional level. This decentralization and participative management helps to take the decisions quickly and makes the students to enhance their leadership skills respectively. The institution for effective functioning framed various committees at institutional level with clearly defined objectives and functions. Almost in all administrative domains rules and policies are in practice. In the important domains like admin finance student support and examination e-governance is implemented. The institution is running under the umbrella of Navodaya Education Trust which also runs medical and paramedical institutions, there is provision for the students and faculties to have free/low cost medical services. The management provides fee concession for NET's employees children in various institutions under this trust. The faculty also encouraged and financially supported to participate in conferences workshops etc., the teachers are continuously motivated to undergo FDPs. At the end of every year performance appraisal will be looked in by the management. The institution established IQAC in 2017 to impart high quality of education with effective planning and close monitoring. The institution undergoes academics and admin quality checks at appropriate times.



Institutional Values and Best Practices

The institution promotes the measures for the gender equity by conducting various curricular and co-curricular activities. Separate facilities are made available for women on campus like safety and security, counselling, common rooms and one hour extra permission at lunch time for needy women to feed their babies. The institution has facilities for alternative sources of energy and energy conservation measures viz. solar power plant of 0.5MW, sensor based energy conservation and using of LED bulbs. There is a separate mechanism for solid, liquid, E, wastes management. In the campus there are 36 recharge pits for ensuring good ground level water. Also rain water is collected effectively and directed to a large ground level tank to store water. Waste water is used for harvesting. Inside the campus many green initiatives are in practice. Every year quality audits

on green, environment and energy are regularly undertaken. The institution maintains disables friendly, barrier free environment. The institution promotes human values and professional ethics among the student and faculty communities by organizing various events. The institution gives utmost to the discipline by bringing code of conduct for student, teacher and administrators and other staff.



2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	NAVODAYA INSTITUTE OF TECHNOLOGY
Address	NAVODAYA NAGAR, MANTRALAYAM ROAD, RAICHUR
City	Raichur
State	Karnataka
Pin	584103
Website	https://engineering.navodaya.edu.in/

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	M VENKATA MALLIKARJUNA	08532-240054	9880724369	08532-240115	principal.nit@navodaya.edu.in
IQAC / CIQA coordinator	SUMAN KUMAR BURNWAL	08532-240334	9849342529	08532-240061	hodhs.nit@navodaya.edu.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details

Date of establishment of the college

30-06-2008

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

Karnataka

Visvesvaraya Technological University

[View Document](#)**Details of UGC recognition****Under Section****Date****View Document**

2f of UGC

12B of UGC

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

AICTE

[View Document](#)

01-07-2019

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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	NAVODAYA NAGAR, MANTRALAYAM ROAD, RAICHUR	Rural	27.899	31729

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	BE,Civil Engineering	48	PUC	English	60	18
UG	BE,Computer Science And Engineering	48	PUC	English	60	27
UG	BE,Electronics And Communication Engineering	48	PUC	English	60	12
UG	BE,Electrical And Electronics Engineering	48	PUC	English	60	24
UG	BE,Mechanical Engineering	48	PUC	English	60	8
PG	Mtech,Digital Communication Networking	24	B.E.	English	18	4
PG	Mtech,Thermal Power Engineering	24	B.E.	English	18	2

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	9				14				64			
Recruited	9	0	0	9	11	3	0	14	46	18	0	64
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				68
Recruited	26	42	0	68
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				37
Recruited	28	9	0	37
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.	9	0	0	4	1	0	1	0	0	15
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	7	2	0	40	23	0	72

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	56	3	0	0	59
	Female	30	0	0	0	30
	Others	0	0	0	0	0
PG	Male	3	0	0	0	3
	Female	3	0	0	0	3
	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	12	11	11	14
	Female	7	8	9	11
	Others	0	0	0	0
ST	Male	3	0	5	7
	Female	2	5	1	1
	Others	0	0	0	0
OBC	Male	39	68	66	75
	Female	22	34	36	45
	Others	0	0	0	0
General	Male	8	8	18	14
	Female	2	7	8	13
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		95	141	154	180

Extended Profile

1 Program

1.1

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

2019-20	2018-19	2017-18	2016-17	2015-16
365	380	426	398	399
File Description		Document		
Institutional data prescribed format		View Document		

1.2

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
7	7	7	7	8

2 Students

2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
651	735	782	856	766
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
164	228	228	228	258

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2019-20	2018-19	2017-18	2016-17	2015-16
243	197	194	193	171
File Description	Document			
Institutional data in prescribed format	View Document			

3 Teachers

3.1

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

2019-20	2018-19	2017-18	2016-17	2015-16
78	87	82	82	80
File Description	Document			
Institutional data in prescribed format	View Document			

3.2

Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
87	87	94	94	86
File Description	Document			
Institutional data in prescribed format	View Document			

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 35

4.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
162.7	297.8	390.3	156.0	154.1

4.3

Number of Computers

Response: 371

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

The College was established in 2008 and affiliated to VTU, Belagavi, Karnataka. In the AY 2015-16 the VTU introduced CBCS scheme for all its affiliated colleges. Subsequently in the AY 2018-19 VTU made it mandatory for all its affiliated colleges to adapt the OBE system.

The College strictly adheres to the curriculum delivery as per the VTU guidelines. In view of implementing the curriculum NIT has effective mechanism as described under.

I. Curriculum Analysis and Delivery Plan

1. Curriculum Analysis

It is analysed that the VTU curriculum is a blend of HSS, BS, ES, PS-core/Electives, Internship, Project work etc. as per the AICTE guidelines. The Curriculum meets the industrial needs and also inculcate the ethical and moral values to the students.

2. Curriculum Delivery Plan:

The curriculum delivery plan as described below will address the Vision and Mission of the institute and meets the OBE components like PEOs, POs, PSOs, and COs as defined by regulatory bodies.

In view of effective curriculum delivery, the institution established IQAC which takes care of the academic planning and monitoring.

- Institution strictly adheres to the Academic Schedules prepared by IQAC in line with Academic Calendar of the VTU, incorporating the Co-Curricular and Extra-Curricular activities of the departments.
- Subject allocation is done at the department level based on their specialization and expertise in the subject. Department Level Time Tables are prepared which includes Academic activities, Library, Sports, Aptitude classes, English Language lab, Programming Skill Classes etc.
- The faculty will be clearly educated how to administer the course by adopting various types of learning mechanisms like Active Learning, Cooperative learning, inductive learning & Self Learning.
- Academic Co-ordinator of the respective departments monitors the academic activities.

II. Infrastructure available for effective delivering of the curriculum

- Classrooms are equipped with LCD projector, CCTV and internet facility to impart web-

based/online teaching to the students for better understanding the subject. Bio-Metric instruments(RFID) are installed in each classroom to monitor online attendance of students every hour.

- All the labs are well equipped with sophisticated Equipments.
- Excellent library facilities, digital library, access to e-journals and Wi-fi and internet facility is available in the campus for better teaching and learning

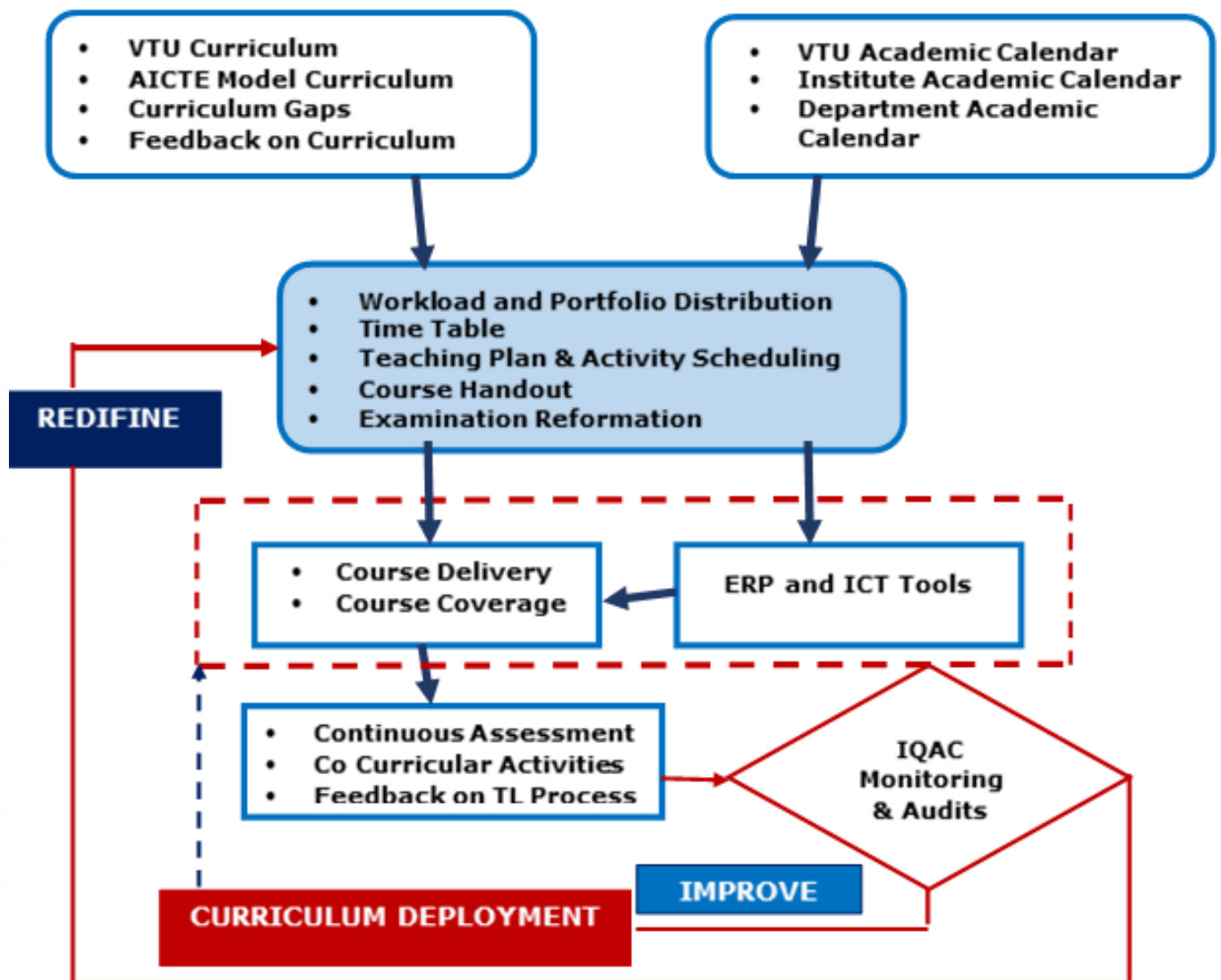
III. Process of implementation of curriculum

- As per the Academic Schedule/Time Table the faculty will be maintaining a course file and make use of the available infrastructure for effective delivery of the curriculum.
- IQAC will continuously monitor the attendance and syllabus coverage for every fortnight.
- Students feedback on teacher will be taken after fifteen days of the commencement of the semester.
- Through Class committee meetings the academic difficulties with the students will be knowing at department level and appropriate actions will be initiated.
- Mentoring of students is done after every internal assessment, which helps to identify the non-performers and weaker students.
- As per the regulation, the creation of project batches and guides are allotted.

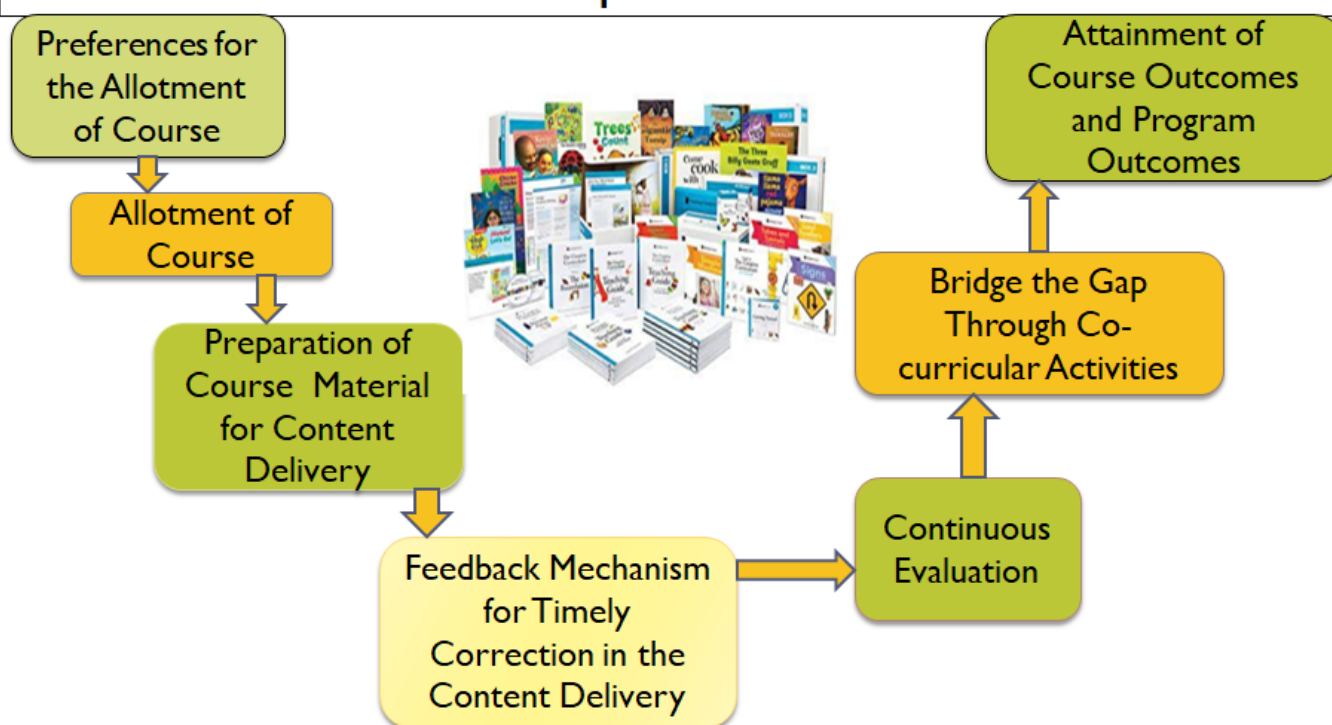
IV. Supporting activities for effective delivery of curriculum

- FDP programmes
- Industrial visits
- Project-based experiential learning
- Remedial classes
- Add-on Courses
- Certificate/ Diploma programs
- Skill Development courses

CURRICULUM DELIVERY PLANNING & IMPLEMENTATION



Methodology Followed in Department for the Effective Curriculum Implementation



File Description	Document
Upload Additional information	View Document

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

NIT-R strictly adheres to the academic calendar pertaining to CIE as published by the Affiliating university. As per the prevailing academic regulations 4th year Students are following R15, 3rd year students are following R17, 1st and 2nd year students are following R18. The CIE includes Internal Assessments for Theory, Lab, Mini Project, Main project (Phase-I and Phase-II), Technical Seminar & Internship.

1. Internal Assessment

As per the R17 & R18 university regulations the CIE and SEE assessment weightages for theory subjects are 40:60 respectively. The CIE marks will be the average of three IAs of 30 marks each and the remaining 10 marks will be awarded for the evaluation of three assignments. But as per R15 the CIE and SEE assessment weightages for theory subjects are 20:80 respectively. The final marks will be the average of best two tests out of three tests conducted for maximum of 15 marks. The remaining 5 marks will be awarded for the evaluation of three assignments. The Faculty prepares the question paper as per the bloom taxonomy principles in the syllabus covered for the respective IA test and the scheme of evaluation. The CIE will be conducted after every 5 weeks from the commencement of the semester as per the VTU Instruction. In the same way applicable regulations are followed for PG courses.

2. Lab. Internal Assessment

For laboratory evaluation for under graduate courses, the institute conducts lab internal for 40 marks as per R17 & R18 and 20 marks as per R15. In the same way applicable regulations are followed for PG courses

3. Mini Project

For R18 the CIE marks awarded to the Mini-Project will be based on the project report, presentation and viva voce in 50:25:25 respectively.

4. Main Project Work

For maintaining the quality of the projects, the internal evaluation is done by the project review committee constituted at institutional level. The CIE marks will be awarded for Project Phase-I and Project Phase-II based on the Project Report, presentation, and viva voce in 50:25:25 respectively.

5. Internship

The marks awarded for the internship will be based on the evaluation of Internship report, presentation and viva voce in 50:25:25 respectively.

NIT signed MoU with leading industries to provide internship to the students, so that they have good industrial exposure. Internship evaluation is done by examiners from industrial and academic background as per the university norms.

6. Technical Seminars

As per the curriculum, the technical seminars are conducted for final year students. The CIE marks are awarded for technical seminar, based on the report, presentation and Question & Answer sessions in 50:25:25 respectively.

7. Value added Courses

Similarly, the tests will be conducted for Value added courses such as Technical English, Constitution of India, Kannada, Professional Ethics and human Rights, environmental studies and additional mathematics I & II as prescribed in the curriculum.

File Description	Document
Upload Additional information	View Document

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. Academic council/BoS of Affiliating university

- 2.Setting of question papers for UG/PG programs
- 3.Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
- 4.Assessment /evaluation process of the affiliating University

Response: B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 100

1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 7

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

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 71

1.2.2.1 How many Add on /Certificate programs are added within the last 5 years.

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	15

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document

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

Response: 47.54

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

2019-20	2018-19	2017-18	2016-17	2015-16
227	256	383	400	361

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

1.3 Curriculum Enrichment

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

Response:

The Crosscutting issues like Gender equality, Environment and Sustainability, Human Values and Professional Ethics are well integrated into the Curriculum prescribed by VTU, and listed below:

Program Name	Course Code	Core Course Name	
CE, ECE, EEE, ME and CSE	18CPC39	Constitution of India, Professional Ethics and Cyber Law	
	18CPC49		
CE, EEE, ECE, ME	18CIV59	Environmental Studies	
ME	18ME751	Energy and Environment	
EEE	18EE731	Solar and Wind Energy	
ME	18ME81	Energy Engineering	
	18ME651	Non-Conventional Energy Source	
CE	18CV46	Water Supply and Treatment Engineering	
	18CV754	Water Resources Management	
	18CV55	Municipal & Industrial Wastewater Engineering	

18CV653	Occupational Health and Safety
18CV654	Sustainability Concept In Civil Engineering
18CV642	Solid Waste Management
18CV732	Air Pollution and Control

1. Professional Ethics and Human values

In view of promoting the professional ethics among the engineering graduates the VTU has introduced professional ethics as a credit course

- This course enables students to know fundamental rights, directive principles, and the duties of citizens, to understand engineering ethics and their responsibilities, identify their individual roles and ethical responsibilities towards society.
- The professional ethics and human values are dealing with the ethical aspects for the prosperity of organization and personal development of students.
- It helps to lead the life towards holistic and value-based living.
- Even though it is in academic curriculum the college takes efforts for integration of ethical and human values through extracurricular activities such personality development, yoga, meditation etc.
- The institute is organizing various programmes under NSS and YRC to inculcate human values among students.
- Different activities like guest lecture, seminar and workshops relating to the professional ethics and human values have been organized for students.

2. Gender

- The institute understands the importance of Gender equality and thus maintain good ratio of women to men work force in both teaching and non-teaching. Also, as per the admission analysis girl to boy student ratio is 40:60.
- NIT has provided separate hostel for boys and girls with good infrastructure.
- Institute's woman forum has been working consistently for women safety in college campus and other problems related to girl students.
- Numbers of programmes are specially conducted for promoting gender equality. Some of the programmes are sponsored by National Commission for Women.
- Institute has organized various workshops and invited talks on Woman Empowerment, Laws for Woman, Role of Woman in Nature Conservation, The Sexual Harassment of Woman at workplace etc.

3. Environment and Sustainability

- Environmental studies are a part of VTU curriculum which provides information about ecology and environmental issues that apply to air, land, and water.
- NSS unit took initiation for planting of good number of saplings including fruit bearing plants to make environment green and pollution free.
- NSS organizes various environment related programmes like Earth Day, World Environment Day, plastic free drive, seminars and guest lectures on environmental awareness etc.
- NIT has installed solar power panel with 500KW power generation and partly it is used by the institute and the other part is contributed to the grid.
- Environment, Green and Energy Audits are carried out periodically.

GENDER**Women Empowerment Cell Activities****ENVIRONMENT, SUSTAINABILITY**

- NSS Activities
- Courses in Curriculum
- Value Added Courses

PROFESSIONAL ETHICS

- Courses in Curriculum
- Value Added Courses
- Professional Society Membership
- Co and Extra Curricular Activities
- Professional Society Chapters Activities

- Courses in Curriculum
- NSS and YRC Activities
- Co and Extra Curricular Activities

HUMAN VALUES

File Description	Document
Any additional information	View Document

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 73.94

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
221	267	289	282	281

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 32.62

1.3.3.1 Number of students undertaking project work/field work / internships

Response: 213

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document

1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni

Response: A. All of the above

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

1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1.Feedback collected, analysed and action taken and feedback available on website
- 2.Feedback collected, analysed and action has been taken

3.Feedback collected and analysed

4.Feedback collected

5. Feedback not collected

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

File Description	Document
Upload any additional information	View Document
URL for feedback report	View Document

NAAC

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 33.66

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

2019-20	2018-19	2017-18	2016-17	2015-16
95	138	153	172	185

2.1.1.2 Number of sanctioned seats year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
327	456	456	456	516

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

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

Response: 61.8

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

2019-20	2018-19	2017-18	2016-17	2015-16
72	108	111	136	141

File Description	Document
Average percentage of seats filled against seats reserved	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 and organises special Programmes for advanced learners and slow learners

Response:

Diagnosing learners' abilities:

Diagnostic test is conducted in Mathematics, Physics, Chemistry, English and aptitude during Induction Program. On the performance in these tests, along with the CET rank and 10+2 Marks students' abilities are identified.

A structured Mentoring and Training Programme is in place. Every student is provided with a faculty mentor and the scheduled interactions are recorded in a well-designed mentoring sheet. During the course of interaction and regular performance in internal assessments, students' abilities are identified and necessary counseling and training are provided to cater the needs of slow and advanced learners. Subject experts and class in-charges through classroom interaction and counselling classes, identifies the strengths and weakness of individual students. In addition the HODs with the help of mentors identify students who are slow learners and having backlogs.

Advanced learners:

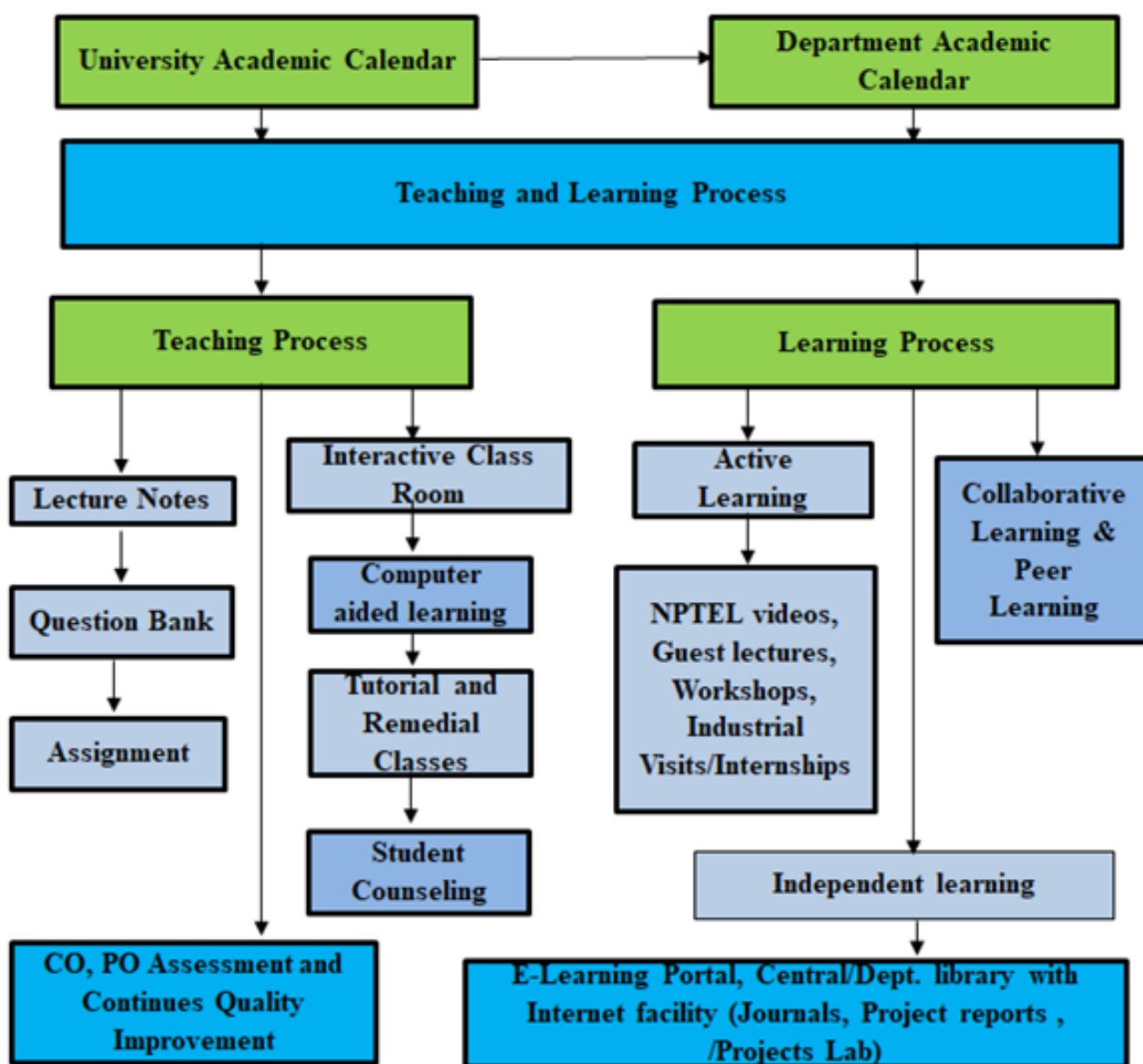
- Encouraging to participate in group discussions, technical quiz to develop analytical and problem-solving abilities.
- Motivating them to do projects (micro/mini/major as applicable) to inculcate research and practical awareness right from 2nd year onwards.
- Encouraging them with extra care/guidance to obtain University ranks and such students are appreciated with certificates and cash awards from management.
- Students are encouraged to become members of professional bodies like ISTE, CSI etc.
- To Enhance the innovative and creative skills the students are motivated to participate and organize intercollegiate as well as national level technical seminars/symposiums.
- Advanced learners are encouraged to register for NPTEL courses for certification.
- The students will be engaged in consultancy works accordingly.
- To take up competitive exams like GATE, IES, GRE, TOEFL, IELTS, CAT, PG CET etc.

Slow learners:

- Departments conduct remedial classes, and a separate library hour is included in the timetable for the slow learners and faculty are always available to clear doubts at any point of time.
- Faculty provide lecture notes for slow learners and those students who are in the verge of dropping out due to arrear subjects.
- Extra classes are organized to clarify doubts, re-explaining of critical topics for improving performance.

- The slow learners are given regular class tests in order to improve their performance in the university exam
- Further faculty members make the students to practice previous year question papers after completion of every module.
- The institution started a separate programme called Backlog Reduction Programme for slow learners.
- The Institute practices a robust student academic mentoring process and during the course of study, group of students are assigned to a faculty for mentoring, the mentors monitor academic performance and interact frequently to understand and assist any student with issues that affect their ability to learn or impeding their academic success.
- The institute has a system to communicate performance and attendance of students to parents as needed.
- **Bridge Courses:** For the students joining under the lateral entry system (diploma holders joining the second year engineering course), the college offers special coaching, bridge programmes and peer guidance.

LEARNING PROCESS ADOPTED AT NIT- R



File Description	Document
Upload any additional information	View Document

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

Response: 8:1

File Description	Document
Any additional information	View Document

2.3 Teaching- Learning Process

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

Response:

NIT-R believes in the adoption of students centric methods to enhance student involvement as a part of participative learning and problem solving methodology. Role Plays, Team works, Debates, Seminar Quizzes and case studies Specifically Students centric Teaching Methods are reflected in project work, Field Visit, Industrial visit& guest lectures. Specifically the students centric methodology includes:

I. Experiential Learning

1. Project work

- Project work is organized in two phases 1) Mini project and 2) Major Projects this is an essential element of each programme
- Internship or Field Projects in industry

2. Participation in competition at various level : For Real time exposure students are encouraged to participated at National and International Level

3. Field Visits : Faculty identifies and propose Academically significant Field visits and Surveys

4. Industrial Visits Departments Plan and Organize the industrial visits for students to provide exposure to industrial work culture.

5. Guest Lecture: Guest lecture by eminent experts from industry and academics from across the world are organized to supplement the teaching process and provide experiential learning. VTUs e-consortium conducts online classes i.e., EDUSAT on various topics every semester where students can interact with the resource persons to clarify their doubts.

6. Technical Fest i.e., NITOTSAVA is organized every year where the students from various other Engineering Colleges comes to participate and compete.

II. Participated Learning

1. Role play : Teachers adopt role play method especially in communicative and management courses to supplement Teaching by way of participative learning

2. Team work: All Departments organize students' professional societies and club activities to promote the spirit of Team work. The activities and Camp of NSS, institutional social responsibility through Red Cross, Village Adoption, Tree plantation. Swachh Bharat and Health awareness camp to help the students to learn Art of living in a team for Social and community welfare.

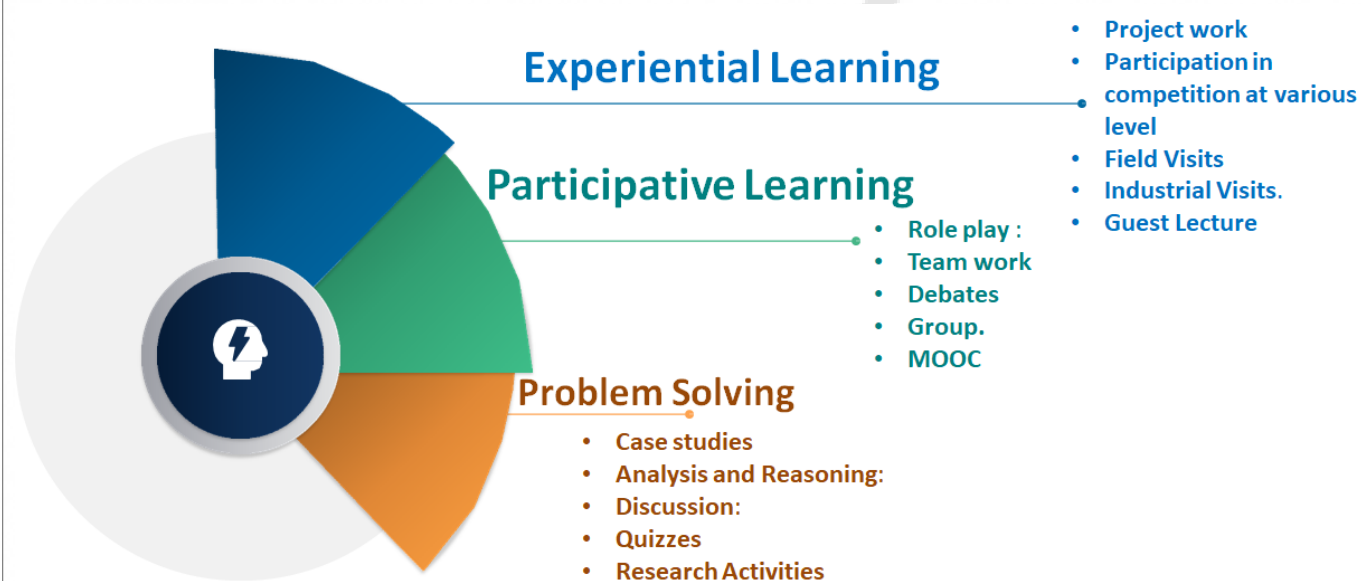
3. Debates: Debates are followed in many of the subjects where students are required to come with different opinions, thought processes thus the learning process gets justified in the argue-mental way of learning.

4. Group work: Practical and workshops in all individual and group work under the guidance of teachers are also conducted.

5. Students are also encouraged to attain NPTEL/ MOOCs certification courses.

III. Problem solving Methodology

1. Case studies: Case study method is adopted in teaching learning process to make the students have logical thinking and practical knowledge to develop problem solving ability.
2. Analysis and Reasoning: Skill Development Centre (SDC) of the institute conducts aptitude classes and programming classes.
3. Discussion: Institute follows the discussions methods in many of the subjects as it makes the students to think wide and participate in coming up with the opinions & suggestions to check their current knowledge.
4. Quizzes: Quizzes are conducted by subject teachers in all UG programmes.
5. Research Activities · Research activities are conducted in each Department under the guidance of senior faculty where the students of different semester get knowledge about emerging area.



File Description	Document
Upload any additional information	View Document

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

NIT-R emphasis on ICT infusion in pedagogy to improve learning, motivate and engage learners, promote collaboration, foster enquiry and exploration, and create a new learner centered learning culture. It permits the move from reproductive model of teaching and learning to an independent, autonomous learning model that promotes initiation, creativity and critical thinking with independent research. Learners are expected to collect, select, analyze, organize, extend, transform and present knowledge using ICT in authentic and active learning paradigm. The Institute has 100 Mbps leased line with 371 computers/ laptops/ tablets connected through LAN and Wifi. Class rooms are equiped with LCD projectors. Lecture capturing and editing facilities are in place. Teachers are expected to create a new flexible and open learning environment with interactive, experiential and multimedia based delivery system. Faculties utilize three types of ICT tools such as

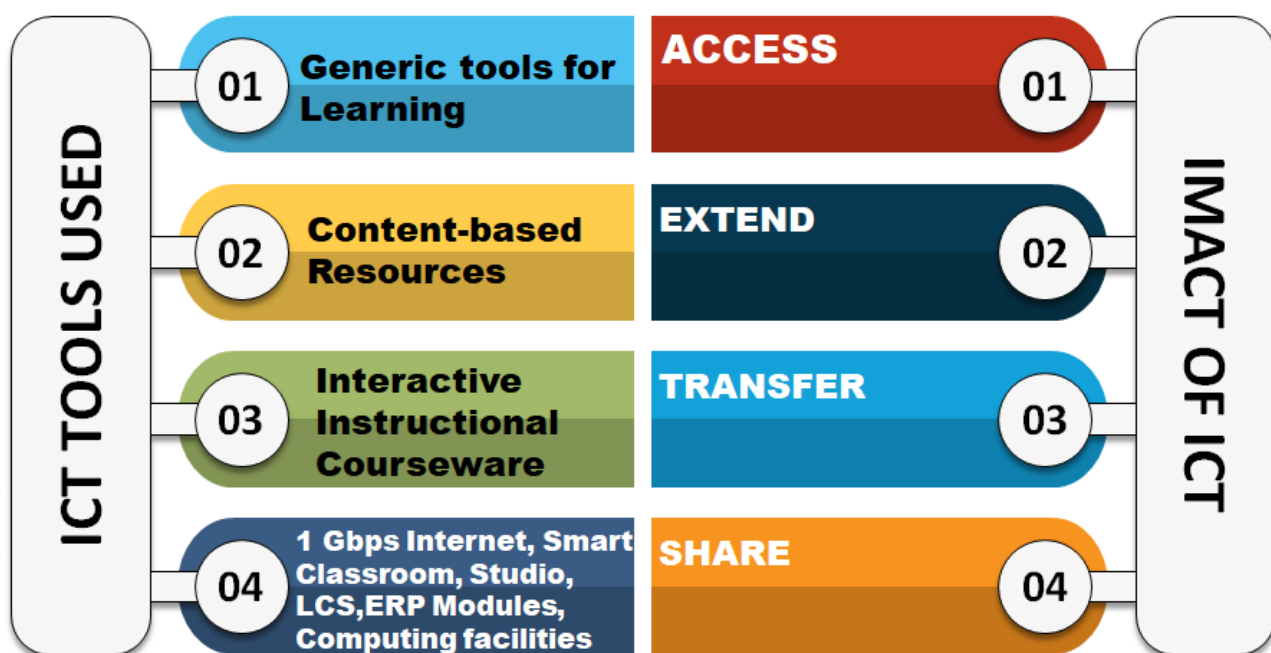
1. **Generic tools for learning** : Starting from productivity tools to simulation & modelling to access, extend, transform and share information e.g. Licenced and open source software for lab and Projects.
2. **Content-based resources** : to access a vast source of educational resources that effectively can be integrated with the curriculum objectives e.g MHRD-NMEICT, NPTEL-SWAYAM, Blogs, NDL, SPOKEN TUTORIAL. Kiosk is available in the library for faculty and students to search for the various books and journals available in the library. Our institute is a member of VTU E-consortium where national and international journals of repute can be accessed in the digital library. VTU releases schedule every semester for e-shikshana online video lectures for few core subjects. The respective department follows the schedule strictly for subject enrichment of students.
3. **Interactive instructional courseware**: Self-paced learning materials e.g Google Class Room, MOODLE/Blackboard/Canvas LMS, Video Lecture, Course material in website, YouTube channel. etc. The entire faculty prepares the lecture notes referring the standard books pertaining to the subject. These lecture notes are uploaded in the college website for students 'reference. In this manner students are aware of the topics their faculty is taking/ would be taking in the next class, and thus can prepare well in advance before actually the faculty takes that topic and gets their queries clarified by the faculty. Online lecture notes also help the students, who missed the class due to some reason, to be updated with the lectures.

Apart from the above the following activities are adopted to promote ICT based learning

- Teaching methodologies like Flipped Classroom, Crossword puzzles and Think-Pair-Share
- Subject wise e-resources are compiled by faculty members and are made available on website.
- Practical conduction through various licensed and open source Simulation Software. Additional lab experiments virtually through VTU prescribed web links

Positive Impact

- Explore and represent information dynamically and in many forms
- Become socially aware and more confident
- Increase motivation
- Communicate effectively about complex processes
- Develop better understanding and broader view of processes and systems
- Greater problem solving and critical thinking skills.



File Description	Document
Upload any additional information	View Document

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

Response: 14:1

2.3.3.1 Number of mentors

Response: 48

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	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: 93.5

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 13.15

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

2019-20	2018-19	2017-18	2016-17	2015-16
16	10	11	7	12

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

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

Response: 3.69

2.4.3.1 Total experience of full-time teachers

Response: 321

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

The institution has an examination cell to ensure the effective implementation of the assessment and evaluation reforms of the University.

The Mechanism of Internal Assessment will be as per the norms of the affiliating University and are mentioned below:

- **Theory courses and Assignments:** As per the R17 and R18 there are 3-internal assessments (IA) conducted and average of the three IAs performances is taken as final IA marks. As per R15 there are 3-IAs conducted and average of the best 2-IAs performance is taken as final IA marks.

- **Laboratory work** The CIE marks awarded in Practical is based on the weekly evaluation of laboratory journals/reports after the conduction of every experiment and one practical test at the end of the semester.

- **Main Project work** is a part of VTU curriculum for B.E. final year. It is carried out in two phases phase-I (odd semester) and phase -II (even semester).

- **Internship** was introduced from 2015-16 admitted batch. The duration of the internship varies between 2-4 weeks as per VTU guidelines

- **Extensive Survey** is confined to Department of civil engineering for the students of B.E. III year

To maintain the transparency in the conduction and evaluation of IAs the following is practiced:

1. Examination section prepares the time table of IAs and circulate to all the departments, a week before.
2. Seating arrangement is prepared by the Examination and the same is displayed near the college entrance and doors of the examination hall for the student's reference.
3. The subject wise evaluation schemes are prepared by the respective subject teachers and is submitted along with the IA question paper to the examination branch before IAs.
4. After the completion of IAs the evaluation schemes are displayed on the notice board for the student's reference, and also to maintain the transparency in the evaluation system.
5. The evaluated scripts are shown to students to make sure that no discrepancy arises due to oversight of the faculty.
6. The CIE marks awarded in Practical is based on the weekly evaluation of laboratory journals/reports.
7. The B.E. final year major project is conducted in two phases.

The phase-I consists of formation of groups, Identification of Project Topic, Submission of Project Synopsis with presentation and finalization of the topic after review.

Phase-II of the project includes Fabrication/ Hardware implementation/Simulation as applicable.

Performance of the individual students in the batch are assessed based on the reviews of the project committee.

8. CIE is done for final year students undergone Internship after submission of internship report and performance in the seminar.

9. Extensive Survey is carried out for 2 weeks and is evaluated as per the VTU regulations.

As per the regulations of the VTU the finalized Internal Assessment marks for the above listed academic components is acknowledged by the students, faculty, HODs and Principal before uploading in the VTU portal. This leads to transparency and avoid any form of discrepancies. The institution strictly adheres to the academic regulations of the University.

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

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient

Response:

We follow the procedures laid down by the University in regard to assessment and evaluation of internal examination (as mentioned in 2.5.1).

After every internal assessment (IA) the answer scripts are evaluated based on the evaluation scheme prepared by the concerned subject teachers. The question papers of IAs are also discussed by the respective subject teachers in the class room after the completion of IAs. The valued scripts are shown to students to maintain transparency in the evaluation process. The marks obtained by the students are displayed on the notice board of the department for student's reference. After preparing the assessments report it is shown to the students, if any grievances are there it can be resolved immediately and submitted by the concerned faculty to the department. The final average IA marks is submitted through online portal of the University at the end of the semester, and same is acknowledged by the students, subject faculty, HODs and Principal.

We have academic grievance committee to address the grievances related to academics. Grievances related to the internal assessment are brought to the notice of concerned teachers/ HODs for solution, and then is directed to the respective committee of the college. There is complete transparency maintained in the process of evaluation. As far as the evaluation of answer scripts are concerned subject faculty shows the valued scripts to students, and if any scope of improvement of marks arises the script is once again evaluated.

For the University level examinations, if any student realized to score less than expected then they can redress the grievances to the University within stipulated time. There is a revaluation of scripts is done as per the norms of the University.

File Description	Document
Any additional information	View Document

2.6 Student Performance and Learning Outcomes

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

Response:

The college has framed the vision and mission, and the quality policy to meet the national/societal needs. For achieving this vision and mission the college has adapted the Outcome Based Education (OBE) as per the guidelines laid down by Approving and regulatory authorities. The CBCS curriculum has been implemented as per the directions of affiliating university from AY 2015-16. In line with OBE Program Specific Outcomes (PSOs), Program Outcomes (POs) and Course Outcomes (COs) are evolved. The Vision, Mission, Program Educational objectives and Program Specific Outcomes has been framed by the departments by collecting review of all stakeholders maintaining consistency with Institute Vision and Mission. The Program Outcome as defined by NAAC and NBA are followed.

Course Outcomes (COs) are defined for every course, and are statements that describe the competencies gained by the student through the course. Every CO is aligned to one or more POs, and is measured at the end of the course, through various assessments, designed specifically to effectively measure the CO and contribute to the PO that it is mapped to. The number of COs for a course is not fixed, and may have about six COs. Few courses may have as few as three COs, while courses like the project may have as high as twelve COs. While defining the COs, we need to ensure that they are not an abridged version of the course content, but instead, through every CO, we attempt to specifically address one or more POs through the course content and its assessments. When COs are well defined, the CO-PO mapping becomes redundant, as one can map the CO to the PO through comprehending the essence of the CO. However, the strength of the mapping is dependent on the course instructor and this component, necessitates the need to have the CO-PO mapping together with its strength.

After finalization of PEOs, POs/PSOs and COs the respective departments publish and disseminate these statement among all the stakeholders through the following medium.

- 1.College website
- 2.Display in the various class rooms and laboratories.
- 3.Student handbooks
- 4.Departmental office and notice board
- 5.Course file and lab manual
- 6.Workshops on OBE
- 7.Assessment manuals
- 8.HOD Room
- 9.Faculty rooms
- 10.Department Notice Board

File Description	Document
Upload any additional information	View Document
Past link for Additional information	View Document

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

Response:

Attainment of COs

Course Outcomes are narrower statements that describe what students are expected to know, and be able to do at the end of each course. These relate to the skills, knowledge, and behavior that students acquire in their matriculation through the course.

CO attainment levels can be measured based on the results of the internal assessment and external examination conducted by the university. This is a form of direct measurement of attainment.

For arriving at an attainment level the rubrics as per SAR format of NBA are followed.

Attainment of Course Outcomes (COs):

- Establishing a correlation between Course Outcomes (COs) and Program Outcomes (POs) in the scale of 1 to 3 (i.e. Mapping COs with POs).
- Measure overall CO attainment level. The overall CO attainment level can be measured based on the results of Internal Assessment (IA) and Semester End Examination.

Internal Assessment (IA)

For each course in a semester, two or three IA tests could be taken into account

- For each IA test, calculate the % of students who achieved a set target for each CO prepared (i.e. calculate % of students attaining CO1, CO2, CO3,.....etc. respectively)
- After three IA tests, calculate the average of % of students attaining the prepared COs. This will decide the CO attainment level of a particular course in IA.

Semester End Examination (SEE)

- Set target level ? 60% of the maximum university marks in a course
- Calculate the % of students scored ? 60% of the maximum university marks in a course (or reached the target level).

This will decide the CO attainment level of a particular course.

Overall CO attainment level (Suggested by NBA in SAR, 2015):

Overall CO attainment level = 20% of CO attainment level in IA tests + 80% of CO attainment level in EE

Attainment of POs

Programme Outcomes (POs):

Program Outcomes (POs) are one step broader statements than COs that describe what students are expected to know and be able to do upon the graduation.

It is required to compute the attainment levels for PSOs in addition to computing attainment of POs. Program outcomes and 'program specific outcomes' are attained through the attainment of COs. This is called direct attainment of POs and PSOs.

Steps for attainment of Programme Outcomes (POs):

- Prepare the COs and POs mapping matrix for each course (starting from I- Sem. to VIII- Sem.)
- Prepare the Course- PO matrix for all courses. It is the average PO values, obtained in CO-PO mapping matrix, for each course
- Calculate the PO attainment values using the Course-PO matrix and overall CO attainment value for course

Overall PO attainment values- It is computed by adding direct PO attainment and indirect PO attainment values in proportion (as per the regulations).

Direct PO attainment- It is the average of individual PO attainment values

Indirect PO attainment: For determining indirect attainment of POs, SAR suggests the activities such as student exit surveys, employer's survey, co-curricular activities, extra-curricular activities etc.

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

2.6.3 Average pass percentage of Students during last five years

Response: 90.09

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
221	189	171	158	160

2.6.3.2 Number of final year students who appeared for the university examination year-wise during

the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
243	197	194	193	171

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Paste link for the annual report	View Document

2.7 Student Satisfaction Survey**2.7.1 Online student satisfaction survey regarding teaching learning process****Response:** 3.92

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 0.27

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

2019-20	2018-19	2017-18	2016-17	2015-16
0.26	0.34	0	0	0

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 6.9

3.1.2.1 Number of teachers recognized as research guides

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

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 20

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

2019-20	2018-19	2017-18	2016-17	2015-16
3	2	0	0	0

3.1.3.2 Number of departments offering academic programmes

2019-20	2018-19	2017-18	2016-17	2015-16
7	7	7	7	7

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Paste link to funding agency website	View Document

3.2 Innovation Ecosystem**3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge****Response:**

NIT has dedicated Innovation and Incubation Centre, that provides a platform for students, research scholars, researchers, field experts and industry personals to interact and work in partnership to initiate breakthroughs: fusing the uncommon, taking risks and thinking big.

Innovation Centre: With the rapid development in Science and Technology, the management has decided to establish NIT-INNOVATION CENTRE in our Institute. A distinct office for the innovation activities was setup from July 2018-19.

The main objectives are to:

- Invoke innovative ideas and increase job opportunities.
- Motivate students to participate in technology transfer management.
- Increase effectiveness and utilization of resources on research and development activities.

Incubation Centre: The Incubation Centre was setup in the year July 2018 and it provides creative atmosphere where new ideas and projects can flourish. Incubation centre offers

- A Platform on business incubation and innovation to provide spaces for incubation, counselling services on business management and technological solutions.
- Interaction with the industries and other peers, finding the workable issues and provide appropriate solutions.

Entrepreneur Development Cell:

The ED Cell was established in NIT from 2017-18 with a faculty Coordinator and in the individual department a faculty as a committee member. The key vision of the cell is to shape the future entrepreneurs to transform the world for a better living. The mission statement for the cell is to create and foster entrepreneurial culture among students by identifying, training and motivating students to become entrepreneurs.

The Cell has the objective to create awareness of opportunities and benefits on entrepreneurship for students and make their dream business through innovative products and to develop entrepreneurial culture.

Overall Objectives:

1. Transfer of knowledge, methodology and practice of technology-based entrepreneurship and support to students with creative thoughts and ideas.
2. Encourage students and faculty to participate in innovation, idea generation and product development.
3. Create awareness on patents among faculty, students and researchers.
4. Link higher educational institutes and industries.
5. Create platform to share knowledge and implement real time research and applications
6. Motivate and create a permanent network among the students and researchers for knowledge exchange and technology transfer.

Functions

1. Workspace provision, connectivity and infrastructure facilities for the students to work
2. Arrangement of seed grant to transform an idea into product
3. Arrangement of workshops on Entrepreneurship for students and faculties
4. Provide training in latest technologies

Apart from this the Institute has a separate center known as Engineering Projects in Community Services (EPICS). It encourages the students to realize their Idea in Student Design & Experimental Learning Center/Weekend Projects Lab, where the students can work/research on an idea. The Idea Lab also provides an opportunity for the students to ask questions in different areas of knowledge. As part of EPICS, the students visit the nearby villages, find the problems and try to give technologically based solutions. This exercise equips them with the ability to think, conceptualize the idea, design the prototype, work on it and report the findings. The completed projects are deployed in the nearby villages. The Industry-Institute Interaction Cell (IIIC) bridges the gap between industry and academia.

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years**Response:** 41**3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
7	8	8	8	7

File Description	Document
List of workshops/seminars during last 5 years	View Document

3.3 Research Publications and Awards**3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years****Response:** 0.33**3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years****3.3.1.2 Number of teachers recognized as guides during the last five years**

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document
URL to the research page on HEI website	View Document

3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years**Response:** 0.1**3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
0	1	0	1	3

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

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

Response: 1.39

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

2019-20	2018-19	2017-18	2016-17	2015-16
2	0	0	0	1

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

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

NIT encourages students 'social participation in sports, NSS activities such as blood donation camps, health camps, Swachh Bharat Abhiyan, tree plantation etc. and also drives to achieve its goal of providing technical education with ethical values.

Each activity under NSS wing is monitored and guided by the faculty members. The attendance of the students in these activities is registered and they are encouraged by providing certificates. NIT conducts various activities through NSS, and other forms of community development services. The students 'volunteer' teams are formed under faculty coordinators and are involved in all college programmes including technical & cultural fest, graduation day, and sports meet. During induction, the coordinators of

these sections will educate incoming students on the benefits and scope of the extension activities. The information about the proposed activities is disseminated on the college notice board, circulars, web notifications, and also by orally through interaction/ briefing by section incharges.

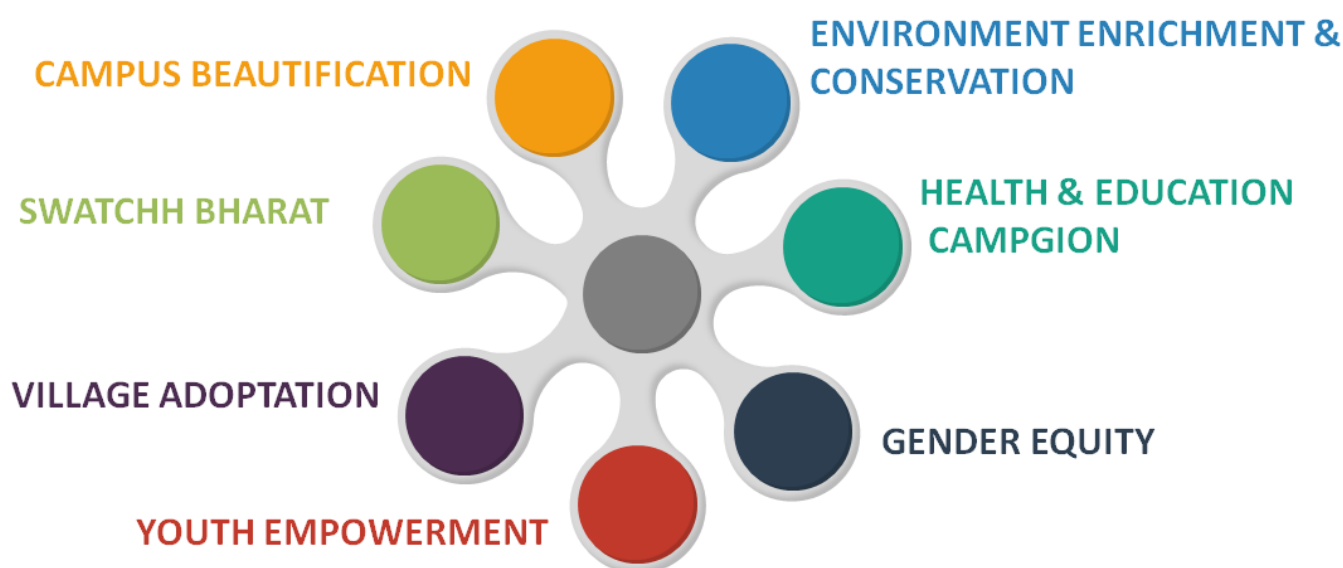
The Institute has Women's Cell which takes care of the harassment cases, if any, of girl students. Women's Day is celebrated every year to recognize the women's contribution to society. Women's cell of the institute organizes seminar on women empowerment, and also cultural activities for the girl students on women's day and every department has a lady's lounge with first aid kit.

Seminars on social and environment awareness are periodically organized to make students socially responsible. Socio-economic magazines are made available in the library to bring awareness of social responsibilities. NIT has made a conscious effort to promote social justice as a value in learning process and administrative interactions. The institute helps the students in obtaining all types of scholarships provided by the state and central governments.

Science exhibition - ENTHUSIA is organized for the PUC students of the district where working and non-working models are put up on display by the participants. The best models are given prizes which are completely sponsored by the institute. Technical Festival ?NITOTSAVA is organized every year where students from other institutes also participates in the events like paper presentation, poster presentation, technical quiz, project display, etc.

Training in personality development, aptitude, etc. is conducted to make students employable and a great entrepreneur. These programmes create much awareness and are important for the holistic development of students. English Language & Communication Skill Lab (ELCS) is established to help the students from vernacular background. ELCS lab is helpful to students to improve the writing and communication skills, and soft skills. Classes on verbal and non-verbal and aptitude are also conducted to make students industry ready.

NIT is conscious of its role in campus community connection, well-being of its neighborhood and has initiated a number of community development activities. These activities include Blood Donation Camps, Swachh Bharath Abhiyan, Sports Meet, World Environment Day, Earth Day, Women's Day, 5K Run on National Science Day etc.



3.4.2 Number of awards and recognitions received for extension activities from government/ 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/ Government recognised bodies year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
00	00	00	00	00

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

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

Response: 74

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

2019-20	2018-19	2017-18	2016-17	2015-16
13	8	6	4	5

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

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 71.45

3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
490	530	290	220	270

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

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 73

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 55

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

2019-20	2018-19	2017-18	2016-17	2015-16
15	12	8	7	1

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Provision of adequate infrastructural facilities for teaching and learning has always been a priority area for the Institute. NIT-R campus is situated in 27.92 acres with built up area of 31729 Sq.Mts. Standalone buildings are constructed for each department meeting the areas like Instructional, Administrative, Amenities and Circulation as per AICTE norms. NIT-R has the state-of-art infrastructure, creating an environment for progressive learning and development which includes classrooms, laboratories, HoI/HoD Chambers, tutorial rooms, workshops, library, faculty cabins, conference and seminar halls, auditorium, e-skishana room and English language lab. The infrastructure is also made available to conduct various technical activities such as seminars, workshops, expert lectures, conference, campus recruitments training sessions etc. The Institute has five Engineering and one S&H Departments with 30 classrooms & 35 Laboratories. At the beginning of the academic year need-assessment for replacement / up-gradation / addition of the existing infrastructure is carried out based on the suggestions from IQAC members, HOD, other internal and external stakeholders after reviewing course requirements, computer-student ratio, budget constraints, working condition of the existing equipment.

Class rooms: Each classroom is of adequate size and has enough lighting, air ventilation and good ambience. Class rooms are equipped with LCD projectors to facilitate the teachers to adopt varied teaching methods. One classroom is also equipped with Smart board for interactive learning experience.

Laboratories/Workshops: There are 34 well equipped laboratories, 1- Central Computing Facility and 1-workshop for different departments. The Institute has Laboratories with state of the art equipments and machinery for the students to carry out Practical courses. Apart from this each department has dedicated project lab and Computer lab. All laboratories are operational, and well maintained not only for carrying out curriculum oriented lab practical's but also to carry out research activities.

Tutorial rooms: 11-Tutorial rooms are available in Institute to conduct tutorial classes to address the personal level doubts and queries of the students.

Seminar Hall: The Institute has well equipped seminar halls. Nearly 250 to 300 people can be accommodated in the seminar halls. These halls are regularly used for conducting seminars of state and national level at the Institute. The specialized facilities and equipment for teaching learning and research etc. are available in each department.

Computing Equipments: Institute has sufficient Computing facilities with total 371 computers for staff and students. All computers are equipped with high speed internet of 100 Mbps speed. Sonicwall 2650 Hardware firewall, Digisol Managed Switch and Cisco Routers 1901.

E- Learning: ERP module is being utilized for efficient management teaching and learning process. To make the learning process more friendly the institute established Learning Management System Modules which enable a centralized source for e-material and slide/video-based presentations for all the branches

and for remote learning by accessing the material through college website. Apart from these Local Chapter of NPTEL by IIT Madras. NIT-R provides scope for self-learning/learning beyond syllabus to the students through the VTU e-skishana program and well-furnished digital library helps to access e-resources.

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

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

Response:

NIT-R running under the umbrella of Navodaya Education Trust (NET), the institution has adequate facilities to promote extracurricular activities like cultural events, sports, games, gymnasium and yoga.

Cultural Activities

The college has best in class facilities for organizing, conducting and promoting cultural activities to students. Various cultural events are held in auditorium and open corridor at CSE block. The open area at food court can be utilized for conducting mega events at college level. The college conducts NITOTSAVA as a part of college annual cultural & technical festival and ENTHUSIA Science exhibition where the students from other colleges participate and show case their talents in different events. The Management provides cash incentives for outstanding student achievers during NITOTSAVA techno-cultural fest. The college encourages the students to take part in cultural activities at college level, University level etc. that enable them to showcase their talent and creativity in various events. The necessary training is provided to the participating students by the college. Students have actively participated in VTU Youth Fest at university level regularly.

Sports and Games

There is a well-equipped sports department, under charge of the physical director of Navodaya Educational Trust. The college has provision to make use of common facilities like indoor and outdoor stadiums at trust level apart from the sports facilities available inside the NIT campus. At college level intra and inter departmental level sports and games are organized. There is one sports period every week for all year students. The college encourages the students to participate in various sports events held at Regional, University, State, National and International levels.

Apart from the regular sport hour, the students can utilize the sports facilities even on holidays and evening sessions also.

Sl.No	Description
	Indoor Games

1	TT Room
Outdoor Games	
1	Playground
2	Badminton Court
Sports Equipment	
1	Chess Board, Clock
2	Football, Goal Posts, Nets
3	Badminton Racquets, Shuttle,Nets
4	Carom
5	Carom Mens
6	TT Table, Bats, Balls,Net
7	Volley ball, Pole, Net
8	Throw Ball
9	Cricket Kit

Gymnasium

NIT-R has a separate multi facility gym for boys and girl students at NET trust level to build their physical strength to stay healthy.

Sl.No	Description
1	Dumbbells
2	Barbells
3	Latpull Machine
4	Chest Press Machine
5	Cross Over Machine
6	Trade Mill
7	Barbell plate stand
8	Dumbbell stand
9	Stationary bicycle
10	Calf raises Machine
11	Multi angle bench
12	Swiss Ball

Yoga

The sports and cultural club of NIT conducts yoga classes in the college. International Yoga Day event is celebrated every year since from the date of announcement. NIT is giving importance to yoga and is having MoU with Sahaja Sthithi Yoga Camp, pyramid Spiritual Society of Raichur. The objective of conducting these programme is to provide services and programs that inspire growth, development and retention of students in a present-day and safe environment that develops fitness, social connectivity and leadership opportunities. Every Year Health and Fitness Classes (Yoga and Meditation) is being conducted for all students and faculties.

File Description	Document
Paste link for additional information	View Document

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 35

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document

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

Response: 17.63

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

2019-20	2018-19	2017-18	2016-17	2015-16
55.09	17.61	25.03	33.98	44.05

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

NIT-R library holds the rich collection of 13319 volumes of books comprising of 4659 titles. The library has facilities which includes 21 Indian journals, 7 International journals, 7 daily newspapers and 4 weekly magazines. Library consists of books for all the departments to encourage the students for higher education and to prepare them for competitive exams. The college is a member of the VTU E-Resources Consortium since 5 years. The users of library can access e-journals and e-books of all major publishers like Taylor & Francis, ICE, Emerald, Elsevier, Science Direct etc. To inculcate the research culture among the faculties and students, the library has a license of Turnitin, plagiarism originality online check software for checking similarity index and also NetAnalytics, a sentence correction and grammar tool for research articles, papers & thesis. The digital library provides online access to e-resources using K-nimbus (Digital Library Platform and Remote access). The digital library has 46 computers to access the e-resources.

Library Services:

NIT-R Central Library offer various types of information services to its users such as 'Intranet Based Current Awareness Services(OPAC)', 'Newspaper Clippings', 'Digital Library' for Digital Collection Mgmt., 'Seminar & Conference Alerts', 'Thesis of the Month-Notification', 'Reference/Bibliographical Services', 'Additional borrowing privileges for Reserved Category & Topper Students', provision of 'Important Links from Library portal, Use of group e-mails and social media for instant outreach of the current information to the end users.

Library Automation: Library is partially automated using Easylib V4.3.3 software, which provides a single window search and the user can search the required books subject/author-wise and it can be issued to the user quickly. Online Public Access Catalogue (OPAC) has resulted in easy access information of subject/author-wise book, account information etc. Easylib is extensively used for generating all the reports that are required in day to day of the Library such as circulation status, fine status, contact details, reading & circulation history. Easy to use interface makes the user experience a pleasant one.

OPAC (Online Public Access Catalogue)	: Yes
Electronic Resource Management package for e-journals	: Yes
Federated searching tools to search articles in multiple databases	: Yes
In-house/remote access to e-publications	: Yes
Library automation	: Yes
Total number of computers for public access	:10
Total numbers of printers for public access	: 01

Internet band width/ speed	:100 Mbps
Institutional Repository	:Yes
NDL Active Members	: Yes
File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

4.2.2 The institution has subscription for the following e-resources

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

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

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

Response: 11.61

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

2019-20	2018-19	2017-18	2016-17	2015-16
7.07	8.99	11.01	19.08	11.89

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Any additional information	View Document

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

Response: 28.24

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

Response: 209

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

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The IT facilities available in our college can be summarized as follows:

LAN Facility:

In the year 2010, the institute has 140 systems with 10 Mbps internet speed, now 347 high configuration systems are available for students and all these systems are provided with LAN connection upgraded to 100 Mbps of internet connectivity shared across entire campus.

Server configuration in Data Centre:

There are 4 servers installed in the campus. These servers are used for to store, retrieve and send the data to other computers on a network. The configuration of Domain Controller is HP Proliant ML350e-Gen8, Intel Xeon Processor (64Bits), 16GB RAM, 2.4 TB. Institute also has Student and faculty biometric devices which are connected to the main server through LAN connectivity installed in all class rooms and admin block.

Storage server = 2.4TB x 1 = 2.4TB (Mirroring)

Softwares:

Institute has 371 licensed Windows operating systems and 4 Windows Server 2003, 1 Windows Server 2008R2, 1 Windows Server 2012. Our college has 10 MATLAB licensed software. We also access open source operating systems such as Ubuntu, Fedora & CentOS. The college has also open access to Autodesk Educational Licenses like Revit 2017, 2019, 2020 Nastran 2017, 2018, 3DS Max 2017 etc. also Licensed Open Source Software provided by Design Tech Systems-MATLAB which includes MW-Matlab, Signal Processing Tool Box, Communication system Tool Box, SIM Power Systems etc. All the systems are protected with Sonicwall firewall. There are 30 licensed Microsoft office 2013 procured from Microsoft.

Printers:

The Institute has 18 Laser jet printers, 1 Xerox machine and 7 scanners for academic and administrative usage, and also A3 printer is available for CAED drawing as per the curriculum and evaluation requirements.

Cameras:

As per the VTU guidelines and Karnataka safety ACT the institution installed the 65 CCTV's which covers administrative, classrooms, Laboratories, parking and common areas for student's safety, prevention from unauthorized visitors and safety of campus.

Updates and Up-gradation:

Institute upgraded the computers as per the needs. Updates are maintained regularly through WSUS (Windows Server Update Service) and antivirus is updated using free edition.

Wi-Fi:

6 Extendable Wi-Fi routers are placed in various places like Admin, all departments. Wi-Fi access is provided to all the students which is monitored and controlled by Sonicwall firewall at the IT department for secure content access.

A comparison of IT facilities can be summarized as follows:

Sl. No.	Items	2009-10	2013-14	2018-19	
1	System configuration	Intel core 2 duo E7500 processor, window vista, 2 GB RAM, 320 GB HDD	Intel Core i3 & i5-3470, 4GB RAM, 500GB HDD, Intel HD	Intel Core i3 & i5-3470, 4GB RAM, 500GB HDD, Intel HD Graphics 2500 & Nvidia Quadra 410 & Nvidia 512MB Graphics	Intel Core i3 & i5-3470, 4GB RAM, 500GB HDD, Intel HD Graphics 2500 & Nvidia 512MB Graphics
2	CCTV installation	--	17	65	
3	QPDS Room	--	--	1	
4	Accessories (Printers &	6	10	18	

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

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

Response: 2:1

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

4.3.3 Bandwidth of internet connection in the Institution

Response: A. 750 MBPS

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

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 62.31

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

2019-20	2018-19	2017-18	2016-17	2015-16
110.40	242.00	306.39	56.07	84.04

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	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:

Under the umbrella of NET there are nine institutions in the same campus to look after the Maintenance of various domains like buildings, classrooms, Sports complex etc.

A central maintenance department is established to look after the maintenance of these domains. There is separate IT cell to look after the maintenance of computers and e-facilities at trust level. The Maintenance Co-ordinators / Supervisors will continuously monitor and timely put the request for service and maintenance. The maintenance and utilization of physical, academic and support facilities are governed by standard procedures. Adequate academic, physical and support facilities are available on the campus. In order to ensure their maintenance and optimum utilization, various systems and procedures are established so as to benefit all the stakeholders.

1. Maintenance of Physical Infrastructure and Support facility:

Institute believes in maintaining a spic and span campus as a necessary prerequisite to achieving a salubrious environment. In view of this, Maintenance Committee has been formed which ensures that the maintenance of the physical, academic and support facilities is carried out in a planned and systematic manner as per the standard policies developed by the Institute.

a) Routine Maintenance:

Cleaning, Dusting, Sweeping and Mopping of all areas is undertaken daily by the housekeeping staff and is supervised. Regular cleaning charts and progressive maintenance records are maintained. For minor repairs, the Institute has a workforce of Carpenters, Masons, Electricians and Plumbers.

b) Preventive Maintenance:

- **Painting:** The Institute has prepared a Calendar to ensure that all the areas are periodically painted.
- **Air Conditioning:** Many areas of the Institute are air conditioned. The maintenance of the Heating, Ventilation, and Air conditioning (HVAC) system is outsourced. The agency services the machines monthly and submits its report to Administrative Officer/ Manager.
- **CCTV:** The Institute has installed multiple CCTVs on the Campus. The maintenance of the system is outsourced. The agency inspects the equipment monthly and submits its report to the Administrative Officer/ Manager.

- **Water testing and cleaning:** Water is tested and cleaned by professional service-providers once a year.
- **Pest Control:** The Pest control which includes combating general disinfection, rodent treatment and larva breeding is done periodically as per pre-decided calendar. Anti-Termite treatment is also done periodically.

All the classrooms, seminar halls, auditoriums, etc. are ICT enabled and maintained under the supervision of the **Administrative Officer/ Manager**. All works related to periodic inspection, maintenance and repairs are carried out by the Administrative officer and his team of technicians and housekeeping staff. Proper utilization of teaching premises is ensured by all the faculty members as per standard norms. A dedicated team comprising a system administrator and technicians takes care of periodic maintenance and upkeep of all computer systems in the Institute. Proper utilization of systems is overseen by the Lab incharges and concerned faculties. Apart from the above all the Laboratories are maintained in proper working conditions in terms of the premises as well as all pieces of equipment, i.e., consumables and non-consumables, as overseen by the concerned Lab Incharges. Separate registers are maintained for lodging complaints, stock keeping works executed, etc.

- **Laboratory Maintenance and Utilization**

All the laboratories are spacious and well maintained. Do's and Don'ts /safety precautions are displayed in each departmental laboratory. To get the specification and history of the equipment QR code is provided. All the computational facilities and necessary softwares are upgraded timely. For all the lab equipment's maintenance schedules are well defined. As per the schedules the maintenance may be periodic or preventive. The equipment maintenance details are recorded in the predefined format maintained by the respective lab incharges. the maintenance includes calibrations, repair, servicing, overhauling, component replacements etc. Safety and security equipments are made available readily as need which includes fire extinguishers, first aid, sand buckets, water etc.

Library maintenance

Knimbus, a complete digital library platform for personalized learning and research is made accessible for both faculties and students. There is a regular stock verification process carried out by the library. A file is maintained which contains the stock verification reports carried out at different intervals. Physical verification of the library stock is the process by which the accession register is tallied with the books in the library. It gives the overall picture of the available documents in the library. The files relevant to Library and Library services are well maintained and labeled for easy access to any of the Library staff.

- **Computers**

IT cell is functioning in the campus for resolving the issues like hardware trouble shooting, software installation, Maintaining Biometric devices/RFID's and network related issues are monitored and maintained periodically. The complaints are posted through E-mail and a separate App is created to lodge IT related complaints to address immediately. All the students of all the branches have the computer assisted labs in their curriculum. Also, it is utilized for doing project works, consultancy and for giving Technical related Skill Training.

- **Electric Power Backup:**

NIT-R campus has 0.5MW Solar Roof Top Photo Voltaic system and associated 1x750kVA, 11kV/433V Transformer and HT metering cubicle on net metering basis. Sufficient back up power supply has been maintained in case of power failure from GESCOM. Monitor and maintain electrical power backup equipment's such as Generator, UPS and batteries monthly and on regular basis as per the condition/Status of equipment.

- **Sports Facility:** The sports centre is headed by the Sports Committee In charge who oversees the maintenance and utilization of the sports premises as well as all sporting items/equipment, grounds, etc. List of sporting items, equipment, etc. are maintained in stock registers. The issue and return of sporting items are overseen by the Committee. Service, repair of sporting premises and/or equipment/items are carried out as per the due standard procedures, with the express approval of the Principal and the Management.

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

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 last five years

Response: 64.78

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

2019-20	2018-19	2017-18	2016-17	2015-16
393	371	699	611	435

File Description

Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)

Document

[View Document](#)

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 10.77

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

2019-20	2018-19	2017-18	2016-17	2015-16
171	114	67	28	0

File Description

Upload any additional information

Document

[View Document](#)

Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)

[View Document](#)

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 79.75

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

2019-20	2018-19	2017-18	2016-17	2015-16
60	45	0	0	0

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

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

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

Response: A. All of the above

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

5.2 Student Progression

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

Response: 38.59

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

2019-20	2018-19	2017-18	2016-17	2015-16
25	96	77	103	69

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 20.16

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 49

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

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

Response: 100

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

2019-20	2018-19	2017-18	2016-17	2015-16
3	5	3	3	2

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

2019-20	2018-19	2017-18	2016-17	2015-16
3	5	3	3	2

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 (Data Template)	View Document

5.3 Student Participation and Activities

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

Response: 11

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

2019-20	2018-19	2017-18	2016-17	2015-16
10	0	3	0	0

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

5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Response:

The institution constituted various Committees / Cells pertaining to administration, co-curricular and extra-curricular domains in which students' inclusion is there. The below listed are the Committees / Cells in function.

1.Grievance and Redressal committee / College Internal Complaint Committee.

As per the guidelines of Affiliating university this committee is vested with the authority to address grievances raised by the students, teachers and non-teaching staff of the college with 2 to 3 students' representation. This committee meets thrice in a year and also as needed. In recent times as per the directions of AICTE institution introduced Grievance redressal portal.

2. Anti-Ragging Committee

As per the guidelines of AICTE and the Affiliating university the Anti-Ragging committee is constituted. The committee is comprised as per the laid down guidelines. Nearly 2 to 3 students will be representing the committee.

Apart from this the students are permitted to attend the Anti-Ragging Awareness related programmes in association with district police authorities.

3. Women's Empowerment Cell

At institutional level Women Empowerment Cell is constituted to develop self-confidence among girl students and lady staff, and also to prevent sexual harassment and related Grievances and 2 to 3 female students will be representing the committee formed by the cell as needed. The committee meets thrice in a year as per the prescribed schedules and also as and when needed.

Co-Curricular

1. Skill and Entrepreneur Development Cell

NIT established this cell with the objective of strengthening the technical and Entrepreneur skills among the students. This cell has a team / committee to carry out the related activities and trainings in which the 5 to 10 students representing the committee. The students being a part of this cell helps the institute to develop skill-based Add-on courses.

2. Programming Club

Keeping the global requirement in view the programming club is established. Technically getting equipped with basic programming languages is a cardinal requisite for engineering students irrespective of their discipline.

3. ISTE Student Chapter

Our Institute is ISTE registered member since 2010 and has recently established ISTE student chapter in 2018. Most of the students will be the members of the ISTE student chapter. The ISTE Students chapter of the Institute organizes Workshops/Seminars/ Guest Lectures etc.

4. Alumni Cell

NIT Alumni Association (NITAA) is formed with a view to create a platform that helps improve student interaction and relations after completion of their course at NIT. It is a forum for discussion that plays an instrumental role in academic exploration by way of queries by juniors for guidance and advice by the seniors from their experience. It is all about enterprise, inspiration and mentoring.

Apart from the above the student representatives are included in IQAC, NSS, YRC, Canteen Committee, Hostel Committee, Training & Placement Committee. The appointment changes for every academic year so as to encourage different number of students in different streams, Such as Orientation/ Induction Program, Technical Committee for Tech fest, Cultural Committee for Annual Day, Sports Committee for Annual Sports Day, Student Activity Center (SAC).

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 23.4

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
18	22	23	21	27

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	View Document

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

Alumni Association:

The NIT Alumni Association (NITAA) aims to link the alumni to the institution, develop synergistic plans to support the institution and achieve its vision, and to enable the institute to add value to all its stakeholders. The Institute established alumni cell in 2014 to maintain a good linkage between institute and alumni. The alumni association was registered in 2018 with register no. DDRH/SOR/363/2018-19 dated 27-11-2018. The main objective is to enroll all alumni as members of the association and facilitating active participation of the alumnae in appropriate activities, events, and initiatives of the Institute. The alumni association helps in building a network of the alumni and helps in being in touch with the corporate world. The alumni meet is conducted once in a year.

Also keeping the busy schedule of the alumni in mind NIT-R has changed its strategy regarding interaction with the alumni. Most of the alumni during their weekend will be available in Raichur city. The Alumni coordinator gets the information of the availability and will be invited to come and interact with the students during their availability. This has become the continuous practice of the institution. This concept is helping a lot to the students and fetching good results.

The Following are the activities carried out with the help of Alumni.

Curriculum Enrichment: Alumni are involved for curricular gap identification and development of value added course module.

Interactive Sessions: The alumni association helps in holding interactive sessions to motivate current students about the employability and educational opportunities abroad. They share their opinions in social networks, blogs and forums.

Industry connect: Alumni helps in establishing MoUs with industries. The alumni those who are entrepreneurs arranges industrial visits to the students and provide inputs on how to start a new venture to turning them in to job providers. The Alumni extend their support for student internship.

Research and consultancy: To encourage the students of the college & members of the Association for research & consultancy works in various fields like Engineering, Computers, Industrialization, etc. Alumni helps the departments by directing the entrepreneurs to carry out consultancy works in various sectors of the engineering stream.

Mentorship: Alumni can play an active role in voluntary programs like mentoring students in their areas of expertise. To utilize the rich experiences of old students of the college for the benefit. To assist the students in securing suitable jobs.

Placements/ References: The alumni network of a college is one of the biggest sources of placement opportunities to the students. Alumni can help students in referring to companies and get placed at their respective organizations. The Alumni conduct mock personal interviews and job oriented training.

Generosity: Few of the alumni of various departments have donated text books for departmental library to keep available for utilizing by poor students.

Administration: Alumni are members in IQAC and provides inputs for imparting quality system adaptive to recent trends and requirements of industry.



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

Response: E. <1 Lakhs

File Description	Document
Upload any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

Vision

“Aims at developing the most respected institution of higher learning, renowned for its excellence in technology and for its commitment to producing high-quality engineers who are versatile, innovative and globally competitive.”

Nature of Governance

Participation of Teachers in Decision Making Bodies

The institution strictly adheres and function as per the rules and regulations laid down by the regulatory bodies. In view of executing the directions/instructions received from regulatory bodies and decisions taken in Governing Council at trust level the institution has a structured administrative system and also framed various statutory and non-statutory committees

Mission

To provide high-quality education in major engineering disciplines at the graduation level with a creative balance of academic, professional and extra-curricular activities through

M1. relevant programs in instruction,

M2. training and research,

M3. in response to the changing needs of the industry and society,

M4. with high degree of morality and ethical values.

Governing Body provides the technical/non-technical support to an institution for achieving the mission. A governing body of the institute defines the strategies, policies, goals, road-map and quality policy for Institute. The institution is clearly defined its mission in which infrastructure, academic, administrative, research, social, ethical and other co/ extra-curricular components are given more prominence. The governance of the institution is empathic to changes taking place in the current education system

Perspective Plan:

The right to education is not only the right to access education but also the right to receive an education of

good quality. Education must be available and accessible but also acceptable and adaptable. Quality is at the heart of education. Based on this philosophy in order to meet the local, technical and global requirement, perspective plan for college is prepared in line with

the vision and **mission components M1,M2,M3,M4 the strategic plan as mentioned below are in the process of deployment**

- 1.Enhance engagement with Society
- 2.Diverse Student learning environment
- 3.Enhance engagement with Industry
- 4.Improve internal support systems
- 5.Enhance alumni engagement
- 6.Develop a cleaner and greener campus
- 7.Academic Autonomy and Industry Oriented Curriculum

After enabling the State of Art Infrastructure and facilities Institution focuses on development in educational, industrial and social change so as to fulfill the corresponding needs by providing qualified staff which leads students towards technical & social excellence. Governing body constitutes Chairman, Principal, Heads of department, Internal Quality Assurance Cell chairperson, Government person, Industry person. Heads of department review the department progress for continuous improvement.

Various committees like College Academic committee, IQAC Committee, Department Academia/Advisory committee, Class Committee, Library Committee, Skill & Entrepreneurship Development Cell, R&D cell, College Internal Complaint Committee, Hostel Committee, Grievance and Redressal committee, Anti-Ragging Committee, Women's Empowerment cell, Anti-sexual harassment committee, Alumni Cell, Sports and cultural Committee, National Social Service (NSS) and Youth Red Cross (YRC) constituted at institutional level function in tune with the requirement to meet the vision and mission of the institute. Every department has its own vision and mission established in-line with the institutional vision and Mission.

NAAC

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

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

Response:

Response:

Vision and Mission statements define the quality policy of the institute in very well manners which are

designed by the Top management, the Principal, Vice Principal, HOD and senior Faculty members of the institute. An action plan is prepared collectively by the Principal, Vice Principal and the Head of Departments for implementing the quality policy. According to the action plan, specific roles are assigned to various faculty members. The Principal provides leadership for the academic administration and creates an effective environment

conducive for learning. He ensures that quality education is imparted to the students that foster the holistic development of the students. He also ensures all-round development of the Institute and achievement of strategic plans of the institution. The institution has in place several Committees / Sub-Committees to continuously monitor/guide the academic and administrative activities. The committees comprise of key stakeholders including government, administrators, faculty, staff, industry, employer, alumni, parent and students. The top management provides effective academic leadership to the faculty, by setting goals and involving them in participative decision-making process, not only to achieve the vision, mission and goals of the institute, but also in building the organizational culture. The Principal permits the HODs and staff members in performing freely in the academic activities and administrative programmes such as departmental activities, allotment of workload, various academic committee programmes, association and club activities.

Top Management:-

- Designing Quality Policy
- Provide Budget
- Infrastructure
- Recruitment
- Provide support to economical backward students

Principal:-

- Quality policy- Planning, deployment and monitoring
- Weekly Meeting with HOD
- Departmental Meeting with faculty once in Semester
- Administration of teaching and learning
- Monitor academic performance
- Non teaching member meeting
- Recruitment
- Maintenance

Vice Principal

- Assist Principal for the execution and monitoring the policy
- Stake holders feedback review and monitor corrective action

Head of the Departments:-

- Departmental meeting
- Execution of course work

- Social activities
- Mentor to student
- MOU's
- Maintenance
- Result Analysis and corrective actions

Decentralized

- 1.Top management has given necessary authority to Principal to manage different functions with operational autonomy.
- 2.Principal forms different committees as per requirement.
- 3.Committee co-coordinators have given appropriate authority by principal to take decision.

Participative

- 1.Participative management.
- 2.Students, faculty and administration join hand in hand.
- 3.Internal as well as external stakeholders are involved for any modification in teaching learning and administrative process or any similar process.
- 4.College constitutes committees for general and academic development which includes faculty, nonteaching staff and students' participation and everyone is involved in decision making processes.

The institute has made remarkable progress in the last 5 years as most of the decisions that were taken in the GB have been implemented successfully after consulting faculty and students wherever required. Some of them are

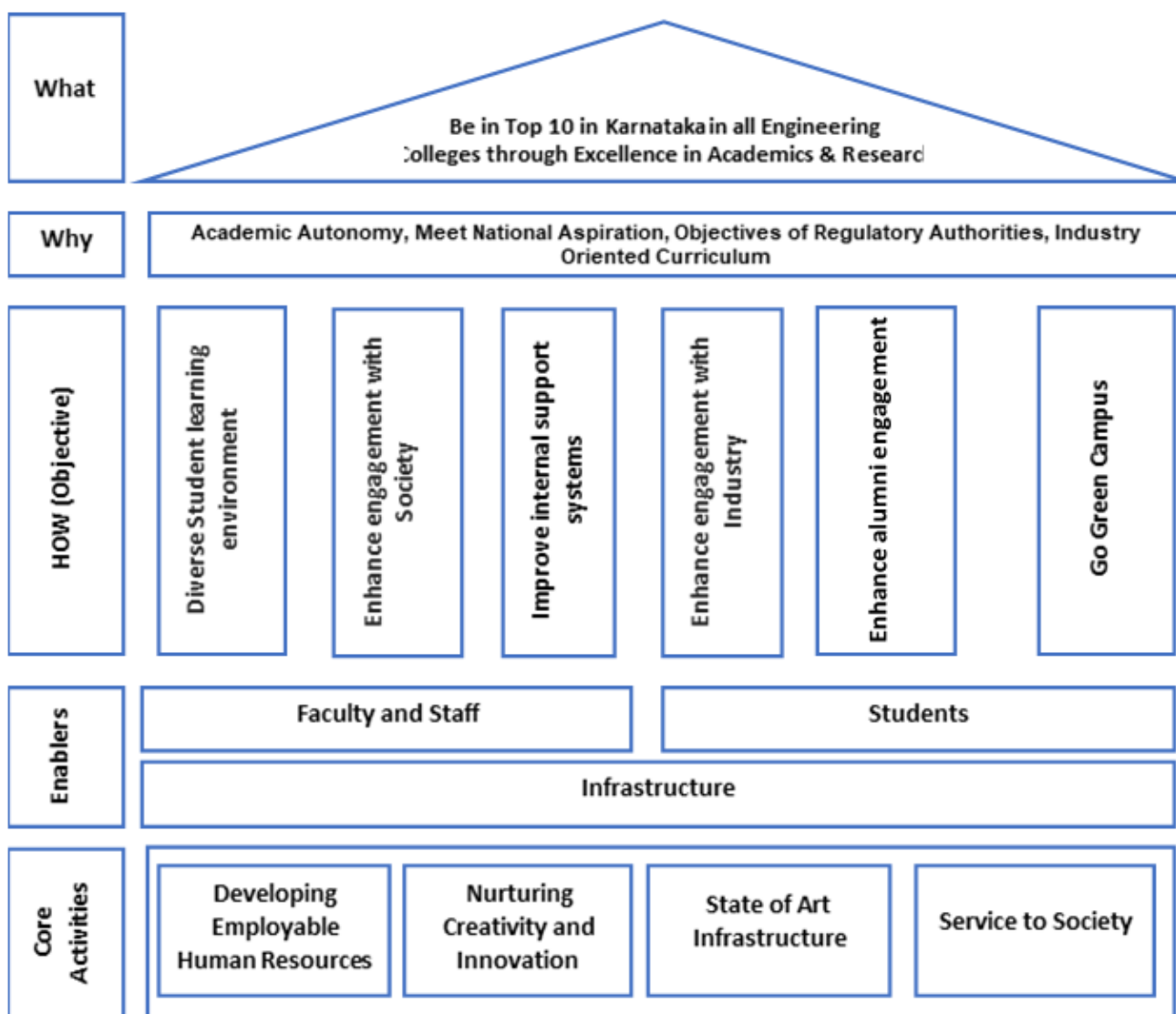
- 1.**State of Art Infrastructure**
- 2.**HODs of all department are PhD holders**
- 3.**Establishment of Skill Development Centre**
- 4.**ERP Automation**
- 5.**Incubation Center**
- 6.**Improvements in teaching-learning process reflected in the feedback**
- 7.**MOUs, Industry Academia Meet**
- 8.**PMKVY and DDUGKY**

<p>GOOD GOVERNANCE</p> <ul style="list-style-type: none"> • Voice and accountability • Organisational Stability • Regulatory quality and integrity 	<p>TRANSPARANCY</p> <ul style="list-style-type: none"> • Timeliness - Plans Execution, Evaluation • Comprehensiveness – People, Structure and Process • Forward Looking: Vision, Mission and Values
<p>EFFICIENCY</p> <ul style="list-style-type: none"> • Physuscal efficiency- input vs Output Values • Economic Efficiency- Assets, Liabilities and profits • Value Efficiency- Respect and Recognition 	<p>ACCOUNTABILITY</p> <ul style="list-style-type: none"> • Inputs • Outputs • Outcomes • Processes

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:



The Strategic Plan seeks to leverage the strengths that NIT-R has developed over the decades and to build upon them and acquire or develop new strengths. In particular, the Strategic Plan proposes to nurture the large groups of faculty working on transformational technologies that have the potential to address the societal challenges faced in India today-specifically in areas such as water, energy, healthcare, education, housing and waste management etc.. Strategic Plan identifies the following broad targets:

Sr. No	Strategic Plan	Sub Plans	Status
1	Enhance engagement with Society	NSS, Other Social Activities and contributions	Deployed
2	Diverse Student learning environment	ICT based TL, Value Added, , Skill Development Center , VTU Consortium etc	Deployed
3	Enhance engagement with Industry	Guest Lectures, Internship, MOUs Other Initiatives.	Deployed
4	Improve internal support systems	ERP, LMS, effective Implémentation,	Deployed
5	Enhance alumni engagement	Registered Alumni Association, Alumni Meet, Alumni involvement	Partially Dep
6	Develop a cleaner and greener campus	Solar, LED, All type of Waste Management, Green Landscaping	Deployed
8	Academic Autonomy and Industry	Improvement in Admission,	Process Initia

Oriented Curriculum	NAAC Assessment with A grade , NBA 50% Program more than 675 Score. Academic Autonomy from UGC, Curriculum with horizontal mobility, One module purely for recent contemporary industry development/Applications. MOOC courses as credit based course. 3-4 Audit courses on Industry/Society/Environment.
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The team consisting of Principal, Heads of Departments and senior faculties are the prime body that develops drives and deploys the policy. To facilitate better planning and implementation, an Internal Quality Assurance Cell (IQAC) is formulated strictly as per the guidelines of NAAC. The IQAC meets periodically to discuss and proposes plans/measures for strengthening the following aspects:

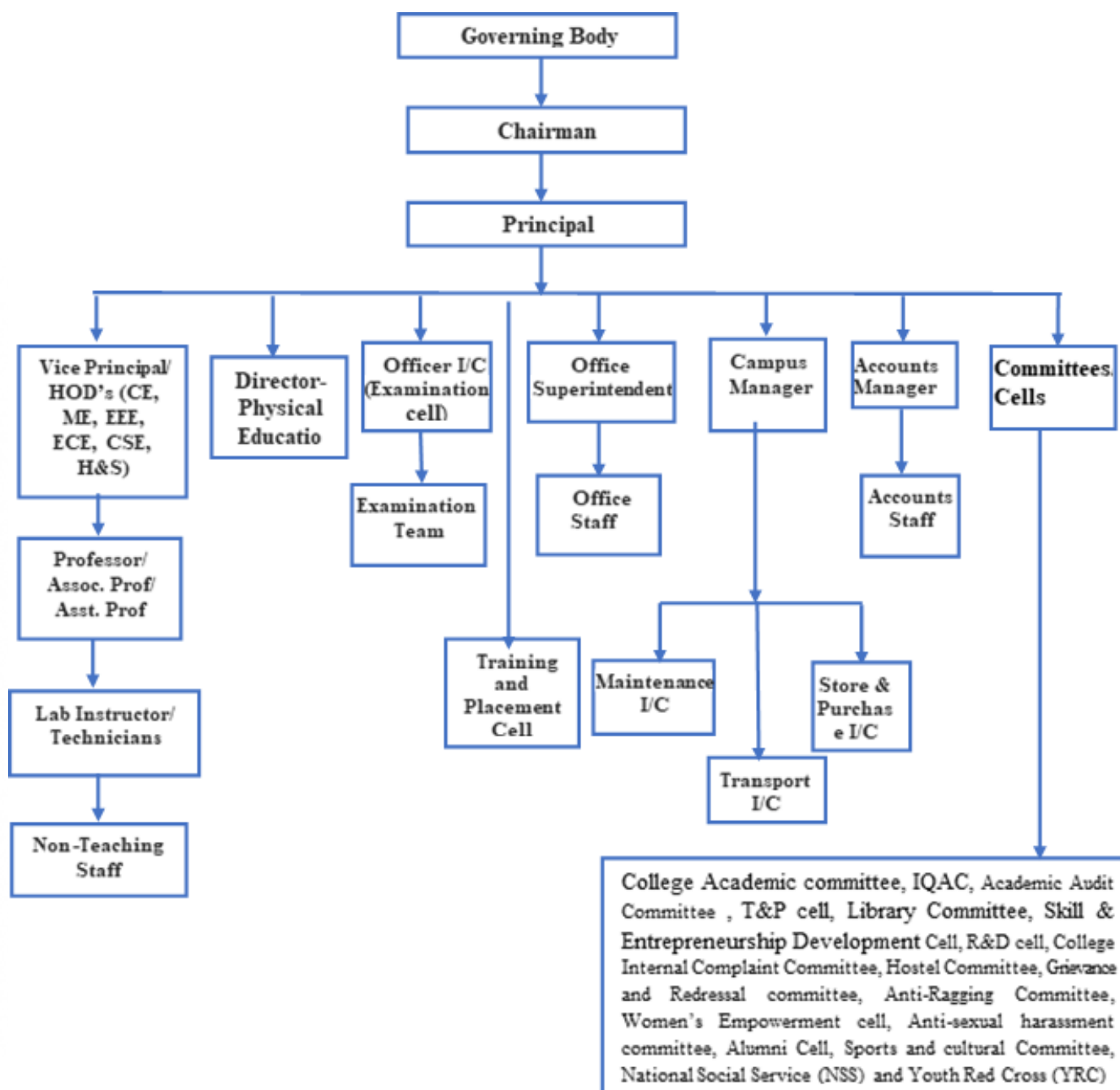
- Curricular Aspects
- Teaching-Learning and Evaluation
- Research, Innovations and Extension
- Infrastructure and Learning Resources
- Student Support and Progression
- Governance, Leadership and Management
- Institutional Values and Best Practices

The conclusions arrived at IQAC meeting is carefully reviewed and policies are further formulated for corrective actions.

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

Response:

The institution has a well-structured organogram to facilitate effective administration.



Organogram Link is Provided.

The governing body of the institution is the highest authority constituted according to the norms of regulatory bodies. It guides, monitors and plays a vital role in decision making of academics, administration and in overall development of the institution. The decisions/resolutions passed in GB will be immediately taken up by the HoI for execution.

HoI / Principal coordinates and integrates the duties, responsibilities, roles and functions of the Vice Principal, HODs, Exam Section, T&PC, Physical Education, Office Superintendent, Campus Manager, Accounts Manager, Wardens, coordinators of various committees and cells so as to align them for effective execution of the resolutions made.

All the in-charges of above-mentioned entities are supported by the supporting staff mentioned in the Organogram. The campus manager of the institution monitors day to day administration and looks after

purchase and maintenance.

The following Cells/ Committees/ Units are also the part of Governance of the institute playing the vital role.

College Academic committee, IQAC, Academic Audit Committee, Department Academia/ Advisory committee, Class Committee, Training and Placement cell, Library Committee, Skill & Entrepreneurship Development Cell, R&D cell, College Internal Complaint Committee, Hostel Committee, Grievance and Redressal committee, Anti-Ragging Committee, Women's Empowerment cell, Anti-sexual harassment committee, Alumni Cell, Sports and cultural Committee, National Social Service (NSS) and Youth Red Cross (YRC).

The above-mentioned committees are constituted as per the guidelines of the regulatory bodies with defined objectives and functions, helping in carrying out the academic, co-curricular and Extra-Curricular activities. These committees meet as per the prescribed schedules and takes appropriate decisions for development of the institute.

File Description	Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View 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:

Employees are undeniably crucial stakeholders who influence organisational effectiveness by stabilizing the tremor caused by adaptive environment. The management of NIT-R implemented various monetary as well as non-monetary welfare measures for employees.

Monetary welfare schemes are

1. Group insurance for Teaching staff.
2. Maternity Leave
3. Employee is entitled to use Earned Leaves in case of his/her marriage.
4. The Institution provides incentives/appreciation certificates to the faculty for outstanding performance in
the curricular/co-curricular/extra-curricular activities.
5. Vacation leaves provision for all employees as per the college norms.
6. Grant of Special Casual Leaves (20) when faculties are required to go out on official duties or to participate in conferences, seminars, workshops etc.,
7. Sick Leaves will be provided based on the request from faculty subjected to discretion of management.
8. Financial support for Professional Membership Fees.
9. Free Medical consultancy and treatment for common ailments through the Navodaya Medical Hospital
& Research Centre.
10. EPF is in force to sub staff. EPF is being contributed from management with an equal contribution from
employees based on the pay scale governed by EPF rules.
11. ESI is applicable for eligible sub-staff.
12. Dearness Allowance
13. Incentives to faculty who receive State, National and International recognition/awards

14. Provision of Special Leave to the existing faculty for the pursuance of their higher studies like PhD and

PDF.

15. Faculties are encouraged to write and publish books or monographs and incentives are provided.

16. Incentives will be given to the faculty member for publication in national/ international journals of Repute.

17. The institution will pay the registration fee, TA & DA and provide OD (On-Duty) for research paper presentation in the conferences.

18. Special incentives for research grants.

19. Support NPTEL/FDP certification programmes for knowledge updation

Apart from monetary schemes various non-monetary welfare schemes are provided to employees for their professional development. The schemes are listed below

1. Technical workshops are conducted to keep pace with syllabus and new technologies.
2. Faculty development programs /STTP are conducted in the institute.
3. Experts from the industry and academia are invited for interaction with the staff.
4. The institute motivates the faculty and staff for arranging / attending industrial training programs/ visits.
5. Training programs are arranged for updating the knowledge of the non-teaching staff.
6. Faculty members are encouraged and benefited from qualification improvement programs such as PhD,
M Phil.
7. Remote Access to Digital Library through VTU Consortium.
8. Sessions for Health and Stress management.

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: 48.47**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**

2019-20	2018-19	2017-18	2016-17	2015-16
34	44	27	25	20

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years**Response: 19.8****6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
17	12	18	17	10

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).**Response: 59****6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
57	65	42	47	37

File Description	Document
Upload any additional information	View Document
Details of teachers attending professional development programmes during the last five years	View Document

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

The Institution has put great emphasis on staff performance. The annual Performance Report formats have been derived as shown hereunder by considering the Knowledge Skills and Behavior aspects into account.

- University results
- Research & publications/ academic progress
- Students feedback
- Punctuality & adaptability
- Mentoring/ counselling of students
- Administrative contributions

The non-teaching staff are appraised based on the following parameters:

- Punctuality & adaptability
- Administrative contributions

The attitude, commitment and achievement of staff with regard to above mentioned parameters are the key areas to their appraisal. Peer members feedback is also considered to determine how good a team member he/ she is. At the end of academic year, every staff is asked to submit the self-appraisal form to the Human Resources Department. Self-Appraisal reflects the contribution of the faculty members to teaching-learning process, research activity, involvement in department and college level activities (academic and administrative). The performance appraisal reports are assessed by the Head of the department, Principal and Management. Annual increments and promotions are granted after the approval of the management as per the laid down procedures. Effective decisions taken by the management are incorporated in the proceedings of the meeting. The outcome of the review of the performance approval reports is also communicated to the staff through oral or written communication.

File Description	Document
Upload any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Navodaya Institute of Technology runs under the umbrella of Navodaya Education Trust. We have centralized audit section which carries out every year the internal and external audits for all the institutions by deputing the audit committee comprising of qualified chartered accountants. After thorough scrutiny/ verification, committees submit their audited statement for follow up action. There have been no major audits objections are identified as the internal financial approval mechanism ensures adherence to financial discipline. The minor objection, if found any, is resolved as per the inputs of the Account Officer and his team.

Audit procedures:

1. Source of income verification: Auditor will cross verify the fee collections with approved list of students like:

- List of students with KEA list for the first year CET admission students and list sent to VTU for the first-year management admission student.
- Eligibility list of students approved and sent to VTU for higher semester students.
- Other incomes cross verified with the receipts issued to the students.
- Fee amount receivable and amount received will be reconciled.
- Checking Grants received if any.

2. Expenses Vouching:

- Auditor will vouch payment with the approved supporting.
- Correctness of Classification revenue and capital expenses.
- Reconciliation of bank accounts and checking the bank confirmations. Reconfirmation of unreconciled items.
- Calculation of depreciation of fixed assets.
- Status of the old debit/ credit balances.
- Checking of statutory dues payment.
- Salaries payments with the salary statements.
- Any other statutory compliances verification required as per Income Tax Act.

3. On such verification any discrepancies will be discussed and sorted with the management. Any changes will be incorporated into.

4. One all financial transactions are accounted and based on that financial statements like Balance sheet and Income and Expenditure for the financial year end.

5. Such financial statements will be signed and approved by Auditor and Management. Based on the audited financial statements, auditor will issue "Audit Report"

File Description	Document
Upload any additional information	View Document

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

Response: 30.23

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

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

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

Response:

Primary Sources of funds:

- Tuition Fee collections from the students
- Fee collections for the other services rendered to the students.
- Hostel and Mess Fees

Other Sources:

- Grants from KSCST/PMKVY/CMKVY/ISTE
- Grants from National Commission for Women
- DDU-KVY Rents
- NSS funds from VTU
- Consultancy works.

Mobilizations of funds:

- The short term deposits
- Long term deposits

Funds utilization strategies:

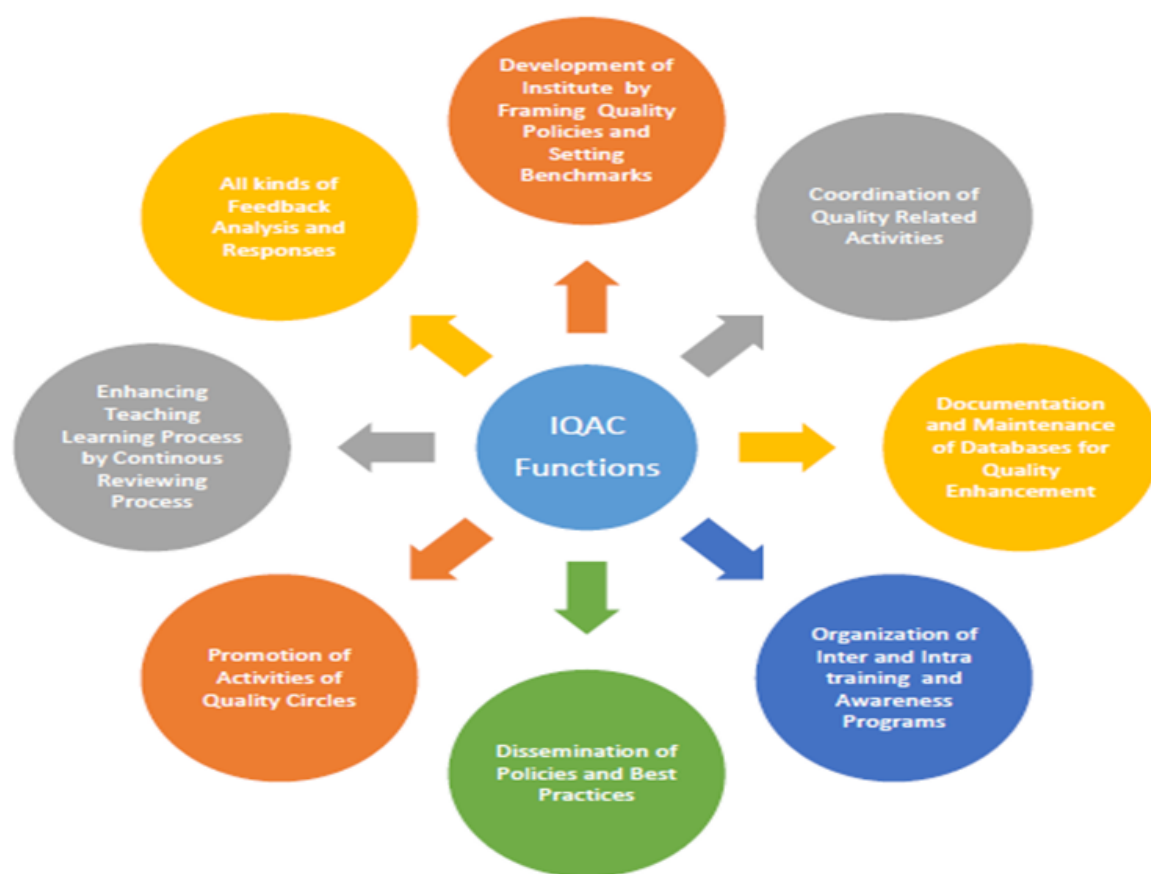
- The funds will be used to cover regular operational and administrative expenses and also used in the establishment of advanced laboratories of the institute.
- According to financial requirement of each department, budget amount will be allocated annually such budget will be discussed and Monitoring the establishment of the infrastructure, purchase of equipment's for various labs.
- Sufficient funding is allocated for enhancement of teaching-learning practices which includes conducting Faculty Development Programs, Orientation programs, Workshops, Interdisciplinary activities, Training programs to improve quality education.
- Purchase of educational technology aids.
- Enough funds are allocated to maintain a Green campus and amenities.
- Sufficient funds are allocated to social service activities as part of social responsibility.
- Any excess of income over expenditure generated is utilized for infrastructure augmentation

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 main aim of the quality policy is to impart the technical education using the state of- the-art technology and ensure that the students are industry ready. The work of IQAC is the step towards the internalization and institutionalization of quality enhancement.



The IQAC has taken many initiatives for the development of the college. Among them the two best practices that has been institutionalized are:

- **Centralized Internal Assessment:**

The main purpose of introducing Centralized Internal Assessment in NITR is to bring consistency and transparency in conduction and evaluation of teaching learning process. The schedules of internal assessments are communicated to students and faculty in the beginning of the semester through institute academic calendar/schedule. The internal assessment evaluation process is communicated to students by the respective faculty and also during orientation program for first year students.

Syllabus for internal assessment will be communicated to students in the beginning of the semester through academic schedule. This has helped in covering the syllabus across all the department uniformly. This initiation led to conduct the internal assessments at one go across all the departments and also this practice has made the faculty to submit the IA QP along with the Scheme of Evaluation as per the schedule.

Question papers are set based on Course outcomes, in turn to attain Programme Outcomes, and are approved by heads of the department to ensure that the QP is set to meet the fixed duration. Evaluation of blue books is based on scheme and solution by the faculty and internal assessment marks are displayed on the notice board. The blue books are given to students after the completion of evaluation for verification of the marks. Any grievances in evaluation will be handled by faculty and Head of the department if necessary. This Practice has led to timely submission of assessment report by subject faculty so that the finalized IA marks could be submitted to the University within the prescribed schedules. The success rate

in the final university exam has been improved after the implementation of the centralized internal assessment.

- **Programming Club:**

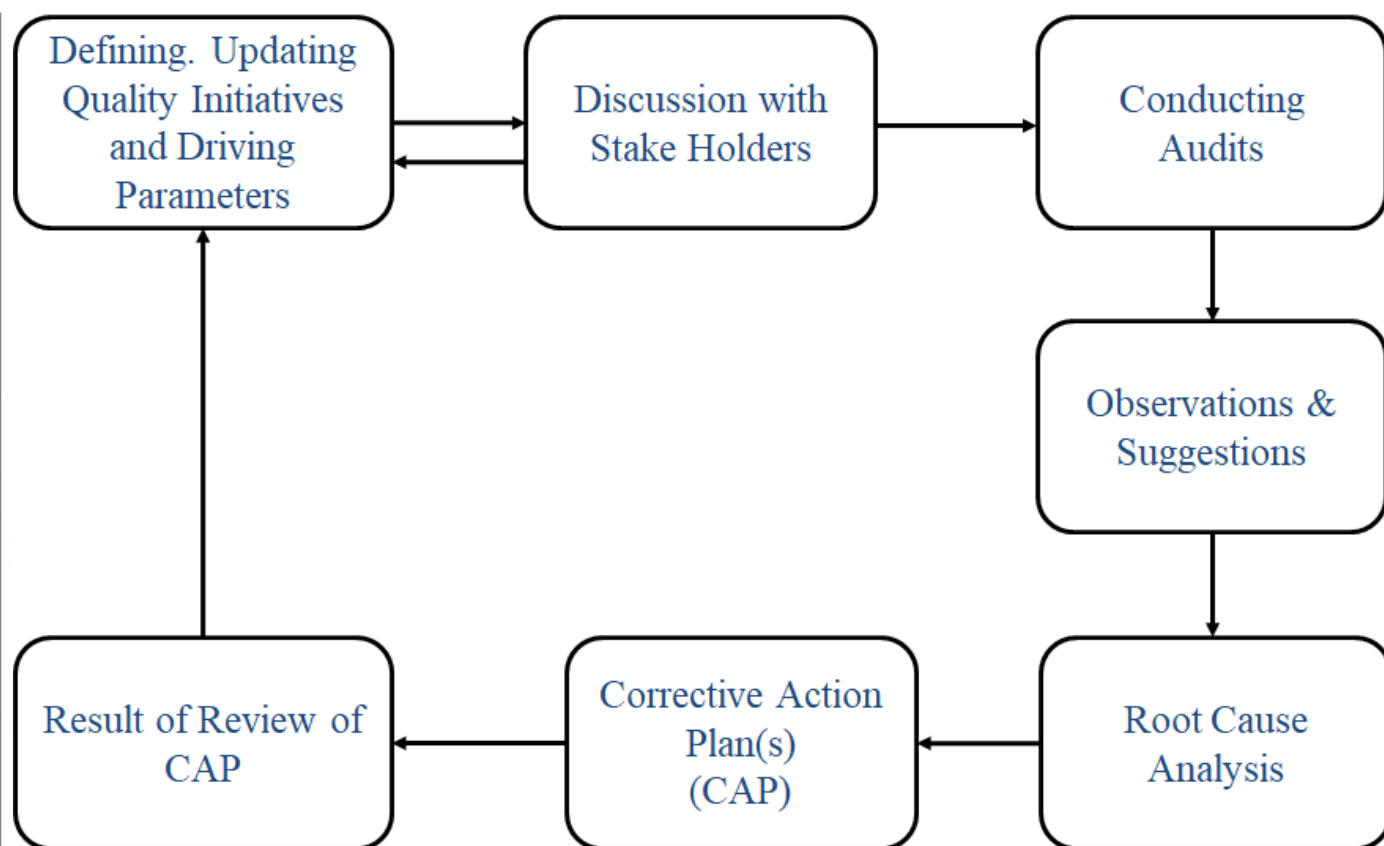
It is evident from the current industrial needs that the students lack in programming skills because of which they are loosing the employability opportunities. The programming club comprises of faculty and students' representatives from each department. In view of strengthening the programming skills with the students hence the programming club is established at institution level. Apart from the regular curriculum one or two periods in a week are spared for imparting programming skills from second year to final year in all semesters.

The club developed suitable curriculum for the respective semesters to address the industrial needs keeping in view. The learning in programming club is through interaction and practice. There will be a Continuous Internal Evaluation through Quiz, test, group discussions etc.,

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

IQAC of the Institution has brought the following reforms in the Teaching-Learning Process;



Planning and Monitoring Quality of teaching learning process

A calendar of events including holidays, tests, fests and other academic programs are prepared at least one month before the start of semester at the college level in conformity with the university requirements. HoD's plan the department / program activities well before start of the semester as given in the processes below:

1. HoD circulates list of courses to be delivered for the ensuing semester for teachers to give their preferences.
2. HoD allots courses to Staff members based on experience, expertise and preferences given by the teachers.
3. Faculty prepares a course file containing:
4. Individual and class time tables.
5. Previous action plans/observations (if any)
6. Syllabus, Course outcomes (CO), CO-PO/PSO mapping with justification
7. Lesson plan including action plans (from previous year), innovative teaching methods (if any) approved by HoD. The first lecture hour has to be devoted to overview of the course and explanation of course outcomes, testing pattern & assessment methods.
8. List of teaching methodologies adopted by the teacher
9. List of assessment processes adopted by the teacher (tests, quizzes, seminar/assignments if any, laboratory experiments).
10. Assessment plan.
11. Work diary , previous University question papers

f. Faculty deliver the course as per lesson plan and writes work diary.

g. Review of work diary by HoD before I test/II test/III test.

h. If the number of classes conducted is less than the actual number of classes/portion covered (COs) is less than the planned work/student feedback is low/innovative teaching method used is not effective then HoD suggests action plan. These suggestions should be recorded in an additional sheet attached to the work diary.

i. Faculty plan suitable actions implement and report to HoD. Staff measures the effectiveness of actions taken. (Eg. Use test marks, performance of an extra quiz addressing specific shortcoming, take feedback on specific issue to get students opinion)

j. Identification and remedy for slow learners. Identification of bright students and motivation

k. Course closing report.

The IQAC has developed a continuous review process on teaching-learning to sustain effective teaching and learning for targeted outcome. IQAC believes in appropriate planning for success. Following are few parameters on which review is conducted.

Curriculum Level

Review of Academic Process Calendar	-	Once in Semester
Review on Curriculum Planning	-	Once in Semester
Review on Teaching – Learning (Planning)	-	Once in Semester
Review on Teaching – Learning (Execution)	-	Once in Semester
Review on Teaching – Learning (Attainment)	-	Once in semester
Review on Syllabus Completion Monitoring	-	Twice in semester
Review on Teaching Feed Back from students	-	Twice in semester
Review on Conduct of Remedial Classes	-	Once in semester
Review on Quality of Projects/Product Development-		Once in Year

Co-Curricular Level

Review on Industrial Visits	-	Once in Year
Review on Internships	-	Once in year
Review on Guest Lectures/Work Shops/		
Certification/Value Added course for students	-	Once in semester

Review on students Technical Paper Publication in Journals/

Technical Events	-	Once in year
Review on Quality of News Letter Publication	-	Once in year
Review on Conduct of Activities by Professional Bodies	-	Twice in year

Extra-Curricular Level

Review on Student participation in Art/Literary/Cultural Activities	-	Once in Year
Review of Student participation in Sports & Games	-	Once in year
Review of Student participation in NSS activities	-	Once in year
Review of Student participation in NCC activities	-	Once in year

Organisation level

Review on attainment of Cos, POs and PSOs	-	Once in year
Review on ICT / Laboratory facilities	-	Once in year
Review on Best practices/Innovation/product Development	-	Once in year
Review on Faculty Development Programs conducted / attended	-	Twice in year
Review on Budget planning & utilization	-	Once in year
Review on finance audit	-	Once in year

Feedback System and Monitoring Quality of teaching learning process.

Feedback System

Structures & Methodologies of Operations

IQAC has implemented a structured feedback mechanism for analysing the effectiveness of the teaching learning process through

- Mentoring
- Mid semester feedback
- Informal feedback from the students

Mentoring

The feedback received on academic grievances related to coverage of syllabus, understanding level,

grievances on the examinations, study materials, need of special or revision classes from the students are analysed through mentoring system. The feedback received on non-academic grievances such as infrastructure, transportation, hostel, food, activities are solved.

In few cases, solutions are provided directly by the mentor, whereas in other cases, problems are reported to the HoD for further action. The non-academic complaints are forwarded to the appropriate authorities by HoD for solutions and respective coordinators follow-up. Academic grievances are handled by the subject teacher and HOD. The action taken to redress the suggestions expressed in the meeting is recorded in the minutes of meeting. This kind of practice helps to improve the teaching-learning process.

Mid Semester feedback

The IQAC has recommends a set of questions to be answered by the students using hardcopy.

The analysis report is taken by the IQAC coordinator and the faculty member may be called for the personal counselling for having feedback between 50% to 60% so as to improve teaching methods. If faculty having feedback less than 50%, IQAC head suggest to concern hod to change the subject of concern subject handling faculty or swap the subjects between faculty members Students'. feedback on teaching-learning process is given due weightage in the self-appraisal form of the faculty members.

Informal Feedback on Teaching-Learning Process

An informal feedback on teaching-learning process is collected by the course teachers, Faculty advisor, HOD and IQAC (during academic audit). This helps the teacher to involve the students through various teaching pedagogies.

6.5.3 Quality assurance initiatives of the institution include:

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

Response: C. 2 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document

NAAC

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

The Academic teaching and community outreach with a focus on addressing gender equality gaps plays a vital role in the development of key policies and steps contributed towards women's empowerment. The Institute established a Women Empowerment Cell with the vision of "*Preserving and Strengthening the Status of Women*", and with the objectives to develop self-confidence, prevent sexual harassment, promote general well-being of female students, teaching and non-teaching women staff of the College, providing opportunities and organizing programs on gender-related issues with emphasis on educational attainment, health, preparation for economic opportunity and safety. These programs help female students to be financially, mentally and emotionally empowered so as to promote their growth as individuals in their own rights. In organizing curricular & co-curricular activities the girl students/women faculty will be given appropriate preference. Every department will have a women faculty coordinator for taking care of contribution of students/staff in the events organized. The committee submits the action plan with details of curricular and co-curricular activities at the beginning every academic year related to the promotion of gender equality. NIT-R has a systematic process/approach for conduction of all these events. This enables us to meet the set objectives and outcome.

NIT-R provides specific facilities for women empowerment as follows:

1. Safety and security

- The entire campus is under CCTV surveillances.
- In library separate reading rooms for boys and girls are provided.
- Without wearing helmet, the students with bikes are not allowed into the campus.
- The district police authorities kept a pink box to drop any complaint of the students.
- Regular patrolling is done by local police also displayed the contact number of police help line.
- Female faculties will be appointed as hostel wardens to take care of the girls residing in hostel.
- The Internal Complaint Cell as per the guidelines of VTU is active to address all women grievances.

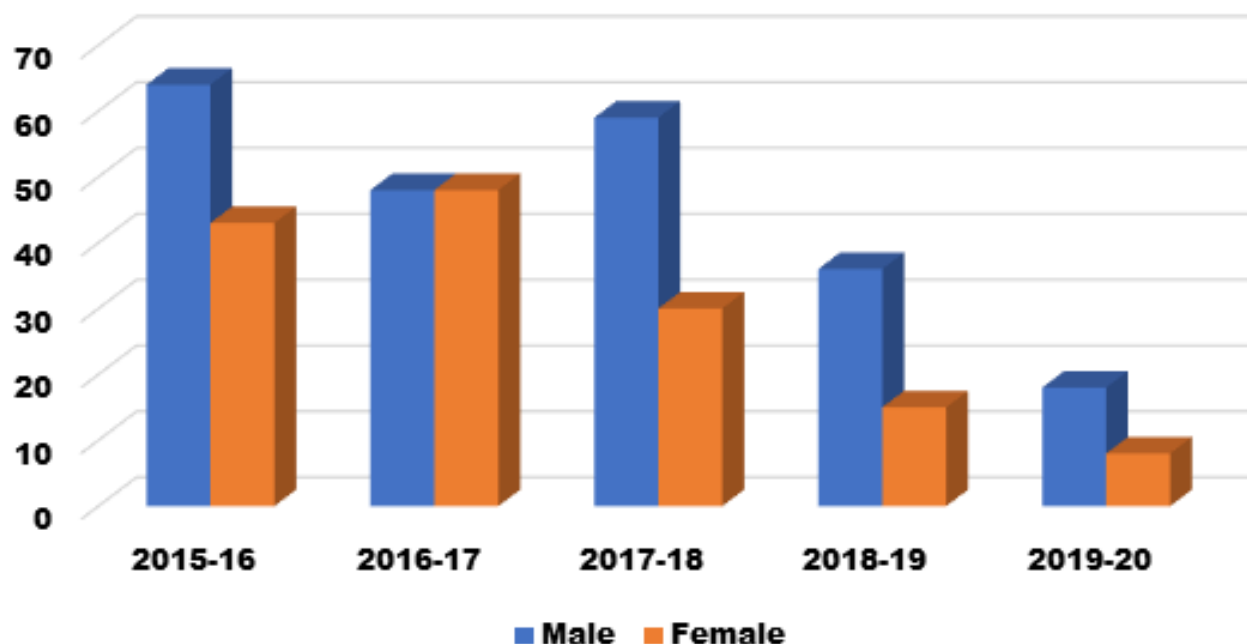
2. Counselling

For every fifteen student's there will be a faculty counselor. During counselling the students related academic and other information like health profile, teasing problems, academic grievances, any other personal/family problems will be traced out and necessary action will be initiated.

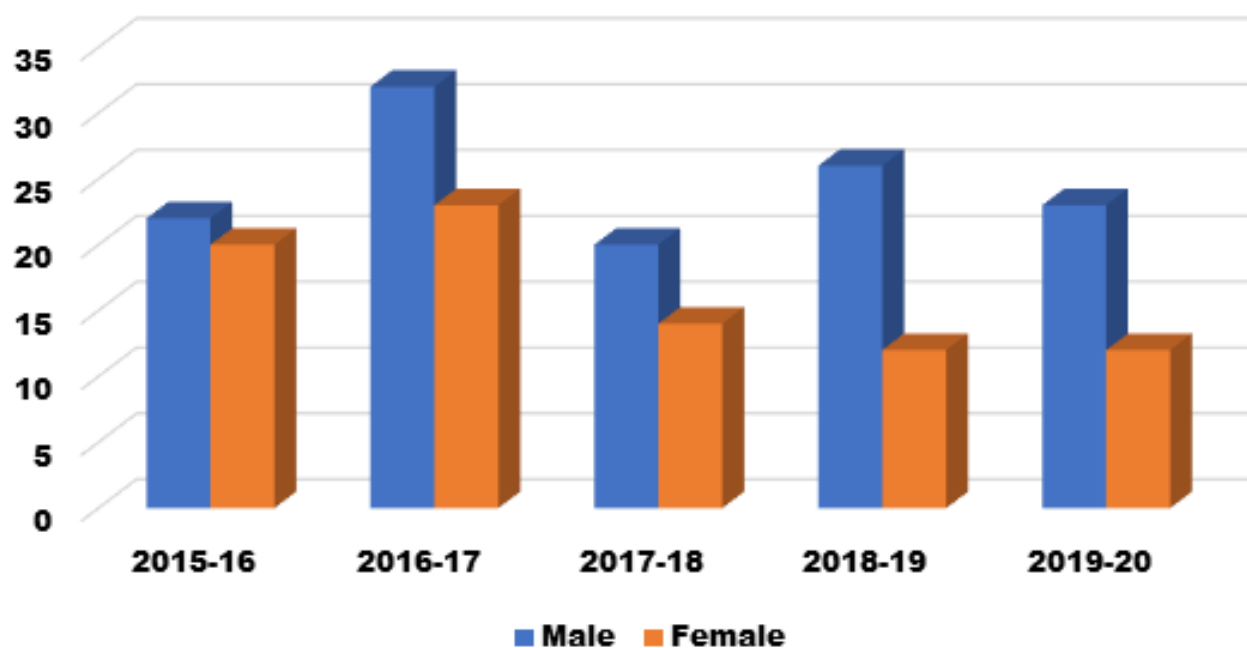
3. Common Rooms: every block and floor of NIT-R are equipped with common rooms which are well furnished and easily accessible. There will be a female attendant in each common room to assist the girls students as needed. In case of any sickness the students will be taken to the Navodaya Hospital and research centre situated in the adjacent campus.

4.Extension of Lunch break for baby care: The female faculty will be permitted to avail special permissions beyond lunch break timings to attend the needs of the young children about one to one and half hour.

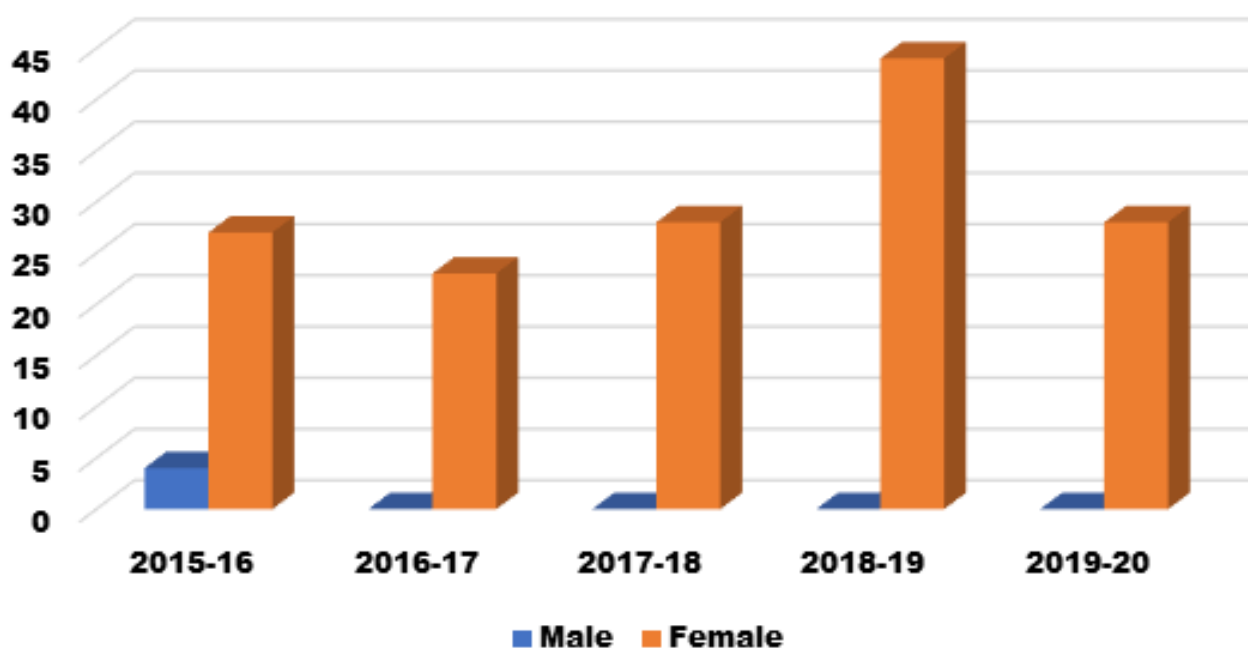
Admitted Students



FACULTY



OTHER STAFF



YEAR	GIRLS	BOYS	MALE FACULTIES	FEMALE FACULTIES	OTHER FEMALE STAFF	OTHER MALE STAFF
2014-15	79	48	13	19	15	2
2015-16	64	43	22	20	27	4
2016-17	48	48	32	23	23	--
2017-18	59	30	20	14	28	--
2018-19	36	15	26	12	44	--
2019-20	18	8	23	12	28	--

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

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

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

Response: B. 3 of the above

File Description	Document
Any other relevant information	View Document

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

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

The Institute is committed to create an eco-friendly campus. The campus is kept clean & tidy with full of greenery. It has taken a number of positive steps to reduce its environmental impact. The institute ensures the green environment by a dedicated team of gardeners and sweepers to take care of lawns, gardens and planting maintenance. The Institute has conducted the Green Audit and strives to implement the suggestions. The intention of organizing Green Audit is to upgrade the environment condition in and around the institution. It is carried out with the aid of performing tasks like solid waste management, energy conservation, and sewage treatment plant to turn the campus into a better environmental friendly institute. The Institute has conducted 'Go Green' & 'No Plastic' awareness programs.

1. **Solid Waste Management:** The solid waste that is generated in the campus is segregated into bio-degradable and non-bio-degradable. The bio-degradable waste is dumped into pit located inside the campus and decomposed, which will be used later as manure to plants. Whereas the non-bio-

degradable waste is also collected by municipal authorities were going to commercialised by selling to the recyclable waste to the Hyderabad based companies.

2. **Liquid waste management:** The liquid waste of the campus is discharged into underground sewage system of the Raichur Municipal Corporation. All waste water lines from toilets, bathrooms, kitchens etc. are connected to the septic tank. The chemical wastes are neutralized and disposed.
3. **E-waste management:** The generation of e-waste is not significant in the campus as the used e-components like computers are given to sister and other needy Institutions. Other e-waste generated in the campus are given to e-waste collectors.
4. **Biomedical waste management:** The institution does not produce the above waste materials.
5. **Waste recycling system:** The recyclable wastes such as examination papers are collected and periodically supplied to the local recycling vendors to avoid wastage dumping. One sided paper is re-used by the faculty members and staff for rough works. Single used plastic water bottles are collected and used for saplings.
6. **Hazardous chemicals and radioactive waste management:** the trust has established an MoU with REMAX Company, Bangalore. The hazardous chemicals are collected/connected and treated in the effluent plant and then disposed to the UGDS.

File Description	Document
Link for Geotagged photographs of the facilities	View Document

7.1.4 Water conservation facilities available in the Institution:

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

Response: B. 3 of the above

File Description	Document
Any other relevant information	View Document

7.1.5 Green campus initiatives include:

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

Response: Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document

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

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

Response: A. Any 4 or all of the above

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

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

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

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

(within 500 words).

Response:

Tolerance and Harmony towards Cultural & Regional factors

The institute puts lot of efforts/initiatives in bringing an inclusive environment. The students and staff of this institute are from different cultural background and from different states. The staff and students belong to different communities like Hindus, Muslims, Christians, Jains etc. being their mother tongues different like Kannada, Hindi, Telugu, Tamil etc. the institution has a very effective approach to maintain tolerance and harmony even though they belong to different communities and with different culture by organizing the events which bring the harmony and integrity among the students. Yoga, guided meditation sessions, seminars on human values are organized every semester to create coherent environment and respect for individual. Organizing youth day, republic day, womens day, science day, engineer's day, Independence Day, matra bhasha divas, state formation day etc. promotes nationalism and patriotism among the students and staff community.

Linguistic factors:

For linguistic tolerance and harmony once in a year we conduct essay competitions in their own languages in which they can write in their mother tongues also as directed by MHRD we started conducting Matra bhasha divas. The affiliated university VTU has introduced as per the instructions of Karnataka government the credit courses Vyavaharika Kannada (Kannada for communication) and

Aadalitha Kannada (Kannada for Administration) in the curriculum from 2018-19 AY onwards with the aim of making the students to have a better understanding of any aspect.

Communal factors:

Also, institute organizes events and campaigns by the NSS and YRC of NIT-R like plantation, blood donations, greenery importance awareness programmes Environmental day, Swachh Bharath Abhiyan, Constitution day, Sadh bhavana day, Jal divas etc. also the women empowerment cell of the institute organizes Ethnic day, Women's day programmes sponsored by NCW to empower the women/girls of all sects. Students and staff demonstrates communal harmony by celebrating the festival Dewali, Eid, Christmas and Holi collectively irrespective of religious, racial, cultural and lingual identities.

Socio-economic & other diversities

So far 1200+ students are graduated from the institute from 2008 onwards. Majority of them are from rural areas and belong to middle class. Nearly 80% of the students got employment and supporting their families. The institute strives for uplifting the students and their families socially and economically.

File Description	Document
Link for any other relevant information	View Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

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

Response:

The majority of the students who seek admission to the college hail from remote rural areas. They are not fully aware of the great culture of the country. They even do not know about the role the nation had played in the history of the world. The authorities of the Institution know that the students of this generation need to be enlightened about the history and culture of this country. They also need to be told about the freedom struggle and contribution given by great stalwarts in the freedom struggle. It is observed that they do not have any knowledge of the Constitution of the country. They are not aware of duties and rights of a common man in India. In view of this the affiliated university VTU has introduced the courses Constitution of India, Professional Ethics, Cyber Law in the curriculum as mandatory credit courses to fulfil the requirements of getting degree. The objective of these courses, to provide basic information about Indian constitution, to identify individual role and ethical responsibility towards society, to understand human rights and its implications.

The outcomes of these courses are

- Have general knowledge and legal literacy and thereby to take up competitive examinations
- Understand state and central policies, fundamental duties
- Understand Electoral Process, special provisions
- Understand powers and functions of Municipalities, Panchayats, Co-operative Societies,
- Understand Engineering ethics and responsibilities of Engineers.
- Have an awareness about basic human rights in India, Constitution of India and professional ethics

Apart from the curricular activities functions like Independence Day, Republic Day, Constitution Day, Human Rights Day, Gandhi Jayanti, Engineers Day, Woman's day, NSS foundation Day, National Youth Day etc. are celebrated in the college.

Similarly the students have to be told about the role they shall be required to play as Engineers after completion of their academic pursuits. The college therefore conducts programs to enlighten them about the role they shall be required to play in future. Birth and Death Anniversaries of the great leaders like Mahatma Gandhi, Dr. A. P. J. Abdul Kalam, Savitribai Phule etc, are observed to make the students aware of their contribution in shaping the country. Eminent speakers are invited to speak on such occasions.

These speakers throw light on the lives and work of these stalwarts. The students get motivated and inspired to espouse the cause of National Development.

After the Independence the country had to toil hard to vie with other developed countries. Due to earnestness and foresight of the persons who were at the helm of the affairs of the country the country began to make rapid progress. Since Independence the country made huge efforts so today India is considered as one of the powerful countries. India is not dependent on any other country for the needs of the people of the country. The students of this generation have to be told how India has made rapid progress and today it is almost on the acme of glory and success.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document
Link for any other relevant information	View Document

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

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

Response: A. All of the above

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

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

Response:

The institution celebrates Days of National Importance like Independence Day and Republic day with fervour and festivity. Death and Birth anniversaries of great personalities, Important Days of National and

International events are also celebrated meaningfully. The institution celebrates these days of national importance to recall the events or contribution of our leaders in building the nation.

Republic Day It is a day to remember when India's constitution came into force on January 26, 1950, completing the country's transition toward becoming an independent republic.

World water day is held annually on 22 March as a means of focusing attention on the importance of freshwater and advocating for the sustainable management of freshwater resources.

22 April- is all about appreciating the uniqueness of our planet Earth with its incredible biodiversity. On this day various national and international activities are conducted to understand the biodiversity and how should we protect our nature – plants, animals and environment.

8 May : The aim of this day is to provide relief to common people in distress and desolation due to war, food shortage, epidemic diseases or natural calamities.

National Technology day is being observed across India on May 11 to mark India's technological advancements and to promote the development of technology in various fields

14 June encourages students/faculties to donate blood voluntarily without compensation. The goals of World Blood Donor Day are: To raise awareness that individuals can save lives and improve the health of others by donating blood.

21 June: to develop the habit of meditation among youngsters so that they can enjoy more peace of mind and self-awareness, which is essential for a stress-free existence.

15 August Independence Day marks the end of British rule in 1947 and the establishment of a free and independent Indian nation. It also marks the anniversary of the partition of the subcontinent into two countries, India and Pakistan.

29 August - is to create awareness about the importance of the game and to focus on the people's attention in understanding the benefits of the human body.

5 September - (India) has been dedicated to the teaching profession by celebrating this day as teachers day all through the India. It is celebrated every year to commemorate the birth anniversary of former India President, Dr. Sarvapalli Radhakrishnan as well as pay honour to the teachers.

15 September - Engineer's Day (India) to take a pledge to promote and encourage the youth to select for Engineering education. To produce quality Engineers for the bright future of our country.

Gandhi jyanthi is celebrated on 2 October every year to mark the birth anniversary of the most prominent leader of the Indian Independence struggle

10 December - is celebrated across the world to promote awareness about human rights among the people. Get together and celebrate in co-operation to discuss and highlight the specific issues of the human rights.

File Description	Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

Best Practice I

1. Title of the Practice: Skill Development Centre (SDC)

2. Objectives of the Practice

- To train the students to achieve their goals (placements, higher education, entrepreneurs).
- To enhance the employability opportunities by strengthening the programming, aptitude, communication skills, personality development etc.
- To make the students ready to face the competitive exams
- To create the zeal among the students to settle as entrepreneurs

3. The Context

Since the industry is continuously evolving and adapting advanced technologies, just learning the curriculum is not sufficient. There is often a gap between what is learnt in the institution and the industrial expectations. In order to bridge this gap and make students industry-ready, the institution established a skill development centre headed by a senior professor. The emphasis is given for imparting aptitude, communication, programming, entrepreneur personality development skills. IQAC will take care regular monitoring and assessment of academics.

4. Practice

- **SDC** imparted skills like communication, programming, aptitude, entrepreneur development, personality development etc.
- **Communication skills:** NIT-R established a separate LAB for strengthening the English communication skills with 40 computers and all other computer accessories and software's. As per the AICTE directions in both I/II semester VTU has introduced professional English communication course as a credit course. Hence for a first-year students it is mandatory to complete the course.
- For the subsequent 2nd 3rd and 4th year students the lab was kept opened for effective utilization of it by the students.
- There is an English faculty who will be continuously educating the students as per the need basis.
- **Programming skills:**
 - We have established programming club at institutional level for imparting programming

skills on various platforms.

- As per VTU curriculum, there is a programming subject in the first year (both semesters) for 2nd 3rd and final year of students. Separate classes are included in the regular time table. The curriculum is formulated in three levels such as basic, moderate and advanced.
- **Aptitude:** Aptitude skills are imparted by designing separate curriculum semester wise from second year onwards up to final year. One period per week for second and third years and two period per week for final years. The students were assessed continuously for every fort night.
- **Entrepreneur development (ED):** A cell is established towards imparting the entrepreneur skills to the students, which organised and promoted the ED related events.
- **Personality development:** The TPO cell of the institution organised career guidance and personality development programmes to enhance placement opportunity of the students.

5. Evidence of Success

Particular	2015-16	2016-17	2017-18	2018-19	2019-20
Placement details	43	60	63	68	12
Higher education	22	8	11	8	
Government jobs/competitive exams	2	3	3	5	2
Entrepreneurs	5	1	3	0	0

6. Problems Encountered and Resources Required

- Being affiliated to a university, students are required to follow the traditional instructional method of learning where exams are given much importance. This makes students lose interest in pursuing online and other value-added courses. Owing to time constraints, they also find it difficult to balance between regular academic work and co-curricular & placement activities.
- To solve this, all the computer centres, research labs and the library are kept open beyond the working hours and on select holidays for students to complete their courses and projects.
- students from rural background could not stay back beyond the working hours. Some students missed the classes.
- As value added courses could not be incorporated within the regular academic calendar, such courses were planned during the semester holidays which enabled students to enrol and attend the same.

Best Practice II

1. Title of the Practice: Go Green campus/NITR green initiative

2. Objectives of the Practice

- Promote the concept of corporate social responsibility (CSR) as a critical element in human development.
- Enhance awareness of environmental issues especially among youth by encouraging them to create

a wide range of environmental projects.

- Promote and strengthen the concept of sustainable partnership building between different stakeholders (Civil society, private sector etc) by actively encouraging different sectors to work together through the 'Go Green' activities.
- Exchange strategies, experiences, and identify common interests in relation to environmental protection and sustainability.
- Identify problems, constraints and priorities on one hand, and opportunities and possible areas of cooperation with various stakeholders on the other.
- Build social capital by bringing various stakeholders together for networking and cooperation
- Educate individuals about sustainability in their specific regional environment and globally.
- Support individuals in their efforts to adopt environmentally sustainable lifestyles.
- Build communities of people who take action towards smarter, more environmentally friendly consumption
- Improve the quality of life through good consumption and conservation habits and increased involvement in their community

3.The Context

“Go green” means to pursue knowledge and practices that can lead to more environmentally friendly and ecologically responsible decisions and lifestyles, which can help protect the environment and sustain its natural resources for current and future generations.

Students and faculties in the program not only learn the value of caring for the environment, but they have fun along the way. Students participate in recycled crafts, recycled games, gardening and composting, planning and delivering outreach events, and utilizing technology to educate others. One of the most popular going green concepts is done by practicing the 3R principle which is by reducing, reusing, and recycling the resources used, using organic products, and installing equipments with green technology.

4.Practice

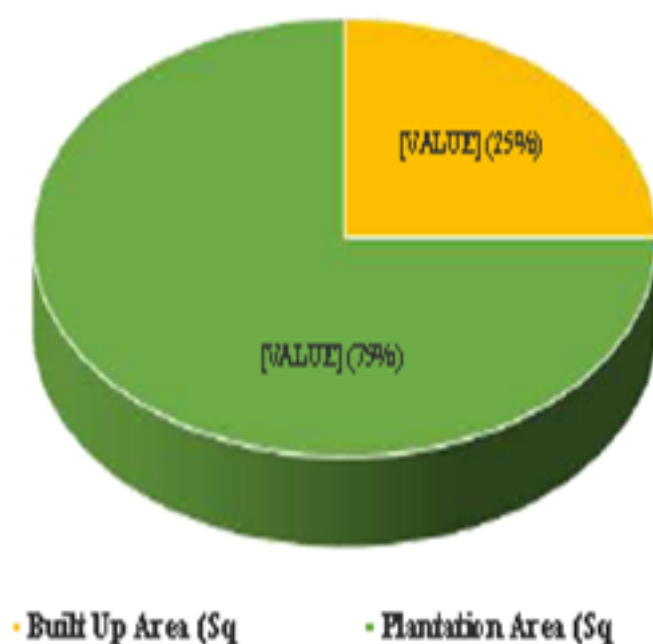
- Plantation is done on each event with the resource person and students.
- Awareness “Go Green” is done by creating awareness programmes like swach bharath abhiyaan, jal divas etc
- dedicate team to maintain activities like watering, fertilization etc. for maintaining good green. Separate budget is allotted for this.
- Every student and faculty at their interest plantation can be done.
- Green lawns are maintained at selective areas in the campus.
- Every year Green Audit and environmental audits are done.
- Every month once “No vehicle day” is adopted in common practices to reduce the pollution.
- Swach Hi Seva is done regularly.

5. Evidence of Success

- Installation of 0.5MW solar power plant in the campus led to
 - Carbon emission reduced 690 tons/year
 - Matured trees planted 31,550
 - Coal usage abated 330 tons/year
- Land usage of NIT Raichur campus

CATEGORIES OF LAND USE	AREA
PLANTATION AREA	227635.5
BUILT UP AREA (INCLUDE ROADS)	75878.5
TOTAL AREA	303514.0

LAND USE ANALYSIS
, NIT



6. Problems Encountered and Resources Required

- Average rainfall is less as per the district metrological department
- Due to climatic conditions less number of plants survive in this area.
- Only little number of plants is adjusted to the soil quality.

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

7.3 Institutional Distinctiveness

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

Response:

The institution believes that academically excelling the students along with inculcating ethical and moral values with societal consciousness and finally making them to kindle the economy of nation.

Context:

The institution with a vision to impart high quality technical education and mould young students globally competent. Also societal transformation nourishes them through effective teaching learning process, innovative thinking and community outreach.

Practice:

The institution with foresight of improving the students' in all dimensions follows modern methods of teaching apart from the traditional chalk and talk method. In teaching learning process each student is provided with a blend of concepts and practices with modern infrastructure facilities in a conducive environment. The students are made to acquire knowledge through various learning mechanisms like teaching-learning, self learning, learning by practicing and group learning. The curriculum designed by affiliated university incorporated the courses which are in-line with these learning mechanisms. The faculties are well versed in delivering the contents adapting suitable mechanism. There is a structured administration of the course for prescribed periods. The faculty maintains the course file with all needed curriculum delivery components these include identification of slow learners and advanced learners for taking appropriate measures. As per the regulations of the university continuous internal evaluation is done for theory and labs. Finally the students are evaluated by the university. The quality of academics is monitored by IQAC and any reforms/changes obeying the university curriculum are brought in to practice through DAC, CAC and GC if needed. The curriculum is a blend of various courses like core, elective, humanities, sciences, linguistic, value added etc. this help the student to become academically knowledgeable as well as a good human being. Apart from regular class works good number co-curricular and extra-curricular activates make the student more pragmatic. Students are provided with interactive learning environment through usage of ICT and smart classes. The students are provided with access to e-content resources of the library. The students are motivated towards research through project based learning. The students' chapters and department associations offer a vibrant space for the students to work on their interest beyond the classroom.

File Description	Document
Link for appropriate web in the Institutional website	View Document

NAAC

5. CONCLUSION

Additional Information :

1. ISO 9001 : 2015 certified institution.
2. Applied for UGC 2(f)
3. Ragging free campus
4. Certificate of recognition “The DOYENS guardians of knowledge” by the Hindu Group.
5. India 9th ranking by Education World (India private higher education ranking 2019-20) grand jury award for student diversity.
6. Fourth partner energy recognizes Navodaya Institute of Technology as a “GREEN CHAMPION” for installing 500kWp rooftop solar power plant. The power generated from the solar plant is equivalent to Carbon emission reduced 690- tons/year, matured trees planted 31550 and coal usage abated 330tons/year.
7. The Institution has an active Entrepreneur Development Cell which organizes a number of events to promote awareness of entrepreneurship.
8. The Institution inculcates social consciousness among its students through active forums such as NSS, Youth Red Cross unit, Women Empowerment Cell & Grievance Redressal Cell.

Concluding Remarks :

NIT Raichur has completed 12 years of its establishment in giving quality education to the students since 2008 with support of vision of the management and governance. The state-of-the-art infrastructure, amenities and other support services provided in the campus has nurtured the student growth as well as the learning process. NIT-R with its defined vision has abled to provide the holistic growth of students. The research initiatives, technical training, industry-academia interface, extension and outreach programmes by the institution have promoted research culture and establishment of good rapport with the community and industries. In pursuit of excellence, NIT-R looks forward to achieve more heights in the times ahead. The thrust in academic excellence and holistic growth of the students remain the prime focus of the institution. The faculty members join hands in the Institution’s zeal to enhance and sustain quality education flagging way for the attainment of Vision, Mission and Values. The institution’s societal commitment provides opportunity for the faculty members and students alike to render services to the society. The institution today can boast of activities and accomplishments with regard to the social responsibility and academic excellence.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.3	<p>Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years</p> <p>1. Academic council/BoS of Affiliating university 2. Setting of question papers for UG/PG programs 3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses 4. Assessment /evaluation process of the affiliating University</p> <p>Answer before DVV Verification : A. All of the above Answer After DVV Verification: B. Any 3 of the above</p>																				
1.2.2	<p>Number of Add on /Certificate programs offered during the last five years</p> <p>1.2.2.1. How many Add on /Certificate programs are added within the last 5 years. Answer before DVV Verification:</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>13</td><td>13</td><td>15</td><td>15</td><td>15</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td><td>15</td></tr></table> <p>Remark : Duplicate course names and course codes removed.</p>	2019-20	2018-19	2017-18	2016-17	2015-16	13	13	15	15	15	2019-20	2018-19	2017-18	2016-17	2015-16	0	0	0	0	15
2019-20	2018-19	2017-18	2016-17	2015-16																	
13	13	15	15	15																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
0	0	0	0	15																	
1.2.3	<p>Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years</p> <p>1.2.3.1. Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years Answer before DVV Verification:</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>334</td><td>321</td><td>383</td><td>400</td><td>365</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>227</td><td>256</td><td>383</td><td>400</td><td>361</td></tr></table> <p>Remark : Revised the values of the last two years as per the student list found in the new</p>	2019-20	2018-19	2017-18	2016-17	2015-16	334	321	383	400	365	2019-20	2018-19	2017-18	2016-17	2015-16	227	256	383	400	361
2019-20	2018-19	2017-18	2016-17	2015-16																	
334	321	383	400	365																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
227	256	383	400	361																	

supporting document.

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

1.3.2.1. Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
318	316	335	321	326

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
221	267	289	282	281

Remark : Revised as per the attached list.

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders

1) Students

2) Teachers

3) Employers

4) Alumni

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: A. All of the above

1.4.2 Feedback process of the Institution may be classified as follows:

Options:

- 1. Feedback collected, analysed and action taken and feedback available on website**
- 2. Feedback collected, analysed and action has been taken**
- 3. Feedback collected and analysed**
- 4. Feedback collected**
- 5. Feedback not collected**

Answer before DVV Verification : A. Feedback collected, analysed and action taken and feedback available on website

Answer After DVV Verification: A. Feedback collected, analysed and action taken and feedback available on website

2.1.1 Average Enrolment percentage (Average of last five years)

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
95	141	154	180	185

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
95	138	153	172	185

2.1.1.2. Number of sanctioned seats year wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
336	456	456	456	516

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
327	456	456	456	516

Remark : Revised the count of number of students as per the attached document. Revised the number of sanctioned seat in the current year as per AICTE data.

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
80	127	133	160	162

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
72	108	111	136	141

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
13	11	12	7	12

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
16	10	11	7	12

Remark : considered the attached list of teachers with PH.D.

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
0.18	0.09	0	0	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0.26	0.34	0	0	0

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

3.1.2.1. Number of teachers recognized as research guides

Answer before DVV Verification : 6

Answer after DVV Verification: 0

Remark : Metric opted out by the HEI.

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	2	0	0	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
3	2	0	0	0

3.1.3.2. Number of departments offering academic programmes

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
5	5	5	5	5

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
7	7	7	7	7

Remark : Revised 3.1.3.2 as per the departments mentioned in the IIQA.

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

3.2.2.1. Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
9	8	8	9	7

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
7	8	8	8	7

Remark : Revised as per the attached reports. Overwritten of date/year on the program brochure will not be considered.

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

3.3.1.1. How many Ph.Ds registered per eligible teacher within last five years

Answer before DVV Verification : 2

Answer after DVV Verification: 0

3.3.1.2. Number of teachers recognized as guides during the last five years

Answer before DVV Verification : 6

Answer after DVV Verification: 0

Remark : Metric opted out by the HEI.

3.3.2	<p>Number of research papers per teachers in the Journals notified on UGC website during the last five years</p> <p>3.3.2.1. Number of research papers in the Journals notified on UGC website during the last five years.</p> <p>Answer before DVV Verification:</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>0</td><td>1</td><td>0</td><td>1</td><td>6</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>0</td><td>1</td><td>0</td><td>1</td><td>3</td></tr></table>	2019-20	2018-19	2017-18	2016-17	2015-16	0	1	0	1	6	2019-20	2018-19	2017-18	2016-17	2015-16	0	1	0	1	3
2019-20	2018-19	2017-18	2016-17	2015-16																	
0	1	0	1	6																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
0	1	0	1	3																	
3.3.3	<p>Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years</p> <p>3.3.3.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>15</td><td>17</td><td>32</td><td>24</td><td>28</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>2</td><td>0</td><td>0</td><td>0</td><td>1</td></tr></table> <p>Remark : Considered only those books for which Navodaya Institute of Technology is the Affiliating Institute at the time of publication and the name of the author matches with the mentioned name in the e-copy of the book.</p>	2019-20	2018-19	2017-18	2016-17	2015-16	15	17	32	24	28	2019-20	2018-19	2017-18	2016-17	2015-16	2	0	0	0	1
2019-20	2018-19	2017-18	2016-17	2015-16																	
15	17	32	24	28																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
2	0	0	0	1																	
3.4.2	<p>Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years</p> <p>3.4.2.1. Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.</p> <p>Answer before DVV Verification:</p> <table><tr><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td></tr><tr><td>10</td><td>05</td><td>08</td><td>04</td><td>04</td></tr></table>	2019-20	2018-19	2017-18	2016-17	2015-16	10	05	08	04	04										
2019-20	2018-19	2017-18	2016-17	2015-16																	
10	05	08	04	04																	

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
00	00	00	00	00

3.4.3

Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
21	14	15	11	13

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
13	8	6	4	5

Remark : Revised considering the valid extension and outreach programs only and excluded those which are conducted by the HEI itself without any collaboration.

3.4.4

Average percentage of students participating in extension activities at 3.4.3. above during last five years

3.4.4.1. Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
490	530	549	620	522

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
490	530	290	220	270

Remark : Revised as per the event and activities considered in 3.4.3

3.5.1

Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

3.5.1.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
41	30	0	2	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : No proper copy of collaboration or related documents provided as per the requirement. As per the SOP, Certificates issued by external agencies to students/Faculty for research/Faculty exchange/Student exchange/ internship cannot be the proof for having collaboration with the external agency.

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years**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**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
26	9	8	11	1

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
15	12	8	7	1

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)**4.1.3.1. Number of classrooms and seminar halls with ICT facilities**

Answer before DVV Verification : 35

Answer after DVV Verification: 35

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)**4.1.4.1. Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16

41.45	17.61	25.03	33.98	44.05
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Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
55.09	17.61	25.03	33.98	44.05

Remark : Edited as per the figures mentioned in the attached document.

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
99.72	242.00	306.39	56.07	84.04

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
110.40	242.00	306.39	56.07	84.04

Remark : Revised as per the attached document

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
350	364	703	608	464

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
393	371	699	611	435

Remark : Revised the count as per the authorised list.

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the

institution / non- government agencies during the last five years**5.1.2.1. Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
170	114	71	28	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
171	114	67	28	0

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years**5.1.4.1. Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
551	590	624	678	581

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
60	45	0	0	0

Remark : List of students benefited by guidance for competitive examinations not provided. Considered only those students whose certificates are attached.

5.2.1 Average percentage of placement of outgoing students during the last five years**5.2.1.1. Number of outgoing students placed year - wise during the last five years.**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
25	96	78	103	69

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
25	96	77	103	69

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural

activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
0	5	3	0	3

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
10	0	3	0	0

Remark : Revised considering only inter-university/state/national or international achievements.

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

5.3.3.1. Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
18	23	23	25	28

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
18	22	23	21	27

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
55	63	35	31	21

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
34	44	27	25	20

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
22	13	27	24	13

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
17	12	18	17	10

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3.97	18.97	7.29	0	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

6.5.3 Quality assurance initiatives of the institution include:

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

Answer before DVV Verification : B. 3 of the above

Answer After DVV Verification: C. 2 of the above

7.1.2	<p>The Institution has facilities for alternate sources of energy and energy conservation measures</p> <ol style="list-style-type: none"> 1. Solar energy 2. Biogas plant 3. Wheeling to the Grid 4. Sensor-based energy conservation 5. Use of LED bulbs/ power efficient equipment <p>Answer before DVV Verification : A. 4 or All of the above Answer After DVV Verification: B. 3 of the above Remark : Considered 1, 3 & 5 as per the attached proofs. No Proof found for sensor based energy conservation.</p>
7.1.4	<p>Water conservation facilities available in the Institution:</p> <ol style="list-style-type: none"> 1. Rain water harvesting 2. Borewell /Open well recharge 3. Construction of tanks and bunds 4. Waste water recycling 5. Maintenance of water bodies and distribution system in the campus <p>Answer before DVV Verification : A. Any 4 or all of the above Answer After DVV Verification: B. 3 of the above Remark : Serial no. 2, 3 & 4 are considered.</p>
7.1.6	<p>Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:</p> <ol style="list-style-type: none"> 1. Green audit 2. Energy audit 3. Environment audit 4. Clean and green campus recognitions / awards 5. Beyond the campus environmental promotion activities <p>Answer before DVV Verification : A. Any 4 or all of the above Answer After DVV Verification: A. Any 4 or all of the above</p>
7.1.10	<p>The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.</p> <ol style="list-style-type: none"> 1. The Code of Conduct is displayed on the website 2. There is a committee to monitor adherence to the Code of Conduct 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized <p>Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above</p>

2.Extended Profile Deviations

ID	Extended Questions				
1.1	Number of courses offered by the Institution across all programs during the last five years				
	Answer before DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16
	399	410	478	449	457
	Answer After DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16
	365	380	426	398	399
2.1	Number of students year-wise during last five years				
	Answer before DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16
	653	735	784	861	767
	Answer After DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16
	651	735	782	856	766
2.2	Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years				
	Answer before DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16
	163	217	217	217	244
	Answer After DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16
	164	228	228	228	258
3.1	Number of full time teachers year-wise during the last five years				
	Answer before DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16
	87	87	82	82	80
	Answer After DVV Verification:				
	2019-20	2018-19	2017-18	2016-17	2015-16

78	87	82	82	80
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