



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

NAGPUR INSTITUTE OF TECHNOLOGY, NAGPUR

**SURVEY NO 13/2, MAHURZARI, NEAR FETRI, KATOL ROAD, NAGPUR
441501**

www.nit.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Nagpur Institute of Technology, Nagpur, District-Nagpur (M.S.) is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. It is approved by AICTE New Delhi and DTE, Maharashtra State. Established in 2008, it is **accredited by NAAC**. Institute is engaged in running various Engineering programs in UG level i.e Mechanical Engg, Electrical Engg, Civil Engg, Computer Science and Engg, Information Technology with experienced academicians. It has received **Platinum Ranking by AICTE-CII Survey** of Best Industry Linked Institutes. It is an authorized Training Center of **National Skill Development Corporation (NSDC)**. It is having official **“ICT Academy of Huawei”** for HCIA Certifications. It is official Training Center of **MKCL**. It is having status as **Host Institute/Business Incubator of MSME**. It is having Incubation Sub-Center of **INCUBEIN**- Incubation center of Nagpur University. It has been ranked in Beginner category in **ARIIA (ATAL Ranking on innovation Achievements by AICTE)**. It has got 3 stars for activities and achievements at Ministry of Education’s Institution Innovation Council (IIC). It is having Center of Excellence of **EduSkills Foundation, Solid Woks Dassault Systems, Bentley Systems, ASG Vision**. It has received Star Performer award by **MKCL**. It is an **ISO 9001:2015** certified Institute. It is having MoUs with **leading** Industries and organizations. It has received research grant from **Rajiv Gandhi Science and Technology Commission**. It is also having **Institute of Engineers (IEI) Student Chapter, SAE Collegiate Club, ISTE Chapter, Life Time Institutional Member of Quality Circle Forum of India (QCFI), NPTEL Chapter, EWB India Chapter**. It has received **Entrepreneurship Awareness grant** from Department of Science & Technology, **ED Cell** grant from AICTE. The students and faculty members have **Patents**. The faculties have received various national awards.

Vision

Service to Society by creating Technical & Skilled manpower through Value based Technical Education

Mission

- To provide quality technical education to meet the requirements of industries and society.
- To equip students with need based technical skills through continual improvements in Teaching Learning processes and research activities.
- To inculcate ethical values for overall holistic development of students.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Green campus surrounded by lush green fields
- Qualified and dedicated faculty members with good team work.
- Progressive and Committed Management.
- Clear Vision, Mission, Goals and Objectives.

- Good Admissions.
- Active Internal Quality Assurance Cell (IQAC) to ensure quality in Teaching learning process.
- Effective mentoring system with close monitoring towards overall development of students.
- Excellent placement opportunities for students as the number of companies recruiting are increasing year by year.
- Constituted IEI, SAE, ISTE, QCFI, ISHRAE, chapters to facilitate co curricular and extension/outreach activities
- In house newsletters and magazines are published regularly
- Facilities available for various indoor and outdoor games and sports
- Financial support to participate in national and international level events.
- EduSkills, NPTEL Local Chapter, Tata strive for certification courses and internship.
- Center of Excellence – Edu- Skills, ASG Vision, Solid Works, Bentley Systems
- Extension and service to society through NSS and other Government bodies.
- Constant Endeavor to upgrade quality.
- MSME- Incubation Center and RTMNU – Incubation sub center
- MKCL and NSDC Training Center.
- Patents and Copyrights by faculty and students.
- Books published by faculty.
- Rankings like ARIIA, IIC, MKCL. AICTE- CII.
- National Rural Institutions Sustainability Grading - Accreditation for Green Campus by MoE Govt. of India.

Institutional Weakness

- Lack of interest among students towards higher studies/research owing to financial commitments (to repay educational loan)
- Departments yet to get recognition as research centers.
- Foreign linkage and collaboration.

Institutional Opportunity

- To become an Autonomous Institution.
- Scope for consultancy and research projects.
- Tie-up with research laboratories to promote knowledge
- Strong Alumni Association – a chance for industry offered courses in Curriculum enhancement
- Setting up Multi-Disciplinary research Centres.
- **Increased focus on higher education:-** Govt. on India focusing more on higher education to provide quality education for UG and PG courses
- **NEP** Implementation

Institutional Challenge

- Majority of the students joining the institution are from rural background with poor language and communication.
- Most of the students joining the institution avail educational loans for their studies and hence lack

interest towards higher studies/ entrepreneurship.

- Achievement of 100% completion rate - Providing placements for students in core engineering areas
- Securing funded research projects.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Institute follows the curriculum prescribed by the RTMNU Nagpur. The curriculum is implemented through preparation as well as critical thoughts by the teachers concerned.

- The Academic calendar of the institute, reflects University's academic calendar and includes curricular, co-curricular, extracurricular activities. Academic-Calendar and Teaching-plans are strictly followed and are audited regularly.
- The institution encourages the faculty to keep themselves updated their knowledge by offering refresher courses, faculty development programmes and workshops.
- Well defined mechanism for planning, execution and monitoring of curriculum and value added courses to enhance the skills of students towards industry expectations and competitive examinations.
- Institution is sensitive to gender, environment issues, human values and professional ethics and conducts different programs. University has introduced courses on professional ethics, Human values and Environmental science.
- Departmental activities are scheduled which include Industrial visits, Implant training, Guest Lectures, Project Competition, Seminars, Conference, Placement and Training and related activities.
- EduSkills, Solid Works, Bentley System, ASG Vision Center of Excellence for Certification Courses.
- The IQAC academic coordinator monitors and assists the faculty members for effective curriculum delivery.
- The feedback received from the students and stakeholders are carefully analyzed, discussed and appropriate actions are initiated.
- Curricular gaps are identified and communicated to University.

Teaching-learning and Evaluation

- Admission process for different programs through the Entrance Test conducted by the State Government of Maharashtra. The admission process ensures inclusion of students from all categories through social reservations defined by State Government of Maharashtra State.
- The institute has a Learning Management System and a good reservoir of e-learning materials. The excellent mentor-mentee system of the institute takes care of academic and stress related issues.
- Additional support for advanced learners students and student centric learning environment that promotes independent, interactive and collaborative learning.
- Encouragement and support for all co-curricular and extracurricular activities to nurture critical thinking, creativity and scientific temper.
- Well qualified, committed faculty with 15 PhD holders.
- Student centric learning is through experiential learning, participative learning, project based learning. Faculty members are intensively using the ICT based Teaching learning methods.
- Institution has brought several reforms in the examination system which comprises of Continuous Formative Assessment and Summative Examinations conducted at the end of the semester. The system

is fool-proof and transparent.

- Faculty and students are also educated on POs, PSOs, PEOs (also displayed on website).
- The institution systematically checks for attainment of outcomes and reviews the Teaching- Learning- strategies.

Research, Innovations and Extension

- Faculty members and undergraduate students are provided with adequate resources to pursue research in their respective field of interest. Students are encouraged to take up research project under the supervision of the faculty members.
- The institute has the Incubation Centre for the young entrepreneurs recognized by MSME and RTMNU.
- The faculty members have received research grants from central government.
- Faculty members have been granted with many patents and copyrights.
- Workshops/ seminars on IPR & Industrial linkages are conducted.
- During Project expo/Innovation competition, students are displaying their gadgets to encourage young minds who visit the expo.
- The faculty members pursuing research are encouraged by providing them the required equipments, books, leaves for research work, financial assistance for conferences/journals, e-resources, computer facilities, Wi-Fi etc.
- The college provides incentives to the faculty for their research contribution.
- The faculty members who do not possess Ph.D degree are advised to register for research work.
- The research papers have been published in the UGC recognized journals during last five years.
- More than 200 books/Chapters/ conference proceedings have been published by faculty members.
- Institution has an Industry Institute Partnership Cell (IIPC) which has signed 38 active MOUs with Industries, Institute of national Importance for Industry Academia linkages.
- Industrial linkage program such as internship, field trip, on-job training have been organized.
- Faculty members and students are actively involved in Institutional Social Responsibility activities through structured forums like NSS, Rotaract Clubs and Societies and programs/activity conducted by Govt. Organizations.
- Many recognition and awards are received for various extension activities from University, State level agencies and NGOs. Numerous activities have been organized in near past, such as tree plantations, adoption of the village, having a residential camp for building a rapport.

Infrastructure and Learning Resources

The state-of-art infrastructure augmented learning environment is the significant concern of the institution. The Management of Institutions is generous in enhancing the infrastructure as and when needed which promotes a good teaching learning environment.

- Campus area of 17.74 Acres and built-up area of 71813.5 sq.mtr. Sufficient number of class rooms and laboratories with all facilities as prescribed by AICTE/affiliating university.
- Classrooms and Seminar Halls are equipped with ICT facilities.
- College and Hostels are Wi-Fi enabled.
- High speed Internet connection with 300 Mbps Leased Line. The college has licensed and open source software in various departments.
- The Library has a collection of Volumes and Titles and print Journals, E-journals, E-Books are

available.

- Digital Library is equipped with 10 Systems; users can access e-resources.
- Faculty and students can access the facilities beyond the office working hours.
- Excellent power back up through generators
- Wide and spacious playground exclusively for boys and girls
- Welfare schemes for staff and students.
- Excellent campus maintenance. Adequate financial allocations are made for internal maintenance work of all infrastructures.

Student Support and Progression

- Institution puts in relentless efforts for the all round development of students. Student chapters of various professional societies like ISTE,IEI, ISHARE, SAE are active.
- Adequate representation is given for students in all academic/administrative committees and students are involved in the decision making process.
- More than 70% of the students avail scholarships & freeships from Government. Fee Concession is given to students from economically backwards sections.
- Grievance-Redressal-Committee and Anti-Ragging-Committee and Internal complaints committee help the students to address the issues, if there are any.
- Institution has a good placement record and on an average more than 60% of the students are placed on campus or opted for higher education in prestigious institutions. Students who are appearing for the competitive examinations are all qualified.
- Department level forums/ clubs to encourage students in cultural activities.
- The Alumni association contributes actively to the growth of the institution through the alumni association. Alumni association with active contribution of alumni in enhancing teaching learning process.
- Institute supports the Sports and cultural activities. It has financially supported the Sport Color Holder Students and for cultural activities.

Governance, Leadership and Management

- The institution has an effective and transparent governing system in tune with the vision and mission of the Institution.
- The organization structure of the institution and decentralization is clearly defined in the campus.
- The Governing Body conducts periodical meetings and analyses the progress of the institution and recommends the improvements.
- The Management has constant touch with the Principal to maintain cordial rapport to discuss the infrastructural needs, development, administration and appointments.
- The Principal is the Academic and Administrative head of the college and responsible for the implementation the Vision and Mission of the college.
- Institution/ departments have a clear perspective/ strategic plan and it is deployed effectively.
- Each functional body is clearly defined with service rules and procedures.
- Institution has well defined procedures for recruitment and promotion.
- Institution has implemented e-governance in the all the areas of administration.
- Various bodies/ cells/ committees are working effectively and regular meetings are called for the discussion and recorded.

- HODs organize Career Guidance Programmes, Workshops, Value added course, symposium, social relevance activities, Seminars and Conferences to enrich the knowledge and showcase the talents of students.
- The teachers are benefitted with financial support to attend conferences/workshops and towards membership fee of professional bodies.
- The professional development/ administrative training programs organized in the campus for benefits of teaching and non-teaching staff during the last 5 years.
- More than 70% of teachers benefited from attending professional development programs. Institution has implemented various welfare measures for teaching and non-teaching staff to keep them comfortable.
- The Institution follows rigorous Quality Assurance processes that pave the way for ensuring academic excellence.
- The IQAC is responsible for the effective implementation of the Quality processes.
- IQAC is conducting quarterly meeting
- IQAC has submitted the AQAR to the NAAC.
- IQAC conducts the Academic and Administrative Audit and based on the observation of the report, quality recommendation are given.
- The incremental improvement is significant.

Institutional Values and Best Practices

- We adopted a number of activities to enhance institutional values. Under this program, the Institute has organised gender equality programmes for providing safety and security of the students. Due consideration given to women in the list of leaders.
- There are adequate CCTV installed at various selected important places. Medical facilities are provided for the students and ambulance is available for emergency for the students for 24x7 basis.
- Separate boys and girls common rooms are there in the campus.
- Initiatives were taken for waste garbage separation, Rain water harvesting, E-waste management, etc. The rain water harvesting plant is installed in the Institute.
- Various activities like tree plantation and plastic free campaign are taken up by the students and faculty members at regular intervals to make the institute campus more environmental friendly.
- For differently abled students the Institute is ready with wheel chair, ramps, scribes for the examinations. Hostels are equipped with solar water heater under renewable energy initiative.
- The Institute has roof top solar PV plant which is leading to power saving.
- As green practices, students and faculty members are using Bicycles, public transport, paperless offices and green landscaping with trees and plants. The institute organizes National Festivals and birth / death anniversaries as Republic / Independent Day, Mahatma Gandhi Jayanti, Teachers and Engineers Day.
- Institute has adopted certain Best Practices like Fostering PACE for self Learning among faculty and students, Innovation and Skill based Technical Education practices.
- The institute is recognized for its distinctiveness for efforts towards social and community equivalence.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	NAGPUR INSTITUTE OF TECHNOLOGY, NAGPUR
Address	Survey No 13/2, Mahurzari, Near Fetri, Katol Road, Nagpur
City	Nagpur
State	Maharashtra
Pin	441501
Website	www.nit.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Amol Deshmukh	0712-2985258	9881711787	-	principal@nit.edu.i n
IQAC / CIQA coordinator	Shrikant Zade	9764-974144	8007733018	-	zadeshrikant@nit.e du.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	

State	University name	Document
Maharashtra	The Rashtrasant Tukadoji Maharaj Nagpur 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	23-03-2024	12	
AICTE	View Document	23-03-2024	12	

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Survey No 13/2, Mahurzari, Near Fetri, Katol Road, Nagpur	Rural	17.74217	71813.5

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Co course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Mechanical Engineering,Mechanical Engineering	48	XII	English	60	60
UG	BTech,Civil Engineering,Civil Engineering	48	XII	English	60	57
UG	BTech,Computer Science And Engineering,Computer Science and Engineering	48	XII	English	120	120
UG	BTech,Information Technology,Information Technology	48	XII	English	60	60
UG	BTech,Electrical Engineering,Electrical Engineering	48	XII	English	60	60

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	4				7				69			
Recruited	4	0	0	4	6	1	0	7	43	26	0	69
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				57
Recruited	52	5	0	57
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				0
Recruited	23	5	0	28
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	4	0	0	6	1	0	3	1	0	15
M.Phil.	0	0	0	0	0	0	1	1	0	2
PG	0	0	0	0	0	0	39	24	0	63
UG	0	0	0	0	0	0	0	0	0	0

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

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

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	0	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	724	9	0	0	733
	Female	563	3	0	0	566
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	24	40	56	52
	Female	26	59	29	57
	Others	0	0	0	0
ST	Male	3	7	4	2
	Female	1	8	7	2
	Others	0	0	0	0
OBC	Male	33	36	35	50
	Female	19	22	17	37
	Others	0	0	0	0
General	Male	24	36	38	38
	Female	20	29	28	22
	Others	0	0	0	0
Others	Male	13	19	8	18
	Female	10	13	13	20
	Others	0	0	0	0
Total		173	269	235	298

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Nagpur Institute of Technology conducted programs on National Education Policy which was led by eminent academicians and educationists. It helped the institution design and develop its own perspective
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	<p>and strategies to be adopted for following a multidisciplinary approach. As an affiliated college, the college follows the curriculum prescribed by the University. It is mandatory for every UG student to study at least one interdisciplinary / Multidisciplinary course to complete their degree. The college promotes interdisciplinary studies among its students through various departments. For instance, Computer Science students are encouraged to do a course on Solar PV systems. As a practice, the college has been offering a number of certificates/adds on/value-based courses of interdisciplinary nature, every year. Faculty members have participated/ worked as resource person in programs organized by other colleges for NEP. We have participated in all programs conducted by AICTE and RTMNU for NEP implementation.</p>
<p>2. Academic bank of credits (ABC):</p>	<p>The institution already offers credit-based courses and projects as per the curriculum and organizes community engagement and social service activities for the fulfillment of the programs. The college has sufficient collaborations and MoUs with national and foreign institutions testifying to its satisfactory state of internationalization of education. The college has acquainted its faculty with the procedures to offer online MOOCs courses through international platforms like EDUSKILLS, COURSERA etc. Experience of faculty in curriculum design and pedagogy is enhanced through formulating a curriculum for certificate courses.</p>
<p>3. Skill development:</p>	<p>The institution promotes vocational education and soft skill development of students through various establishments like the Institutional Innovation Council (IIC), and Research Innovation and Incubation Centre for Entrepreneurship. A concept of 'Skill Bank' has been formed in line with the Skill India Mission which helps in polishing, promoting, and fine-tuning the skills of students to cope with the needs of emerging social and industrial opportunities. During the admission time itself, students enlist their preferred Psychomotor and unique skills and enroll in various certification programs under the Skill Bank.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>Located in a multilingual region, the institution promotes the exchange of linguistic and cultural traits of heterogeneous groups. Students get an opportunity to develop their multilingual capacity. Students are</p>

	promoted to download technical books in marathi language from ekumbh portal.
5. Focus on Outcome based education (OBE):	The Institution already follows outcome-based education with a customized lesson plan manual which clearly states, course outcome, program specific outcome and program outcome. Students are made aware of the various course outcome, and program-specific outcomes through the curriculum and orientation program. Attainment of outcome is analyzed and assessed at the end of the program.
6. Distance education/online education:	The institution promotes teaching-learning through virtual platforms. Faculty members have sufficient experience in e-content development and the use of technological tools for the teaching-learning process. The institution has a learning management system (LMS) for academic practice and follows innovative teaching methods. After conferment of Autonomy based on the policy of RTMNU and AICTE online programs will be introduced.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	The NIT - Nagpur established the Electoral Literacy Club (ELC) in the year 2023 as part of its commitment to civic education and democratic values. The primary mission of ELC is to raise awareness among students aged 18 to 21 regarding democratic rights and the electoral process, encompassing voter registration and the significance of casting votes for the enhancement of a robust democracy. The specific objectives of ELC focus on: i) Enlightening the target audience about the significance of their vote, promoting the understanding that voting is a crucial exercise of their democratic rights. The goal is to empower students to participate confidently, comfortably, and ethically in political elections. ii) Cultivating a culture of active electoral participation among students to ensure maximum informed and ethical voting. ELC aims to instil the principles of 'Every vote counts' and 'No Voter to be Left Behind,' emphasizing inclusivity and participation in the democratic process.
2. Whether students' co-ordinator and co-ordinating	Yes 1. Faculty coordinator name: Mr. Rahul Kadam

<p>faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?</p>	<p>2. Student Coordinator: Mr. Prashant Golhar. The ELC is functional.</p>
<p>3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.</p>	<p>ELC of NIT- Nagpur actively promotes voter awareness through various initiatives organized by the NSS team. The college engages students in a comprehensive voter awareness program that includes diverse activities to foster a sense of civic responsibility and encourage active participation in the electoral process.</p>
<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>Nagpur Institute of Technology Organized Essay writing, Slogan, Elocution, Mime and Quiz competition on the occasion of National Voters day followed by the Voter's pledge on E-Platform. The main motto of the programme was to popularizing electoral participation and disseminating information about electoral processes.</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>The students were made aware of the process for involving as voters. The students above 18 years who are yet to be enrolled as voters in the electoral roll have enrolled for voters.</p>

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
1299	1352	1333	1356	1138

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 160

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2.2

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

2023-24	2022-23	2021-22	2020-21	2019-20
80	80	90	93	74

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
372.79	288.97	347.13	356.58	373.64

File Description	Document
Upload Supporting Document	View Document

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

Nagpur Institute of Technology (NIT) has well defined system for planning and effective implementation of the curriculum.

Curriculum: Being an affiliated college of RTMNU, the Institute follows the curriculum prescribed by the university. This curriculum is revised periodically by the university Board of Studies. The curriculum gaps are identified and activities are planned to overcome the gaps. As the Institute is approved by AICTE New Delhi, model curriculum and the courses prescribed by AICTE not covered by RTMNU are offered as Value added courses or addressed through topic beyond curriculum.

Academic Calendar The RTMNU, Nagpur publishes the University Academic Calendar for both the semesters. The academic calendar provide details regarding date of commencement of academic session, duration of semester, period of internal assessments and semester end examinations in an academic year.

Curriculum Delivery Plan and Implementation : The curriculum delivery plan meets the OBE components like POs, PSOs, and COs as defined by regulatory bodies and departmental committees. The measures are

1. Upon release of university academic calendar the IQAC discuss, decide, and plan the college calendar of events. It includes number of working days, schedule for conducting internal assessment tests, submission of assignments in each unit by the students, conducting Class Committee meetings, Course committee meetings and collecting on-line feedback. Post these respective department heads in consultation with department faculty members prepare the department calendar of events.
2. The Time table coordinator of each department circulates the skill matrix and collect the subject preferences from all the faculty members. Based on these, subjects are allocated by the HoD before the beginning of every semester.
3. The Faculty prepares the Lesson Plan, Notes of lesson, assignment topics, and question bank and sample university question papers. They are verified by IQAC team and HoD.
4. Every month, the log books are verified and the status of portion completion is periodically monitored by the HoD.
5. The important topics in each subject are recorded as video sessions by the faculties and they are uploaded in Youtube channel. This helps the students to revise the topics and helps the absentees to understand the concepts. This also helps other teachers to understand and review the concepts.
6. Online feedback is collected twice in a semester from students.

Process of Monitoring

- The senior members handling a subject are nominated as course coordinators for that subject to monitor the status of course delivery.
- IQAC periodically verifies the quality of delivery process through regular audits of Question paper audits, Answer script audits, Course file audit and continuously monitor the attendance and syllabus coverage for every fortnight, and corrective measures are taken for any deviation observed.

Conduct of Internal Assessment : To ensure this the institute strictly complies with the university academic calendar accommodating all planned activities. The Institute academic calendar help faculty members to plan their respective course delivery and undertake academic and other activities. Portions for each CIE are decided well in advance and faculty members are required to stick to it.

File Description	Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility**1.2.1**

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 105

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 80.64

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
1125	1106	1083	1181	729

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1

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

Response:

Issues related to Gender:

The Institute addresses cross cutting issues relevant to gender. Boys and Girls are encouraged to work together in various curricular (laboratory, classes and group project work), co-curricular and extracurricular activities. No discrimination is made between boys and girls while forming committees of associations and clubs.

Issues relevant to Environment and Sustainability, Human Values and Professional Ethics:

RTMNU prescribes various compulsory courses in the curriculum of various semesters which address issues relevant to cross cutting issues. Various courses of curriculum and the relevant issues are indicated in the following table:

Course	Relevant Issue
Indian Culture & Constitution	Human Values, Professional Ethics
Environmental Engineering	Environment and Sustainability
Professional Practice, Law & Ethics	Professional Ethics

Universal Human Values	Human Values
Environment Science	Environment and Sustainability
Yoga & Meditation	Human Values
Organizational Behavior	Human Values
Professional Ethics	Professional Ethics
Environmental Studies	Environment and Sustainability

1. Professional Ethics and Human values

- In view of promoting the professional ethics among the engineering graduates the RTMNU has introduced professional ethics as an elective course.
- 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 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.
- Different social activities have been initiated by the college like Health and Hygiene awareness programmes, Medical check-up camps, AIDS awareness programmes, Blood donation camps, etc.
- Apart from this, industrial visits are arranged for the students to know about the work culture and practices in the industries. Every year, in summer and winter vacation, the students are encouraged to undergo internship and training in leading organizations. This facilitates the students to get an exposure to a professional environment by solving problems and designing solution professionally.

2. Gender

- Institute's woman empowerment cell has been working consistently for women safety in college campus and other problems related to girl students.
- 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

The subjects like Environmental studies, Environmental Science, Environmental Engineering are provided as mandatory subjects to the students to make them to learn about the significance of safe guarding our environment. Digitizing the regular activities is encouraged. The usage of plastics is avoided inside the campus. Students are motivated to do more projects related to environment issues and finding solution to that. Clean and Green environment is made inside the college campus. Through the NSS, health and hygiene camps are organized to create awareness to the public in rural areas. Students are motivated to develop projects which can help to reduce air pollution and sustain a pollution free environment. The innovative ideas for environment and sustainability are published as papers in conferences and Journals.

File Description	Document
Provide Link for Additional information	View Document

1.3.2

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

Response: 51.66

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

Response: 671

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

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

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 85.38

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

2023-24	2022-23	2021-22	2020-21	2019-20
357	298	235	269	173

2.1.1.2 Number of sanctioned seats year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
360	300	300	300	300

File Description

Document

Institutional data in the prescribed format

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

2.1.2

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

Response: 100

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2023-24	2022-23	2021-22	2020-21	2019-20
298	238	169	204	129

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

2023-24	2022-23	2021-22	2020-21	2019-20
298	238	169	204	129

File Description	Document
Institutional data in the prescribed format	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Student Teacher Ratio

2.2.1

Student – Full time Teacher Ratio
(Data for the latest completed academic year)

Response: 16.24

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

Response:

We adopt student centric methods to make the Teaching Learning process more effective for the holistic development of students through Experiential learning, Participative Learning and Problem solving Methodologies.

The following activities have been adopted by the faculty and they adorn student-centric methods:

Experiential learning:

- **Laboratory sessions**

Curriculum has been designed in such a way that sufficient emphasis is laid on hands-on experiments required for comprehensive understanding of the subjects. The model experiments are beyond curriculum.

- **Industrial and Site visits**

We take our students to various industries in order to make them understand the classroom concepts in a better way.

- **Field works and Internships**

Faculty members have worked as mentors during their internships and randomly visited industry to monitor the task. Students prepared the reports based on work done during internships and presented to get required credits.

- **Industry Oriented Mini Projects**

Students are encouraged to take up any industry oriented application in his/her field of interest in their respective branch/field.

- **Community outreach programme**

Students are taken to community visits under social innovation and practise. We make them understand real world societal problems. The institute has Professional Society - Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) Student Chapter and Institute of Engineering (I) Student Chapter along with Department forums to conduct various technical and non-technical activities throughout the session. After visit they are required to understand and design solutions for at least one problem.

Participative Learning:

- **Expert Talks, Workshops and seminars**

The institution has active MoUs with industries/organizations to conduct various activities like Workshops, Expert Talks, Seminars for the students benefit.

Group Discussions and Role plays

Training & Placement Department regularly conducted Campus Recruitment Training Programme to improve the confidence level, oratory skills and knowledge of the students. This helps in improving the

employability skills of the students and makes them ready for Campus Placement.

Problem Solving Methodologies:

- **Developing Models:** Models make possible to go beyond observables and imagine a world not yet seen. The students are encouraged to prepare models.
- **Project Based Learning :** Institute motivate students to extend their innovative project work to intellectual property rights like copyrights, Design patents etc

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

ICT in education is the mode of education that uses information and communications technology to support, enhance, and optimize the delivery of information. It has been a way to improve the quality of education and support for fast evaluation process. Faculties utilize three types of ICT tools such as

- **Generic tools for learning:** Starting from productivity tools to simulation & modelling to access, extend, transform and share information e.g. Licensed and open source software for lab and Projects.
- **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, NDLE.
- **Interactive instructional courseware :** Self-paced learning materials e.g Google Class Room, LMS, Video Lecture, Course material in website etc

File Description	Document
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

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

2023-24	2022-23	2021-22	2020-21	2019-20
80	80	90	93	74

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 14.15

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
16	12	10	10	11

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms**2.5.1**

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

At the NIT an examination cell is constituted every academic year, comprising of a senior Faculty member as Officer Incharge (OIC) and teaching faculty member from each department and non-teaching staff for smooth conduction of University examination. The final examination is conducted by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. The college follows strictly the guidelines and rules issued by the RTMNU, Nagpur while conducting Mid Semester and Pre-university examinations by the Institute. For conducting the internal assessment test, a department level coordinator / committee is constituted for smooth conduction of internal assessment within the department.

Broadly, there are two assessments at our Institute :(1) External University Examination and (2) Internal Examination Consisting of Mid Semester Examinations I & II alongwith Pre-University Examination. The External University Examination (Theory and Practical) is controlled by RTMNU. The exam-related activities of External University Examination such as the preparation of question papers, exam supervision, answer sheet evaluation, result declaration, etc. are carried out by the RTMNU. All information related to University Examination is communicated in advance, and the same is communicated to the students accordingly by all the HoDs through Head of the Institution. The assessment ratio of University Examination and Internal Examination is 70:30 respectively. The Internal Examination is controlled by the Respective HoDs and Department Examination Cell whereas the Dean, academics controls the entire process. The preparation of the question paper, smooth conduction of the Examination, and evaluation are controlled by the respective Head of the Department.

The Institute has taken the following measures to achieve transparency in the internal assessment process: A planned examination schedule in the Academic Calendar. Consolidation and calculation of internal marks explained to students at the beginning of the semester and after evaluation (Grievance if any). The final 'internal marks' are verified and signed by the concerned subject teacher, HoD and Principal.

MECHANISM FOR GRIEVANCE REDRESSAL The Dean Academics is keen to address grievances related to assessments. Students have multiple channels to raise their grievances including the subject teacher, class teacher, Faculty Advisor, Head of the Department, Dean Academics, Principal.

COLLEGE -LEVEL Grievances: The assessed answer sheets are circulated to students in classroom by the respective subject faculty along with the discussion of correct answers. Faculty discusses about Lacunae in performance with students to enable them to improve their learning and overcome the shortcomings. In case of any discrepancy, they are advised to bring the matter to the notice of concerned subject faculty and get it solved. The matter can always be discussed with class-in-charge, Faculty Advisor or HoD if remains unsolved at the subject faculty level. Hence, the process becomes very efficient.

UNIVERSITY-LEVEL Grievances: The grievances related to RTMNU examinations such as revaluation, duration, and relevance of the question are collected by the principal through the HoDs and the same is communicated to the exam section of the RTMNU Students can obtain photocopies of their answer sheets from the University and can submitted for revaluation process.

File Description	Document
Provide Link for Additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

Response:

- The course outcomes (COs) are clearly defined using Bloom's taxonomy for all academic programmes and courses of the Institute.
- The course outcomes are measurable and stated using active verbs (Bloom's taxonomy).
- They are expressed as complete declarative sentences that clearly describe the knowledge, skills, and competencies that students are expected to acquire as a result of completing their course.
- The outcomes are assessed and measured to identify the extent to which goals are accomplished.
- All Program Outcomes have been adequately addressed through the core courses and their Course Outcomes.
- The importance of the learning outcomes has been discussed and communicated to the teachers in staff meeting and IQAC meeting.
- Process of dissemination of Vision, Mission and POs / PSOs among the stakeholders and it's awareness:
 - The Vision, Mission and POs / PSOs are published on college website, departmental webpage through which it is disseminated to those stake holders who visit these websites.
 - The Vision, Mission and POs / PSOs are displayed in HoD cabin, meeting room, Departmental Notice Boards, Class Rooms, and Laboratories etc. This also is one of the ways of conveying these to stake holders particularly students, faculty, parents, visitors etc.
 - The Vision, Mission are published in Departmental Newsletter, Curriculum and Syllabi Book
 - Apart from this, vision & mission statements are disseminated to all the stakeholders of the programs through faculty meetings, student awareness workshops, student induction programs, parents meet etc. The Course outcomes for all programs can be accessed using the following link: <https://nit.edu.in/>.
- New admitted students are informed about these concepts at induction programs.
- Every teacher, before start of his/her first lecture, informs course objectives and course outcomes.
- After completion of each unit of the course, teacher again informs about the CO and tests the students for its attainment.
- COs are displayed on all examination question papers and laboratory experiment manuals.
- Students are also informed about the objectives of any new program/ activity conducted for them and how it will be beneficial for them in fulfilling the POs and PSO.
- Feedback is taken from students after every semester in terms of achievement of POs and PSO through academics and other activities conducted in the campus.
- Thus, continuously POs, PSO and COs are disseminated to teachers and students.

File Description	Document
Provide Link for Additional information	View Document

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

The assessment tools and processes used for measuring the attainment of each of the program outcomes and program specific outcome are as mentioned below:

R.T.M. Nagpur University, Nagpur develops the curriculum for each program in accordance with AICTE rules and the model curriculum. It includes interdisciplinary courses, professional courses for core and electives, basic science and humanities subjects. The curriculum combines industry applications relevant to the degree with technical theoretical elements approached from a practical standpoint. The curriculum is framed with the understanding that students learn about the most recent technology advancements through invited expert lectures and industry visits.

Method of Assessment of POs/PSOs

- The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are assessed with the help of course outcomes of the relevant courses through direct and indirect methods.

Program Specific Outcomes (PSOs) are specified by specific programs, while Program Outcomes are defined by the National Board of Accreditation, New Delhi and must be met by all programs offered by connected colleges. Program Outcomes and Program Specific Outcomes (PSOs) are matched to the COs. Co-curricular and extracurricular activities, industry visits and training programs, guest lectures from experts, outreach and extension programs, value-added courses, etc. are all carried out to satisfy program requirements that are not addressed by the standard curriculum.

- Direct methods are provided through direct examinations or observations of student knowledge or skills against measurable course outcomes.
- The knowledge and skills described by the course outcomes are mapped to specific problems on University examination, internal exams and assignments. Throughout the semester the faculty records the performance of each student on each course outcome.

Based on how well students do on internal assessments and university exams, the attainment of course outcome is evaluated.

Average attainment in direct method = University examination (70%) + internal assessment (30%)

The CO attainment is determined on a 1-3 scale. It has been noted that the achievement fluctuates according to the degree of difficulty of the subject and can range from 1-2 for courses taken early in the

program to 2-3 by the end, as students grow more used to the Engineering curriculum.

Indirect assessment strategies are implemented through the feedbacks from students, parent and alumni. The tools used for the assessment of POs/PSOs and their frequencies are given in the attachment.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.3

Pass percentage of Students during last five years (excluding backlog students)

Response: 90.91

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

2023-24	2022-23	2021-22	2020-21	2019-20
263	241	378	370	259

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

2023-24	2022-23	2021-22	2020-21	2019-20
298	346	383	376	259

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all students on roll as per 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 in the institution during the last five years (INR in Lakhs)

Response: 5.74

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

2023-24	2022-23	2021-22	2020-21	2019-20
0.97	2.57	2	0	0.20

File Description

Document

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

3.2 Innovation Ecosystem

3.2.1

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

Response:

The institute is governed by AICTE/RTMNU regulations and their curriculum and hence it is imperative that all Engineering programme adhere to the use of the English language as the medium of communication. The college, on the other hand, observes significant days such as Hindi Bhasha Divas and Marathi Bhasha Divas in order to raise awareness of India's national and regional languages as well as the culture that is linked with each of those languages. The college annual cultural festival known as "Pratibimb" and inter collegiate competition hosted by the institute "Udbodhan" include a variety of Indian dance, drama styles as well as musical performances in Marathi as well as Hindi languages. Many a times the role plays related to various on field or office situations simulated in classrooms are encouraged to be performed in Marathi and Hindi languages since in practice local and national languages are most frequently used in these situations. Thus the Institute devotes all of its efforts to the incorporation of the Indian Knowledge system into its operational culture and to the dissemination of this knowledge.

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 INNOVATION CENTRE has been established. 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.

The MOUs established helps broadening the scope of research, its utilization and intellectual property rights.

Incubation Centre: The Incubation Centre was setup and it provides creative atmosphere where new ideas and projects can flourish.

The centre works on the growth of staff and students, identifying the tools, devices, technologies and constructing a network for commercializing the products or services. Innovators and entrepreneurs are benefited in technology, expertise and facilities.

Entrepreneurship Development Cell: The ED Cell was established with a faculty Coordinator and in the individual department a faculty as a committee member. 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. Further, the cell strives to create sustainable start-up business and provide awareness among students on industrial business and availability of financial assistance to start ventures.

A few impacts of the above initiatives are

- Allocation and Utilization of funds for innovative projects, models
- Establishment of Center of Excellence
- Registration of PhD by the faculty in recognised institutes
- Preparing and submitting of research proposals
- Organisation of awareness programs for IPR Preparation and registration of IPR
- Dissemination of information of research proposals to the funding agencies
- Seed Money for filing of patents and copyrights

File Description	Document
Provide Link for Additional information	View Document

3.2.2

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

Response: 61

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

2023-24	2022-23	2021-22	2020-21	2019-20
21	11	16	9	4

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.3 Research Publications and Awards**3.3.1**

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

Response: 0.45

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

2023-24	2022-23	2021-22	2020-21	2019-20
13	22	9	9	19

File Description	Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.3.2

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: 1.55

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

2023-24	2022-23	2021-22	2020-21	2019-20
218	9	5	4	12

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Extension Activities

3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

Response:

The Institute makes the best possible efforts to bring about social and economic transformation of neighbourhood community, so as to promote overall development and wellbeing of society. The Institute inculcates desirable sensitivity, empathy and the virtue of social participation among all its stake holders. Institute is well aware of its social responsibility and hence it renders community service, especially to

marginalized sections. It perceives formal education as an instrument of bringing about positive social transformation which leads to the betterment of social culture and spiritual fabric of human community.

To inculcate the social values and holistic development of the students, the Institute has organized the following events/ programs during last five years:

Rotaract Club Activities: It is a unit of college students who serve the nearby under-privileged and poor students by providing cloths, books and other educational items at free of cost.

National Service Scheme (NSS): Every year NSS organizes different activities such as Swachh Bharat Abhiyan, free medical checkup, awareness programme on solar energy, rainwater harvesting. Many other volunteer programs are conducted every year by the unit such as road safety, cleanliness activities and women empowerment. Expert lectures on anti-ragging act, cyber law for the students were also organized by the NSS unit. Students of NSS regularly visit the old age home and distributes the necessary things to them.

Institute provides financial assistance to the underprivileged students and schools who are working for the betterment of society.

Institute organizes various events and activities in the neighbourhood community from time to time to imbibe the social responsibility amongst the students such as Swachha Bharat Abhiyan, Water Harvesting, adoption of Village under Unnat Bharat, Distributing of Food to needy, and Visits to Orphanages, Blood Donation Camp, and Tree plantation. The institute had rigorously running Tree Plantation Drive, Go Green to support governments various schemes of tree plantation to protect and nurture the environment. The orphanages are visited and it's made sure that their requirements are fulfilled. The Blood Donation Drive is conducted every year in association with Hedgewar Blood Bank. The Rotaract club focuses more on societal activities and had conducted activities like food donation and cloth donation to underprivileged areas. Food and clothes are donated to flood affected areas.

As the Rotaract club is run by students body under the guidance of faculty coordinator, the activities are organized and conducted by students that inculcates the various skills like leadership, social sensitization, organizing and planning amongst the students. The societal work of Rotaract received the appreciation from rotary club. All these mentioned activities and events sensitize the students to Social issues and their role in them. It helps to develop the student community relationship, leadership skills, social skills, perceptual skills, and self-confidence of students. Develop a passion and brotherhood towards community, affected people/animals, and destitute. It also helped in cultivating the hidden personalities of students and creating awareness among students.

File Description	Document
Provide Link for Additional information	View Document

3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies

Response:

Sr.no	Content
1	Appreciation letter for conducting various activities like Swacha Bharat Abhiyan, Tree plantation, village cleaning at Bharatwada village, Nagpur.
2	Appreciation Letter for or conducting activities like Swacha Bharat Abhiyan, Tree plantation, village cleaning and other at Yevla village, Nagpur.
3	Appreciation Letter for Conducting Activity like Organizing HPV Vaccination Drive"
4	Appreciation Letter for Conducting Activity like Organizing Confab with Achievers.
5	Certificate of Accreditation for NRISG
6	IEI Paryavaran Sathi Award
7	Gram Sitare Award
8	Certificate of Rotaract Club
9	Award from PAANI foundation

The institute strongly believes in the need for holistic development of the students and accordingly, the Institution has been at the forefront in directing the students' energy towards addressing social issues through extension activities. Through a series of extension activities and club initiatives, our institution is actively engaged in spearheading diverse social awareness campaigns under the banner of extension activities.

The institute has active NSS and NCC units providing a platform for students to indulge in extension activities in the nearby areas of Fetri. The significant outcome of outreach activities is in terms of appreciation and awards from Govt. recognized bodies in the last five years.

NSS unit has organized special camps at Bharatwada villages by conducting activities like Swacha Bharat Abhiyan, Tree plantation, village cleaning and an awareness rally during the camps. An appreciation letter has been issued by Gram Panchayats of Bharatwada villages for the contribution to the development to villages.

NSS unit organized a special camp at villages Yevla. During the camp, a cleanliness drive was organized to explain the importance of cleanliness and hygiene to village people. Activities like door-to-door garbage collection and disposal were initiated.

The institute also organized HPV Vaccination Drive with Swasthya Vriksha Foundation for girl students. The significant initiative aimed at preventing cervical cancer has made a profound impact on the health and well-being of young girls.

Our approach encompasses equipping them with essential skills, providing comprehensive training, and empowering them to become the vibrant voice of the emerging young India. For this NIT organized "Confab with Achievers"-a series with Koshish Foundation, where we witnessed inspiring and motivational personalities like Shri. Ajinkya Rahane, Indian Cricketer, Shri. Vinod Kambli and Shri. Vishwas Nagare patil, IPS Officer who graced the event with their presence and motivate the students.

Institute was also awarded by IEI Paryavaran Sarthi Award -2023 and Gram Sitare Award, Kuhi Taluka, Nagpur.

Institute has been graded with certificate of accreditation for academic year 2022-23 in Phase I of the National Rural Institutions Sustainability Grading in parameter Green Cover on campus, surface water harvesting, rooftop water harvesting, rooftop solar system and waste management.

Rotaract Club has been awarded with Rotaract Citation for helping Rotary open opportunities in the lives of people all over the world. The institute received prestigious award for water conservation from PAANI FOUNDATION. The Institute has received grants from Unnat Bharat Abhiyaan, grant from DTE office for Tree Plantation, and from University (Red Ribbon Club).

File Description	Document
Provide Link for Additional information	View Document

3.4.3

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

Response: 64

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

2023-24	2022-23	2021-22	2020-21	2019-20
19	8	12	10	15

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.5 Collaboration**3.5.1**

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

Response: 38

File Description	Document
List of year wise activities and exchange should be provided	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching – learning, viz., classrooms, laboratories, computing equipment etc
- ICT – enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

The Institute has adequate infrastructure facilities available in the campus in order to maintain the quality of academic facility which includes classrooms, faculty rooms, laboratories, etc. complying with the standards necessitated by AICTE and RTMNU. Normally the policy of the Institute infrastructure is conveyed and executed by a committee constituted by the Management. The committee confirms a uniform and balanced distribution of space and resources to all departments. It also provides and maintains essential amenities to the faculty and students in a time bound manner.

The Institute has following infrastructural facilities for teaching-learning:

- The Institute is sprawled in an area of 17.74 acres of land and the total built up area of the building constructed is 71813 sq.mt.
- The Institute comprises of various buildings which accommodates different departments, the library and the gymnasium.
- The Institute consists of 25 class rooms, 35 laboratories including computer laboratory in each department, two research and development laboratories, a resource centre, drawing halls and 3 tutorial rooms.
- The Institute has adequate faculty rooms including six HOD cabins, departmental offices and a NSS office.
- Air-conditioned seminar hall having 600 seating capacity
- Air Cooled Central Library is enabled with audio visual facility.
- The other facilities include girls hostels, boys hostel for residential students and staff.
- A reverse osmosis plant is setup for providing pure drinking water for the students and staff.
- There are total 423 computers and most of the computers are connected through 300 Mbps leased line.

- CCTV Cameras have been installed in the campus for safety purpose.

Sports and Outdoor games facility: The campus has a huge playground of total area of 40468.6 sq.mtr. for boys and girls students. For outdoor games and sports, the Institute has running track, cricket ground, football ground, volleyball court, basketball court, tennis court, hand ball court, and khokho ground.

Indoor games facility, YOGA and Gymnasium:

The Institute also has a full-fledged indoor sports facility such as table tennis, carom, chess, badminton and basketball. Space for yoga is available.

Canteen: The Institute has a canteen which accommodates around 60 students at a time for refreshment.

Cultural Activities: The Institute has clubs/associations/forums which conduct various co-curricular and extracurricular activities. Apart from these clubs and forums, the Institute also has NSS units. For cultural activities, an open stage is constructed and sufficient arrangement is made for the audience.

File Description	Document
Provide Link for Additional information	View Document

4.1.2

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

Response: 9.37

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

2023-24	2022-23	2021-22	2020-21	2019-20
51.53	18.56	1.17	0.07	91.64

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

4.2 Library as a Learning Resource

4.2.1

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

Response:

The Institute library has been established since the inception of the Institute. Library has total area of 411.115 sq.m. with reading room having seating capacity of 150 students. Library provides open access facility to students and faculty.

The library is having sections such as, office for staff, photocopy section, circulation desk, new arrival section, searching section through Online Public Access Catalogue (OPAC) and CATALOGUE index, reference section, teacher's table, newspapers, magazines section, digital library, periodical section, project reports, bounded volumes, processing books and journals section.

The Institute has a Library Advisory Committee with Principal as Chairman, Librarian as member secretary and faculty member from each department as members. Committee meets once in every year, prepares proposals, analyzes the feedback taken by the Librarian from the students and staff and submits the report to Institute authorities for necessary action.

Some of the significant initiatives implemented by the committee are:

- Wi-Fi facility, Institute Book Bank Scheme, books circulation with Integrated Library Management System software (Sack Info ERP version 2.5.12.).
- E-access to the library through OPAC.
- Facility of one set of books of each semester to the University and Institute toppers at free of cost.
- The staff and students can see their library account status and access library database through Sack Info ERP version 2.5.12. software and DELNET database anywhere in the campus through internet, as the Institute academic premises is Wi-Fi enabled and all departments are connected with local area network of bandwidth 300 Mbps.

NIT library holds the rich collection of 22311 volumes of books comprising of 3592 titles with a total cumulative investment of Rs. 7134795/-. The library has facilities which includes 30 journals, 11 daily newspapers and 2 weekly, 2 bi-monthly, and 1 yearly magazine. It also has membership of NDLI and e-Shodh Sindhu. Library consists of books for all the departments to encourage the students for higher education and to prepare them for competitive exams. The digital library provides online access to e-resources.

File Description	Document
Provide Link for Additional information	View Document

4.3 IT Infrastructure

4.3.1

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

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

Response:

We have excellent IT facilities for students and faculty. The Institute has 423 computers, out of which 3 are servers and 420 computers are with internet connection. Total 50 different types of software are made available for carrying out their practical and project works of students. The highly configured system available is HP i5 processor with 8 GB RAM and 512 MB SSD.

- The Institute has 8 projectors, 11 scanners and 25 printers across all the departments. To cater the need of internet surfing, academic premises are facilitated with Wi-Fi.
- NPTEL video lectures are made available to the staff and students through intranet.
- Wi-Fi and Internet facility is provided through Gazon Communication with the bandwidth of 300 Mbps. By estimating the volume of data transmission, the bandwidth will be further increased during an ad hoc situation.

The computers in the different blocks are inter-connected with LAN through switches. The entire campus including hostel block has various Wi-Fi access points to access educational resources through internet and intranet service. The JioNet service is available to all the students and faculty members in the campus and they are provided with 1 GB data per day.

- Updating the IT facilities Based on the gradual increase in the intake of the students, the number of systems in all the laboratories is updated. Based on the requirements, necessary software and hardware devices, computer systems and its peripheral devices are purchased.

• Hardware and Software Facilities

S.No.	Item & Configuration	Quantity
1	Number of systems with configuration	423
2	Computer-student ratio	3.62
3	Dedicated computing facility	358
4	Wi-Fi facility	12
5	Propriety software / Open-source software:	50
6	Number of nodes/ computers with internet facility	422
7	LAN facility:	Available

• List of Licensed software

S. No.	Name of the Software	Licensed / Open Source
Operating Systems		
1	Windows 10	Licensed
2	Windows 8.1 Professional	Licensed
3	Windows 8.1	Licensed
4	Windows 7 Starter	Licensed
5	Windows Server Standard 2008 R2	Licensed
6	Windows Server Client	Licensed
7	Ubuntu	Open Source
8	RactOS	Open Source
Application Software's and Others		
1	Matlab Academic Teaching School Sute (TSS)	Licensed
2	Bentley Education Advanced Infrastructure Digital LAB Program	Licensed
3	Solidworks EDU Edition 2024	Licensed
4	CNC Simulation Software: Lathe & Mill	Licensed
5	CNC Train Programming Software	Licensed
6	Aristosim Simulation Software: Axis Robot	Licensed
7	Autocad – Including specialised Toolset Academic (Freeware)	Open Source
8	Sonicwall NSA2700 Firewall Software	Licensed
9	NPAV Total Security Antivirus Gold 3 Year	Licensed
10	Quickehal Total Security Antivirus 3 Year	Licensed
11	Visual Studio Professional Edition 2008	Licensed
12	Visio Standard 2007	Licensed
13	Project 2007	Licensed
14	Office Standard 2007	Licensed
15	Essl Biometric Software	Licensed
16	Softlib ERP Software	Licensed
17	Tally ERP 9	Licensed

File Description	Document
Provide Link for Additional information	View Document

4.3.2**Student – Computer ratio (Data for the latest completed academic year)****Response:** 3.63**4.3.2.1 Number of computers available for students usage during the latest completed academic year:**

Response: 358

File Description	Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure**4.4.1***Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)***Response:** 39.87**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)**

2023-24	2022-23	2021-22	2020-21	2019-20
183.47	152.74	114.72	113.39	129

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

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

Response: 93.07

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

2023-24	2022-23	2021-22	2020-21	2019-20
1215	1245	1252	1285	1032

File Description

Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.1.2

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

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

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 72.21

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

2023-24	2022-23	2021-22	2020-21	2019-20
941	876	1095	937	829

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.4

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

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

Response: A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2 Student Progression

5.2.1

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

Response: 67.24

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

2023-24	2022-23	2021-22	2020-21	2019-20
186	161	239	238	192

5.2.1.2 Number of outgoing students year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
263	241	378	370	259

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

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

Response: 4.04

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

2023-24	2022-23	2021-22	2020-21	2019-20
1	7	6	3	3

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

5.3.1

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

Response: 24

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

2023-24	2022-23	2021-22	2020-21	2019-20
6	8	3	0	7

File Description**Document**

list and links to e-copies of award letters and certificates

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.3.2

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

Response: 27.4

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
51	37	11	6	32

File Description**Document**

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[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:

The NIT Alumni Association 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 to maintain a good linkage between institute and alumni. The alumni association is registered. 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. Every year Alumni meet is hosted by the Alumni association and supported by the Management. This paves an opportunity for the alumni to meet other alumni and cherish their past experiences and moments. The Alumni Association provides an avenue for sharing their intellectual, career and professional experience not only with the teachers but also with the present students.

- **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 connects:** Alumni helps in establishing MoUs with industries. The alumni those who are entrepreneurs arrange 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 help the departments by directing the entrepreneurs to carry out consultancy works in various sectors of the engineering stream.
 - **Mentorship:** Alumni 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 help students in referring to companies and get placed at their respective organizations. The Alumni conduct mock personal interviews and job oriented training.
 - **Administration:** Alumni are members in IQAC and provide inputs for imparting quality system adaptive to recent trends and requirements of industry.

The institute has Alumni portal “VAAVE” wherein there is exclusive portal, database management,

website management, Member management, Alumni engagement, Alumni networking, Fundraising, Analytics & reports. The alumni are registered on this portal and they are communicated with the activities of the institute on regular basis. The details about job opportunities & Internship are floated to them through this portal.

File Description	Document
Provide Link for Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

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

Response:

NIT has a well-defined Vision and Mission that discourses the requirements of all its stakeholders. By instilling human values, ethics, and compassion via quality education, the Management and the College are committed to providing high-quality, value-based education and hope to create high-caliber professionals.

Vision: Service to Society by creating Technical and Skilled manpower through Value based Technical Education

Mission:

- To provide quality technical education to meet the requirements of industries and society.
- To equip students with need based technical skills through continual improvements in Teaching Learning processes and research activities.
- To inculcate ethical values for overall holistic development of students

Nature of Governance

The confluent approach of the College Management, Principal and Faculty members develop and implement the quality policy and plans in order to uphold the mission and vision of the college. The Governing Body (GB) is formed as per rules and ordinance of UGC/AICTE. It is the supreme body, it takes decisions on the basis of the feedback taken from all the Stakeholders. GC provides guidance for effective functioning of the college as per the guidelines given by various statutory bodies. It works in close collaboration with the Principal to regulate and maintain an amicable and scholastic environment required for this purpose.

CDC: The role of the College Development Committee is to ensure that the Institute's total development program is in concert with the strategic direction and needs. The committee serves as the mechanism by which the academic and other activities are ensured for the effective outcome.

Leadership

We firmly believe in strengthening participation of all stakeholders through decentralization & participative management under the leadership of Principal. The top management gives liberty to the Principal along with Internal Quality Assurance Cell (IQAC) Co-ordinator, and Head of Departments to plan, lead and implement all the activities of the Institute through various Committees/cells comprising

representatives of all stakeholders as members. Consequently, the practice of decentralization and participative management is quite evident at all levels. The institution has a mechanism for assigning responsibilities and providing operational autonomy to the various functionaries, thereby increasing the efficiency and improving the quality of the system.

Perspective Plans: A 360 degree perspective plan is developed by IQAC which considers important factors i.e. structure, mechanisms and stakeholders within the system and their capacity to act, their creativity, the collaboration between them, their confidence, and the coherence of the action with other initiatives. The objective is to ensure the quality and imbibe the culture of excellence and focus on the time-bound goals set for academic, administrative, research and development activities. The entire process is based on participative approach wherein the faculty members, and other stakeholders are involved in the development of plans and its efficient execution. The summary is as follows

Sr. No	Strategic Plan
1	Academic Excellence
2	Enhance engagement with Industry
3	Improve internal support systems
4	Enhance alumni engagement
5	Contribute to Sustainable Development Goals
6	Implementation of NEP
7	Academic Autonomy

File Description	Document
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

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

Response:

Yes, the college employs strategic planning, as the successful execution of the strategic plan is crucial for the ongoing advancement of the institution. Tirelessly striving to achieve its objectives with meticulous accuracy, the institution emphasizes an academic distinction, infrastructure growth, research and development, faculty enhancement, student career progression, and the refinement of assessment and evaluation methods. The institution has a robust strategic plan targeting well-defined goals. This plan is implemented through consistent action plans, daily activities, resource distribution, and the engagement of stakeholders at multiple levels. Periodic assessments of performance and quality indicators offer transparency in realizing the strategic objectives. The Institute has an IQAC to evaluate the progress of the Strategic Plan and institutional policies and to take remedial actions for achieving long-term goals.

The perspective plan is designed with the institution's vision, mission, and objectives in mind.

Functioning of Institutional Bodies

The organizational structure of the institution is headed by the Management. The Governing Body is constituted as per the guidelines of competent authorities. As per the guidelines are given by the management, academic and administrative departments are led by the Principal, and Head of Departments. Internal Quality Assurance Cell (IQAC) chaired by the Principal works to monitor the quality of education in the institution. Various functional committees consisting of staff members and students are categorized under administration, academic, student affairs and Research & Development which are headed by Senior Faculty. These four categories take care of curricular, co-curricular and extracurricular aspects.

A human Resource section, student section, and account section are headed by the Registrar.

Hostel administration is monitored by the Hostel Warden.

Recruitment policy

1. The requirement of teaching staff considering Student-Teacher Ratio / Cadre ratio is calculated as per the norms laid down by AICTE/UGC/RTMNU.
2. The recruitment process through university and the local selection committee is as per the norms of RTMNU.
3. In case of immediate requirement, faculty recruitment is done by a committee formed by Principal.
4. The recruitment of technical/non-teaching staff is as per the requirement and recruitment policy guidelines.

Service rules

It consists of the following clauses:- 1. Probation period 2. Pay-Scale and allowances 3. Appointment subjectivity as per the availability of workload 4. Service books are maintained for all the staff 5. Adhering code of conduct for any other full-time, part-time job or otherwise 6. Discontinuation of services in case of non-reporting for a stipulated time, breach of the code of conduct after a proper notice period.

Promotional Policies: Internal promotions are subject to the following aspects:

1. Availability of posts and internal eligible faculties
2. Previous performance appraisal
3. Technical compatibilities of faculties for higher posts
4. Interactions with Head of Development, Principal, and Management

AICTE Parakh platforms are essential now a days because of varieties of elective subjects like professional electives & open electives thereby offering more choice of subjects for students. Entrepreneurship Development Cell, Higher Education & Competitive Examination Cell.

File Description	Document
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

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 of each module reflecting the name of the HEI	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1

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

Response:

Various welfare measures are provided for the teaching and non-teaching faculty to ensure their wellbeing and value their contribution towards the progress of the institution.

Teaching Staff:

- Providing training to teachers for excellence in upgrading their credentials and skill sets.
- Motivating Faculty for pursuing higher education.

- Sponsoring Faculty & staff for attending workshops, and conferences at the national level by granting academic leave and financial assistance.
- Faculty members are encouraged/ assisted to undertake professional body membership for active involvement
- Organizing FDPs periodically and regularly.
- Systematic organization of professional society activities.
- Duty leaves for attending University and Institute level assignments.
- Provident Fund, Group Insurance, and Gratuity for eligible Faculty.
- Medical facility is available to meet medical emergencies on campus.
- Medical leave for hospitalized staff members.
- Maternity leave benefits, Paternity leaves, and bereavement leave to faculty & staff.
- If the staff members meet with an accident, financial assistance is provided.

Non-Teaching Staff:

- Festival advance as and when required.
- Group insurance is available.
- Crash Course in Computer Basics for the interested Supporting Staff.
- Casual Leaves are provided for all the Supporting Staff.
- Two sets of free Uniform are provided for Non-Teaching Staff
- Bus facility for non teaching staff
- Scholarship for Employee wards

Faculty appraisal process : The self-appraisal form is filled by the individual staff members and is further forwarded to IQAC/HOD/Principal and management for evaluation. Assessing the performance is based on the following performance indicators: - The aim of appraisal of faculty performance is to ensure that the program objectives are served best. The following methods are practiced in the college, among other informal ways: 1. Course Monitoring 2. Student Feed Back 3. Annual Faculty Performance Appraisal. The institution organizes short-term training programs, and guest lectures, FDP’s to strengthen the potential of staff which ultimately aids in strengthening the performance of every individual in the organization.

Non teaching appraisal process :

Every year for non teaching staff of the Institute a proforma (questionnaire) is provided which has to be filled by respective lab in-charges and HODs.It consist of the following details like Nature of appointment

- Educational qualifications
- Punctuality in attending the duty
- Ability to work for extra hours with responsibility
- Up keepment of the records

File Description	Document
Provide Link for Additional information	View Document

6.3.2

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

Response: 27.58

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

2023-24	2022-23	2021-22	2020-21	2019-20
64	47	3	0	1

File Description	Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 60.7

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
116	116	100	46	124

6.3.3.2 Number of non-teaching staff year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
85	85	80	80	80

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

The major source of income of the institution is annual student fees. The institution has a mechanism to monitor effective use of this funds. The top management has a well-defined procedure to monitor the effective and efficient utilization of available resources for infrastructure development and teaching-learning process. The following procedure is adopted for the utilization of resources.

Planning: The Head of the Department takes a departmental meeting to finalize an annual budget. The laboratory in-charges propose laboratory-wise requirements along with supporting documents as received from the subject teachers. The expenses required for the departmental activities such as organizing cocurricular and extracurricular activities are also included in the annual budget.

Budget Formulation: An annual budget of the department is prepared and forwarded by all the Head of Departments to the Principal for consent. The budget of all the departments are reviewed by the Principal. The Principal directs the Registrar to prepare a consolidated budget of the institution. The final consolidated budget is forwarded to the Management Committee for final approval.

Expenses: The sanctioned funds from management are utilized for the development of laboratories, procurement of books, national and international journals, staff salary, development and maintenance activities, etc. In case of any additional funds required for unplanned activities such as attending seminars/workshops/ conferences / technical competitions, then the concerned faculty has to prepare a note sheet stating the details of the importance with supporting documents and submit to account section in charge. Looking to the importance of the requirement, the Principal forwards the note to the

Management for its final sanction is received from the Management, the Principal directs the Head of Department for utilization of requested sanctioned funds.

Audit: The Accounts Section of the Administrative Office verifies the expenses against the sanctioned amount carried out under various institutional/departmental activities from the supporting documents and gives their remarks for the final settlement. At the end of the financial year balance sheet is prepared and is approved by management. The Books of accounts are as per the statutory requirements. The auditorensures that all payments are duly authorized. Internal financial audit used to carry out every month by S. M. Nimodia & Co. External financial audit executes once in a year by Ratan Chandak & Co.

File Description	Document
Provide Link for Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

IQAC facilitate/ contribute:

- To a heightened level of clarity and focus in institutional functioning towards quality enhancement and facilitate internalization of the quality culture.
- To the enhancement and integration among the various activities of the institution and institutionalize many good practices.
- To provide a sound basis for decision making to improve institutional functioning.
- To monitor the utilization of resources with the accomplishment of academic and administration for affording the social responsibilities.
- Organization of workshops, seminars on quality related themes and promotion of quality circles.

Through the establishment of IQAC, institute organizes meetings of IQAC head and members with frequency of quarterly in a year. In these meetings, various committees have been formed for academic and administrative activities like teaching and learning methodologies under student grievance cell, guest lectures on content beyond syllabus by the expert academician/ industry person, signing number of MOUs with the industries and institutes, various seminars and workshops for women empowerment and harassment related issues, taking feedback from students regarding academic and administrative facilities, also institute concentrated about student's skills development in curricular as well as extracurricular activities by engaging the students in various paper presentations, conferences, seminars and mini project competitions and various activities and seminars, solving hostel issues for students etc.

To impart quality education to students and to maintain an effective teaching learning process, quality assurance cell has been formed.

Quality Assurance Processes –Practice 1: Establish systematic process in academics and administration

- At the beginning of every year, an academic calendar has been prepared and circulated to all stake holders.
- Meeting with stake holders are mentioned and conducted as per the schedule.
- Class and course committee meetings have been scheduled and conducted. The grievances and the comments given in the meeting have been addressed by IQAC.
- College day and Sports day are conducted as per the calendar plan.
- Holidays and special working days also mentioned.
- Counselling schedule have also been scheduled and the comments given in the reports also addressed by IQAC.
- Online feedback has also been scheduled periodically and collected in time.
- Based on the feedback from students, faculty members have been directed properly to overcome the issues.
- Periodic reviews and audits are conducted by the IQAC.
- Orientation programmes have been organized every year for the young and newly joined faculty members to adapt themselves to the systematic process of the institution.
- Internal assessment tests are periodically conducted as specified in the academic calendar.
- Question paper and the answer scripts are audited periodically.
- Course end survey is conducted at the end of every course, to know about the satisfaction level of teaching learning process in each subject.
- By the end of every month, all faculty meeting is organized by the Principal to ensure the smooth run of all activities in each department.

File Description	Document
Provide Link for Additional information	View Document

6.5.2

Quality assurance initiatives of the institution include:

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2.Academic and Administrative Audit (AAA) and follow-up action taken**
- 3.Collaborative quality initiatives with other institution(s)**
- 4.Participation in NIRF and other recognized rankings**
- 5.Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

Response: A. Any 4 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

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

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

Response:

NIT is a leading Institute that believes in promoting gender equality and justice. With female staff and female students, we recognize the importance of creating an inclusive environment that allows individuals of all genders to thrive. The institution acknowledges the immense potential of women and is committed to empowering them in all areas of academic, professional, and personal growth. Women hold key positions and they are actively involved in portfolios and extracurricular activities. Both male and female students are provided equal opportunities in areas such as academics, research, and extracurricular activities. NIT celebrates Women's Day every year by a variety of sensitization programs such as webinars, seminars, counselling, and guidance sessions to promote gender equity among staff and students. The institution also has a Women Empowerment Cell that ensures the welfare of female staff and students. The cell conducts various programs such as motivational talks by eminent speakers, health check-up camps, speech on health and diet, hands-on training on self-defence, and counselling sessions for mental health issues such as depression, anxiety, distress, disabilities, disorders, and phobias. The institute recognizes the unique needs of women and has provided separate common rooms for girls and boys. We provide maternity leave for female staff and allows faculty with infant babies to visit their homes during working hours. A health center with a nurse is available to provide medical care to the students. In case of emergency special Doctors are called along with nurse and other staff members are available in times of emergency. Our institution maintains E- Surveillance with high-resolution cameras throughout the day and night. This facility of distributed recording has been set up on the campus to have strict monitoring over any strangers entering the college. The Institution never steps back in continuing high-quality CCTV cameras to track the activity of every student thus ensuring their safety within the campus. The Institution has a special cell called the Student Grievances Redressal Cell (GRC) through which it addresses the student's grievances related to academic and non-academic matters, such as any criticism, victimization, bullying by peers or any sort of disharmony by teachers etc. The institution grooms the students to be competent, to have excellent interpersonal skills, problem-solving capabilities, leadership skills, tolerance and respect of cultural differences, social conscience, and zero tolerance towards any kind of gender discrimination.

File Description

Document

Provide Link for Additional information

[View Document](#)

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures**
- 2. Management of the various types of degradable and nondegradable waste**
- 3. Water conservation**
- 4. Green campus initiatives**
- 5. Disabled-friendly, barrier free environment**

Response: A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

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

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

The institution has been making significant efforts and initiatives to provide an inclusive environment that promotes tolerance and harmony towards cultural, regional, linguistic, communal, socioeconomic, and other diversities. By celebrating various National and International Days, Events, and Festivals, the institution aims to foster tolerance and harmony among students, staff, and other stakeholders.

India's diversity is unique, with its vast population and endless varieties of physical features and cultural patterns. Our college organizes a cultural event under "Udbodhan" on the occasion of the Ganesh Festival called "Sankalp". In this event, various activities like singing, dancing, and fashion shows are organized. Students wear different attires representing various states, religions, and cultures. Through this activity, students become acquainted with the diverse cultures of our nation, helping to develop tolerance and harmony towards cultural, regional, linguistic, communal, socioeconomic, and other diversities.

The institution also celebrates Independence Day and Republic Day with a flag hoisting ceremony and Constitution Day. World Entrepreneurs' Day is celebrated on August 21st by organizing seminars on the importance of entrepreneurial skills. Engineers' Day is celebrated on the birth anniversary of Sir Mokshagundam Visvesvaraya, and Teachers' Day on the birth anniversary of Dr. Sarvepalli Radhakrishnan. National Unity Day, or Rashtriya Ekta Diwas, is celebrated on the birth anniversary of Sardar Vallabhbhai Patel.

We honor the legacies of social reformers like Mahatma Gandhi, Mahatma Jyotiba Phule, and Dr. Babasaheb Ambedkar by celebrating their birth anniversaries. These activities inspire students to

embrace social consciousness and ethical leadership. National Education Day is celebrated by organizing various activities. The institute also organizes Food Safety Awareness Campaigns, Road Safety Awareness Programs, Cervical Cancer Awareness Programs, Swachhta Abhiyan, and campaigns promoting the use of helmets and banning plastic and nylon manja.

Expert talks are arranged on various issues associated with women, such as building emotional boundaries, leading a fearless life, and personality development. National Science Day is celebrated on February 28 to mark the discovery of the Raman Effect by Indian physicist Sir C.V. Raman, spreading the message about the importance of science. Social Awareness Programs like voter awareness, awareness about laws, and E-pulse polio vaccination campaigns are organized. The institute also conducts tree plantation programs on World Environment Day at nearby locations to cover open lands with trees. The aim of these programs is to create awareness about various social issues and challenges. The institute celebrates Yoga Day on June 21 by arranging yoga sessions to connect students and staff with nature through the practice of yoga.

Various activities are undertaken by Swachata Hi Seva and Swachata Abhiyan, including Nukkad Natak for public awareness. A seminar was organized to improve students' ability to understand and apply information. The NSS organizes a Blood Donation Camp every year for a social cause and conducts campaigns like Swachata Pakhwada in various villages. These efforts and initiatives help in creating a socially conscious, culturally harmonious environment within the institution and its surrounding community.

File Description	Document
Provide Link for Additional information	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

Title of the Practice: Fostering pace for self-learning among faculty & Students.

Objective of the Practice:

- Allow students to learn at their own pace and in their preferred learning style.
- Both Faculty and Student need to Develop self-directed learning skills, such as time management, goal setting, and self-assessment.
- Overall improvement in educational outcomes and personal development.

Context: In an era marked by technological and artificial intelligence advancements, there is a noticeable trend toward self-Learning. Creating an effective pace for self-learning among faculty and students involves balancing several key factors: the goals of the learning process, individual capacities, available resources, and the overall context of the educational environment that aligns with individual and institutional goals.

Practice: Our Institute decided to adopt best practices in a way of self-pace learning for faculty & students. We have created a balanced and effective pace for self-learning that supports the growth and success of both faculty and students.

For Students: - This practice provide clear, well-defined learning objectives and outcomes for self-learning activities to develop student focused and goal-oriented self-learning experiences. It gives flexible learning paths to choose from a range of learning materials and methods that suit their learning styles and schedules. We are providing AICTE-NPTEL, EduSkill, Tata Strive platform for Students self-learning resources. In this platform student solve various assignment and quizzes and at the end of courses conduct an Exam for students. Through this exam students enhanced their skill & knowledge in respective subjects and also get certification for successfully passed the Exam.

For Faculty: In EduSkill, NPTEL, offered diverse of courses where they Tailored learning experiences that address specific areas for their own growth.

Evidence of Success: By recognizing the diverse needs and learning styles of faculty and students, institutions can tailor self-learning experiences that are both engaging and effective. Flexibility in learning paths allows for a more personalized approach, ensuring that each individual can progress at a pace that suits their personal and professional circumstances.

Problems Encountered and Resources Required: The successful implementation of this approach involves understanding and addressing the unique needs and goals of both groups while providing the necessary support and resources. **To over countered this problem Institute giving extra slot in timetable for student to complete his self-pace learning courses and also for faculty** providing incentives for self-learning efforts boosts motivation and engagement.

BEST PRACTICE – II

Title of the Practice: Innovation & Skill Based Technical Education Practices

Objective of the Practice:

1. To build entrepreneurship and innovative vision and instinct in students.
2. To encourage students to present research papers, file patents, and participate in project competitions and hackathons.
3. To develop soft skills and value-based education.

Context:

The ecosystem at our institute is designed to foster both institutional initiatives and student involvement in diverse entrepreneurship and innovation activities. As the engineering and technological fields become increasingly competitive, the institute recognized the need to promote and establish an Entrepreneurship

Development Cell (ED Cell) and Institutional Innovation Cell (IIC).

Practice:

To address these challenges, additional activities pertaining to innovative based practices have been conducted apart for the curriculum which are aligned with industry requirements. Along with domain knowledge and innovation, the holistic development of students is emphasized through life skills such as communication, leadership, team-building, and stress management. These efforts help to develop a sense of belonging and responsibility, coupled with technical and managerial skills. The cells play a pivotal role in channeling the passion, enthusiasm, and interest of students in entrepreneurship and innovation, extending beyond academics. This culture opens multiple avenues for student development and enhances employability.

Institutional Innovation Cell (IIC):

The IIC aims to foster a culture of innovation and startups. It involves a significant number of faculty, students, and staff in various Innovation and Entrepreneurship (I&E) activities, such as ideation, problem-solving, proof of concept development, design thinking, intellectual property rights (IPR), project handling, and management at the pre-incubation/incubation stage. The institute provides financial and other support for students through diverse activities conducted by the IIC.

IIC conducts activities like inter/intra-institutional idea competitions, challenges, hackathons, and rewards the best ideas. Events like motivational sessions with successful entrepreneurs and startup founders inspire students. Collaborations with organizations like the Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) and the Ministry of Micro, Small & Medium Enterprises (MSME) ensure students understand the importance of IPR for their academic projects and future work.

Entrepreneurship Development Cell (ED Cell):

The ED Cell creates awareness about entrepreneurship through activities and programs like project competitions, hackathons, and project paper exhibitions. The institute encourages and supports budding entrepreneurs by providing necessary guidance and resources. Activities like Socio-Ideathon 1.0, in collaboration with the District Skill Development Entrepreneurship Guidance Center Nagpur, and the National Project Competition-Gen Z Idea Genesis, organized by the ED Cell and IIC, have seen enthusiastic participation from students across various domains. These initiatives enhance students' entrepreneurship skills, soft skills, and leadership abilities.

The institute encourages students to participate in various project competitions in different colleges to enhance their skill based knowledge

Evidence of Success: We have planned and executed numerous activities to develop entrepreneurship skills in students, helping them become successful entrepreneurs. Several students have won prizes and received recognition for their innovative ideas. The institute, with the support of external partners, has conducted many activities focused on design thinking and ideation, resulting in active participation from students and faculty.

Problems Encountered and Resources Required: Institute in terms of sharing and imparting their industry knowledge to the existing students is difficult because many potential entrepreneurs may not be

aware of the benefits or existence of an ED Cell. Also, Potential entrepreneurs may lack necessary skills in areas like business planning, marketing, finance, etc.

To overcome this Institute conducts outreach programs, workshops, and marketing campaigns to raise awareness about the ED Cell's role and services Through the IIC Cell & ED Cell in Institute offer skill development workshops, training sessions, and access to online resources to develop their Entrepreneurship skills and outline their business Ideas.

File Description	Document
Best practices as hosted on the Institutional website	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:

Title: -Efforts towards social and community equivalence

Objective of the Practice: -

- Our institute vision is “Service to society by creating Technical and Skilled man power through value based Technical Education”.
- We also aim to empower rural students from economically disadvantaged backgrounds by providing comprehensive support through free coaching, mock tests, and preparatory programs for the MHT-CET entrance examination, enabling them to achieve educational success, secure well-paying jobs, and contribute to nation-building.

Context: -

Nagpur Institute of Technology believes in its moral and social responsibility to extend financial support and assistance to underprivileged, economically weaker, and meritorious students. This initiative is a humble contribution towards youth empowerment and development, aiming for "Nation Building" through "Giving Back to Society."

Nagpur Institute of Technology (NIT) is situated in a rural area and caters to students from socio-economic backgrounds, including middle-income, lower-middle-income, and lower-income families. Many of these students are first-generation learners, making them the first in their families to receive an education or pursue higher education. Their primary goal is to pursue technical educational to secure good jobs and support their families. Recognizing these aspirations, NIT has introduced various supportive activities to help these students to become employable.

Few of the supportive activities provided by NIT for these students include:

- The institute implements various initiatives to provide focused guidance for entrance test preparation, enabling students to become eligible for technical education in engineering.
- We provide comprehensive support to rural students preparing for various employability tests.
- We offer training in entrepreneurship, technological awards, patents, and copyrights to the rural students.
- We provide sports training for students from rural backgrounds. And many more

Practice: -

1) Guidance for MHT-CET Exam

MHT-CET is an entrance examination conducted by the CET cell of the Maharashtra Government for admissions to technical educational institutions. Nagpur Institute of Technology offers free coaching classes for economically disadvantaged students from rural areas for this examination.

Process of Conducting NIT MHT-CET Free Coaching Classes:

- Conduct awareness programs about the MHT-CET entrance examination and announce free coaching classes for 12th-grade science students from various junior colleges in rural areas.
- Register economically weak students through a Google form.
- Start the free coaching classes at various centers in rural areas after the completion of the Maharashtra state board examination.
- Provide guidance and assistance in three main subjects required for the MHT-CET entrance examination: Mathematics, Chemistry, and Physics.
- Experienced basic science faculty members from NIT teach the syllabus designed by the MHT-CET cell of Maharashtra.
- The classes run for 40 days.
- Conduct regular unit tests during the coaching.
- Ensure comprehensive development of the students for the MHT-CET entrance examination.

2) NIT MHT-CET Assessment Test

NIT conducts mock tests modeled after the MHT-CET entrance examination pattern.

Process of Conducting NIT MHT-CET Mock Test:

- Students register for the mock test conducted by NIT.
- NIT prepares sample papers for Mathematics, Chemistry, and Physics with the help of experts.
- Ensure that the paper pattern aligns with the government MHT-CET examination.
- Conduct the mock test at various junior colleges in rural areas.
- Obtain permissions from junior colleges for smooth conduction of the mock test.
- Faculty members check the mock test papers and display results on the institute website.
- Award prizes to the top three students of the NIT MHT-CET mock test and felicitate them during the institute's annual program.

3) Success Strategies: Effective Preparation for Entrance Examinations:

NIT conducts an orientation program, "Success Strategies," designed to equip rural students with the necessary tools for excelling in the MHT-CET entrance examination. Esteemed faculty members from Nagpur lead the program, offering expert guidance on the syllabus, problem-solving techniques, and examination patterns to enhance students' preparation and performance.

Our students for whom we have provided various facilities and amenities have made their career. Few of our achievers are

- Harshal Narayan Wankhede selected in Indian woodball Team for the event 3rd Bitch Woodball Word cup at Malesia. He is also selected in Indian Woodball Team.
- Mr. Nadeem Khan is the entrepreneur and establishes the company NS Lava Pvt., Nagpur. He is also received 2nd prize in Global Student Entrepreneur Award from top Indian student entrepreneur and represented India at US Global Finals at Washington.
- Miss Manasi Bagde is pursuing her higher education in Masters of business in Information Technology from RMIT University, Australia.
- Snehal Parate is selected in TATA Consultancy Services Limited (TCSL) as a Assistant System Engineer-Trainee in Grade Y.

Conclusion: -

As part of our efforts towards making the rural students more enlightened for their entrance with these outcomes-

- Students gain familiarity with the pattern and process of the Maharashtra government MHT-CET entrance examination.
- Students gain comprehensive knowledge about the MHT-CET examination and the admission process for technical institutes.
- The NIT MHT-CET Mock Test provides rural students with a clear understanding of the pattern and process of the Maharashtra government MHT-CET entrance examination.
- Our institute also offers admission to economically disadvantaged students from rural areas at reduced tuition fees, which facilitates their entry into various technical companies.
- Our Institute help student help to achieve his career goal in diverse field like Placement, Entrepreneurship, Higher Education, Sports and many more.

Title: Distinctive Achievements in Environmental Sustainability

Accreditation Overview: The Nagpur Institute of Technology has consistently demonstrated its commitment to environmental sustainability through various initiatives and practices. This dedication is reflected in the recent recognition of Nagpur Institute of Technology has been awarded a Certificate of Accreditation by the Mahatma Gandhi National Council for Rural Education (MGNCRE) under the Ministry of Education, Government of India. The certificate acknowledges the institute's exceptional performance in various environmental sustainability parameters.

Distinctive Features:

1. **Green Cover on Campus (Grade: A+)**
2. **Surface Water Harvesting (Grade: A+)**
3. **Rooftop Water Harvesting (Grade: A)**

- 4. Rooftop Solar System (Grade: B)
- 5. Waste Management (Grade: A)

File Description	Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information :

We focus on “Building the Future” through quality technical education and promotes an environment

- Where we believe that education should stimulate the minds of the young and inflame their intellect.
- Where ethical citizens of tomorrow are groomed by dedicated and trained faculty.
- Where the focus is on teaching not just to make a living but how to make a life.
- Where there is symbiosis of technological development and human values.
- Consistent institutional growth with respect to student intake, faculty, infrastructural, facilities, etc. Students performance at university examination.
- Campus placement for eligible students.
- Increase in number of students planning for higher studies.
- Organization of successful national and international level events.
- Conduct of university curriculum with full effectiveness and performance monitoring.
- Mock test to boost confidence and performance in campus placement.
- Emphasis on extra-curricular and co-curricular activities for overall growth of personality.
- Industry – Academia Linkage for Partial course delivery, Internship, field projects, Field visits, Certification courses.
- Where there is a platform to transform the innovative idea of students and faculties into reality and linkages to outside world through professional societies.

Concluding Remarks :

We are following

"Excellence is a Continuous Process and not an Accident"

Dr A P J Abdul Kalam

Right from its inception in 2008 with just three branches of undergraduate Engineering courses, the Institution has grown leaps and bounds both in its size as well as stature till this day and promises to continue in its progressive mode of placing at the hands of our nation , Engineers with knowledge, skill as well as human values. The Institution has been constantly refining its focus in achieving the Vision it has set for itself. The descriptive summaries and the accompanying data under each criterion are a proof of the sincere efforts of the Institution in this direction. It is a firm belief as well as the perception of the Management of this Institution that the growth in infrastructure, academics, research, co-curricular and extracurricular activities, activities on social and national issues for creating awareness as well as mitigating the problems, contributions in terms of activities of relevance to local community around the Institution - have all been in keeping with the expectations of NAAC - a wing of the UGC, AICTE, RTMNU, MoE highly relevant to the present-day educational scenario in the country.