

FOR 1st CYCLE OF ACCREDITATION

WAINGANGA COLLEGE OF ENGINEERING AND MANAGEMENT

NEAR GUMGAON RAILWAY STATION, DONGARGAON 441108

www.wcem.in

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

About Parent Organization: Wainganga College of Engineering and Management is governed by Wainganga Bahu-Uddeshiya Vikas Sanstha (WBVS). WBVS is established in 1991, is providing education in Bhandara, Gondia and Nagpur Districts. Today, under the umbrella of this society more than 17 education institutions include primary schools, High Schools, teacher education institutions, academic and professional Institutions.

About the College: WCEM was established in 2008 to included Engineering skills, technical knowledge and management academy is located on society are eco-friendly land on National Highway no.7 Gumgaon Railway Station and proposed metro railway station. College offers 7 undergraduate courses, 6 M-Tech courses and a masters business management courses. Emphasis is given on personality development technical events, Primitivity Indian culture and sports. Nagpur Being upcoming industrial hub, students are benefited in getting secured jobs in various sectors. Institute has well equipped laboratories, library and internet facilities. As a social responsibility, free bus and hostel facilities for girls and boys student are provided. For poor students "earn and learn" scheme in applied. Remedial classes for week students.

Vision

Imparting quality education to students in terms of knowledge ,skills,ethics and values for becoming responsible human beings in society.

Mission

M1: To disseminate knowledge to meet professional challenges.

M2: To provide life skills amongst the students.

M3: To impart ethics, Values among the students.

We at **WCEM**, strive to bring out and nurture the talents and skills of youth with Quality Technical Education, motivate them to be self-disciplined and develop their competence to face the challenges of globalization. We shall achieve this by

- Produce Industry-ready Professionals through training in Soft-Skills and Personality development.
- Undertaking networking with Industry, Academic and Research Institutions.
- Provide State-of-Art infrastructure for academic and research activities.
- Organize national and International Seminars/Conferences.
- Conduct Career -Vision program to facilitate right career choice by students.
- Encourage Entrepreneurship among students.
- Motivate the students to participate in Co-curricular and Extra-curricular activities.
- Train teachers in modern instructional methodologies to improve their teaching skills.
- Motivate the faculty to publish papers in National/International Conferences and Journals.

- Develop and promote Green Environment.
- Provide quality environment and services to all Stakeholders.
- Both teach and follow Ethical, Environmentally responsible Engineering practice.
- Attention to issues of national relevance as well as of Global concern.
- Responding to the changes in both technology and applications.
- Provide systems, resources, and opportunities for continuous improvement.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Enlightened, forward looking and financially sound management with a vision for bringing up the institution to the highest level of quality.
- The Institute has highly motivated well qualified dedicated faculty including experienced Doctorates
- Green and eco friendly campus.
- Merit scholarships for academic excellence.
- Highly transparent governance and administration with well-defined decentralization of authority.
- Students securing good ranks in the University Examination
- Responsiveness to student and educational needs
- Well stacked library with good number of national and international journals.
- The Institute regularly organizes Conferences, Symposia, Workshops, and FDPs
- Effective innovative teaching learning process by experienced faculty with academia and industrial background.
- Wi-Fi facility with e-learning resources on campus LAN and round the clock web connectivity.
- Sports and games facilities to create a work culture of utilization of resources beyond the working hours.
- Innovative facilities like Entrepreneurship development cell, Technology incubation Centre to hone the skills of students.
- Excellent Infrastructural facilities
- Well-equipped Laboratories and Computer center
- Well defined HR policy for faculty incentives for research contribution, faculty retention, consultancy, QIP and staff development programs.
- Exclusive training support for advanced career guidance programs like GATE, GRE, TOEFL, etc.
- Well connected to city by public and private transport
- NSS unit carries out social activities like blood donation camps, education to rural students, health camps and Awareness program on digital financial transaction, tree plantation.
- Implementation of Swachh Bharat mission in nearby village

Institutional Weakness

- Communication skills among rural based students' needs improvement
- Poor English language competency of students, majority being from local medium.
- Lack of understanding of Industrial requirements and real-time projects among students

Institutional Opportunity

- NEP Policy.
- Global demand for technical manpower is ever growing
- Growing Indian economy and Globalization with rural industrialization lead to good employment
- Use of technology and ICT to make teaching learning process more students centric.
- Increased focus on industrialization due to bifurcation of State, offers an immediate opportunity.
- More interaction with industry is possible as NAGPUR is the smart city in India which is industrially developed
- Possibility of offering electives and add on courses in the emerging areas in collaboration with industries.
- New technologies are emerging.
- State Government is providing fee reimbursement for students to pursue higher education.
- Institute can become autonomous under UGC and seek funds for R&D, AICTE, UGC, DST, CSIR ISRO etc.
- Scope for extension activities and community service
- Inviting senior professor /adjunct professor/distinguished professor in the specialized areas
- Establishment of Centre of Excellence for research, training, and development in collaboration with industries and research laboratories in the specialized areas
- Academic consultancy opportunity is there to be explored
- Scientific training programs enhance the Global competency of students thereby the scope of their employability

Institutional Challenge

- Students opting engineering education by chance and not by choice
- Training the students from rural medium background
- Enhancing the employability of the Students
- Rapidly advancing technology may require more human resources and equipment.
- Peer Competition from other institutions located in urban areas.
- Retention of senior faculty due to emerging competition from local, regional, and global institutions
- Impact of industry slowdown on the campus placements
- Attracting meritorious students
- Faster pace of developments in technology and emerging new fields lead to limiting knowledge management by faculty
- Addressing academically weak students
- Placing all the students in industry internship

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Being an affiliated institute of Rashtrasant Tukadoji Maharaj Nagpur University(RTMNU) the Institute follows the curriculum designed by the University for legitimizing its academic and administrative processes. Therefore, the institute has less flexibility in terms of syllabus. Structured and systematic planning and implementation of the curriculum is the main task of

the institute. The Institute adheres to the guideline prescribed by AICTE, RTMNU and other regulatory bodies.

The institute focuses on enhancing the employability, higher studies skill of the students by offering the best of the faculty, infrastructure and self development activities. The Institute is always trying to improve the quality of curriculum planning and implementation by benchmarking, competency building and offering the best of the resources. Feedback from stakeholders is an important tool for continuous improvement.

Important features in Curriculum Planning and Implementation are

- Structure and systematic planning and implementation of curriculum
- Activity based and participative teaching process
- Consistent effort for enhancement of employability of students
- Continuous review and monitoring of curriculum implementation
- Critical analysis of feedback of stakeholders and timely change in curriculum planning and implementation
- Student-centric approach in curriculum planning and implementation
- Regular interaction with industry through placement and activities for recommending necessary amendments to curriculum
- Various value-added courses offered to enrich the curriculum

Teaching-learning and Evaluation

The Institute considers the teaching, learning and evaluation (TLE) as the most cherished academic processes. Sincere efforts are made to make the processes very effective, productive and objective. The institute has adopted a learner centric approach in teaching and learning.

Key features of TLE Process

- The Institute abides by the regulations of Govt. of Maharashtra for selection of candidates for admission through entrance examination conducted by the state government as well as test conducted at national level.
- All the courses are widely publicized through advertisements about admissions in various local and national newspapers as well as on Institute website.
- The college offers financial assistance to the students from economically challenged category.
- Communication skill development program is offered by the college to the students coming from vernacular medium at no cost
- The Institute organises bridge courses at the beginning of the first year so as to enable the students to cope with the course.
- Teaching is based on course plan made by the faculty and approved by the Principal.
- Transparency in admission process, calendar of academic events, course plan and emphasis towards slow and fast learners and learning activities
- Teaching-Learning strategies include interactive learning (group discussion, presentation, role plays, case studies), independent learning (individual presentation, writing articles, seminars) and collaborative learning (assignments / projects given to the students).
- The Institute facilitates extensive use of information and communication technology (ICT) in teaching and learning.
- Efforts are made to recruit and retain qualified competent faculty members. Faculty are encouraged to organize and attend FDP, workshops and conferences.

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Research, Innovations and Extension

The Institute has a well-stocked library and e-resources, e-journals to facilitate research.

A highly experienced group of academicians are in the research advisory team of the Institute.

Important Features

- The Institute has a dedicated research committee which is responsible for all research activities.
- The Institute has sufficient infrastructure like experienced faculty members, rich library, e-journals, journals, online resources and magazines etc. for conducting research.
- The management of the Institute also encourages and supports research work by giving incentives. Faculty members are given special leave and monetary support if their research work is accepted for publication.
- Through its NSS unit and professional society chapters, the college promotes various community engagement activities. College students and faculty members participate in activities such as blood donation camp etc. These activities lead to the creation of students' awareness on social problems, to improve communication skills, teamwork and to grow students as socially sensitive human beings. The college has good collaboration with industries, academic institutes and professional bodies.
- It has signed MOUs with several esteemed organizations from academia as well as industries for different academic purposes.

Infrastructure and Learning Resources

- The Institute has ample infrastructure not only to fulfil the norms of regulating bodies but also satisfies functional need and to conduct all types of curricular, co-curricular and extracurricular activities.
- It has well-equipped Laboratory with equipment as per the syllabus requirement along with high-end equipment is also available for student projects and research, computer, laboratories and centers, a library with all the modern e-amenities, auditorium, seminar halls, common areas and class rooms equipped with modern ICT tools for intense learning.
- The Institute library is fully automated.
- A separate reference library is also available to cater to the requirement of research and project work conducted by students and faculty.
- Libraries with their constant up gradation in the form of purchase of updated versions of books ensures quality of materials available.
- All the other supporting facilities such as hostel, playground, gymnasium and dispensary are available in the campus.
- The Institute makes adequate budgetary provisions for the upgradation of Computing facilities, infrastructural facilities including maintenance of building and housekeeping.

Student Support and Progression

The students are primary stakeholders of the Institute. Policies of the Institute are based on the mission and vision and commitment of the Institute to students and all other stakeholders.

Important Features

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- The institute provides a number of mechanisms for student support and mentoring.
- A review of results and activities is carried out to examine the congruence between institutional commitment and actual achievements.
- The institute conducts soft-skill development, career counseling, and personal enhancement sessions for the students by inviting external experts. For the overall development of students the institute encourages student participation in co-curricular and extra-curricular activities by providing the required support.
- Training and placement cell provides pre-placement guidance to the students for placement activities. The cell coordinates internship and placement activities
- Different committees have been constituted for the welfare and involvement of the students such as Grievance Redressal Committee, Anti-Ragging Committee, Internal complaint Cell.
- The student representatives are the members of IQAC, anti-ragging committee and other committees. The institute collects feedback on support services from all the final year students in order to improve these service
- The Institute supports activities that are held during an academic session such as cultural activities and competitions at local, state and national levels.

Governance, Leadership and Management

The Vision of the Institute is to achieve excellence in technical education and to achieve this; the Mission of the institute is well articulated. The departments, in turn, have formulated their Vision and Mission in tune with that of the institute. Based on the Vision and Mission of the institute and inputs from various stakeholders, the Quality Policy is drafted. The Governing Body give general guidelines for appropriate governance to realize the Vision.

The institute ensures the following

- Academic excellence with support and decentralization of responsibilities by forming various committees for smooth and effective administration.
- Welfare schemes given by the Institute to the teaching and nonteaching staff
- Quality upgradation of employees through participation in skill enhancement programmes by granting leave and financial assistance
- The Institute has developed an effective performance appraisal system for employees
- Effective audit mechanism by internal and external auditor
- Good governance, responsible administration with accountability, responsive staff and commitments to welfare and growth of all stakeholders
- IQAC cell examines and appraise all mechanisms of academic and administrative processes and make certain that quality is promoted and sustained at every level.
- Quality upgrading strategies are planned to take into consideration the feedback of all the stakeholders and implemented in a clear and useful manner.

Institutional Values and Best Practices

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A number of gender equity and sensitization programs are conducted every year to overcome gender disparity and social discrimination. Safety and security of every individual is given utmost importance. Good waste management steps are taken to safe guard the environment from the malicious impact of the waste generated from the campus. As an environmentally conscious Institute, eco friendly practices go hand in hand with the academics in the campus. Many green campus initiatives are taken to make the campus conducive for Teaching-Learning process. Quality audits on environment and energy are regularly undertaken for monitoring quality. The friendly ambience and the infrastructural facilities such as ramps, rails, lifts etc provided for the specially abled students in the campus makes the Institute a disabled-friendly, Barrier free and one of the better options for pursuing their graduation. Inclusive practices are carried out on the campus to fully serve the needs of all the students. A number of activities are organized to increase consciousness about constitutional obligations. The code of conduct which provides a framework to guide every person in the Institute in meeting their obligations and responsibilities exists and it is incumbent upon every individual involved in the academic eco-system to abide by it. With the motto of Nation building and to inculcate patriotism among the students all national festivals are celebrated. The Institute promotes many best practices to improve the quality of education and teaching-learning process. It leaves no stone unturned to make the future of the students bright and excellent. Two of its best practices are "GO GREEN CAMPUS" and "Sensitization of Social responsibilities among Students and Staff". The Institute stands out tall in its distinctiveness and feels proud of its charitable endeavors. The Institute adopts role of social responsibility and inspires the students to understand and contribute to the socio-economic development & welfare of the society.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	WAINGANGA COLLEGE OF ENGINEERING AND MANAGEMENT
Address	NEAR GUMGAON RAILWAY STATION, DONGARGAON
City	Nagpur
State	Maharashtra
Pin	441108
Website	www.wcem.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Bharat Chede	07103-202007	7757062102	-	principal.wcem@g mail.com
IQAC / CIQA coordinator	Prafulla Puri	07103-203728	9834386936	-	prafullaspuri@redi ffmail.com

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	30-06-2008

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University to which the college is affiliated/ or which governs the college (if it is a constituent college) State University name Document The Rashtrasant Tukadoji Maharaj Nagpur University View Document

Details of UGC recognition			
Under Section	Date	View Document	
2f of UGC			
12B of UGC			

	nition/approval by sta MCI,DCI,PCI,RCI etc		bodies like	
Statutory Regulatory Authority Recognition/App roval details Inst itution/Departme nt programme Recognition/App roval details Inst year(dd-mm- yyyy) Remarks months				
AICTE	View Document	03-04-2021	12	

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

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	NEAR GUMGAON RAILWAY STATION, DONGARGAON	Rural	6.75	8544.68

2.2 ACADEMIC INFORMATION

Programme Level	Name of Pr ogramme/C ourse	Duration in Months	lege (Give Data Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Compute r Science And Engineering	48	Intermediate and Diploma	English	60	60
UG	BE,Mechani cal Engineering	48	Intermediate and Diploma	English	60	38
UG	BE,Civil Engineering	48	Intermediate and Diploma	English	60	60
UG	BE,Electrical Engineering	48	Intermediate and Diploma	English	60	42
UG	BE,Artificial Intelligence And Data Science	48	Intermediate and Diploma	English	30	27
UG	BE,Electroni cs And Telec ommunicatio n Engineering	48	Intermediate and Diploma	English	30	23
PG	Mtech,Comp uter Science And Engineering	24	BE B TECH GRADUAT E	English	18	14
PG	Mtech,Comp uter Science	24	BE B TECH GRADUAT	English	18	14

	And Engineering		E			
PG	Mtech,Mech anical Engineering	24	BE B TECH GRADUAT E	English	18	13
PG	Mtech,Civil Engineering	24	BE B TECH GRADUAT E	English	30	17
PG	Mtech,Electr ical Engineering	24	BE B TECH GRADUAT E	English	18	12
PG	MBA,Master Of Business Admistration	24	Graduation	English	60	60
PG	Mtech,Artifi cial Intelligence And Data Science	24	BE B TECH GRADUAT E	English	12	10
PG	Mtech,Electr onics And T elecommuni cation Engineering	24	BE B TECH GRADUAT E	English	18	6

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Prof	Professor			Asso	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/Soci ety or Other Authorized Bodies				5				6	J			88
Recruited	5	0	0	5	4	2	0	6	41	47	0	88
Yet to Recruit				0		1		0				0

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government		7,		0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				39				
Recruited	23	16	0	39				
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				7			
Recruited	5	2	0	7			
Yet to Recruit				0			

Qualification Details of the Teaching Staff

]	Perman	ent Teach	ers				
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD	0	0	0	0	0	0	0	0	0	0
Ph.D.	5	0	0	4	2	0	1	0	0	12
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	40	47	0	87

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

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

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	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	195	0	0	0	195
	Female	115	0	0	0	115
	Others	0	0	0	0	0
PG	Male	64	0	0	0	64
	Female	58	0	0	0	58
	Others	0	0	0	0	0
Diploma	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	56	22	39	18
	Female	44	14	26	21
	Others	0	0	0	0
ST	Male	18	2	8	9
	Female	7	3	6	1
	Others	0	0	0	0
OBC	Male	117	35	59	59
	Female	75	40	45	35
	Others	0	0	0	0
General	Male	42	23	19	40
	Female	30	19	10	9
	Others	0	0	0	0
Others	Male	27	6	14	20
	Female	16	5	9	13
	Others	0	0	0	0
Total		432	169	235	225

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	The affiliating University RTMNU follows syllabus includes the subjects like Constitution of India. The Institute is applying for NAAC Reassessment to fulfill basic eligibility of UGC Autonomy. The vocational courses approved by AICTE are planned and will be offered in subsequent years. After getting UGC autonomy more Multidisciplinary/interdisciplinary programs will be offered. Special BOS for Interdisciplinary Programs will be planned which will be chaired by an Industry Expert.
2. Academic bank of credits (ABC):	We strictly adhere and implement the initiatives of MoE and other regulatory authorities released time to

	time. We have NPTEL SWAYAM LOCAL CHAPTER. We are in the process of signing MOUs with Institute of National Importance/ Govt/ NIRF Ranked Autonomous Institutions. The Academic bank of credits (ABC) system will be followed as per the guidelines given by https://www.abc.gov.in/
3. Skill development:	The Innovation and Incubation Center is in place. The programs on emerging trends has been introduced in both UG and PG level. Center of Excellence are planned. Presently III and IIE Cell is focusing on Industry collaboration for Internship and Training programs.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Faculty members are preparing Videos for 10% course content in both English and Marathi Language. Value added courses on Bhagbat Gita, Indian Culture are offered. Basic of Marathi Language is taught to students coming from non marathi background.
5. Focus on Outcome based education (OBE):	As per the guideline of National Board of Accreditation(NBA) the we are practicing OBE. The examination reformation as per AICTE guidelines are implemented in CIA. Process adopted for formation of Vision, Mission, PEO. PSO and COs. The graduate attributes and POs as framed by NBA are adopted. The eligible programs are identified and we are in the process of applying for NBA accreditation for the programs.
6. Distance education/online education:	We offer programs approved by AICTE New Delhi. As per the GOI no 87. NEW DELHI, WEDNESDAY, MARCH 3, 2021/PHALGUNA 12, 1942 the institution is striving to meet the basic eligibility as per section Part II 3.a page no 12. When the eligigibility norms will be meet we will start offering Distance Education. Presently as per the guidelines of AICTE and MOU between AICTE and NPTEL, college has established the NPTEL LOCAL Chapter and encouraged the Faculty and Students for the MOOC Certification.

Extended Profile

1 Program

1.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
322	335	335	335	335

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

1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
14	13	14	14	14

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1221	729	845	909	909

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

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
264	294	312	312	342

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

2.3

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

2020-21	2019-20	2018-19	2017-18	2016-17
281	211	252	275	242

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
99	120	130	165	166

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

3.2

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
99	120	130	165	166

File Description	Docui	nent	
Institutional data in prescribed format	View	Document	

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 46

4.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
274.66	437.94	502.72	697.63	850.47

4.3

Number of Computers

Response: 352

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

The College was established in 2008 and affiliated to RTMNU, Nagpur. The College strictly adheres to the curriculum delivery as per the RTMNU guidelines. In view of implementing the curriculum WCEM has effective mechanism as described under.

I. Curriculum Analysis and DeliveryPlan

- 1. Curriculum Analysis: It is analysed that the RTMNU curriculum is a blend of HSS, BS, ES, PS-core/Electives, Internship, Project work etc. as per the AICTE guidelines. The Curriculum meets the industrial needs and also inculcate the ethical and moral values to the students.
- 2. Curriculum Delivery Plan: The curriculum delivery plan as described below will address the Vision and Mission of the institute and meets the Outcome Based Education (OBE) components like PEOs, POs, PSOs, and COs as defined by regulatory bodies. In view of effective curriculum delivery, the institution established IQAC which takes care of the academic planning and monitoring. Institution strictly adheres to the Academic Schedules prepared by IQAC in line with Academic Calendar of the RTMNU, incorporating the Co-Curricular and Extra-Curricular activities of the departments. Subject allocation is done at the department level based on their specialization and expertise in the subject. Department Level Time Tables are prepared which includes Academic activities, Library, Sports, Aptitude classes, English Language lab, Programming Skill Classes etc. The faculty will be clearly educated how to administer the course by adopting various types of learning mechanisms like Active Learning, Cooperative learning, inductive learning & Self Learning. Academic Co-ordinator of the respective departments monitors the academic activities.
- **II.** Infrastructure available for effective delivering of the curriculum Classrooms are equipped with LCD projectorand internet facility to impart webbased/online teaching to the students for better understanding the subject. All the labs are well equipped with sophisticated Equipments. Excellent library facilities, digital library, access to e-journals and Wi-fi and internet facility is available in the campus for better teaching and learning
- III. Process of implementation of curriculum As per the Academic Schedule/Time Table, the faculty will be maintaining a course file and make use of the available infrastructure for effective delivery of the curriculum. Dean Academics will continuously monitor the attendance and syllabus coverage for every month. Student's feedback on teacher will be taken in the every semester. Through Class committee meetings the academic difficulties with the students will be knowing at department level and appropriate actions will be initiated. Mentoring of students is done after every internal assessment, which helps to identify the nonperformers and weaker students. As per the regulation, the creation of project batches and guides are allotted.

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IV. Supporting activities for effective delivery of curriculum

- FDP programmes
- Industrial visits
- Project-based experiential learning
- Remedial classes
- Add-on Programs
- Certificate Programs
- Skill Development courses

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

Response:

The institution adheres to the academic calendar for the conduct of Continuous Internal Evaluation (CIE) Academic Calendar: RTM Nagpur University displays the academic calendar on its University website at the beginning of every academic year. The institute refers the University academic calendar and prepares its academic calendar and circulates it in all the departments. All the departments plan and prepare their respective departmental academic calendar and circulate it among the faculties. The academic calendar consists of induction days, time of displaying the attendance, schedules of academic events, extracurricular activities, sports, sessional and pre-University examinations, remedial classes, internal practical submissions, display of sessional & PUT results, guest/expert lectures etc.

Teaching Plan: Faculties are allotted subjects before start of the semester based on their choice and area of interest/expertise. Faculties prepare the teaching plans and are checked by the respective head of the departments. Faculties prepare subject file which includes syllabus of the subject, teaching plan, assessment sheets, question bank, University question papers, content beyond syllabus, list of text & reference books, unit-wise notes, result analysis etc. The concerned faculty perform the experiment at the start of the session & laboratory manuals are revised before the beginning of the semester if applicable. Class time tables are prepared and displayed on all notice boards.

Continuous Internal Evaluation (CIE): Continuous assessment and evaluation of students performance is carried out. Review meetings are arranged periodically by dean academics to review coverage of syllabus. Depending upon necessity, time tables are changed and modified so that syllabus is completed within the stipulated time. Informal feedback of students regarding the understanding of the subjects is taken by head of the department and principal and corrective measures are taken. The feedback of the subject is taken manually & online in each semester. The adherence is monitored every month with IQAC Coordinator & Principal, where syllabus coverage, events to be organized, difficulties faced by the students and feedback are discussed. Attendance monitoring is done on regular basis. on monthly basis attendance report is generated and analyzed. The information of the students having poor attendance is conveyed to the parents in Parent teacher meet, by telephonic call or SMS. Two sessional exams and one Pre-University Test are carried out in each semester. Evaluated answer sheets are shown to the students to understand where they have committing mistakes while writing the answers. Performance of students in exams is analyzed and is conveyed to the parents as well. Continuous assessment of practical evaluated on the basis of experiments performed, presentation skills, technical skills, discipline & regularity, knowledge skills is done by faculties on regular basis & marking is given to the practical in lab session. Project evaluation is

done on relevance of project title, idea/concept of project, literature survey, progress of project on monthly basis through progress seminar in presence of Project coordinator, Guide & Head of department. Final compiled marks are shown to the students by respective subject teachers.

- 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years
 - 1. Academic council/BoS of Affiliating university
 - 2. Setting of question papers for UG/PG programs
 - 3. Design and Development of Curriculum for Add on/certificate/ Diploma Courses
 - 4. Assessment /evaluation process of the affiliating University

Response: A. All of the above

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

1.2 Academic Flexibility

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

Response: 100

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

Response: 14

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

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

Response: 114

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

2020-21	2019-20	2018-19	2017-18	2016-17
62	31	09	06	06

File Description	Document	
List of Add on /Certificate programs	<u>View Document</u>	
Brochure or any other document relating to Add on /Certificate programs	View Document	
Any additional information	<u>View Document</u>	

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

Response: 56.44

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

2020-21	2019-20	2018-19	2017-18	2016-17
1221	699	389	164	202

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

1.3 Curriculum Enrichment

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

Response:

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

Course Code	Course Name	Offered to	

Environment and	Environmental Engineering BE-CSE	
Sustainability		BE-IT
		BE-CE
	Environmental Studies	BE-EE,CE
	Environment Management	MBA- MBA
	Renewable Energy Systems	BE-ME
	Non-Conventional Energy Sources	BE-EE
	Watershed Management	BE- CE
	Environmental Management System	BE- CE
Human Values and	Ethical Science	All Program
	Ethics in Information Technology	BE-CSE
Professional Ethics		BE-IT
	Industrial Economics and	BE-IT
	Entrepreneurship Development	BE-ME
		BE- ETC
	Cyber Forensic and Computer Crimes	BE- CSE
	Digital Forensic	BE- CSE
		BE-IT
		M.Tech- EC
	Cyber Security BE-IT	BE-IT
	Cyber Forensic and Computer Crimes	M.Tech-CSE

- 1. Professional Ethics and Human values: In view of promoting the professional ethics among the engineering graduates the RTMNU has introduced professional ethics as a credit course This course enables students to know fundamental rights, directive principles, and the duties of citizens, to understand engineering ethics and their responsibilities, identify their individual roles and ethical responsibilities towards society. The professional ethics and human values are dealing with the ethical aspects for the prosperity of organization and personal development of students. It helps to lead the life towards holistic and value-based living. Even though it is in academic curriculum the college takes efforts for integration of ethical and human values through extracurricular activities such personality development,yoga, meditation etc. The institute is organizing various programmes under NSS to inculcate human values among students. Different activities like guest lecture, seminar and workshops relating to the professional ethics and human values have been organized for students.
- **2. Gender**: The institute understands the importance of Gender equality and thus maintain good ratio of women to men work force in both teaching and non-teaching. Also, as per the admission analysis girl to boy student ratio is 2:3. WCEM has provided separate hostel for boys and girls with good infrastructure. Institute's woman forum has been working consistently for women safety in college campus and other

problems related to girl students. Numbers of programmes are specially conducted for promoting gender equality. Some of the programmes are sponsored by National Commission for Women. Institute has organized various workshops and invited talks on Woman Empowerment, Laws for Woman, Role of Woman in Nature Conservation, The Sexual Harassment of Woman at workplace etc.

3. Environment and Sustainability: Environmental studies are a part of curriculum which provides information about ecology and environmental issues that apply to air, land, and water. NSS unit took initiation for planting of good number of saplings including fruit bearing plants to make environment green and pollution free. NSS organizes various environment related programmes like Earth Day, World Environment Day, plastic free drive, seminars and guest lectures on environmental awareness etc. WCEM has installed solar power panel with 5 KW power generations and partly it is used by the institute and the other part is contributed to the grid. Environment, Green and Energy Audits are carried out periodically.

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

Response: 64.6

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

2020-21	2019-20	2018-19	2017-18	2016-17
224	205	221	216	207

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document

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

Response: 50.04

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

Response: 611

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

1.4 Feedback System

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

Response: A. All of the above

File Description	Document
Any additional information (Upload)	View Document

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

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

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

File Description	Document	
Upload any additional information	<u>View Document</u>	
URL for feedback report	View Document	

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 42.38

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

2020-21	2019-20	2018-19	2017-18	2016-17
432	169	235	225	189

2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
528	588	624	624	684

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

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

Response: 70.16

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

2020-21	2019-20	2018-19	2017-18	2016-17
360	127	206	175	168

File Description	Document
Average percentage of seats filled against seats reserved	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

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

Response:

Waingang? College of Engineering and Management is a institute providing core technical knowledge in Rural area of Central Maharashtra. On the basis of internal examination assessment and Marks students' are categorized into slow and advanced learner.. Every student is provided with a faculty mentor and the scheduled interactions are recorded in a well-designed mentor DIARY. During the course of interaction and regular performance in internal assessments, students' abilities are identified and necessary counselling and training are provided to cater the needs of slow and advanced learners. Subject experts and class in-charges through classroom interaction and counselling classes, identifies the strengths and weakness of individual students. In addition the HODs with the help of mentors identify students who are slow learners and having backlogs.

Advanced learners: WCEM follows constant evaluation pattern to Encourage students in group discussions, technical quiz to develop analytical and problemsolving abilities. Motivating them to do projects (micro/mini/major as applicable) to inculcate and practical awareness right from 2nd year onwards. Encouraging them with excess guidance to obtain University ranks and such students are appreciated with certificates and cash awards from management. As a tradition of global competitor ,Students are encouraged to become members of professional bodies like ISTE, CSI etc. so that they get advanced technological exposure of their concerned field.

To Enhance the innovative and creative skills the students are motivated to participate and organize intercollegiate as well as national level technical seminars/symposiums. Advanced learners are encouraged to register for NPTEL courses for certification. The students will be engaged in consultancy works accordingly. To take up competitive exams like GATE, IES, GRE, CAT, etc.

Slow learners: Departments conduct remedial classes, and a separate library hour is included in the timetable for the slow learners and faculty are always available to clear doubts at any point of time. Faculty provide lecture notes for slow learners and those students who are in the verge of dropping out due to arrear subjects. Extra classes are organized to clarify doubts, re-explaining of critical topics for improving performance. The slow learners are given regular class tests in order to improve their performance in the university exam Further faculty members make the students to practice previous year question papers after completion of every module. The institution started a separate programme called Backlog Reduction Programme for slow learners. The Institute practices a robust student academic mentoring process and during the course of study, group of students are assigned to a faculty for mentoring, the mentors monitor academic performance and interact frequently to understand and assist any student with issues that affect their ability to learn or impeding their academic success. The institute has a system to communicate performance and attendance of students to parents as needed.

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

Response: 12:1	
File Description	Document
Any additional information	View Document

2.3 Teaching- Learning Process

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

Response:

Wainganga College of Engineering and Management believes in the adoption of students centric methods to enhance student involvement as a part of participative learning and problem solving methodology. Team works, Debates, Seminar Quizzes and project based studies Specifically helps Students in project work, Field Visit, Industrial visit & guest lectures. Specifically the students centric methodology includes:

I. Experiential Learning

- 1.Project work : Project work is organized in two phases 1) Mini project and 2) Major Projects this is an essential element of each programme Internship or Field Projects in industry.
- 2. Participation in competition at various level: For Real time exposure students are encouraged to participated at National and International Level exams like GATE,MPSC CAT and other exams of national importance.
- 3. Field Visits: Faculty identifies and propose Academically significant Field visits and Surveys
- 4. Industrial Visits Departments Plan and Organize the industrial visits for students to provide exposure to industrial work culture.
- 5. Guest Lecture: Guest lecture by eminent experts from industry and academics from across the world are organized to supplement the teaching process and provide experiential learning
- 6. Technical Fest (TECH YARD) is organized every year where the students from various other Engineering Colleges comes to participate and compete.

II. Participative Learning

- 1. Team work: All Departments organize students' professional societies and club activities to promote the spirit of Team work. The activities and Camp of NSS, institutional social responsibility through Red Cross, Village Adoption, Tree plantation. Swachh Bharat and Health awareness camp to help the students to learn Art of living in a team for Social and community welfare.
- 2.Debates: Debates are followed in many of the subjects where students are required to come with different opinions, thought processes thus the learning process gets justified in the argue-mental way of learning.

- 4. Collaborative activity and work: Practical and workshops in all individual and group work under the guidance of teachers are also conducted.
- 5. Students are also encouraged to attain NPTEL/ MOOCs certification courses.

III. Problem solving Methodology

- 1.Projects: Students project method is adopted in teaching learning process to make the students have logical thinking and practical knowledge to develop problem solving ability.
- 2. Analysis and Reasoning: Skill Development Centre (SDC) of the institute conducts aptitude classes and programming classes.
- 3.Discussion: Institute follows the discussions methods in many of the subjects as it makes the students to think wide and participate in coming up with the opinions & suggestions to check their current knowledge.
- 4.Quizzes and debates and debates: Quizzes are conducted by institute at department as well as institute level teachers.

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

Response:

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

- 1.Generic tools for learning: Starting from productivity tools to simulation & modelling to access, extend, transform and share information e.g. Licenced and open source software for lab and Projects.
- 2.Content-based resources: to access a vast source of educational resources that effectively can be integrated with the curriculum objectives e.g MHRD-NMEICT, NPTEL-SWAYAM, Blogs, NDL, SPOKEN TUTORIAL. OPAC is available in the library for faculty and students to search for the various books and journals available in the library
- 3.Interactive instructional courseware: Self-paced learning materials e.g Google Class Room, MOODLE/Blackboard, Video Lecture, Course material in website, YouTube channel. etc. The entire faculty prepares the lecture notes referring the standard books pertaining to the subject. These lecture notes are uploaded in the college website for students 'reference. In this manner students are aware of the topics

their faculty is taking/ would be taking in the next class, and thus can prepare well in advance before actually the faculty takes that topic and gets their queries clarified by the faculty. Online lecture notes also help the students, who missed the class due to some reason, to be updated with the lectures. Apart from the above the following activities are adopted to promote ICT based learning Teaching methodologies like Flipped Classroom, Crossword puzzles and Think-Pair-Share Subject wise e-resources are compiled by faculty members and are made available on website. Practical conduction through various licensed and open source Simulation Software. Additional lab experiments virtually through virtual labs

Positive Impact

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

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

Response: 14:1

2.3.3.1 Number of mentors

Response: 89

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

2.4 Teacher Profile and Quality

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

Response: 100

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

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

Response: 6.44

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

2020-21	2019-20	2018-19	2017-18	2016-17
12	08	08	09	03

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

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

Response: 2.43

2.4.3.1 Total experience of full-time teachers

Response: 241

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

2.5 Evaluation Process and Reforms

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

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Response:

The Mechanism of Internal Assessment are

THEORY ASSESMENT

Theory courses and Assignments. As per the policy decided by head of institution and all Head of departments, 2-internal sessional exams are conducted and average of the 2 performances is taken as final marks. Average of Sessional-1 and sessional-2 exams are treated as base for calculating marks at average level.

Assignment : To improve learning at deep level assignments are given to students on each unit and they are evaluated time to time by subject teacher.

Teacher Assessment: On the basis of regular attendance in theory and practical, extra activities and participation, subject teachers assess the learning performance of an individual student and assess performance internally.

PRACTICAL /ASSESMENT (For 25 Marks)

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

Main Project work is a part of RTMNU curriculum for B.E. final year and M.tech courses along with MBA course. It is mandatory for students to provide project details, demo, thesis work as per rules and regulation of RTMNU Nagpur. Internal project and seminar Marks are awarded on the basis of all above parameters assessed by internal faculties of institute.

To maintain the transparency in the conduction and evaluation of Internal assessments the following is practice is maintained.

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

- 7. The B.E. final year major project is conducted in two phases. The phase-I consists of formation of groups, Identification of Project Topic, Submission of Project Synopsis with presentation and finalization of the topic after review. Phase-II of the project includes Fabrication/ Hardware implementation/Simulation as applicable. Performance of the individual students in the batch are assessed based on the reviews of the project committee.
- 8. Internal viva is carried out for all theory subjects and practical course and is evaluated as per the RTMNU regulations. As per the regulations of the RTMNU the finalized Internal Assessment marks for the above listed academic components is acknowledged by the students, faculty, HODs and Principal before uploading in the RTMNU portal. This leads to transparency and avoid any form of discrepancies.

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

Response:

The institute ensures smooth conduction of all internal and external examinations by means of **examination coordinator** at Department, College and University level for both theory and practical examination. The redressal mechanism of grievances with reference to evaluation is as followsGrievances related to University examinations Not filling examination forms by students within time The withheld result of the student. Non-issue/ wrong entries in the hall ticket /mark sheet Grievances related to the photocopy of answer sheet and revaluation to the university examination Issues related to Elective subject Above grievances are solved by the institute and the university in time for benefits of students.

The grievances related with the examination form/ mark sheet/change of elective / hall ticket students have to apply the application form through student section to the university with necessary fees. After the declaration of results, students who wish to apply for photocopy and revaluation has to submit the online application form on the university website as per the schedule declared by the university. The hard copy of the application with necessary fees has to be deposited in the university accounts section office. University provides a soft copy of answer sheet on student's email ID in stipulated time. With the photocopy of answer sheet received, the student can further apply for revaluation if not satisfied with the assessment. The change/no-change in the revaluation of answer sheets is communicated by the university to students. Principal and Exam coordinator ensures the smooth conduction of external practical examination by taking note of students grievances. With this mechanism, students hardly have grievances related to the examination. Therefore, this mechanism to deal with examination related grievances is transparent, timebound and efficient. Grievances related to

Institute Level: The internal evaluation is majorly focused on student's attendance and their marks in sessional and preUniversity examinations, assignment submission, participation in co-curriculum, extracurriculum. The mechanism for redressal of grievance with reference to internal evaluation is as follows:

Class teacher displays the attendance report on notice board at the end of every month and students having any discrepancy gets corrected by approaching the concerned class teacher with due permission from the head of the department. Students who have taken prior permissions for leaves with medical reasons are generally considered. Faculty members evaluate the answer sheets of sessional examinations and pre-University examination and the evaluated answer sheets are shown to the students. Students grievances

related to the evaluation are addressed by the concerned faculty with permission from the head of the department. In each department, the final internal assessment marks of the students are displayed on the notice boards.

2.6 Student Performance and Learning Outcomes

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

Response:

The learning outcomes are clearly defined using blooms taxonomy for all academic programmes and courses of the Institute. While defining the learning outcomes, following are taken care of:

The Learning 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 programme of study The resources (faculty, library, labs, technology etc) and pedagogy to be adopted for effective course delivery and student learning are determined in consonance with the learning outcomes to be achieved. The outcomes are assessed and measured to identify the extent to which goals are accomplished. The outcomes assessment plan also specifies the performance targets/criteria (measurable objectives) that are used by the Institute to determine the extent to which the programme learning outcomes are being achieved.

The assessment of student learning outcomes is done by using direct and indirect measurement tools. Assessment methodology/tools are decided keeping in mind the parameters/learning outcomes to be measured and the desired emphasis during the delivery of a programme as prescribed in the course curriculum

The PO, PSO, PEOs are published at:

Institute website- www.wcem.in

Mechanism of communication:

The PO, PSO, CO, PEO's are disseminated at:

Principal Chamber, Staff rooms, Notice Boards, Seminars Hall, Library etc Disseminated to all stake holders at appropriate meetings.

In addition to the above, Vision, Mission, PEO's, PSO, POs and COs are conveyed during the first day of each academic semester and also through different Activities. Apart from these Outcomes are disseminated to all the stakeholders of the program through faculty meetings, student awareness workshops, student induction programmes etc.

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

Response:

Attainment of Course Outcomes

The assessment of course outcomes are through Internal examinations, assignments, Seminars, Projects, Viva voce. The internal questions are set with respect to blooms revised learning level. Each question is mapped to Course outcome. Program shall have set Course Outcome attainment levels for all courses.

CO Assessment Rubrics:

CO Assessment	
Internal Assessment	
(20% weightage)	
University Assessment	
(80% weightage)	

Course Outcome is evaluated based on the performance of students in internal assessments and in university examination of a course. Internal assessment contributes 20% and university assessment contributes 80% to the total attainment of a CO.

CO Assessment Tools:

The various assessment tools used to evaluate COs and the frequency with which the assessment processes are carried out are listed below

Direct Assessment Tools

Course Type	Assessment Tools	Minimum Frequency
Theory	Class Test	Twice per course
	University Exam	Once per course
Practical	Daily Performance	Every lab session
	Model Lab exam	Once per course
	University Exam	Once per course
Seminar	Presentation	Once for final year
Project	Zeroth Review	Once per course

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	First Review	Once per course
	Second Review	Once per course
	Demonstration/external evaluation	Once per course
	Evaluation by Guide	Continuous evaluation
Viva Voce	University Assessment	Once per program

Attainment of Program Outcomes and Program Specific outcomes

PO/PSO assessment is done by giving 80% weightage to direct assessment and 20% weightage to indirect assessment. Direct assessment is based on CO attainment where 80% weightage is given to attainment through university exam and 20% weightage is given to attainment through internal assessments. Indirect assessment is done through program exit survey, alumni survey and employer survey where program exit survey and employer survey are given a weightage of 25% each and alumni survey is given a weightage of 50%.

For CO,PO,PSO attainment the attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment levelis to be measured in terms of student performance in internal assessments with respect to the Course Outcomes of a course and in university examination. The attainment is calculated with rubrics set in each year.

Target may be stated in terms of percentage of students getting more than university average ,class averagemarks or set by the program in each of the associated COs in the assessment instruments(midterm tests, assignments, mini projects, reports and presentations etc.). Attainment is measured in terms of actual percentage of students getting set percentage of marks. If targets are achieved then all the course outcomes are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement. If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.

2.6.3 Average pass percentage of Students during last five years

Response: 87.96

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

2020-21	2019-20	2018-19	2017-18	2016-17
281	204	192	225	206

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

2020-21	2019-20	2018-19	2017-18	2016-17
281	211	252	275	242

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process			
Response: 3.66			
File Description Document			
Upload database of all currently enrolled students (Data Template) View Document			

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 11.81

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

2020-21	2019-20	2018-19	2017-18	2016-17
10.71	1.10	0	0	0

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

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

Response: 4.04

3.1.2.1 Number of teachers recognized as research guides

Response: 4

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

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

Response: 10

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

2020-21	2019-20	2018-19	2017-18	2016-17
3	1	0	0	0

3.1.3.2 Number of departments offering academic programes

2020-21	2019-20	2018-19	2017-18	2016-17
8	8	8	8	8

File Description	Document
Supporting document from Funding Agency	<u>View Document</u>
List of research projects and funding details	<u>View Document</u>

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

WCEM has shaped an ecosystem for innovations along with the incubation center and other initiatives for the creation and transfer of knowledge. The college has a Research and Development Cell (R&D) to observe and deal with the issues headed by the R&D head. The R&D cell motivates and inculcates research culture among the faculty members and students to undertake minor and major research projects from various funding agencies. The R&D cell promotes the publication of quality journals from its faculty by providing research lab facilities and financial support. Thus, R&D cells promote innovation through research by encouragement and motivation.

Innovation Incubation and Entrepreneurship (IIE)

The R&D cell identifies the funding agencies like AICTE and supports by getting finances from them and the Management of WCEM. As a result, the students come up with minor and major projects that are promoted to the Innovation Incubation and Entrepreneurship (IIE).

It all starts with an "Innovation Day" which is regularly conducted where students and faculty have an excellent opportunity to share their ideas after which the feasible ones that have commercial advantage get shortlisted.

The Institute has multiple channels towards realizing these ideas into prototypes and commercialized products. In the process of conceptualization, solution identification and realization, the IIE sees scope for Intellectual Property (IP) creation. The Institute strongly encourages IP creation and it has laid out a well

defined IP policy for commercializing the IP either through Technology licensing or Incubation through the Institutes' incubation center. 03 Patents were published in the assessment period and the processing fee was borne by the Institute.

Engineering Projects in Community Services (EPICS)

The Institute has a separate center known as Engineering Projects in Community Services (EPICS). It encourages the students to realize their Idea in Design & Experimental Learning Center/Weekend Projects Lab, where the students can work/research on an idea. The Idea Lab also provides an opportunity for the students to ask questions in different areas of knowledge. As part of EPICS, the students visit the nearby villages, find the problems and try to give technologically based solutions. This exercise equips them with the ability to think, conceptualize the idea, design the prototype, work on it and report the findings. This center was established to provide financial assistance to the students for their real-time projects. The completed projects are deployed in the nearby villages wherever required and the products developed if any are given to the needy people.

Industry-Institute Interaction Cell (IIIC)

The Industry-Institute Interaction Cell (IIIC) bridges the gap between industry and academia in such a way that it brings the opportunity to know the industries' research needs through the interaction. This cell helps in formulating interdisciplinary projects for implementation.

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

Response: 34

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

2020-21	2019-20	2018-19	2017-18	2016-17
14	7	6	7	0

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

3.3 Research Publications and Awards

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

Response: 4.5

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

Response: 18

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

Response: 4

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

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

Response: 0.51

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

2020-21	2019-20	2018-19	2017-18	2016-17
65	1	4	0	0

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

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

Response: 0.73

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

2020-21	2019-20	2018-19	2017-18	2016-17
60	19	8	0	12

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

3.4 Extension Activities

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

Response:

WCEM conducts and takes part in a variety of extension activities with a twofold objective of not only sensitizing students in various public issues but also contributing to the neighborhood and reinforcing community participation. The NSS schemes of the Institute initiated various events like organizing camps, promoting Swachh Bharat, blood donation camps, awareness programs on , Pollution And Hygienic Environment, etc. The college also contributes much through the NSS wing which has multi-faced activities like environmental issues, working with orphanages, etc by involving the volunteers. Events like Tree Guard, Blackboard distribution are successfully conducted with the cooperative participation of the volunteers. The NSS wing takes care of arranging guest talks on topics like gender issues, women's security, etc. The students participate actively in the International Yoga Day as Yoga is considered to be the best art to control the mind through the body.

The institution has carried out different activities under the National Service Scheme. Activities like Covid -19 Awareness program, Covid -19 Vaccination drive, Workshop on Sustainable Human Excellence, Awareness on Pollution and Hygiene Environment, Sanitation for College people, plantation drive seeded for the Green Revolution have been followed as a part of environmental awareness and also motivate the neighborhood to take similar steps in this aspect. Blood donation camps in collaboration with the hospitals are the usual facet where the faculties and students donate blood for the cause. Our NSS unit has a wide vision of protecting our globe from global warming by creating awareness among the people through programs like saying 'NO' to plastics etc.

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

Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5 year	View Document

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

Response: 58

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

2020-21	2019-20	2018-19	2017-18	2016-17
13	14	14	13	4

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

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

Response: 69.84

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

2020-21	2019-20	2018-19	2017-18	2016-17
1205	620	595	650	214

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

3.5 Collaboration

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

Response: 31

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

2020-21	2019-20	2018-19	2017-18	2016-17
4	6	12	8	1

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

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

Response: 34

3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
12	5	9	1	7

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



Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Wainganga College of Engineering and Management, Nagpur is stretched over an area of 2.70 hectors in a green, clean, neat and spacious environment. It is a fully self-contained campus with requisite infrastructure based on AICTE norms and a facilitator for effective teaching- learning process. The Academic block consists of state of art class rooms, laboratories, seminar halls, meeting rooms and is adequate in numbers providing a good learning ambience to students through modern teaching aids and ultramodern facilities. To enhance learning and to provide high standard in technical education, the institute provides a wide array of sophisticated equipment in all the laboratories in various departments. To periodically organize and motivate co-curricular and extra-curricular activities for the students, the campus has seminar halls, conference halls and research laboratories like Centre for Data Science and Artificial Intelligence. The college has a dedicated 300 Mbps FTTH (Fibre to the home) connectivity from BSNL for providing uninterrupted internet services to the systems. There is a separate server room which provides all administrative services, computing facilities to all the computer systems inside the campus. Entire campus is Wi-Fi enabled with secure log in mechanisms ensures the learning through ICT.

Apart from these, the institute also has a very good collection of books, magazines, journals in the central library. The institute patronizes a spirit of perpetual learning by rendering students facilities like tutorial rooms, periodically providing counselling sessions, helping students to develop projects through innovative project cell. The institute nurtures the new ideas of the students by enabling the ideas to undergo various stages of development through entrepreneurship development cell of the institute.

Amenities and facilities are well maintained which include lawn, ramp, and garden. CCTV surveillance at all strategic locations, generator back up, UV water purifier. Spacious and well maintained canteen is available with delicious and hygiene food. The Housekeeping unit takes care of maintaining complete cleanliness in the institute. Infrastructural maintenance, electrical maintenance, and garden maintenance is done on a routine basis keeping in view the benefits of students. First aid facilities, Fire extinguishers are available in each department as a precautionary measure in case of emergency. Periodical monitoring is done to ensure the quality of this equipment. The feedback obtained from parents, students, alumni helps in keeping and maintaining the conductive learning environment within the campus.

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

Response:

Wainganga College of Engineering and Management, Nagpur encourages holistic development of the students and staff by providing various sporting activities. Institute has created and maintained well number of sports facilities and infrastructure for holding cultural events and other co-curricular activities. The achievement of the students in multiple sports activities is an indication of the dedicated attention,

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which are mainly promoted through the Sports committee. The Club also plays supervisory role to initiate, execute, coordinate, and supervise physical education, sports activities and programmes that enhance specific interest in sports, which are conducted throughout the year. The following facilities are available for outdoor

- Cricket Ground
- Football Ground
- Volleyball Court
- Badminton Court
- Fitness Centre

SPORTS COMMITTEE: The College promotes both indoor and outdoor sports activities for the students to bring out the talents of the students in sports. The Physical Education Director (Dr. Ambore Sir) identifies the specific talents and skills of the students and according provide training to them. The campus has the required facilities to play Throw ball, Chess, Carom, Table Tennis, and Badminton, Volleyball, Foot Ball, Cricket, Kho- Kho, and Kabaddi. The campus also provides facilities such as Gymnasium and cross fitness training for students and faculties. All dimensions of these play areas are maintained as per national and international standards.

The College periodically organize inter-Departmental sports tournaments to build up the sports talent and sportive spirit among the young minds. Students are trained and encouraged to participate in the Inter collegiate tournaments. WCEM, Nagpur students have brought many laurels to college in various sports events. Every year, sports day is celebrated where winners of the sports activity were felicitated.

CULTURAL COMMITTEE: The cultural committee has a vision for promoting a vibrant, memorable and rich campus experience for the students through various arts and cultural activities. The mission of the committee is to achieve excellence in various art forms, to explore talents globally to help students to build positive team spirit and other relationships. The club has been conducting workshops, dance events, vocal and instrumental music events for the following activities to the interested students. Every year, the college annual day and Alumni day is celebrated with cultural programmes through this committee.

Other Committee:

To extend the services of WCEM, Nagpur to the society there are Service Oriented committees like National Service Scheme (NSS). The students volunteer their services to the society. Notable services like Blood donation camp, planting tree saplings, raising funds and materials during Pandemic.

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 46

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

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

Response: 25.83

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

2020-21	2019-20	2018-19	2017-18	2016-17
93.61	104.95	126.11	192.13	157.14

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

4.2 Library as a Learning Resource

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

Response:

The institute has well equipped, spacious library of carpet area 224.686 square meters with the rich collection of engineering books including national, international journals, periodicals, and magazines. The library is fully automated with Library Management System. The reading room facility is available for students. The reading room is 224.686 square meters with a seating capacity of 150 students. It has about 3567 titles, 14961 volume, 37 national journals and 1 magazine along with newspapers. All the books are bar-coded and bar-code laser scanners are used in circulation counter for book transaction.

When a student approaches the counter for issuing a book; the book is searched by title or author. Students can also access physically tin the stack area. The entry is made in Library Management System software SACK INFO 2.5 through student login and book is registered and issued. As per the Regulation of statutory and affiliating authorities the text books and reference books are made

available in the library. The college central library has various institutional memberships for eresources and e-Journals. The Institute has membership for National Digital Library, NPTEL Active local chapter and browsing centre with 300 Mbps FTTH (Fibre to the home) connectivity connected computers in the library. Library facility is open to all students and faculty members and is continuously updated with latest books and journals. The institute always strives to provide latest and best collection of books, journals, online sources to the students

Total area of the library (in Sq.	224.686	
Mts.)		
Total seating capacity	150	
Working hours (on working	Academic working days	10 AM to 5 PM
days, on holidays, before examination days, during examination days, during	Academic weekend	10 AM to 5 PM
vacation)		

Average number of walk-ins	80 per day
Average number of books issued/returned	100 per day
Ratio of library books to students enrolled	1:12
Average number of books added during last	250/ year
three years	
Average number of login to opac (OPAC)	20 per day
Average number of login to e-resources	30-40 per day
Average number of e-resources	30
downloaded/printed	
Details of "weeding out" of books and other	No
materials	

OPAC (Online Public Access Catalogue)	Yes
Electronic Resource Management package for	Yes
e-journals	
Federated searching tools to search articles in	Yes
multiple databases	
In-house/remote access to e-publications	Yes
Library automation	Yes
Total number of computers for public access	18
Total numbers of printers for public access	01
Internet band width/ speed	300 Mbps
Institutional Repository	Yes
Content management system for e-learning	Yes

4.2.2 The institution has subscription for the following e-resources

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

Response: A. Any 4 or more of the above

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

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

Response: 3.08

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

2020-21	2019-20	2018-19	2017-18	2016-17
7.59	0.13	2.17	1.13	4.39

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

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

Response: 27.8

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

Response: 367	
File Description	Document
Details of library usage by teachers and students	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institute has always eagerly taken an initiative to upgrade itself in providing IT facilities to students and faculty. The institute now has 440 computers of high configuration. The latest configuration of computer available in the institute is HP i3 with 8 GB RAM, 320 HDD, 130 SSD, i3 processor. Each department has its own computing facility. All 440 computers are LAN connected.

List of Licensed software

Sr. No.	Name of the Software	Licensed / Open Source			
————————————————————————————————————	Operating Systems				
1	Ubantu	Open source			
Application Software's and Others					
2	С	Open source			
3	C++	Open source			
4	Python	Open Source			
5	STAAD Pro	Open Source			
7	AutoCAD	Open Source			

The institute also has open source application software for keeping students updated

Wi-Fi & Internet

WCEM, Nagpur is having BSNL Service with 300 Mbps, being updated once in a months and another BSNL Service as a backup with 100 Mbps, being updated once in year, locally networked and connected through Wi-Fi. All the Laboratories of different department are having Internet facility connected through intelligent switches. The entire college campus covered with Wi-Fi Access points to access Internet and Intranet educational resources.

4.3.2 Student - Computer ratio (Data for the latest completed academic year) Response: 3:1

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

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

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

4.4 Maintenance of Campus Infrastructure

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

Response: 66.86

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)

2020-21	2019-20	2018-19	2017-18	2016-17
176.8	325.99	370.51	459.37	475.87

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

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

Response:

The college provides optimal allocation and utilization of the available financial recourses for maintenance and upkeep of different facilities by holding regular meetings of budget committee constituted for this purpose as per their requirements needed to maintain the college.

Department level Policy: Each department Head along with the faculty members meet to prepare their requirements for every year's budget which include the maintenance and up keeping the infrastructure, submit it to the management and principal. Management and Principal analyze various departments budget submitted by the HOD's and allocate as per their requirements. The department level policy also includes the classrooms and the laboratories maintenance.

Infrastructure/Class room maintenance: The college has a maintenance team for upkeep of physical Infrastructure. At the departmental level, HODs submit their requirements to the Principal regarding classroom furniture and other. The college fund is utilized for maintenance and minor repair of furniture and other ICT facilities.

Laboratory maintenance:

Stock registers and Record of maintenance of stocks are regularized by lab technicians and supervised by HODs of the concerned departments regularly. Other measures to maintain laboratories are as follows:

- The calibration, repairing and maintenance of sophisticated lab equipment are done by the technicians of related owner enterprises.
- The proper account of visitors (students and staff) on daily basis is maintained. With the help of the two full time sweepers cleanliness of class rooms is maintained. They are well equipped with tools for cleaning.

Central Library:

The requirement and list of books available at present is taken from the concerned departments and respective HODs are involved in the process. The finalized list of required books is duly approved by the Principal/Management. Every year in the beginning of session, students are motivated to register themselves in library to access Library. To ensure return of books before appearing in exam, a 'no dues' certificate from the library is mandatory.

Sports and Common facilities:

The common facilities like Seminar hall, Conference hall, Auditorium, and transport facilities are provided and maintained by the maintenance department. This can be accessed based on individual department's request. With the help of digital connect team our contents are published on social media platform and updated immediately after the events on a regular basis.

The maintenance of academic support includes the following activities and their updates:

- E-mail facility with Google Applications: Creation and maintenance of mail account for both individual and group mail Id's.
- Design and maintenance of website: Development and maintenance of the college website is updated every 15days in a month.
- Accounts Management System: The financial support for all academic and non-academic activities

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- is provided; receipts and reports are generated and maintained.
- Payroll Management: Generation of pay slips, provident fund statements, professional tax statements, salary statements
- LMS: A Private customizable website GOOGLE with online courses for teachers and students to achieve learning goals.
- Exam Tool: It gives internal assessment support to the affiliated university by collecting examination fees, attendance entry, internal assessment entry and execution of examinations according to the schedule.
- Online feedback system: A set of questionnaires is prepared by the IQAC; students give their feedback twice in a semester. Reports of feedback are submitted to the principal and the concerned department.
- Intranet facility: RIT has local server to access and maintain the records of academic and non-academic activities.
- Bulk SMS: Regular attendances of students, announcements are conveyed though this service.
- Online feedback: Online feedbacks from the students are collected twice in a semester. The Feedback given to the teachers will be considered during their appraisal. Program Access committee monitors, analyzes and take necessary actions on the feedback at regular Intervals in their individual departments.

Online Complaints: Service request facility has been provided to all faculty members, to post their complaints directly to the maintenance committee. Necessary response action will be taken by the maintenance committee.

Suggestion box: Suggestion box is placed at the admin block. All the students and faculty members use the suggestion box to post their suggestions.

Chat box: Chat box option is available at the college website to provide facility for the stake holders faculty, students, alumni, industry and parents, who can ask and clear their queries related to the academic and Non-academic doubts through the website.

These policies are submitted to the Management committee for up gradation and changes if any require periodically and that being carried out by the various departments for upliftment of WCEM.

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Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 83.8

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
1051	593	686	693	856

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	View Document

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

Response: 28.62

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
352	242	226	215	279

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

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

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

Response: A. All of the above

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

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

Response: 44.06

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

2020-21	2019-20	2018-19	2017-18	2016-17
573	432	468	534	0

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

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

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

Response: A. All of the above

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

5.2 Student Progression

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

Response: 24.57

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

2020-21	2019-20	2018-19	2017-18	2016-17
87	66	61	66	30

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

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

Response: 11.39

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

Response: 32

File Description	Document
Details of student progression to higher education (Data Template)	View Document

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

Response: 40

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

2020-21	2019-20	2018-19	2017-18	2016-17
2	2	0	0	0

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

2020-21	2019-20	2018-19	2017-18	2016-17
2	2	0	0	0

File Description	Document
Upload supporting data for the same	<u>View Document</u>
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document

5.3 Student Participation and Activities

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

Response: 21

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	8	6	7	0

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

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

Response:

The Institute creates a platform for the active participation of the students in the various academic and administrative bodies. It empowers the students to gain leadership qualities, understanding rules & regulations, and developing execution skills. The institute has an active Student committee, Students Chapters, Student associations and is actively participating as well as organizing various activities related to academics, co-curricular and extra-curricular activities, with the guidance of faculty. The Institute also promotes participation of students on academic and administrative bodies. They are providing support to college-related academic/administrative work with the help of other students. They are actively involved in motivating the other students to participate in various activities conducted by the college. Students are encouraged to participate in co-curricular and extra-curricular activities in inter-college, inter-university, and National level competitions.

1. Presence of an active Student Committee:

An active Student Committee comprises Cultural, Technical, Sports, Literary. General functioning including responsibilities of each Committee is described below:

Student Committee: It ensures participation of all the other Committees in annual college festival "TECHYARD" which provides an avenue for creativity, team building, leadership and camaraderie amongst the student community and various co-curricular and extra-curricular activities.

Cultural Committee: Activities like dance, singing, fashion show, modern art is carried out throughout the academic year.

Technical Committee: Technical activities such as technical paper presentation, technical quiz, hands on workshops, technical talks by eminent personalities are organized. The Committee organizes "TECHYARD", a technical extravaganza every year.

Sports Committee: Well-equipped Gymnasium and open grounds for students are available to engage in numerous sport activities like cricket, football, throw ball, Kabaddi, table-tennis.

2. Representation on the academic committees:

Class Representatives: Every class has one class representative and one deputy class representative (preferably girl student). Informal feedback on teaching-learning processes like teaching, course content, study material, practical sessions is sought through meetings with Class Representatives. The suggestions/grievances are accordingly addressed for an enriched teaching learning environment at Department level.

Students clubs: There are 7 clubs such as CESA, MESA, EESA, ETSA etc with a faculty convenor and students. They organize various technical workshops, invited talks, skills/knowledge enhancement programmers etc.

3. Representation on the administrative committees:

Student feedback on amenities: Department of Facility Management is in place to address the problems pertaining to classroom, infrastructure, library, food, water and hygiene. Every Department has one faculty co-ordinator to redress the students' grievances. Students communicate the problems, if any, to the faculty coordinator and subsequently necessary action is taken through the Facility Management Co-ordinator.

NSS: Institute has set up NSS to sensitize students towards societal issues and community services.

Alumni Association: Alumni Association is in place to strengthen the relationship amongst alumni. **Anti-Ragging committee:** One student and one Parent are nominated as Member of Anti-Ragging committee. This facilitates to promotion of an ambiance conducive for WCEM to be a ragging-free campus. **Apart from the above the student representatives are included in** IQAC, Canteen Committee, Hostel Committee, Training & Placement Committee.

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

Response: 18.8

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

2020-21	2019-20	2018-19	2017-18	2016-17
7	26	25	28	8

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

5.4 Alumni Engagement

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

Response:

The WCEM, Nagpur 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 in 2021 to maintain a good linkage between institute and alumni. The alumni association was registered in 2021 with register no. Nagpur/0000174/2021 dated 24-06-2021. The main objective is to enroll all alumni as members of the association and facilitating active participation of the alumni 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 will be hosted by the Alumni association and supported by the Management, where the alumni from different branches are invited to share their views and suggestions on the scope of their course and also to create awareness about the professional world. 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.

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

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

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the engineering stream.

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

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

Generosity: The association also plays a significant role in contributing scholarships to deserving students. Another activity of the Alumni is they donate trees for making the institute environment green. Major visible additional activity of the alumni is by providing donations to the college.

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

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

Response: A. ? 5 Lakhs

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

Nature of Governance - The institution has well defined organizational structure, in which many senior faculty are the members of various decision making committees such as Governing body, IQAC, Grievance Committees and other decision making committees. The institution is recognized by All India Council for Technical Education, approved by Government of Maharashtra and affiliated to *Rashtrasant Tukadoji Maharaj Nagpur University*. The Governance of the institution is strictly in accordance with the Vision and Mission. The system is effectively decentralized for a better governance and performance. The major decisions which have a bearing on the function and the goal of the college are done by the Governing Council which includes the Chairman of the institution. The Institute has a perspective plan for development. It is developed by Principal with the help of HOD's of various departments under the guidance of Governing Council. Based on the academic schedule given by the affiliating university, academic calendar is prepared. The academic calendar includes the list of preplanned programs of various departments and examination schedules prepared with the knowledge of HOD's. To ensure development of the Institute, all the planning and execution is monitored regularly.

Leadership Driven by Vision and Mission - Starting in the year 2008, the institute from an intake of 240 from four programs of UG in Engineering became tenfold offering programs in UG Engineering, PG Engineering, PG Management. Strategic deliberate decisions include appointing Quality faculty., encouraging quality publications in SCOPUS/WoS, sharing the consultancy amount generated with the faculty, sending faculty/students for exposure etc.

Participative governance and Autonomy – Institute ensures seamless management systematically, encouraging participative leadership by involving various stakeholders at appropriate levels of decision-making. Stakeholders of the Institute-students, alumni, parents, employers are involved at different levels in all aspects of the Institute functioning. A trusting environment is cultivated where employees have appropriate autonomy to function effectively.

Transparency- Faculty members participate, through corresponding Functional Committees, in finalising curriculum design, teaching methodology, examination reforms, maintenance of academic standards, student welfare. Such participation brings transparency to the governance and inherently encourages teamwork and effective implementation of decisions. Stakeholders are involved in committees where information exchange is ensured.

Perspective plan- The perspective plan helps to streamline various processes like evaluating methodologies of the teaching-learning process, research progress, infrastructure facilities etc. The institution signs MoUs with the various organization for promoting institute-industry interaction. It also includes the provision for the development of infrastructure for research activities and motivating the faculties towards Research, Consultancy, Patents, etc. The Institute consistently promotes a culture of participative management. The Institute **committee system** for implementation of all its decisions and resolutions for academic as well as professional growth of faculties, students.

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A perspective plan derived from the stated vision and mission of the Institute is to achieve Autonomous status by 2022 through achieving the goals and objectives specified in the Strategic Plan. It focuses on getting all the eligible UG programs accredited by NBA, NAAC Accreditation with A grade, participating in the NIRF rankings, maintaining 75% placements ,Research Centers.

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

Response:

Decentralization and Participative Management is ingrained in the administrative functioning of the Institute. Vision, Mission statements are designed by the Top management, the Principal, IQAC Coordinator, program coordinator and senior Faculty members of the institute. An action plan is prepared collectively by the Principal, Program Coordinators, IQAC for implementing the quality policy. According to the action plan, specific roles are assigned to various faculty members. The Principal provides leadership for the academic administration and creates an effective environment conducive for learning. He ensures that quality education is imparted to the students that foster the holistic development of the students. He also ensures all-round development of the Institute and achievement of strategic plans of the institution. The institution has in place several Committees / Sub-Committees to continuously monitor/guide the academic and administrative activities. The committees comprise of key stakeholders including government, administrators, faculty, staff, industry, employer, alumni, parent and students. The top management provides effective academic leadership to the faculty, by setting goals and involving them in participative decision-making process, not only to achieve the vision, mission and goals of the institute, but also in building the organizational culture. The Principal permits the HODs and staff members in performing freely in the academic activities and administrative programmes such as departmental activities, allotment of workload, various academic committee programmes, association and club activities. Hence, this form of management represents collective decision making which involves the Director, Principle, Heads of the Departments and the faculty members and the non-teaching staff.

Heads of the departments are empowered to individually plan their activities such as subject allocation, purchase and maintenance of equipment and consumables, organizing conferences, guest lectures, workshops, value added courses and training for the placement aspirants. They also recommend necessary industrial visits, in-plant trainings, internships and MOUs.

Top Management:-

- Designing quality policy
- Budget utilization and purchase
- Infrastructure
- Recruitment
- Provide support to economical backward students

Principal:-

- Quality policy- planning, implementation and monitoring
- Weekly meeting with HOD

- Departmental meeting with faculties once in semester
- Administration of teaching and learning
- Monitor academic performance
- Non teaching member meeting
- Recruitment
- Maintenance

HODs:-

- Departmental meeting for execution of course work
- Social activities
- Mentor to student
- MOU's
- Maintenance
- Result analysis and corrective actions

Decentralized:-

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

Participative:-

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

For the smooth functioning various committees are constituted. The each committee consists of senior experienced faculty acting as a co-ordinator of committee and rest of members are involved from each department to ensure uniformity in functioning.

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

WCEM has a Vision and in outcome the institute has arranged strategic plan with regards to the Vision of the institute. Most of the students who look for admission to the institute are from rural territory. The strategic plan of the college has been developed involving all the stakeholders through focused group discussions and workshops by adopting a participatory approach both at institutional and department level. The plan is developed with an aim at achieving excellence by optimum utilization of resources. The Management conducts regular review of compliance to strategic plan (both Long Term Goals and Short Term Goals).

The Strategic management is a continuous process that is systematic and focuses on long term and short term objectives of the institution. The college is having one of the best infrastructures among engineering colleges in the state. It aims to conceptualize learning outcomes in more comprehensive terms and desires that its graduates possess distinguished academic and personal abilities. The management feels that quality of faculty and diversified educational system has an important role to play in an institution to reach its full potential. To have more Faculties with PhD Qualification The institution aims to have 30% of faculty with Doctoral Degree qualification within next two years.

Training and Placements

- To offer variety of training modules to suit higher education or strategic career.
- To continuously provide mentoring with experts from industry to appraise of the industry demands relevant skill set.

The core departments shall offer training in technical domains. Some of the initiatives taken are:

- Technical domain training to the student for placements is provided.
- In-house summer training was started from 2017-18 onwards.
- Student internships through AICTE Internshala and Placement department.
- Online assessment by Rubicon through placements department.
- Organized special awareness and training for entrepreneurs.

Taking into account this the Strategic arrangement of the institute incorporates

- 1. Comprehensive improvement of students
- 2. Motivation and inspiration of students
- 3. Scattering of information loaded with quality
- 4. Employability of students

The institute knows that quest for information is an always augmenting measure. Consistently new information is created. The strategic plan of the institute contains careful and vigilant undertakings to get recently. In Innovation there is capricious pivot of branches the students selected for. The institute, accordingly, will envision the turn of choices of the students and make proper strides to satisfy the requests of the students. The institute intends to present new parts of specialized instruction. The institute intends to convey scholarly workers according to the need of hour. The scholarly representatives should be edified about the new patterns in specialized training; also for these meetings, classes and workshops will be coordinated. The institute intends to make passionate and sincere undertakings to expand the correspondence ability of the students to empower them to compete with others with their heads held high.

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies,

administrative setup, appointment, service rules and procedures, etc.

Response:

According to the organogram guidelines, the president of the institution is the highest authority. Dr.Brahmanand Karanjekar, (M.Sc., Ph.D., B.Ed., L.L.B) is a teacher by profession. He is member of Maharashtra State Secondary and Higher Secondary Education Board, Pune and Nagpur Divisional Board, Nagpur and also member of Senate, RTM Nagpur University, Nagpur.He directs, tracks, and plays a key role in academic decision-making, administration, and the institution's overall growth. Adviser plays equally an important role as that of the president. The decision taken and the developmental projects suggested by the chairman will be escalated and executed by the director through the principal and Administrative officer of the institution.

Director, Principal, Dean Academics are the kingpins who are playing the key roles mutually coordinating and integrates the roles and responsibilities and methodologyof the Head of the departments (HODs), Teaching and non-teaching faculty, students, Exam cell, placement cell, Library, Research and development.

Director, Principal, Dean Academics constantly, consistently monitor the sustained effective execution of the resolutions made and every week organizes meeting of the Heads to assets the progress and setbacks.

The head of the departments and other head in charges of the college who are mentored in the organogram are executing the resolutions and functions of various cells and clubs with the team of well-trained supporting staff contingent under the administration of Administrative officer.

Administrative officer of the institution monitors day-to-day administration purchase and maintenance allocation of funds for functions.

Next major role is played by the following cells/ committee in the successful conduct of all functions smoothly. College office affairs, admin office affairs, scholarship cell, transport cell, research cell, training and placement cell, college redressal anti-ragging committee, women development cell, higher education cell, academic audit cell, admission cell, student welfare cell, NSS and alumni association.

The above-mentioned committees and cells are framed as per the guidelines of the higher-ups and regulatory bodies with clear objectives and activities, helping in executing effectively in aligned with vision and mission of the institutions especially in caring out the academic, co-curricular, extra-curricular activities, soft skills training, placement training.

These committees meet every month to frame the activity action plan as prescribed by the institute and analyse the pros and cons of executing the activities as per the schedule. The committees also empowered to alternate the activities due to unprecedented occasions or unexpected incidence in the locality.

6.2.3 Implementation of e-governance in areas of operation

- 1. Administration
- 2. Finance and Accounts

3. Student Admission and Support

4. Examination

Response: A. All of the above

File Description	Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

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

Response:

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

College Bus facility: All teaching and non teaching staff can utilize bus facility which is available from different routes. The bus for teaching and non teaching staff is extended during meetings in college after out time. The bus routes cover almost entire Nagpur city and surrounding area.

teaching staff Financial support is provided to members for attending trainings/ workshops/seminars: The faculty will approach the management for financial support on prior date to attend training/workshop/seminar. The related faculty will be provided the financial support from the The institute also supports and motivates organizing/arranging the staff for trainings/workshops/seminars/FDPs.

The salary advances for teaching and non teaching: Based on the emergency requirement the staff can approach the management for advanced salary by writing an application. Further the application is processed by the management. The management understands and provides the advance salary of a month or two.

Institutional scholarship for Economical Backward Class: The scholarship for Economical Backward Class are given to students who come from economical weaker section for encouraging students to take higher education.

Financial support is provided to teaching staff members for Patents and Research Paper: The faculty will approach the management for financial support for Patents and Research Paper. The institute also supports and motivates the staff for filing Patents and also to publish Research Paper.

Maternity Leave: Female faculty can avail the facility of maternity leave. The role and responsibility of the faculty will be assigned to Adhoc faculty. After completion of the leave period, the staff can rejoin the institution.

Earn and Learn Facility: All teaching and non-teaching staffs are facilitated with Earn and Learn Facility. This facility helps the staffs to complete their higher education by fulfilling their basic needs with the help of available financial assistance.

Subsidized food facility at canteen: All teaching, non-teaching, students can have food in canteen with low cost. the food quality and hygiene is maintained.

Facility for Higher education: College provides Higher education facility for the interested teaching and non teaching staff. The polytechnic teaching staff can seek admission for M-tech in the same institute or from the other colleges. The B.E faculties can seek admission for Ph.D and the management provides adequate time and encourage faculties for course work and research work.

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

Response: 40

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

2020-21	2019-20	2018-19	2017-18	2016-17
99	120	0	0	0

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

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

Response: 9.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
20	13	13	0	0

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

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

Response: 60

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

2020-21	2019-20	2018-19	2017-18	2016-17
99	120	130	0	0

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

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

Response:

The institution has performance based appraisal system for the assessment of teaching and nonteaching staff. The appraisal report is based on the annual performance of the employees on the basis of their academic, research and other extra- curricular activities.

Performance appraisal system for teaching staff

The teacher, as a person and teacher as performer, is also one of the mandatory assessments for his/her performance is appraised through his/her implementation of

- 1. Innovative methodologies in classroom lectures, seminars, tutorials, course delivery.
- 2. Question paper setting and evaluation.
- 3. Updating of study materials etc.
- 4. Besides, student feedback and pass percentage of the course are also considered.

- 5. Research & publications/ academic progress
- 6. Punctuality & adaptability
- 7. Mentoring/counselling of students
- 8. Administrative contributions

The performance of the faculty is evaluated based on

- 1. Professional contribution to academics,
- 2. Contribution to short term training courses
- 3. Performing invigilation duties
- 4. Contribution to College administrative bodies such as college academic council, R&D council, planning and development committee, NBA, NAAC, etc.
- 5. The institute undertakes a wide range of activities besides academics, for which faculty members are assigned additional duties and responsibilities, which are mostly voluntary. The Institute accords appropriate weightage for these contributions in their overall assessment.

Financial support to the faculty is rendered with the motive to enhance or upgrade their knowledge through their participation in conferences, workshops, publications in Scopus indexed journals, book publication, sponsored projects consultancy, research supervision, awards, honors, fellowships etc.

The performance of each faculty member is assessed according to the Annual Self Assessment for the Performance Based Appraisal System (PBAS).

The PBAS Performa filled by the Faculty Member is checked and verified by the Heads of the Departments, followed by the Dean, Secretary, IQAC and the Director.

Performance appraisal system for non-teaching staff:

A few strategies are observed in appraising non-teaching staff's performance this includes technical contribution of individuals such as subject knowledge, awareness, productivity, quality, innovation willingness to learn, diligence etc. besides they also assess the behavioral aspects like group behavior, acceptability, punctuality etc.

Non-Teaching Staff

All non-teaching staffs are also assessed through annual confidential reports and annual performance appraisal.

The various parameters for staff members are assessed under different categories i.e. Character and Habits, Departmental Abilities, Capacity to do hard work, Discipline, Reliability, Relations/Co-operation with superiors, subordinates, colleagues, students and public, Power of Drafting (where applicable), efficient organization of documents (in case of Ministerial Staff) and technical abilities (in case of workshop staff).

Each staff is graded on a seven-point scale, i.e., Excellent, Very Good, Good, Highly Satisfactory, Satisfactory, Average and Poor. The overall assessment is based on the cumulative grade by the Reporting Officer/HoD, which is then forwarded to the Director by the forwarding officer.

The Annual Confidential Report and the Performance Appraisal System has significantly helped in the

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evaluation of the performance of employees, in motivating them, analyzing their strengths and weaknesses and ensuring better performance.

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The institution has developed a mechanism for conducting internal and external auditing system on transaction every year to make sure financial compliances. The internal audit is conducted by internal financial committee of institute. The committee completely verifies the income and expenditure details and audit report is submitted to management of institution via principal office. External audit is conducted once in every year by an external agency.

• The process used to monitor effective and proficient use of financial resources is as below:

- Before the commencement of every financial year the Head of the Institution submits a proposal on budget allocation, by considering the recommendations made by the heads of all the departments, to the management.
- The institute budget includes recurring expenses such as salary, electricity, internet charges, maintenance cost, stationery, other consumable charges etc., and non recurring expenses like lab equipment purchases, furniture and other development expenses.
- The accounts department observes the expenses as per the budget allocated by the management.

• Process of the external audit:

The financial records of the institution are audited by external auditor regularly as per the government rules. The auditor confirms that all transactions made during academic year are duly approved after the audit and final report is sent to the management for more review. Any incongruity in the procedure of audit would be viewed instantly along with the supporting documents within the prescribed time limits. All these mechanisms proved that transparency being maintained in financial matters and adherence to financial discipline to avoid defalcation of funds or properties of the institution.

·Process of the internal audit:

All the vouchers are audited by an internal financial committee on regular intervals. The everyday expenditure under each head is checked by verifying the vouchers and bills. If any dissimilarity or fault is found, the same is brought to the notice of the Principal. An official audit is conducted at the close of financial year. The management checks the audit report regularly. The expenditure statements are audited by the Institute accountants before it is submitted to the Principal. At the opening of every financial year, proper deployment of financial resources is designed. Accounts department takes care of the collection of tuition fees, tax payment, salary distribution, and loan distribution, purchase orders for the laboratory equipment, teaching aids, furniture, facilities, and payment of maintenance bills. The institution gives maximum importance to the maintenance of proper accounts. There are no flaws or doubt since the institution follow a good system of internal controls like call of quotations, comparison of rates,

confirmation of price, preparation of purchase order etc. The audited statement is duly signed by the authorities of the management and the auditor.

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

Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
•	
Details of Funds / Grants received from of the non-	<u>View Document</u>
government bodies, individuals, Philanthropers	
during the last five years	

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

Response:

The resource mobilisation policy document serves to identify the resources available for various programs and efficient management of funds to widen the resources base of the institution for the enhancement of research and faculty upgradation the document outlines the procedures for efficient utilisation of generated funds.

The institution follows a well-defined mechanism for monitoring the effective utilization of the financial resources for academic process and infrastructure development. The different sources for mobilizing the funds is as follows

- 1. Tuition fees from students
- 2. Govt. Scholarship
- 3. From Trust

The major source of revenue for the institute is the annual tuition fee collected from students. The fee is collected from students as per the guidelines issued by the fee Regulatory Authority of state government of Maharashtra. Mobilization of funds is also done through sponsored projects from govt and non govt. Agencies.. The college follows a systematic approach towards the allocation of budget. All the departments are requested to submit an estimate of requirements for their respective department which is discussed under various heads of their department. The needs of the particular department are analysed separately

and the required budget is allocated. Further, if there is any requirement for the departments other than the one stated in the budget, the same can be procured by submitting the necessary details. Before the commencement of the financial year, budget proposal is collected from all departments. The same is placed before the finance committee and the committee in turn will deliberate and makes necessary changes for a proper balance of receipts and expenditure. The same will be submitted to governing council for approval. Budget approvals will be communicated to the departments and sections. The institution keeps track of the budget. In any unforeseen circumstances, non-budgeted amount is considered and allotted depending on the merit of the case. The requests are consolidated and reviewed by the administration team and funds are allotted. Utilization of allocated funds are monitored periodically and reviewed at the end of the financial year

Almost, 95% of the total budget was spent during the last three years. More budgets have been allocated to the infrastructure built-up and laboratory equipment's. Also moderate budgets have been allocated in case of consumables; the same has been utilized for research and development activities. Separate budget has been allocated for library, research and development. Additional funds will be allocated in case of emergency requirement. Some of the namely utilization of funds is towards the expenditure on salary of teaching and supporting staff, purchase of equipment, machinery and furniture, library books, esubscriptions, electricity charges, consumables, software, internet bills, repair and maintenance, faculty development programs, advertisement, affiliation and approval fees, printing & stationary, sanitation-housekeeping-gardening and security charges, and other miscellaneous expenses.

6.5 Internal Quality Assurance System

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

Response:

The Internal Quality Assurance Cell (IQAC) is established in the institution to maintain and enhance quality of education. To ensure efficient functioning of IQAC, coordinator of the IQAC shall interact with various functionaries for effective implementation of IQAC and apprise chairperson of IQAC from time to time for the progress. IQAC will meet at least once in a year and record its deliberation and suggest improvements required if any in academic / administrative functions. The IQAC plays a vital role in maintaining and enhancing the quality of the institution and suggests quality enhancement measures to be adopted. The quality assurance processes, with regard to academics, administrative, are the integral part of the institutional policy.

Quality Policy: We aspire for global recognition through systematic and meticulous transformation of our students into highly motivated graduates enriched with professional competence, managerial skills, built in dynamism and humanism.

Quality Objectives are as under: Develop quality consciousness among everyone in the institution including students. Promote, foster and sustain an environment to achieve academic excellence.

The quality check involves:

- 1. Monitoring of classes and reporting the discrepancies (if any) to the higher authorities on a daily basis.
- 2. Weekly verification of master attendance registers and teacher's diary.
- 3. Monitoring attendance of students and verification of attendance every two weeks.
- 4. Verification of proctor records and counseling details after every internal examination To check whether the marks & attendance have been updated in the proctor card. Also, to check whether counseling has been done during that period.
- 5. Verification of lab attendance register-To check whether the marks are being allotted according to the lab evaluation process of the institution.
- 6. Verification of final attendance before submission to University. Students having less attendance are informed to the respective proctors and HOD.
- 7. Verification of marks entry in the register after every internal examination.
- 8. Verification of Notice board displays periodically To check whether the current circulars have been displayed or not. Old circulars have to be removed.
- 9. Verification of Department stock register of newly purchased equipment in the beginning of every semester.
- 10. Department library audit in the beginning of every semester.
- 11. Timetable and workload verification in the beginning of every semester
- 14. Central Library audit on a yearly basis.

The most Significant Initiative is 'Globalarena' –

The Finishing School is an in-house department which works for the overall development of the students. It opens the gates of the globe for the students by making them efficient enough to face the real world. Globalarena brings out the quality of being graceful and stylish in student's personality. The ability to communicate information accurately, clearly and as intended is a vital life skill. At the Globalarena - THE FINISHING SCHOOL the college groom the students so that they can excel in every sphere of life with an excellent communication skills and an elegant personality

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

quality initiatives)

Response:

At the beginning of every semester the allocated course coordinator review the syllabus and prepares a course plan for that subject based on the course outcome and schedules a 60 to 70 hours plan to deliver it. He/she also makes a day wise schedule plan, methodology being used, pedagogies and what is expected out of that lesson. Course files or planning documents of every course are used to bring objectivity and strategize the course of teaching and learning for every topic. The teachers go through the syllabus and ensure that all the registered students full fill the pre-requisites of the course. They check if the students have a fair knowledge of the basics, so that they are able to understand the teaching. The Program Structure, Course Syllabus, Course Session Plan, Time-table, Master Academic Planning Worksheet are made available to the students before the commencement of the semester. Daily monitoring of conduct of the classes is done by the in each department. Regular meetings of course faculty are held with Head of the institution to review the course delivery and student learning progress.

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

Curriculum Level

Review of Academic Process Calendar - Once in Semester

Review on Curriculum Planning - Once in Semester

Review on Teaching – Learning (Planning) - Once in Semester

Review on Teaching – Learning (Execution) - Once in Semester

Review on Teaching – Learning (Attainment) - Once in semester

Review on Syllabus Completion Monitoring - Twice in semester

Review on Teaching Feed Back from students - Twice in semester

Review on Conduct of Remedial Classes - Once in semester

Review on Quality of Projects/Product Development - Once in Year

Co-Curricular Level

Review on Industrial Visits - Once in Year

Review on Internships - Once in year

Review on Guest Lectures/Work Shops/

Certification/Value Added course for students Once in semester Review on students Technical Paper Publication in Journals/Technical Events Once in year Review on Quality of News Letter Publication Once in year Review on Conduct of Activities by **Professional Bodies** Twice in year Extra-Curricular Level Review on Student participation in Art/Literary/ **Cultural Activities** Once in Year Review of Student participation in Sports & Games Once in year Review of Student participation in NSS activities Once in year Review of Student participation in NCC activities Once in year Organisation level Review on attainment of Cos, POs and PSOs Once in year Review on ICT / Laboratory facilities Once in year on Best practices/Innovation/ Product Development Once in Review year Review on Faculty Development Programs Conducted / attended- Twice in year Review on Budget planning & utilization Once in year Review on finance audit Once in year

6.5.3 Quality assurance initiatives of the institution include:

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

Certification, NBA)	
Response: A. All of the above	
File Description	Document
Upload details of Quality assurance initiatives of the institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

The Institute celebrates Women's Day annually and motivates all the staff to organize discussions for understanding the role of women towards a progressive society. Female students are motivated and supported for various academic and non-academic activities.

The institute also organize program and spread awareness on the gender equity. Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

Safety and Security:

Safety and security is broadly classified under 4 heads

- 1 Physical
- 2 Environmental
- 3. Organizational
- 4. Educational

1) Physical-

- 24x7 operational CCTV cameras at vital and critical locations.
- Security guards are deployed at various placed the building and in the campus to safeguard the safety.
- first aid Kits and fire extinguishers are available in common places
- A thorough risk assessment of the neighboring area is conducted and security staff is posted in those areas.

2) Environmental

The environmental aspect comprises of the physical aspect of security surveillance that helps to maintain safety and security in the premises.

- Display of Emergency contact number of the designated personnel
- A thorough monitoring and security surveillance is provided till the last women employee, girl student leaves the campus.
- Separate and secured rest rooms are provided.
- Movement of visitors in closely monitored.
- Transport facility is provided for women staff leaving the campus in late hours.

3) Organizational:

Congenial atmosphere is prevailing in the institute where women/girls encouraged to work and study

- Boys are educated on the behavioral norms at the time of orientation.
- Women's Grievance Redressal Cell under Women's Form is constituted to redress and the Women grievance
- Women's Forum conducts different activities to fight against any kind of injustice resulting from gender bias:

4) Educational

- Poster's advocating gender sensitivity is displayed is prominent places.
- Awareness provided on the policy of sexual harassment, gender discrimination and the complain Process.
- Awareness and training on safety and security (Dos and Don'ts while traveling, emergency contacts, helpline etc.)

The ICC Cell promotes gender amity, upholding the right to protect against Sexual harassment in the workplace. ICC Cell seeks help from the police department and local judiciary to create awareness about. How to promote mental health, the significance of yoga and meditation, effective ways to memorize, healthy habits and positive thinking and trends in the lifestyle etc. are addressed.

Common Room:

- 1. Ladies common rooms are provided in every block and floor
- 2. A visitors' room is available at the reception of the institute. Any outsider who wants to meet any student/staff should meet in the visitors' room by making a proper record entry.
- 3.A Dispensary with a doctor and certified nurse is available with first aid facility in case of any illness.
- 4. The Gym and Yoga room is available for female student/staff with separate timings.

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

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

Response: A. 4 or All of the above

File Description	Document	
Any other relevant information	View Document	

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

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

Response:

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The institute also organize program and spread awareness on the gender equity. Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

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7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

File Description	Document
Any other relevant information	View Document

7.1.5 Green campus initiatives include:

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

Response: Any 4 or All of the above

File Description	Document
Any other relevant documents	<u>View Document</u>

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

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

File Description	Document
Any other relevant information	<u>View Document</u>

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

Response:

India is a nation with a diverse community and Indian's culture refers to a set of small, distinct cultures. clothing, festivals, languages, religions, music, dance, architecture, food, and art are all part of India's culture. Throughout its history, Indian culture has been influenced by a variety of foreign cultures. In addition, India's civilization has a long history.

Institution believes in unity in diversity that's why our students respect the different religion, language and culture. We feel the college is our second home and all faculties like a family member. Institution greet and wish each other at different festivals and invite them to have a feast to get introduced with one's culture to have amicable relations and to maintain the cultural, regional, linguistic, communal socioeconomic and other diversities. Similarly, our students also celebrate the different festivals with joy and enthusiasm which help them to implant the social and religious harmony.

The College encourages students to organise and engage in various programmes sponsored by the college, inter-college, university, and other government and non-government organisations in order to increase their awareness of cultural, regional, linguistic, communal, and socioeconomic diversity.

Institution promote harmony towards each other by organising different sports and cultural activities. Commemorative days likeEnvironmental day, International Yoga day, Independence day, Teacher's day, Engineers day, NSS day, Birth anniversary of Mahatma Gandhi, World Student's day, National Education day, Constitution day, Human Rights day, National Youth day, Parakram diwas, National Voter's day, Republic day, Martyrs day, Chatrapati Shivaji Maharaj Jayanti, Women's day Celebration, Birth anniversary Dr Babasaheb Ambedkar, National Technology day along with many regional festivals like Ganpati festival and Dasara are celebrated in the college. This establishes positive interaction among people of different racial and cultural backgrounds. There are different grievance redressal cells in the institute like Student grievance redressal cell, Women grievance redressal cell which deal with grievances without considering anyone's racial or cultural background. Institute has code of ethics for students and a separate code of ethics for teachers and other employees which has to be followed by each one of them irrespective of their cultural, regional, linguistic, communal socioeconomic and other diversities. The sole aim of the NSS is to provide hands on experience to young students in delivering community service. Motivational lectures of eminent persons of the field are arranged for all-round development of the students for their personality development and to make them responsible citizens following the national values of social and communal harmony and national integration. Besides academic and cultural activities, we have built up many strong infrastructures for a variety of sports activities for the physical development of the students.

In this way the institute's efforts/initiatives in providing an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic, and other

diversities.

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

Response:

WCEM regularly keeps sensitizing students and employees of the institution toward their constitutional obligations; values, rights, duties and responsibilities.

For this, the institution regularly conducts and observes various events such as Independence Day, Republic Day, Gandhi Jayanti, Engineers Day, Cultural events and many more in which students and employees participate and deliver motivational speeches, recite poems, perform on stage etc. Apart from these events, few mandatory courses for undergraduate students such as Professional and Social Ethics, Disaster Management have been incorporated in the current academic regulations in order to sensitize students towards the course on the Indian Constitution, Essence of Indian Traditional Knowledge, Engineering and Social Ethics, etc.

Various sensitization programs are held regularly at the departmental as well as institutional level, in which students participate at various competitions such as essay writing, quiz competitions, drawing competitions, stage and street performances, treasure hunts etc. So that they can share their knowledge and ideas about values, rights, duties and responsibilities.

WCEM is certainly a leading cell that fosters the overall development of character, comradeship, discipline, leadership, secular outlook, spirit of adventure, sportsmanship and ideals of selfless service among the youth of the country.

•

National Service Scheme (NSS) was introduced at WCEM in 2015 as a part of the academic programs and since then NSS has been functioning as a regular feature in the realm of our Academics. It is a student centered program in which projects are implemented by the NSS volunteers in the community in close collaboration with the community and thereby it provides vast scope for the students' interaction with the people. N.S.S has enriched the students' souls and minds. The overall objective of this scheme is Education and Service to the community and by the community.

Institute provides duties which are to be followed by faculty. Once join duty, faculty is not allowed to leave the services of WCEM in the middle of the semester. Faculty are not allowed to appear for any examination and to apply for other job without written prior permission of the management. Faculty should be at the head quarter at NAGPUR/NAGPUR metro region and abide by all the rules and regulations as

well as code of conduct laid down by the sanstha from time to time. Faculty should devote whole time to the duties and will not engage directly or indirectly any trade or business, without the sanction of chairman of management; which in his opinion is likely to interface with the duties of appointment.

Faculty should provide correct mailing address as soon as faculty joins the duties and any change in the address given earlier should be communicated to the principal. It will be presumed that any letter sent by registered post on the given address, shall be deemed to have been acknowledged by faculty. Actual teaching days will not be less than 180 days in an academic year. Faculty will not have an engagement of not less than 40 hours per week for teaching and other activities.

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

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

Response: A. All of the above

File Description	Document
Any other relevant information	<u>View Document</u>

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

Response:

Wainganga college of Engineering always believe in promoting a sense of nationalism, integrity and harmony among its staff and students alike. Festivals and events unite the entire college, as they celebrate them under one roof by representing nation wide harmony and patriotism. Wainganga College of Engineering celebrates the following festivals through out the year with great zest and enthusiasm.

Sr. No	Name of the Events/ Festivals	Duration	Partici	pants
1.	Environmental Day	05th June	17	
2.	International Yoga day	21st June	40	
3.	Independence Day	15th August	52	
4.	Teacher'sDay	05th September	55	
5.	NSS Day	24th September	80	
6.	Birth anniversary of Mahatma Gandhi	02nd October	61	
7.	WorldStudent'sday	15th October	69	

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73

The College always celebrates Republic Day and Independence Day with great fervour. Chief Guest is invited and flag is hoisted by him/her in the presence of staff, students.

The college also celebrates Martyr's Day in the honor of all Indians who had lost their lives in the struggle of India's independence. Programme is organized by the college to remember ours lain freedom fighters. Celebrating these festivals commemorates the sacrifices of the great leaders and freedom fighters, who laid down their lives in the foundation of this country with also college Parakram Diwas (Birth anniversary of Netaji Subhash Chandra Bose) was celebrated in the college campus.

NationalVotersDay was celebrated in the college premises. The Principal addressed the staff members and an oath taking ceremony was held. The Principal along with faculty members talk about importance of vote and made students aware of their Right toVote.

The college celebrates International Women's Day to commemorate the cultural, political and socioeconomic achievements of women. Programs are conducted to bring attention to women's rights movement, gender equality and violence against women.

International Yoga Day is celebrated to harmony, happiness and success among all the students and faculty alike. Yoga embodies unity of mind and body, students are encouraged to make it a regular practice for good health and peace of mind.

World Environment Day makes students aware of pressing environmental issues, the need to save resources and reconnect with nature. The college has banned the use of plastic and is a green campus. Recycling of waste is done through the proper channel and students are encouraged to keep the campus clean.

Waingang? College of Engineering and Management has organized Programme "Chhatrapati Shivaji Maharaj Jayanti" dated 19th February which marks the birth anniversary of the great Maratha. Shiv Jayanti

is celebrated on February 19 every year in his honour.	

7.2 Best Practices

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

Response:

Best Practice 1

Title of the Practice	WCEM Green Initiative
Goal	Environmental issues bring about thoughtful questions on the roles
	Irrespective of whether they are contributing to a better enviro
	Institutions have to acknowledge environmental or green issues t
	and measurement. Based on the approach WCEM has significant C
	Promote sustainability by creating awareness
	Share knowledge & expertise-Expert talks about environments
	possible solutions
	Deploy eco-friendly technologies for greening and cleaning our ca
The Context	The main contexts are (i) Sensor base energy Conservation (ii) e-
	Renewable energy generation and (iv) Landscaping and Trees.
The Practice	Energy conservation
	• The Internal stakeholders take all measures to save the power.
	More than 50% lighting requirements are met through LED source.
	Use of renewable energy
	• Interactive solar power generating system of 5 KW is provided to With the installation of this system 100% requirement of can additional advantages like:
	 no escalation in power cost for 15 years upto20% rebate in property tax under Green Building Norn Uninterrupted energy use during day time round the year. Biogas plant available in college campus and it is used as reenergy.
	The Context

Efforts for carbon neutrality

neutrality.

By conserving and reusing energy the need for excessive us greatly reduce thus reducing carbon emissions. Installing so reducing carbon emissions. The installation of XXXKW sol saved the amount of carbon dioxide released into the air. The carbon dioxide is well controlled with these efforts in the in

- Vehicles are not permitted in campus.
- Use of Battery power vehicles.
- Ban on single use of plastics.

Plantation

• Every year students along with the garden staff plant trees. organized by NSS. Due to this program over the years the campu green. Also, a herbal garden consisting of plants with medicinal v cultivated in the college campus.

e-waste management

- E-waste generated is first reused in the campus itself.
- 1. Solar Systems **HEI Data to be added**
 - 2. LED Bulb **HEI Data to be added**
 - 3. Biogas plant **HEI Data to be added**
 - 4. Sensor base energy conservation **HEI Data to be added**
 - 5. Landscaping and Trees. HEI Data to be added

Problems Encountered Resources Required

Evidence of success

and The Green Initiative seeks to better train the world of work and opportunities of the coming transition, and help them take up a must play in managing this change. It provides a platform of kno further build the case that decent work approaches and social dial for truly transformative change. Cost for implementation some immediate deployment.

Best Practice 2

П	1 7	Title of the Practice	Creation of Awareness among Faculty and students about their social re	
	2	Goal	 To develop ethical and moral values among Faculty and student 	
			 To create harmony and peace among the Faculties and stude 	ents ai
			technical staff.	
			 To develop emotional quotient and spiritual quotient along 	with i
			quotient.	
			 To imbibe education among the Faculties and students for the 	he dev
			the society and community.	
	3	The Context	To develop society, the institute has decided to create engineers h	naving

		and moral values. The need of the society today is to develop budding en research mindset, ethical values and entrepreneurship skill. The young very volatile and it is the necessary to bring awareness among them social responsibilities.
4	The Practice	1. Institute conducts the program on National Service Scheme to unders responsibilities. Institute understands the importance of learning the organizes co-curricular, cultural programs, tours, and visits, conference interpersonal skill, decision making and values clarification. Free motivational books to school students. Institute arranges spiritual lecturidolized thoughts.
		2. The people living nearby railway station were suffering from water p water supply provision at railway station also. The Waingang? college m identified the need of the passengers and thought to provide the Railway station, So that it will be helpful to the people around. The water through the tube well where the pipe line has been laid from the college station and all water needs are supplied from college with free of cost. water is supplied to the railway station storage tank.
		3. The approach road from railway crossing on Gumgaon phata to colle bad condition. The students, Passengers, crossing people, comfortable to travel across the route. So Waingang? College has take to construct the TAR Road to reach the College comfortably. Institute about the periodic maintenance of road to keep it in good condition. Constructs are taking the advantage of this facility comfortably.
5	Evidence of success	1. HEI Data of 1. Organizing blood donation camp 2.tree plantation, 3 etc., community activity is promoted in the neighborhood of the in activities also give the social ethical awareness among students. Stress lectures will be helpful to students and staff for relieving stress and maintage. 2. Water supply document 3.Road Image
6	Problems Encountered	and Going to the villages and convinced them that the institute is wor
	Resources Required	betterment is a herculean task. More budget provision needs to be made out social work.
7	Notes (Optional)	Environmental Science, Green Engineering Systems, Energy Audit Co Management, Air pollution and control, Professional Ethics and Human Patents, Professional Ethics & Morals-I & II education is already curriculum which is framed by the University to create awareness on issues

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:

WCEM encourage engineering professionals who will be academically and technically sound along with well-built ethics. Institute's distinctiveness is elaborated in following paragraphs. Institute has a parent Sanstha like WBVS, which has management members who have dedicated themselves to social cause in Vidarbha Region.

Academics Brilliance: A high quality of academic excellence can provide value-added experience to the students. The positive outcomes are achieved by designing the curriculum to meet the global needs and through teaching-learning methods that blends with ethical values. It outlines the commitment to academic performance expected of all students. The structured orientation of the student into the curriculum enables to imagine the career opportunities and the approach towards achieving them.

Student welfare: To cultivate competence and efficiency along with character and integrity amongst the youth, for creation of a society that is at once progressive and advanced but also inclusive and just is the Vision of the College. The College caters to both the urban and the rural population in and around Nagpur District and hence we are focused on including the economically weaker segment students into the main stream. In order to effectively implement this inclusiveness the college not only disseminates various Government scholarships to the needy students but Endowment Funds for payment of fees of the very needy students is also setup in the college alongwith students welfare schemes to take care of students needs.

Research Knowledge: The Institute's determination to be transformed into a centre for major research is therefore a commitment to offer high quality teaching through:

- Synergies between Research & Education Activities
- Research Based Learning & Teaching

The Course based projects, Social impact projects, certificate courses offered by the institute provides the knowledge regarding cutting edge technologies, enabling the students to carry out inter-disciplinary research. The Research and Consultancy Centre (RCC), of the institute is equipped with advanced level research Laboratories to make possible the academic and sponsored projects.

Enthusiasm of Innovation & Entrepreneurship: The institute provides a platform to business Start-ups to develop their ideas into commercially viable products. The students participate in the Big Idea Competition and the best ideas are rewarded. Week End Lab facilitates the students to work on innovative project ideas. WBVS encourages the stakeholders to incubate the selected projects, by providing the seed money and infrastructure based on their credentials. Training and placement Cell crucially works on generating the excitement in the young engineering brains to manufacture innovation and thus laying the stones for entrepreneurship.

Physical facilities: A well equipped and student friendly physical education department having vast sports ground and other facilities provides avenues for participation of the students in sporting activities. Every department conducts career orientation program right at the time of admission of student into any program thereby giving the student, focus to work till he/she completes the course. Also, value added courses are periodically conducted as part of the capability building of the students. The NSS addresses the innate

social responsibility of the students through various activities that are focused on social issues, local needs and issues of state and national importance. The NCC trains the students in national patriotism and nation building activities while imbibing discipline in the students.

WCEM Encourages engineering professionals who will be academically and technically sound along with well-built ethics. Institute's distinctiveness is elaborated in following paragraphs. Institute has a parent Sanstha like WBVS, which has management members who have dedicated themselves to social cause.

The idea started as Education Process Re-Engineering (EPR) which proposed by faculty members. This EPR has four faces, viz. (a) Brilliance in Academics (b) Investigation of Knowledge through Research (c) Enthusiasm of Innovation & Entrepreneurship (d) Exponent for Development of a Rounded Personality with Global Vision and Social Responsibility.

Brilliance in Academics: A high quality of academic excellence can provide value-added experience for the students. The positive outcomes are achieved by designing the curriculum to meet the global needs and through teaching-learning methods blended with ethical values. It outlines the commitment to academic performance expected of all students. The structured orientation of the student into the curriculum enables to imagine the career opportunities and the approach towards achieving them.

Investigation of Knowledge through Research: The Institute's determination to be transformed into a centre for major research is therefore a commitment to offer high quality teaching through:

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Exponent for Development of a Rounded Personality with Global Vision and Social Responsibility:

Participation of the students in Co-Curricular Activities (CCA) and Extra Curricular Activities (ECA) helps to enhance all rounded personality to strongly face the turbulent road of the future. Experiences and appreciations gained through these activities assist students during internships. Career guidance, Personal counselling, Training are well structured through a Mentoring Training and Placement (TP) centre. Student participation in ECA / CCA is facilitated through professional bodies and student associations. Since the

Vision of the Institute focuses on comprehensive and sustained growth of the students and that of the Institute along with its student community, the Experts serves as a unique tenet that directs the Institute's de facto modus operandi which leads to appreciable, all-round performance

5. CONCLUSION

Additional Information:

We at Wainganga College of Engineering and Management (WCEM), strive to bring out and nurture the talents and skills of youth with Quality Technical Education, motivate them to be self-disciplined and develop their competence to face the challenges of globalization. We shall achieve this by

- Provide value-based education.
- Produce Industry-ready Professionals through training in Soft-Skills and Personality development. Undertaking networking with Industry, Academic and Research Institutions
- Provide adequate and furnished infrastructure for academic and research activities.
- Organize national level Seminars/Conferences.
- Promote Creativity and Innovation among students.
- Conduct Career -Vision program to facilitate right career choice by students.
- Encourage Entrepreneurship among students.
- Motivate the students to participate in Co-curricular and Extra-curricular activities.
- Train teachers in modern instructional methodologies to improve their teaching skills.
- Motivate the faculty to publish papers in National/International Conferences and Journals.
- Provide Hostel and Residential accommodation to students and staff.
- Develop and promote Green Environment.
- Provide quality environment and services to all Stakeholders.
- Both teach and follow Ethical, Environmentally responsible Engineering practice.
- Attention to issues of national relevance.
- Responding to the changes in both technology and applications.
- Provide systems, resources, and opportunities for continuous improvement.

.....AN INSTITUTE WITH A DIFFERENCE......

- Where we believe that education should stimulate the minds of the young and inflame their intellect.
- Where global 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.

Concluding Remarks:

Institute has well framed vision and mission, considering the needs of the society. Best academics, infrastructure, laboratories, industry-interaction, self-learning and co-curricular and extra-curricular activities

are some of the special features which cater to the comprehensive development of the students.

The governance comprising of Governing Body, College Development Cell, Departmental Advisory Board, Internal Quality Assurance Cell, Academic Monitoring Committee and various institute level committees. These all play significant role in the evolutionary reforms towards positioning the Institute in the preferred list of all stake holders.

The Institute believes in promoting a culture of delegation of powers through strategic policies. The Director of Institute is assisted Principal, HODs, Administrative Head, Section in-charges and coordinators of various committees in decision making process at the Institute.

Institute executes strategic planning from time to time for producing quality engineers and overall growth of the institute

Institute has well established organizational structure to execute smooth functioning of administrative and academic processes. WCEM has deployed e-governance in all the areas of academic processes to ensure better academic planning and monitoring.

Institute regularly conducts training to staff and faculty members for implementation of quality procedures. External audit by various agencies like AICTE,RTMNU, ISO and internal audit is undertaken periodically to improve institutional activities.

The Institute believes that Excellence is a continuous process. 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, highly relevant to the present-day educational scenario in the country.