

### YEARLY STATUS REPORT - 2022-2023

Part A		
Data of the Institution		
1.Name of the Institution	Shri Ramdeobaba College of Engineering and Management, Nagpur	
• Name of the Head of the institution	Dr. Rajesh S .Pande	
• Designation	Principal	
• Does the institution function from its own campus?	Yes	
• Phone No. of the Principal	07122580011	
Alternate phone No.	9607980531	
Mobile No. (Principal)	9359719949	
• Registered e-mail ID (Principal)	principal@rknec.edu	
• Address	Shri Ramdeobaba College of Engineering and Management, Katol Road, Gittikhadan,Nagpur	
City/Town	Nagpur	
• State/UT	Maharashtra	
• Pin Code	440013	
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)	26/03/2011	
• Type of Institution	Co-education	

• Location	Urban
Financial Status	Self-financing
Name of the IQAC Co-ordinator/Director	Dr.(Mrs.) Aleefia.A.Khurshid
• Phone No.	07122580011
Mobile No:	09890419732
• IQAC e-mail ID	iqac@rknec.edu
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.rknec.edu/igac/
4.Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.rknec.edu/academic- calendar/

#### **5.**Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.10	2014	10/12/2014	09/12/2019
Cycle 2	A+	3.35	2021	28/02/2022	27/02/2027
6.Date of Establishment of IQAC		14/08/2013			

#### 6.Date of Establishment of IQAC

7. Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

						NAGPU
Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding	Agency	Year of Award with Duration	l	Amount
Electrical Engineering	Rajiv Gandhi Science & Technology Commission (RGSTC)	Govern o: Mahara	£	22/02/202	2	200000
Electrical Engineering	Unnatt Bharat Abhiyan (Indian Institute of Technology, Delhi)	Minist Hum Reso Develoy Govt Ind	nan urce pment, . of	16/05/202	2	100000
Electrical Engineering	All India Council for Technical Education	Govern of In All I Counci Techn Educa	ndia, India 1 for Nical	11/03/202	2	2500000
3.Provide details re	egarding the compos	sition of tl	ne IQAC:			
-	test notification regard of the IQAC by the HI	-	<u>View File</u>	2		
9.No. of IQAC mee	tings held during th	ne year	03			
compliance t	nutes of IQAC meeti o the decisions taken the institutional web	1	Yes			
-	upload the minutes of d Action Taken Repor		No File U	Jploaded		
-	ve funding from any support its activities	•	No		]	

• If yes, mention the amount	

**11.Significant contributions made by IQAC during the current year (maximum five bullets)** 

Ranked in NIRF Ranking 2022. The Institute has been Ranked in band 100-150 in Engineering Category in All India Ranking.

NBA accreditation of Department of Computer Science Engineering and Electronics and Communication

State level awareness program on NEP 2020

Examination and evaluation reforms

Institutionalization of OBE process

12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
Examination reforms	Evaluation methods assessing higher order abilities apart from traditional examination systems is introduced
Promoting Green Initiatives and waste management in the institute	IEI Paryavaran Saathi Award for efforts towards environment protection and awareness carried out by the institute.
NBA Accreditation for UG/PG programmes	NBA accreditation for undergraduate program in Computer Science Engineering and Electronics and Communication
Value added courses in the emerging areas to cater the need of the changing society	Value added courses related to personality development, communication skills and emerging technologies were conducted
To increase Ph. D enrollment	102 Ph.D students registered
To enhance research visibility and IPRs	143 IPRs and 371 research papers published
Improve NIRF ranking	Ranked in NIRF Ranking 2022. The Institute has been Ranked in band 100-150 in Engineering Category.

	10101 UK	
<b>13.</b> Was the AQAR placed before the statutory body?	Yes	
• Name of the statutory body		
Name of the statutory body	Date of meeting(s)	
Board of Management	30/12/2023	
14.Was the institutional data submitted to AISHE ?	Yes	
• Year		
Year	Date of Submission	
2022-23	14/02/2024	
15.Multidisciplinary / interdisciplinary		
The Institute has constituted a committee for implementation of NEP 2020. Undergraduate/Postgraduate programmes in inter/multidisciplinary areas have already commenced from session		

2020-21. The features already implemented in the curriculum as a part of NEP include open elective courses for interdisciplinary learning provision for earning extra credits through Minor certification value-based courses like Bhagwat Gita, Human relationship dynamics, and Gender and cultural studies Courses on environment studies liberal arts and humanities like environmental science, fundamentals of economics, photography, theatre, ornithology Credit transfer through MOOCs MoUs' to enable credit transfer with foreign universities, University of North Florida, USA UMASS Lowell, USA, N+I engineering institutes, France, RWTH Aachen academy, Germany The good practices include projects in the areas of community engagement and service through UBA and NSS Environmental education through NSS and REEF One semester industry/research /RCOEM-TBI internship Interdisciplinary Minor and Major Projects Involving students in faculty research Value added courses to enhance employability quotient The institution supports collaborative approaches leading to multidisciplinary solutions and to promote more multidisciplinary research endeavors, the following centers of excellence (COE) are established. TATA -CIIIT COE NVdia COE Intellisense COE for microsystems QCFI COE Center for energy research

#### 16.Academic bank of credits (ABC):

The Institute has registered for the Academic Bank of Credit through the Digi locker NAD portal. The Institute has been making every effort for internationalizing education and credit transfer prior to the notification of NEP 2020. MoUs' has been signed with the University of North Florida and UMASS Lowell for credit transfer. 1053 students have registered on the NAD portal.

#### **17.Skill development:**

The Institute regularly organizes soft skill enhancement programs through the Career Development and placement cell in alignment with NSQF in physical and online modes. The curriculum includes the following courses for the Soft Skills development of students Practical course Personality development Audit course on Professional Skill Development and Soft Skills Open elective on Human Relationship Dynamics and Psychology for Professional Growth. Course on Organizational behavior Also, following practices help in developing soft Skills beyond the curriculum Group activities in the Language Lab that not only aim directly at the intended objective of enhancing English and employability skills but also help develop soft skills. Group tasks given as assignments in various courses in Humanities help the students strengthen their soft skills Students' Club activities Guest lectures on soft skills The Institute promotes value-based education to inculcate positivity among students by offering an audit course on the Constitution of India as an audit course which helps to inculcate constitutional and citizenship values in the students as well as teach them the values of peace, and righteous conduct as citizens as enshrined in the Indian Constitution. Some of the elements of the course on business and technical communication taught in various programmes teach the learners about ethical conduct as professionals, not only in terms of their behaviour but in professional writing too. The good practices include REEF, the environment club which aims at inculcating the value of love for nature and non-violence towards animals. As part of activities like bird watching they learn righteous conduct which is the ethical way of conducting themselves during this activity so that they do not harm the birds and their habitat. This also helps develop humanistic values. The team activities help the students learn life skills such as handling stress, making long-lasting friendships, conflict resolution, time management, thinking beyond "self", self-responsibility, etc. Induction program at the entry-level incorporates lectures on universal human values. NSS activities promoting among students the universal human values. Yoga course/Sports activities to strengthen humanistic and ethical behaviour as well as life-skills.

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

The Curriculum includes an open elective course on Bhagwad Geeta and a non-credit mandatory course on Indian traditional knowledge for all undergraduate programmes. The institution promotes Indian languages and Sanskrit is being taught as an open elective course in the undergraduate programmes. The course on Indian traditional Knowledge various topics related to basic Indian traditional knowledge, Indian philosophical& artistic traditions to knowledge of traditional Indian Science and technology. Indian arts include Chitrakal, Murtikala, Vastu Kala, sangeet , Nritya and Sahitya which are also a part of the course on Indian traditional knowledge. The faculty members are well versed to provide delivery in bilingual language. The good practices include formation of students' club related to Indian arts such as Music, Drama and Dance where the students are trained from certified trainers to encourage creativity and better understanding of cultural practices. Students are taught about the importance of Indian cultural heritage with specific reference to traditional art forms as well as folk and tribal art forms of India.

#### 19. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

The initiative to transform the curriculum towards OBE started with the preparation of NBA accreditation for the programmes since 2001. Presently the Institute has 07 NBA accredited B.Tech programmes, as per the Washington Accord framework. Efforts were made to conform to the NBA guidelines while defining the programme outcomes (POs). PEOs were defined considering the vision and mission of the Institute, and stakeholder inputs. The programme specification by professional associations/bodies were also considered. The Departments have developed COs for the courses under various programmes and were mapped to POs, and PSOs of the programmes. For individual level computation of attainment, regular in-house workshops are conducted for faculty. Faculty members have undergone online courses on OBE. As per the set-up procedure, the implementation at the faculty level starts with the specification of the teaching plan in all offered programmes. Teaching plans defines unit-wise engagements as per weightage for evaluation and assessment. The units have been mapped to COs.While setting the question paper, care is taken to ensure coverage of entire syllabus and specification of COs and Revised Bloom Taxonomy levels. Questions papers are subjected to moderation for verification of the above. Besides evaluation of students' performance, the marks awarded against various questions are tabulated against the COs for further analysis and calculation of CO/PO attainment. The good practices in regard to capture OBE in

teaching-learning practices include Training programs by IQAC on implementation of OBE Certification through online faculty development programs Regular Discussion of attainment of POs and PSOs and plan of action in BOS/ IQAC meetings Question papers reflecting Cos and learning levels as per Revised Blooms taxonomy Regular review/revision of course outcomes in BOS meeting

#### **20.Distance education/online education:**

The Institute has been constantly promoting online education, the use of technological tools, and blended learning for teaching learning activities which have resulted in increased student engagement & learning outcomes. The curriculum has a provision for credit transfer through MOOCs as well as dropping a course that allows students to learn at their own pace. Learning autonomy to students is provided by facilitating the use of e-learning materials/resources. The good practices adopted include the use of technology as a tool to enhance learning in the content area and following are the key points Collaborative tools like Google Forms/Google Docs are used for information sharing and collection. Use of online platforms like YouTube and Zoom/Google Meet to conduct classes and presentations. Use of digital platform for delivery of assignments to students. Provision of delivery of specialized lectures through online platforms Use of Blended Learning

### **Extended** Profile

#### **1.Programme**

#### 1.1

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

#### 2.Student

#### 2.1

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	<u>View File</u>
2.2	1224

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2.2

4866

#### Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

2.3

1269

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

#### 3.Academic

3.1

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2

264

791

Number of full-time teachers during the year:

Extended Profile				
1.Programme				
1.1		28		
Number of programmes offered during the year:				
File Description	Documents			
Institutional Data in Prescribed Format		<u>View File</u>		
2.Student				
2.1		4866		
Total number of students during the year:				
File Description	Documents			
Institutional data in Prescribed format	<u>View File</u>			
2.2		1224		
Number of outgoing / final year students during t	he year:			
File Description	Documents			
Institutional Data in Prescribed Format	<u>View File</u>			
2.3	1269			
Number of students who appeared for the examin conducted by the institution during the year:	ations			
File Description	Documents			
Institutional Data in Prescribed Format		<u>View File</u>		
3.Academic				
3.1 791				
Number of courses in all programmes during the year:				
File Description	Documents			
Institutional Data in Prescribed Format		View File		

	NAGP	
3.2	264	
Number of full-time teachers during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.3	239	
Number of sanctioned posts for the year:		
4.Institution		
4.1	646	
Number of seats earmarked for reserved categorie GOI/State Government during the year:	es as per	
4.2	72	
Total number of Classrooms and Seminar halls		
4.3	2624	
Total number of computers on campus for academ	nic purposes	
4.4	3297.12	
Total expenditure, excluding salary, during the ye Lakhs):	ear (INR in	
Part	B	

#### CURRICULAR ASPECTS

#### **1.1 - Curriculum Design and Development**

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

The curriculum development is carried out by Statutory Bodies associated with the Institute, considering the local, national, regional and global needs. The focus of learning experience is 'Student Centric'. The Institute has adopted a skill/ability oriented 'Outcome Based Education' system with emphasis on handson practices, field projects, innovation and industry exposure to address local, regional, national as well as global requirements. The course contents are frequently updated taking into account the feedback from stakeholders and technological trends. The Institute has started four undergraduate and one postgraduate programme in the emerging areas, 162 new courses were introduced and 21 courses' contents are revised in the year 2020-21. The industries across the region are offering courses or parts of the syllabus are taught by experts from the industry. The key highlights include:

 One semester industry internship[VIII Semester] 2. Adoption of Choice Based Credit System 3. Open Electives, Credit Transfer, MOOCs. 4. Enrichment of entrepreneurship education through courses on Design Thinking and Entrepreneurship Development 5. Development of bilingual abilities through languages like German and Sanskrit 6. Introduction of courses on emerging technologies like: electric vehicles, internet of things(IOT), artificial intelligence(AI), cloud computing, supply chain management, environment protection etc.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	https://www.rknec.edu/syllabus/

#### 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

9

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	No File Uploaded

### **1.1.3** - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

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File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	No File Uploaded
Any additional information	<u>View File</u>

#### **1.2 - Academic Flexibility**

#### 1.2.1 - Number of new courses introduced across all programmes offered during the year

36

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

### **1.2.2** - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

30

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	<u>View File</u>

#### **1.3 - Curriculum Enrichment**

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

The Institute has implemented courses in the curriculum that

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strengthen professional competencies, inculcate broad competencies including social, ethical, and human values, environment sensitivity, and gender concerns to holistically develop students.

#### Gender Sensitivity

First-year B.E students must take "Constitution of India" to understand and practise gender and social equality. Fieldwork, community outreach, and gender sensitization events give students real-world gender sensitivity experiences.

Environment and Sustainability issues

Environmental Studies is offered in all undergraduate programmes to raise environmental awareness. Ramdeobaba College Engineers for Environment Forum (REEF) educates students and teachers about environmental conservation. Summer internships support Swachh Bharat internships and offer incentives according to Institute rules. Seminars, field trips, and Earth Hour, which students and faculty participate in, were designed to educate students about environmental and sustainability issues.

#### Human Values and Professional Ethics

The curriculum includes 'Social Science', 'Psychology for Professional Growth', 'Employability skills for Engineers', 'Organizational Behaviour and Development', 'Ethics in IT', 'Contract Works Account and Management', 'Essence of Indian Traditional knowledge', 'Rural Technology', 'Rural Marketing', and 'Engineering for Agriculture'. Curriculum design emphasises morality and ethics. Technical writing ethics are taught in "Technical Communication" and micro projects.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	<u>View File</u>

**1.3.2** - Number of value-added courses for imparting transferable and life skills offered during the year

8	
File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	No File Uploaded

#### **1.3.3** - Number of students enrolled in the courses under 1.3.2 above

294

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	No File Uploaded

#### 1.3.4 - Number of students undertaking field work/projects/ internships / student projects

#### 1213

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	No File Uploaded

#### 1.4 - Feedback System

<b>1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is</b>	Α.	All	4	of	the	above
obtained from 1) Students 2) Teachers 3)						
Employers and 4) Alumni						

File Description	Documents	
Provide the URL for stakeholders' feedback report	https://www.rknec.edu/igac/	
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>	
Any additional information	No File Uploaded	
1.4.2 - The feedback system of t comprises the following	he Institution	A. Feedback collected, analysed and action taken made available on the website
File Description	Documents	
Provide URL for stakeholders' feedback report	https://www.rknec.edu/igac/	
Any additional information	<u>View File</u>	
TEACHING-LEARNING AND	EVALUATION	
2.1 - Student Enrollment and P	rofile	
2.1.1 - Enrolment of Students		
2.1.1.1 - Number of students ad	mitted (year-wi	ise) during the year
1376		
File Description	Documents	
Any additional information		No File Uploaded
Institutional data in prescribed format	<u>View File</u>	
		categories (SC, ST, OBC, Divyangjan, etc.) as lusive of supernumerary seats)
167		
File Description	Documents	

File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

#### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The Institute assesses the learning levels of the admittedstudents at entry level through Psychometric test . Students are grouped into different baskets and mentored by the faculty mentors.Later as the students' progress in the programme, academic performance in tests and discussions in the class forms the basisof identifying slow and advanced learners. Remedial classes/doubt solvingsessions are organized after the regular class schedulefor academically weak students. The Institute recognizes the need to adapt to the different learning levels of students and hasintroduced certain provisions in the regulations.

Provisions for Fast Learners:

(1)One Semester Internship in Industry/R&D Laboratories/RenownedInstitutions for UG /PG students

(2)One Semester, RCOEM Technology Business Incubation(TBI) Startup Scheme for UG /PG students

(3) Two Semester Internship in Industry/R&D Laboratories/RenownedInstitutionsfor PG students

(4)Credit Transfer Scheme for completion of one semester in otherInstitutions

(5)Incentives for R&D/Incubation/ On-line Courses completedsimultaneously with curriculum

(6) Capability Linked Opportunities(Honors/Minor Certification)

#### Provisions for Slow Learners:

- 1. Make-up Examination
- 2. Improvement of Grade/CGPA while undertaking a Programme
- 3. Forgo Continuous Assessment Marks
- 4. Improvement of Grade/CGPA after completion of Programme

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#### 5. Dropping the course

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

#### 2.2.2 - Student - Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
01/07/2022	4866	264

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

#### 2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problemsolving methodologies are used for enhancing learning experiences:

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The Institute focuses on student-centric methods to
enhancelearning experience . Faculty members take efforts in
making the learning activity more interactive by adopting the
contemporarypedagogical practices as mentioned below. Pedagogical
Practices Teaching Methodology
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Sr. No.
```

Learning Methods

Implementation process

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1
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Class Room Learning

Chalk And Talk Method,

Ppts/Multimedia

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Experiential / Field Learning
Practical Learning
Industrial Visits
Internships
Training Programs
Real World Cases
3
Problem solving Learning
Tutorial
Assignments
4
Participative Learning
Project & Seminars
Case Studies
```

Group Discussions

Students Presentation

MOOCs

Use of Google classroom, conduction of tutorials have ensured that students take an active part in the teaching-learning process. Effectively designed open-ended experiments are adopted. The students are also trained in virtual labs and modern simulation tools to enrich their experiential learning. Independent learning is encouraged through assignments, seminars and self-study components. Use of technology(MOOCs) for enhancing the learnability coefficient of the students is encouraged and incentives are awarded to the students. Participative learning is encouraged through paper presentations, participation in technical events, and industryand research projects.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	Nil

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

100% faculty use ICT tools for teaching / academic and other purposes. Various ICT resources for effective teaching-learning utilized by faculty include video lectures, Google classroom, faculty web pages, faculty You tube Channels, etc. along with the institutes LMS - JUNO Campus. Please find the web links pertaining to different ICT tools used by the faculty below:

1. Webpages + You tube Channel :
http://www.rknec.edu/AQAR/2021-22/02
/2.3/2.3.2/2.3.2-webpages+blog+channel.pdf

2. Video Lectures ; http://www.rknec.edu/AQAR/2021-22/02/2.3/2.3.2
/2.3.2-Media-Center.pdf

3. ICT tools used (PPT, Blogs, Google forms, Quizzes, Slide player, Google slides, Google spreadsheets): http://www.rknec.edu/AQAR/2021-22/02/2.3/2.3.2/2.3.2-ICT-Tools Used.pdf

4. ICT Infrastructure:http://www.rknec.edu/AQAR/2021-22/02/2.3/2.3
.2/2.3.2-ICT-Infrastructure.pdf

5. Google classroom:http://www.rknec.edu/AQAR/2021-22/02/2.3/2.3.2
/2.3.2-google-classroom.pdf

6. LMS-JUNO-Link www.rcoem.in Username- naac@rknec.edu password Naac@1234

7. LMS Details:http://www.rknec.edu/AQAR/2021-22/02/2.3/2.3.2/2.3. 2-LMS.pdf

8. LMS Invoice: http://www.rknec.edu/AQAR/2021-22/02/2.3/2.3.2/2.3
.2-LMS-Invoice.pdf

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://www.rknec.edu/rcoem-media-centre/
Upload any additional information	<u>View File</u>

#### 2.3.3 - Ratio of students to mentor for academic and other related issues

#### 2.3.3.1 - Number of mentors

#### 264

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<u>View File</u>
Circulars with regard to assigning mentors to mentees	<u>View File</u>

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

The academic calendar ensures uniformity in various academic and assessment procedures and process across all the departments of the institute and is framed at least 15-30 days prior to the start of the academic session for all UG & PG programmes. Itincludes all the important academic and co-curricular activities schedules. The academic calendar is prepared with necessary inputs from various stakeholders' including Deans, Controllers of Examination, andHeads of Departments of the Institute. The academic calendar is circulated to all the stakeholders and uploaded on the Institute website for reference to all the students. In addition to the Institute level academic calendar, a department level academic calendar is also designed and followed. This calendar includes the activities planned at the department level, which may include co curricular and schedules of various professional societies of the department. The adherence to the academic calendar is ensured by Head of Department and Dean Academics. Dean Academics seeks report with respect to activities involved in the academic calendar and ensure adherence to action items of the calendar. The Head of the Department also ensures adherence to teaching plans from time-to time by seeking the necessary details from the faculty of the respective departments.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

#### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Number of full-time teachers against sanctioned posts during the year

264

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
Any additional information	No File Uploaded

### 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

#### 151

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<u>View File</u>
Any additional information	No File Uploaded

### **2.4.3** - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

#### 11.46

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	No File Uploaded

#### 2.5 - Evaluation Process and Reforms

### 2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

#### 10

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	No File Uploaded

### 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

#### 25

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	No File Uploaded

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

Examination procedures RCOEM has a well-established, completely automated and transparent evaluation process and it is communicated to all the stakeholders.Outcome based education has been implemented from 2011 since the inception of autonomy.RCOEM has adopted Revised Bloom's Taxonomy whichprovides an important framework to not only design curriculum and teaching methodologies but also to design appropriate examination questions belonging to various cognitive levels. Processes/Procedures integrating IT: The examination processes are completely automated. All the students are registered online through ERP. Examination forms are autofilled. Hall tickets are printed by the student themselves through their ERP login. Online payment gateway facility is made available for the students for payment of fees. All the Examination Records are digitized. The results are processed online and students can access results through ERP login. Integration of IT in examination processes has made the examination system fast, efficient,

transparent and error free. Continuous Internal Assessment System Students are assessed on a continuous basis through traditional and innovative modes of assessments such as Open book examination, online quizzes, computer based testing etc. and relative grading system is implemented with CGPA for all the programmes.These assessment tools assess the various abilities and learning outcomes among the students.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.rknec.edu/wp-content/uploads/2 023/12/EXAMINATION-REPORT-Summer-2022.pdf

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

The Institution has clearly stated programme outcomes (PO), program-specific outcomes (PSO), and course outcomes (CO) for all the programmes. The curriculum structure and syllabi for all the programmes are developed in a structured manner through a well defined process that involves the participation of stakeholders'. The Institute has an elaborate mechanism to effectively disseminate the information about POs, PSOs and COs amongst faculty and students, and are :

1.Clearly displayed on the Institute website.

2. Printed in the copy of syllabi which is given to all the students seeking admission to the first year of every programme.

3.Prominently displayed in the office of Head of the Department and important locations of every department.

4.Discussed in parent-teacher and employers' meet.

5.Discussed by the course teacher with the students at the beginning of each course.

6. Displayed as a screensaver on desktops and laptops in the concerned departments.

7. Included in the course file for each semester.

Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	No File Uploaded
Upload any additional information	No File Uploaded
Link for additional Information	https://www.rknec.edu/syllabus/

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

The Institution ensures effective curriculum delivery based on best practices of pedagogy, evaluation and assessment to attainthe POs as well as PSOs.Programme Assessment and Quality Improvement committee(PAQIC) defines the performance indicators and sets the target for POs and PSOs in the beginning of the academic year. At the start of every semester, course coordinators sets the target for each CO attainment which is reviewed at the end of each semester by the course teachers and is further presented in the PAQIC meetings held every semester. The level of attainment of POs and PSOs are measured using various indicators at the end of the academic year. The process of calculation of COs/POs/PSOsare institutionalized . Then at the end of each academic session, PAQIC meetings are held to understand the degreeof PO and PSO attainment for the graduating batch of students and suggest remedial measures for the next academic year.Both direct and indirect methods of assessment are used to ensure the attainment of POs. The direct assessment tools include : Assignments Laboratory performance Student Project Internal Test Examinations End Semester Examinations The indirect assessment tools include: Course End Survey Exit feedback Alumni Survey Employer Survey Cocurricular Activities Extracurricular Activities

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

#### 2.6.3 - Pass Percentage of students

**2.6.3.1** - Total number of final year students who passed in the examinations conducted by Institution

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://www.rknec.edu/wp-content/uploads/2 023/12/EXAMINATIONS-REPORTS- Winter-2022.pdf

#### 2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

https://www.rknec.edu/wp-content/uploads/2024/02/SSS 2022-23.pdf

#### **RESEARCH, INNOVATIONS AND EXTENSION**

#### **3.1 - Promotion of Research and Facilities**

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

- 1. Incentives and Funding for Research
- Financial incentives/support to all stake holders for publication of research papers, registration and travel for presenting papers in conferences, FDPs, STTPs, Workshops etc. held in India and abroad, filing, publication and grant of patents and pursuing part time PhD from reputed institutes.

The dedicated IPR Cell promotes creation of IPRs through well defined policy.

Academic research quality is ensured through mandatory publications in Scopus/SCI journals at PG/PhD levels.

1. Provision for research funding:

1) Young faculty Research fund (Seed Money up to rupees two Lakhs)

2) Department wise R&D budget.

Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

1. Policy Norms for Pursuing Higher Studies

Faculty willing to pursue Part-Time PhD at RCOEM orInstitute/University of National Repute are eligible for three months full-salary study leave or six months half-salary study leave for PhD work.

1. Research Recognition Policy

Awards constituted:

- 1. Researcher of the Year Award
- 2. Young Researcher of the Year Award
- 1. Academic Integrity and Prevention of Plagiarism Policy

The policy lists the responsibility of faculty, staff and student towards academic integrity and provides the mechanism to deal with case of plagiarism.

5) Research facilities: The Institute has developed different research-oriented laboratory facilities for each individual department and are regularly updated, central fabrication facility and centres of excellence : RCOEM-TATA CIIIT,NVDIA Centre of Excellence in Artificial Intelligence and Deep learning, Intellisense Centre for Microsystems, RCOEM-QCFI Centre of Human Excellence, Energy Research centre.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	http://www.rknec.edu/R%20and%20D/Docs/2023 /RnD%20Policy%202023.pdf
Any additional information	<u>View File</u>

#### 3.1.2 - The institution provides seed money to its teachers for research

**3.1.2.1** - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	No File Uploaded
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View File</u>
List of teachers receiving grant and details of grant received	No File Uploaded
Any additional information	<u>View File</u>

### **3.1.3** - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

7

File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	No File Uploaded

#### **3.2 - Resource Mobilization for Research**

**3.2.1** - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

#### 79.766

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<u>View File</u>
List of projects and grant details	<u>View File</u>
Any additional information	No File Uploaded

#### **3.2.2** - Number of teachers having research projects during the year

7	
File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
List of research projects during the year	<u>View File</u>

#### **3.2.3** - Number of teachers recognised as research guides

#### 78

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

### **3.2.4** - Number of departments having research projects funded by Government and Non-Government agencies during the year

	4		
	7	L	
. =	-	F	

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://www.aicte-india.org/;https://rgstc .maharashtra.gov.in/
Any additional information	<u>View File</u>

#### **3.3 - Innovation Ecosystem**

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

The RCOEM has cultivated a culture of innovation in research, academia and entrepreneurship. The Institute has pioneered the incubation of innovative ideas through SPV RCOEM Technology Business Incubators Foundation (RCOEM TBI) and has been steadfast in building a prolific regional ecosystem.

Salient features of the RCOEM Innovation Ecosystem:

• Dedicated Incubation facilities of 8000+ sq. ft.

• Established of six Center of Excellence namely,

o RCOEM TATA CIIIT in association with TATA Technologies led global partners

o RCOEM MSME ASPIRE Innovation Centre,

o CoE in AI-ML in association with Nvidia,

o Microsystems in association with Intelligence Technologies,

o Energy Research Center

o CoE in Human Excellence in association with Quality Circle Forum India.

• Access to 10+ laboratories.

• RCOEM IPR Cell provides assistance for prior art searches, defining claims and patent disclosures of inventions through its partners R. K. Diwan, Brainiac Global solution, BLI consultant.

• 80+ Industry partners, Industry associations MIA, VIA, CII and NGOs, Govt. i.e. DST, MSME who support and mentor us.

• Global Mentor and Investor Network and formal engagements with Serial entrepreneurs, VC firms

• RCOEM helps students ideate, inculcate design thinking, build business plans and pitch, conducts startup internship programs.

• Inspiring and mentoring students and faculties.

• Students won prizes in National & International events and received incubation

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	http://www.rknec.edu/IncubationCell.aspx

### **3.3.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

2	1
4	÷

File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
Any additional information	No File Uploaded

#### **3.4 - Research Publications and Awards**

3.4.1 - The Institution ensures	А.	<b>A11</b>	of	the	above
implementation of its Code of Ethics for					
Research uploaded in the website through the					
following: Research Advisory Committee					
Ethics Committee Inclusion of Research					
Ethics in the research methodology course					
work Plagiarism check through					
authenticated software					

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<u>View File</u>
Any additional information	<u>View File</u>

### **3.4.2** - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

#### **3.4.2.1** - Number of PhD students registered during the year

File Description	Documents
URL to the research page on HEI website	http://www.rknec.edu/R%20and%20D/DoctoralP rograms.aspx
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

## **3.4.3** - Number of research papers per teacher in CARE Journals notified on UGC website during the year

#### 175

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	No File Uploaded

### **3.4.4** - Number of books and chapters in edited volumes / books published per teacher during the year

#### 83

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

### 3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

#### 3.4.5.1 - Total number of Citations in Scopus during the year

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	No File Uploaded

# 3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

#### 3.4.6.1 - h-index of Scopus during the year

#### 33

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.5 - Consultancy

### **3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)**

#### 19.71987

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<u>View File</u>
List of consultants and revenue generated by them	<u>View File</u>
Any additional information	<u>View File</u>

### **3.5.2** - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View File</u>
List of training programmes, teachers and staff trained for undertaking consultancy	<u>View File</u>
List of facilities and staff available for undertaking consultancy	No File Uploaded
Any additional information	<u>View File</u>

#### **3.6 - Extension Activities**

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

The NSS Unit of college organized various events as follows:

On 8th August, NSS unit of took the initiative and organized Samuhik Rashtragan event in which the National Anthem was sung in the college to commemorate the 75 years of independence and to awake the Spirit of National Pride in everybody.

On 17th August, Samuhik Rashtragan was conducted on 11 am in all over college Campus as per the guidance of State Government program for 75 years of celebration of independance under SWARAJYA-SAPTAH.

RCOEM Celebrates 75 Years of Glorious -Progressive Independent India Nagpur, 15th August 2022 and on 26th January 2024.

On the Occasion of foundation day of this premier institute on 10th September, a blood donation camp was organized.

On 24th September, Foundation Day of NSS is celebrated, on this 53rd occasion- NSS Unit of RCOEM Celebrated NSS Foundation Day on 24th September 2022 in the EN auditorium of the college.

National Youth Day was celebrated on 12th January 2023 at Football Ground of Shri Ramdeobaba College of Engineering and Management, Nagpur. Government of India, Ministry of Youth Affairs & Sports Regional Directorate of NSS, Kolkata, West Bengal & The University of Burdwan, East Burdwan, West Bengal organized a National Integration camp from 18.02.2023 to 24.02.2023.

International Yoga Day is observed every year on June 21st to raise awareness about this ancient practice and to celebrate the physical and spiritual powers that yoga has brought to the world.

PRERNA is a week-long socio-cultural camp curated by NSS UNIT from 20/01/2023 to 28/01/2023, RCOEM. PRERNA 15.0 was as grand as its predecessors.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

**3.6.2** - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

#### 37

File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

#### 15

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

3133	
File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.7 - Collaboration

**3.7.1** - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

#### 1493

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

#### 20

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	<u>View File</u>

#### 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 equipments, etc.

RCOEM campus is spread over 16.77 acres of land. The Institute has an adequate infrastructure with ICT-enabled classrooms . There is provision of LCD projector and internet connectivity in every laboratory as per the curriculum requirements .There are 8

academic blocks consisting of 66 classrooms, 6 seminar halls, 97 laboratories and air-conditioned auditoriums. The campus is Wi-Fi enabled with a bandwidth of 1.1Gbps. The Institute has a total number of 2136 computers and 120 laptops which is above the prescribed AICTE norm. The Institute has state-of-the-art laboratories with computing and research facilities such as Mechatronics, RAC lab, CAD/CAE, PCB design, Electronic workshop, Biomedical Instrumentation ,High Voltage, Geotechnical labetc. The Department of Computer Science and Engineering has developed a state of the art laboratory "RCOEM Accenture Innovation Centre" in collaboration with Accenture Services Pvt. Ltd . Mass Communication Studios (Media centre), Language labalso form a part of modern teaching facilities available in the Institute. Centers' of Excellence for promoting research and multidisciplinary projects are also established. The Central library is fully automated and its OPAC can be electronically accessed. The Institute has a central library, 10 departmental libraries, Incubation center, Five center's of Excellence. The Institute has separate hostels for boys and girls within the campus with a total intake capacity of 569. The Institute houses a Bank, ATM, Spacious canteen , Stationery and photocopy centre. A robust MIS system in the Institute takes care of students' feedback, attendance, assessments, admissions, Finance , Administration, Examination etc.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

The Department of Physical Education and Sports offers Yoga and Sports course as a part of the curriculum for the overall development of students. The Institute hasa certified Yoga Teacher. Sports day is organized every yearfor faculty and students.Adequate facilities for the conduction of indoor and outdoor games are available. There is a separate gymnasium for boys and girls.The Institute has established a separate sports complex at Dorli, Katol road, Nagpur with an area of 43 Acres .The details of the sports and recreational facilities are as under:

Sports

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Name	NAGP
AREA	
EQUIPMENT	
Indoor	
Table tennis	
ChessCarom	
152	
TT- Tables, Chess and Carom boards	
Gymnasium	
339	
Tread Mill, Elliptical Trainer, etc.	
Outdoor	
Volleyball	
1,056	
Volleyball court(In Campus)	
Basketball	
1042	
1105	
1185	

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Basketball court (In Campus)
Basketball court (Sports Complex)
Cricket
1250
24, 762
Practice Pitches(In Campus)
Three Turf Pitches and ground with international standard
Football
1,560
9,360
Five a Side Ground(In Campus)
Standard football ground
Athletic Track
19,357
Standard 400 meter track
(8 lane)
Yoga Centre and cultural Facility
Sr. No.
Facility
Specification (Area in Sq.mt)
1
```

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```
Yoga Centre
302.66
2
Lawn with Stage
4500
3
Auditorium
437.43
4
Open Air Theatre(OAT)
192sq.m
Cultural Activities
Students' Representative Council organizes a wide range of
activities through various students' societies/ clubs at the
institute, state, and national level. The Institute organizes an
annual social gathering 'Pratishruti' which includes the
conduction of intercollegiate cultural events. The Institute
provides financial and academic incentives to students who achieve
excellence in sports and other extracurricular activities.
File Description
                       Documents
```

Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.rknec.edu/nss/

# 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

72

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

# **4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)**

## 1987.20216

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	<u>View File</u>

## 4.2 - Library as a Learning Resource

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

- Name of the ILMS software :JUNO CAMPUS
- Nature of automation (full or partial):Fully
- Version :Deployed version is GEMS\_52208 JUNO CAMPUS-5.4.2(Android App
- Year of automation :Since 2001 all the library activities were automated on the System for Library Information and Management (SLIM). From 2014 onwards, it has been upgraded on MIS software - JUNO CAMPUS

The Central Library of the Institute is housed in a spacious area spanning over 1340.33 sq.m. with a seating capacity of 174 users. The library has a collection of more than 22,000 titles and 97,000 volumes of resources like books, handbooks, abstracts, standards, project reports & thesis etc. on wide range of subjects including Engineering, Management & Social Sciences.It gives access to ejournals like ASME, ASCE, EBSCO e-journals, Science Direct, Springer, Scopus, EBSCO e-book, NPTEL video lecture & DELNET.

All the functions of the library are automated using JUNO CAMPUS. It is deployed on a cloud server. Some of the features are as follows:

CATALOGING

- Import Bibliographic data ,Supports all material types
- Attach digital content with catalog record
- Search catalog
- Technical Processing

```
CIRCULATION
```

- Check out (Issues)
- Check in (Returns)
- Reservations
- Emails and SMS facility

#### WEB OPAC

- Various types of searches.
- Reserve & cancel items on line.
- List of new arrivals.

#### REPORTS

- Accession register
- List of titles
- Stock verification
- Detailed Circulation Transaction
- Users List
- Daily attendance
- Current arrivals

?Generate Purchase Order and Online payment

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.rknec.edu/central-library/
4.2.2 Institution has access to	the following: A April 4 on more of the should

# 4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

# **4.2.3** - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

# 50.3230

File Description	Documents
Audited statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

# 4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

# 4.2.4.1 - Number of teachers and students using the library per day during the year

544.39

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	<u>View File</u>

# 4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

The campus is Wi-Fi enabled with a Wi-Fi controller, secured through a UTM firewall and hosted through RADIUS server/MAC authentication. The Institute's VLAN network is equipped with highend core switches (D-Link DGS3620-28SC), distribution switches (D-Link DGS 1500-28/1510-28), and access switches in various departments.

The College internet gateway is protected with UTM Firewall (Sophos SG450 full guard licence). To cater for the increasing need for computing facilities, the college has two dedicated leased line connections. 1Gbps leased line from BSNL and 100 Mbps from Ishan Netsol.

The Institute has a total number of 1736 desktops exclusively for student use in the year 2022-2023. Institute has 1937 licensed system software. Realizing the importance of soft skills for technocrats, the Department of Humanities hosts a language laboratory that is equipped with 41 computers, an overhead projector and licensed language learning software. The classrooms, seminar halls, and conference halls are equipped with LCD Projectors and internet connectivity. In the year 2022-23, wi-fi connectivity on the campus is also upgraded.

The up-gradation of IT facilities is carried out periodically. The Institute annually purchases and/or upgrades/replaces the computing hardware as per the requirement. The Institute has a dedicated central computer centre with a seating capacity of 100. Every department has a computer centre/laboratory to cater to the specific requirements of the teaching-learning process.

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional information	https://rknec.edu/Registrar/IT%20Policy/RC OEM%20IT%20Policy.pdf	

#### 4.3.2 - Student - Computer ratio

		NAGI
Number of Students		Number of Computers
4866		2136
File Description	Documents	
Upload any additional information		<u>View File</u>
<b>4.3.3 - Bandwidth of internet co</b> the Institution and the number campus		A. ?50 Mbps
File Description	Documents	
Details of bandwidth available in the Institution		<u>View File</u>
Upload any additional information		No File Uploaded
4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing		A. All four of the above
File Description	Documents	

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rknec.edu/rcoem-media-centre/
List of facilities for e-content development (Data Template)	<u>View File</u>

# 4.4 - Maintenance of Campus Infrastructure

**4.4.1** - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

#### 1259.59894

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

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

The Administrative Officer and Construction and Maintenance Engineer of the Institution is responsible for the maintenance of the physical, academic and support facilities. The Institute has an in-house team for undertaking routine computer, website, solar panel, MIS maintenance activities and private agency 'Dust Blower' for the cleaning of entire campus. Annual Maintenancecontracts for maintenance of lifts, water purifier, Gardens, Security Staff etc are periodically reviewed and renewed. Electrical Maintenance Engineer and the supporting staff take care of the requests for electrical maintenance work. The maintenance of water supply systems, buildings, Sewage Treatment Plant (STP), rain water harvesting structures, etc. are carried periodically .All the maintenance requests are applied and processed through MIS.

Library: The Librarian manages the working of the Central library. A fully automated air-conditioned library and its digital section is maintained by Computer Network Centre.

Laboratory: The laboratory in charge is responsible for laboratory requirements and the technical assistant provides required technical support to enable the laboratory to function effectively. Yearly stock verification is supervised by the administrative officer and equipment' are identified for repair / write-off periodically.

Sports: Physical education department manages the sports section and the support staff maintains open playground and gymnasiums.

Computers: The maintenance of all the computers is done by the central networking and computing department following the prescribed procedures.

Other academic facility: The building supervisor and construction department is responsible for the maintenance of the buildings and the physical facilities on campus

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.rknec.edu/wp-content/uploads/2 023/12/STANDARD-OPERATING-PROCEDURES-SOP- MANUAL.pdf

# STUDENT SUPPORT AND PROGRESSION

#### 5.1 - Student Support

# **5.1.1** - Number of students benefitted by scholarships and freeships provided by the Government during the year

#### 2616

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	<u>View File</u>

# **5.1.2** - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

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File Description	Documents		
Upload any additional information	<u>View File</u>		
Institutional data in prescribed format	<u>View File</u>		
5.1.3 - The following Capacity I and Skill Enhancement activitie organised for improving studer capabilities Soft Skills Languag Communication Skills Life Skil Physical fitness, Health and Hy Awareness of Trends in Techno	es are nts' ge and lls (Yoga, /giene)		

File Description	Documents
Link to Institutional website	https://www.rknec.edu/students/
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

# **5.1.4** - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

## 1376

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>

5.1.5 - The institution adopts the following	A.	All	of	the	above
mechanism for redressal of students'					
grievances, including sexual harassment and					
ragging: Implementation of guidelines of					
statutory/regulatory bodies Creating					
awareness and implementation of policies					
with zero tolerance Mechanism for					
submission of online/offline students'					
grievances Timely redressal of grievances					
through appropriate committees					

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti- ragging committee	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	<u>View File</u>

## **5.2 - Student Progression**

## 5.2.1 - Number of outgoing students who got placement during the year

#### 1060

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

## 5.2.2 - Number of outgoing students progressing to higher education

49

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Details of students who went for higher education	<u>View File</u>
Any additional information	No File Uploaded

# **5.2.3** - Number of students qualifying in state/ national/ international level examinations during the year

# 5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

93

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	<u>View File</u>

#### **5.3 - Student Participation and Activities**

**5.3.1** - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

68

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

- Students' Representative Council (SRC): The SRC is functioning in accordance with the guidelines led down by the Government of Maharashtra University's Act 1994. Dean -SRC along with the student council members, outline and plan the activities throughout the year as per the academic calendar.
- Internal Quality Assurance Cell (IQAC)
- Unfair means Committee: This committee has one student member nominated by SRC.
- Student representation on Administrative committees:
- College Development Committee (CDC): The Cultural Secretary of the SRC is member of CDC.
- Hostel & Mess Committee
- Women Empowerment Cell (WEC): One girl student representative is nominated on WEC.
- Anti-ragging committee: Two students representative (one girl and one boy) are nominated on Anti ragging committee.
- Internal Complaint Committee (ICC): One student each from under graduate, post graduate and Ph.D. programme nominated as members of ICC.
- Equal Opportunity Cell: Secretary Student council is nominated as the member of this cell.
- Student representation on department/professional societies/ Training & Placement: Every department forms students' society and these students are actively involved in organising different co-curricular and extracurricular activities leading to their overall personality development. Students are also encouraged to form professional society student's forum like IEEE, CSI, IIIE etc.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.rknec.edu/src/

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

#### 63

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	<u>View File</u>

#### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

The alumni share a deep bond with the Institute and has been making notable contributions both financially and non financially for the development of the Institution. The Alumni Association has a separate website 'www.rknecalumni.org' on which more than 19,000+ alumni is registered. It has a worldwide presence with chapters spread all across the globe. Alumni Association has chapters in U.S.A, U.K, Singapore, Middle East and in major cities of India including New Delhi, Mumbai, Pune, Bangalore, Jaipur, Hyderabad, Chennai, and Kolkata. The Alumni of the Institute occupies the top notch positions in private corporate and Government Institutions. One of the Alumnus has Instituted scholarship for students with an outlay of Rs. 30,00,000 (Thirty Lacs) Alumni of RCOEM have taken a novel initiative to support students by paying full/partial fees of economically weaker but meritorious students. Alumni created a fund at RCOEM called as Students' welfare fund. They regularly appeal to all outgoing students to contribute in this fund. In fact now it has become a culture and practice that all alumni donate a small sum to support this cause. Over the years this fund has grown to Rs. 54, 60,698/and is getting reflected in college ledger account as "Students welfare account".

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://www.rknecalumni.org/
5.4.2 - Alumni's financial contr	ibution A. ? 15 Lakhs

during the year

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

# **GOVERNANCE, LEADERSHIP AND MANAGEMENT**

# 6.1 - Institutional Vision and Leadership

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

The governance of the Institute is reflective of responsive leadership reinforcing a culture of excellence in line with the vision and mission of the Institute focusing on the areas of teaching, research, industry engagement and societal service. RCOEM leadership is involved in ensuring the Institute's management system development, implementation and continuous improvement through strong interaction with all its stakeholders with regard to the aspects as formulated in the perspective plan. Academic Advisory Board chaired by Padma Vibhushan Dr. Anil Kakodkar guides the Institution towards achieving its mission.

Decision making is aided by extensive consultation with faculty who are members of Board of Management, Academic Council, Board of Studies, College Development Committee, Staff Selection Committee, IQAC, Finance Committee and other statutory bodies and committees and thus are able to contribute in a significant way to the participatory ethos of the institution. The outcome of effective leadership has resulted in sustaining quality education and is evident from the recognitions gained from the society i.e. NIRF ranking, CSR and Outlook survey.

The second strategic plan has been developed, and deployed from 2021-22 in view of NEP 2020 and changing education landscape.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.rknec.edu/academics/

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

Effective leadership is reflected in various institutional practices, and decentralization and participative management are the key aspects that exemplify this .The case study related to such participative management is stated as follows:

Research Promotion: The generous freedom and flexibility exist for the Principal together with the other Administrative offices to lead all the academic and research activities of the Institute and take necessary steps to implement the perspective plan of the Institution. This is evident through the proposal of a research promotion policy with the underlyingobjective to motivate the faculty members to undertake quality research, consultancy, and other research & innovation-centric activities. The proposal for research incentive payment and award policy was discussed in the meeting of the Heads of departments and Heads of other Administrative offices by Chairman, IQAC. After approval from the members, the proposal was further approved by Academic Council in its meeting dated 11/04/2022 and Board of Management.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

#### 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

With reference to the effective implementation of the perspective plan in general and pillar 3 in specific whose objective is to strengthen the research-innovation ecosystem and maximize the quantity and quality of research outcomes, the following are the deployment details:

Tangible actions toward ecosystem creation:

- Development of efficient research performance measurement and monitoring system
- Investment in research infrastructure to support thrust areas
- Industry engagement with local industries/SMEs by providing them R&D support
- Collaborate with private and public sector organizations for training, research, and funding opportunities
- Higher enrolments for doctoral research, provision for stipend, and support for better outcomes

#### Outcomes:

- increase in the number of publications in quality journals:296
- increase in the citations of publications: Scopus-1342, WOS-230
- increase in the number of books and book chapters with highimpact publishers:23
- publications jointly authored with researchers from industries and institutes:83
- increment in research infrastructure and promotion expenses: Rs.69,23,039/-
- increase in research and development grants: Rs.176,62,600/-
- Increase in enrollment in PhD programs:45
- completion of doctorates:05
- increase in consultancy and sponsored research: Rs.19,71,987/-

Number of collaborative research projects with SMEs/Industries/Institutes:07

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File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://www.rknec.edu/wp-content/uploads/2 023/11/RCOEM-Perspective-Plan-2022-27.pdf
Upload any additional information	No File Uploaded

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

The roles and responsibilities of various bodies/committees are distinct and the organizational structure includes following bodies:

Areas

Name of the Bodies/Officials/Committees

Planning, Implementation and Review

Board of Management (BoM)

Principal

Finance Committee

Steering Committee

Staff Selection Committee

Dean-Second Shift

Deans

Administration and Finance

Registrar

Finance Officer

Administrative Officer

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Hostel Wardens
Academic Development,
Implementation and Evaluation
Academic Council
Controller of Examinations
Head of the Departments
Board of Studies (BOS)
Programme Assessment and Quality Improvement Committee (PAQIC)
Quality Maintenance and Sustenance
IQAC
ISO
Ranking and Accreditation
NIRF
NBA
NAAC
Committees as per UGC/ AICTE/ Govt Guidelines
   • Grievance Redressal Committee
     Examination Committee
   •
   • Admission Committee
     Library Committee
   •
      Students Welfare and Counselling Cell
   •
      Internal complaints committee
   Anti-Ragging Committee
   •
   • Academic Audit Committee
     Equal opportunity Cell
   •
   • Woman Empowerment Cell
Other institutional Committees and Cells
     Central Research Review Committee
```

- Seed Money Proposal Evaluation Committee
- Research Advisory Committee
- Supervisor Allocation Committee
- Central Training and Placement Committee
- Internal Complaint Committee

File Description	Documents
Paste link to Organogram on the institution webpage	https://www.rknec.edu/organization- structure/
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.rknec.edu/registrar-office/
6 2 3 - Implementation of a gave	$\alpha$ represented in $[A All of the above$
areas of operation: Administra and Accounts Student Admission	tion Finance
6.2.3 - Implementation of e-gov areas of operation: Administra and Accounts Student Admissio Support Examination File Description	tion Finance
areas of operation: Administra and Accounts Student Admission Support Examination	tion Finance on and
areas of operation: Administra and Accounts Student Admission Support Examination File Description ERP (Enterprise Resource	tion Finance on and Documents
areas of operation: Administra and Accounts Student Admission Support Examination File Description ERP (Enterprise Resource Planning) Documen	tion Finance on and Documents View File

#### **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

The significant welfare measures are listed below:

- Employees/Voluntary Provident Fund (EPF/VPF)
- Mediclaim
- Gratuity
- Maternity Leave
- Study Leave
- Ph.D fee reimbursement
- Increments for Higher Education
- Earn Leave Encashment for supporting staff

• 50% concession in fee for support staff wards studying in Institute

Apart from the above, the provision for career advancement scheme, financial incentives for research publications, Registration fees and travel allowance for faculty attending conferences and workshops is also in place. SRKNEC staff credit co-operative society Ltd provides the term insurance of Rs. 10 lakh to every employee. Premium for Rs.5 lakhs is contributed by society while the premium for remaining Rs.5 lakhs is paid by employee.

Other amenities include on campus bank, canteen, ATM, separate parking for staff, sports, gymnasium etc.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.rknec.edu/registrar-office/

**6.3.2** - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

47

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

# **6.3.3** - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

15

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	No File Uploaded

# 6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

#### 153

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	No File Uploaded

#### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

The Institute has adopted a transparent policy concerning external and internal financial audits. The internal audits are carried out quarterly. The verification is carried out on the following areas and the report is submitted to the Principal and Management.

- Cash vouchers
- Bank Vouchers
- Ledger
- Payroll
- Trail Balance
- Payroll
- Journal Vouchers

The compliance report based on the observations of the internal auditor if any, is submitted to the Steering committee. The details of the auditing agency are as given below:

Internal Financial Audit

Financial Year

Agency

Frequency

2022-23

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#### M/s Loya Bagris Co.

#### Quaterly

External audit is also regularly carried out on yearly basis. Compliance on observations, if any, made in the audit reports are promptly carried out by Finance Officer and are communicated to the Management, for subsequent submission to statutory auditor. The details of the auditing agency are as given below:

#### External Financial Audit

Financial Year

Agency

Frequency

2022-23

#### M/s S. D. Paranjpe and Co.

#### Yearly

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.rknec.edu/finance-office/

# 6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

Nil

File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	No File Uploaded

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

RCOEM is a self-financed autonomous Institute and the important source of financial mobilization is annual tuition fees collected from the students strictly as approved by fee regulatory authority of Government of Maharashtra. Additional funding is obtained by encouraging faculty to prepare and submit research projects to various funding agency so that the the Institute can not only enrich itself in the terms of quality research but can also mobilize some funds for the research and laboratory development. The Institute has a policy of sharing the revenue generated through consultancy assignments with the faculty members which in turn also improves the content delivery apart from the generation of funds.

The Institute adheres to utilization of budget approved for academic and administrative expenses and follows the defined process and is financially self sustained. The transparent financial practices are hallmark of the Institution. It is committed to make optimal utilization of financial resources by promoting augmentation of physical infrastructure, academic and research excellence and enhancement of human and technical services. The recurring expenses are minimized through the adoption of green practices which include use of LED's, solar energy, effective recycling of waste, use of MIS as a step towards paperless office etc.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.rknec.edu/finance-office/

#### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

IQAC has contributed significantly to institutionalizing the quality assurance strategies and processes and in developing quality benchmarks thereby aiding towards effective implementation of the perspective plan to achieve the vision of the Institute. The following two practices have been institutionalized during Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

#### 2022-23:

1.Question Paper Audit: Question paper audits are a part of quality assurance measures and a systematic review of examination questions is essential to ensure that exam questions are aligned with the curriculum and learning objectives, reflecting what students are expected to have learned. IQAC contributed to the formulation of a policy that outlines the process to be adopted at the Institute level and to be executed by the office of Controller of Examinations. The audit policy was approved for implementation in the IQAC meeting held on 14/09/2022 and further by Academic Council in its meeting on 20/10/2022.

2. Alternate Modes of Assessment: In pursuance of the commitment to ensure the academic standards and provide alternate ways for student assessment,IQAC initiated the practice of promoting different modes of assessment apart from the conventional practices. Specific guidelines related to the different modes of assessment were institutionalized. The policy was approved in the IQAC meeting dated 23/12/2022 and further by Academic Council for implementation in its meeting on 20/05/2023.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rknec.edu/igac/

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

The two examples of institutional reviews and implementation of teaching-learning reforms are:learning reforms are:

Review of Learning Outcomes: IQAC regularly reviews various aspects of the institution's functioning. One of the key areas that IQAC focuses on is the teaching-learning process ensuring that assessment methods align with learning outcomes. Alternate evaluation practices are discussed and recommended. Integrating quality assurance measures with the strategic plans of the institution, and aligning the curriculum as per the recommendations of NEP2020 were the key focus areas during the academic session 2022-23, which resulted in the implementation of a second five-year strategic plan. External and Internal Academic Audit: An internal academic audit is carried out to monitor and review the quality of academic systems. The inter-departmental audit is performed through ISO protocols and the auditor reviews the evidence of the processes by which the institution assesses the quality of teaching or student learning, thereby the interaction between the quality assurance policies and the activities of the academic unit is traced. Every year external academic and administrative audit of the institution also takes place and the recommendations of the audit committee are used to improve the teaching-learning process and learning outcomes.

File Description	Documents				
Upload any additional information	No File Uploaded				
Paste link for additional information	https://www.rknec.edu/igac/				
6.5.3 - Quality assurance initiat institution include Regular med IQAC Feedback collected, anal for improvement of the institut Collaborative quality initiative institution(s) Participation in N other quality audit recognized national or international agence ISO Certification)	eting of the lysed and used tion s with other NIRF Any by state,				

File Description	Documents
Paste the web link of annual reports of the Institution	https://www.rknec.edu/wp-content/uploads/2 023/12/Annual-Report-2022-23.pdf
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	No File Uploaded

# 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 year

The Institute's unique work culture, healthy traditions have led to enrolment of 68% women students and 49% women staff approximately. Safety, security and well-being, along with gender equity and friendly working atmosphere are the issues of prime concern. The curriculum includes a course on 'Constitution of India' which has enabled students' to learn and practice the concepts of gender equality and social equality. Concepts of industrial democracy, responsive and responsible bureaucracy, peaceful coexistence, value of cooperation and egalitarian transformation of Indian society form a part of the course curriculum.

The gender equity promotion initiatives include Women Health awareness program, Female Self Défense workshop, Women Empowerment: Youth Parliament Competition Sanitation and Hygiene for females, Financial Planning Workshop, My Story Session of Women Entrepreneur, Women Physical Fitness, Complete Body Test and Gym Actvities. Orientation programmes for sensitizing students at entry level, Self-defence, Sanitation and Hygiene were also conducted to create awareness amongst students. Specific facilities provided for women in safety and security include common rooms, Sanitary napkin vending machines,151 CCTV cameras and deployment of 33 security guards and 3 supervisors under the leadership of the lady officer of the rank of former Assistant Commissioner of Police.

File Description	Documents				
Upload any additional information	<u>View File</u>				
Paste link for additional Information	Women Empowerment Cell   Rcoem (rknec.edu) Untitled document - Google Docs (rknec.edu)				
7.1.2 - The Institution has facili alternate sources of energy and conservation: Solar energy plant Wheeling to the Grid Se energy conservation Use of LEI power-efficient equipment	l energy Biogas ensor-based				

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File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Solid Waste Mangement: The Institute employs a robust solid waste management system, encompassing collection, transportation, handling, disposal, and utilization of value-added products. Horticultural waste on campus is transformed into approximately 20 kilograms of vermicompost every three months, serving as an ecofriendly fertilizer. This initiative minimizes landfill waste and reduces the dependence on chemical fertilizers.

Waste Water Recycling and Liquid Waste Management: To address water conservation amid escalating demand and diminishing supply, the Institute implemented a liquid waste management system. A portable 200 KL/D Moving Bed Biological Reactor (MBBR) plant efficiently collects, transports, and treats liquid waste on campus. The MBBR, known for its effectiveness, filters waste through various beds to yield purified water. Post-treatment, chlorinated water is utilized for activities like toilet flushing and gardening, ensuring sustainable water usage.

Management of e-waste: Recognizing the environmental and health impacts of e-waste, the Institute prioritizes its responsible management. Every lab within departments has designated bins for electronic waste collection. Approved vendors, including government-recognized e-collectors and e-recyclers like "Suri Tech Computers Nagpur," facilitate recycling. This systematic approach significantly reduces the need for metal mining, cutting greenhouse gas emissions and promoting environmental and public health.Top of Form

File Description	Documents					
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>					
Geotagged photographs of the facilities	<u>View File</u>					
Any other relevant information	No File Uploaded					
7.1.4 - Water conservation facil in the Institution: Rain water h Bore well /Open well recharge of tanks and bunds Waste wate Maintenance of water bodies an system in the campus	arvesting Construction r recycling					
File Description	Documents					
Geotagged photographs / videos of the facilities	<u>View File</u>					
Any other relevant information	No File Uploaded					
7.1.5 - Green campus initiatives	sinclude					
7.1.5.1 - The institutional initiat greening the campus are as foll						
<ol> <li>Restricted entry of autor</li> <li>Use of bicycles/ Battery- vehicles</li> <li>Pedestrian-friendly path</li> <li>Ban on use of plastic</li> <li>Landscaping</li> </ol>	z-powered					
File Description	Documents					
Geotagged photos / videos of the facilities	<u>View File</u>					
Various policy documents / decisions circulated for implementation	<u>View File</u>					
Any other relevant documents	No File Uploaded					

7.1.6 - Quality audits on environment and energy undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:	Α.	Any	4	or	all	of	the	above
<ol> <li>Green audit</li> <li>Energy audit</li> <li>Environment audit</li> <li>Clean and green campus recognitions/awards</li> <li>Beyond the campus environmental promotional activities</li> </ol>								

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	No File Uploaded
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader scribe soft copies of reading	Α.	Any	4	or	all	of	the	above	
reader, scribe, soft copies of reading materials, screen reading, etc.									

Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

File Description	Documents
Geotagged photographs / videos of facilities	<u>View File</u>
Policy documents and brochures on the support to be provided	<u>View File</u>
Details of the software procured for providing assistance	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

- Under the Ministry of HRD, the Unnat Bharat Abhiyaan has adopted four villages in the region to carry out socioeconomic development activities. It has also provided scholarships to students who are economically disadvantaged. Finally, the organization has celebrated Independence Day, Republic Day, National Youth Day, Yoga Day, Constitution Day, and other similar occasions to create an inclusive environment by uniting students and teachers from diverse backgrounds on one platform.
- The curriculum includes a course on the Indian Constitution and traditional knowledge. Activities such as road safety awareness, blood and plasma donation, webinars on ancient traditional water management systems in India, and blanket and grocery donations foster harmony with culture and contribute to the noble goal of serving society.
- The Prerana Event seeks to raise students' awareness of a range of topics pertaining to those with disabilities and the importance of creating an inclusive society for them.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>

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

The Institute has curated a diverse range of courses aimed at sensitizing students to concepts fostering universal human values

such as gender sensitivity, environmental awareness, sustainability, and ethics. For instance, courses like 'Organizational Behaviour' and 'Human Relationship Dynamics' delve into understanding values, attitudes, job satisfaction, and multiculturalism. The 'Constitution of India' course explores fundamental rights, duties, and the Directive Principles of State Policy, all of which advocate for human values.Moreover, the course 'Human Relationship Dynamics' addresses values and ethics, while 'Education, Technology, and Society' sheds light on ethical considerations in technology usage. 'Basic Ornithology for Engineers' sensitizes students to environmental importance, conservation, and ethical interactions with nature. Additionally, courses like 'Technical Communication' emphasize gender-neutral language and ethical writing principles.

Furthermore, leadership-focused courses highlight human values as essential qualities of effective leadership. Extension activities such as Junoon, Prayas, Speak Streak, Reflection, webinars on the `1% Formula for Success,' and `Open Mic' sessions further instill values necessary for shaping responsible citizenship among students.

File Description	Documents		
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>		
Any other relevant information	No	File Uploaded	
7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized		all of the above	

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File Description	Documents
Code of Ethics - policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The institution celebrates with great enthusiasm to commemorate the ideology of nationalism and to pay tribute to our National Leaders. The Faculty, Staff and Students of the institution come together to celebrate these occasions and spread the message of Unity and Peace. The Institute has organized the following programs to commemorate and national/ International day, festivals, Events and the anniversaries of great personalities:

- National festivals (Independence Day and Republic Day). Patriotic songs, dance performances, and drama were presented Online on these occasions.
- International yoga day celebrated on June 21
- Birth anniversary of Swami Vivekananda which is observed as National Youth Day is celebrated on January 12.
- 'National Sports Day' on August 29,2022 (birth anniversary of Major Dhyanchand)
- Constitution day celebrated on November 26 to create awareness about the values of constitutional democracy among students.
- National Unity Day was celebrated on October 31.
- NSS Foundation Day celebrated on September 24.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<u>View File</u>
Geotagged photographs of some of the events	<u>View File</u>
Any other relevant information	No File Uploaded

## 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Title: Revitalizing Reading Culture: Engaging Library Activities

Objectives:

- 1. Cultivate a passion for reading.
- 2. Foster healthy reading habits through library services.
- 3. Encourage creative expression among students.
- 4. Improve accessibility to digital resources.

Context: Modern students' declining interest in reading is attributed to technological distractions and a reliance on easily accessible content for learning, hindering language skills development.

Practice: The institution employs various initiatives including:

- Readers' Reverie Club
- Newsletters
- Annual Literature Festival
- Library resource awareness programs
- Open Electives in Fiction
- Infrastructure enhancement
- Bird Box: Blindfolded Conversations
- Collaboration with "Foster Reads" startup
- Interdepartmental Competitions
- Academic evaluations emphasizing book usage

Success Indicators:

- Best student magazine award
- Inter-collegiate debate competition accolades

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- Best paper awards at international conferences
- Increased utilization of library resources

Challenges and Resources:

- Digital distractions and time constraints
- Economic barriers and slow internet connectivity

Overall, these efforts aim to reinvigorate reading habits and enhance literacy skills among students, despite prevailing challenges.

File Description	Documents
Best practices in the Institutional website	https://www.rknec.edu/igac/
Any other relevant information	Nil

#### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

The Institute's distinctive feature emanates from the adoption of TRANSPARENCY as a prime governance policy and distinctive activities resulted in :

Excellence in Academics: The rigorous academic programmes incorporate blended learning pedagogy . To ensure that the students are fully equipped and to maximize their learningcustomized modules in the form of value added courses delivered by faculty and industry experts .

Skill enhancement through Experiential Learning: The learning experience is enriched by project-based learning, internships at industry, research organizations, and incubation centers. These have been achieved and implemented at an impressive scale with the involvement of Alumni which led to several positive outcomes.

Exploration of Knowledge through Research: The academic scholarship is enhanced through well crafted policies for Seed Funding, Technology development and transfer initiatives, and research. The acknowledgment provided by the Research and Teaching Awards has acted as a stimulant to encourage improved performance.

#### Promote Social Commitment:

To foster social commitment among students, activities like village adoption, computer literacy programs for underprivileged students, events for specially-abled children and children from orphanages, and environment protection were organised.

Excellent Placements and Internships: The institute has seen a consistent progression in the number of placements and internships leading to the highest number of offers in the region with more Tier-1 companies visiting campus.

File Description		Documents
Appropriate link in institutional websit		https://www.rknec.edu/wp-content/uploads/2 023/07/Scheme-And-Syllabus-BTech-First- Year-2022-23.pdf
Any other relevant	information	No File Uploaded

7.3.2 - Plan of action for the next academic year

#### Future Plan

1. Alignment of thrust areas of teaching and research with the Vision 2030

2. Quality enhancement of students at entry level

3. NBA Accreditation for Multiple programmes

4. Value-added courses in emerging areas with industry collaboration

5. Start of Twinning Programmes

#### 6. To enhance research funding