

YEARLY STATUS REPORT - 2021-2022

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	Katol Road	
• 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)	http://www.rknec.edu/AQAR2020-21% 20img.pdf
4.Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	http://www.rknec.edu/Imp%20Links/ AcademicCalendar.aspx

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

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.)?

				NAGPUR
Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding Agency	Year of Award with Duration	Amount
Institution	FIST Level 0	DST	19/12/2016	2250000
Electrical Engineering	Rajiv Gandhi Science & Technology Commission (RGSTC)	Government of Maharashtra	09/02/2022	200000
Electrical Engineering	All India Council for Technical Education	Government of India, All India Council for Technical Education	11/03/2022	2500000
Electrical Engineering	Unnatt Bharat Abhiyan (Indian Institute of Technology, Delhi)	Ministry of Human Resource Development, Govt. of India	16/05/2022	100000
Computer Science Engineering	Research Project	Ministry of Coal,GOI	14/03/2021	13000000
Electronics Engineering	Technology Adaptation Project - Creation of Apps and Virtual class room for Non Formal Sanskrit Education	Rashtriya Sanskrit Sansthan	01/03/2020	20000

8. Provide details regarding the composition of the IQAC:

• Upload the latest notification regarding the composition of the IQAC by the HEI

<u>View File</u>

9.No. of IQAC meetings held during the year	4
• Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes
 If No, please upload the minutes of the meeting(s) and Action Taken Report 	No File Uploaded
10.Did IQAC receive funding from any funding agency to support its activities during the year?	Yes
• If yes, mention the amount	Rs. 30,000/-

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

Ranked in NIRF Ranking 2022. The Institute has been Ranked 146 in Engineering Category in All India Ranking. NBA accreditation for two under graduate programs B.E. Computer Science and Engineering and B.E. Electronics and Communication Engineering. Continuous capability enrichment through experiential learning and internship. Implementation of green practices to main eco-friendly campus. International Conferences organized a) Smart Strategies for Self Reliant Economy- An Industrial Engineering Perspective [SSSIEP-2021] b) International Conference on Innovative Computing and Applications [ICICA-2021]

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
Ranking and Accreditation	The Institute has been Ranked 146 in Engineering Category in All India Ranking. NBA accreditation for two under graduate programs B.E. Computer Science and Engineering and B.E. Electronics and Communication Engineering.
Promotion of research culture amongst students and Faculty	Enhanced research publications/IPRs for faculty and students :222 publications, patents filed: 42,publishes:29 and awarded :10
Capacity development of faculty in the emerging areas	22 Faculty development programs organised in the area of artificial intelligence,
Vision 2030 Strategic Plan	The strategic plan is in place for five years(22-23 to 27-28)
Collaboration for enhancing academic rigor with institutions of repute	06 MoUs with industries and Institute are signed for enhancing academic rigor
Organization of conferences/seminars in emerging areas and NEP 2020	Two conferences were organized on emerging areas and one Workshop on NEP 2020 is organised.
Creation of an ecosystem to achieve sustainable development goals	Environment's best practice principles for sustainable development through Environment club REEF led to securing the position as, the champions of tide turner's challenge organised by United Nations Environment Program (UNEP)
13.Was the AQAR placed before the statutory body?	Yes

• Name of the statutory body

Name of the statutory body	Date of meeting(s)
College Development Committee	23/12/2022
14.Was the institutional data submitted to AISHE ?	Yes

• Year

Year	Date of Submission
2021-22	31/12/2022

15.Multidisciplinary / interdisciplinary

The Institute has constituted a committee for implementation of NEP 2020. Undergraduate/Postgraduate programmes in inter/multi disciplinary 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 like
- 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. Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

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

28

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

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	4793	
Total number of students during the year:		
File Description	Documents	
Institutional data in Prescribed format	<u>View File</u>	
2.2	1310	
Number of outgoing / final year students during t	he year:	
File Description	Documents	
Institutional Data in Prescribed Format	View File	
2.3 4759		
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	791	
Number of courses in all programmes during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.2	248	

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Number of full-time teachers during the year:

Number of fun-time teachers during the year.		
File Description	Documents	
Institutional Data in Prescribed Format		<u>View File</u>
3.3		224
Number of sanctioned posts for the year:		
4.Institution		
4.1		646
Number of seats earmarked for reserved categories as per GOI/State Government during the year:		
4.2		72
Total number of Classrooms and Seminar halls		
4.3		2624
Total number of computers on campus for academic purposes		
4.4		1219.23
Total expenditure, excluding salary, during the year (INR in Lakhs):		
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:

1. 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	http://www.rknec.edu/Academics/syllabus.as px

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

22

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

257

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

156

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

22

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 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

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during the year

27

21	
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

1672

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

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

1334

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

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

File Description	Documents			
Provide the URL for stakeholders' feedback report	http://www.rknec.edu/Imp%20Links/Docs/stak eholders%20feedback%20parameter%20wise.pdf			
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	http://www.rknec.edu/Imp%20Links/Docs/stak eholders%20feedback%20parameter%20wise.pdf			
	No File Uploaded			
Any additional information		No File Uploaded		
•	EVALUATION	No File Uploaded		
FEACHING-LEARNING AND I		No File Uploaded		
Any additional information TEACHING-LEARNING AND I 2.1 - Student Enrollment and Pa 2.1.1 - Enrolment of Students		No File Uploaded		
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TEACHING-LEARNING AND I 2.1 - Student Enrollment and P 2.1.1 - Enrolment of Students 2.1.1.1 - Number of students ad	rofile			
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TEACHING-LEARNING AND I 2.1 - Student Enrollment and P 2.1.1 - Enrolment of Students 2.1.1.1 - Number of students ad 1269	rofile mitted (year-wi			

580

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/doubtsolvingsessions 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) Start-up 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 5. Dropping the course

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

2.2.2 - Student - Teacher (full-time) ratio

		NAG
Year	Number of Stud	dents Number of Teachers
01/08/202	22 47	93 248
File Description	Documents	
Upload any additiona information	1	No File Uploaded
2.3 - Teaching- Lear	ning Process	
	c methods such as experienties are used for enhancing lea	ial learning, participative learning and problem- arning experiences:
enhancelearning making the lea:	rning activity more	centric methods to alty members take efforts in a interactive by adopting the s as mentioned below.
Pedagogical Pra	actices	
Teaching Metho	lology	
Class Room Lea:	rning	
1. Chalk and 2. PPTs/Mul	d Talk method timedia	
Experiential /	Field Learning	
 Practical Internshi Training Case Students Students 	ips programs lies ctures	various competitions
Problem solving	g Learning	
 Tutorial Assignment Quizzes Research Participative Interface Project 	and case studies work	

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3. Group Discussions

4. Students presentation

5. MOOC

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	No File Uploaded
Link for additional Information	http://www.rknec.edu/Academics/Departments /Docs/2022/CS%20Innovative%20teaching.pdf

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 in the table 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	http://www.rknec.edu/AQAR/2021-22/02/2.3/2 .3.2/
Upload any additional information	No File Uploaded

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

2.3.3.1 - Number of mentors

248

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, and Heads 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 cocurricular 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-totime 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

248

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

143

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	<u>View File</u>

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

9.24

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

10.5

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

14

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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 auto-filled. 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	<u>View File</u>
Paste link for additional Information	Nil

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 welldefined 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.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	No File Uploaded
Link for additional Information	http://www.rknec.edu/Academics/syllabus.as px

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 attain

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the 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
- Co-curricular 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

1310	
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	http://www.rknec.edu/coe/COE_ExaminationRe ports.aspx

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

http://www.rknec.edu/Imp%20Links/Docs/SSS%20_2021-22.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 Ph.D 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.
- Provision for research funding:
 - Young faculty Research fund (Seed Money up to rupees two Lakhs)
 - Department wise R&D budget.

2.Policy Norms for Pursuing Higher Studies :Faculty willing to pursue Part-Time PhD at RCOEM or Institute/University of National Repute are eligible for three months fullsalary study leave or six months of half-salary study leave . Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

3. Research Recognition Policy

Research Awards:

- Researcher of the Year Award
- Young Researcher of the Year Award

4. Academic Integrity and Prevention of Plagiarism Policy:The policy lists the responsibility of faculty, staff and student towards academic integrity and provides a mechanism to deal with cases 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/2019 /R&D%20Policy.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)

42.14624

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

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<u>View File</u>
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	<u>View File</u>
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

6				
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)

36.64509

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

9

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

73

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

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://www.aicte-india.org/,https://unnat bharatabhiyan.gov.in/,https://rgstc.mahara shtra.gov.in, https://www.meity.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. Annual Quality Assurance Report of SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

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 support.

SOME IMPORTANT ACTIVITIES DURING THE YEAR

- 1. SEED Funding support of Rs. 110,000/- provided to 4 startups.
- 2. Provided Six months Startup Internships.
- 3. Enrolled and Selected 09 ideas for incubation support.

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

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

61

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	Α.	A11	of	the	above
			Ŭ1	CIIC	
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

36

File Description	Documents
URL to the research page on HEI website	http://www.rknec.edu/R%20and%20D/PhDSuperv isors.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

1124

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

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

31

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)

11.75323

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

367.80840

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	<u>View File</u>
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 has organized the following events

Raksha Bandhan with an aim to spread togetherness and love with the underprivileged kids on 21-08-21 and with the Central Reserve Police Force (CRPF) on 22-08-21.

NSS FOUNDATION DAY using a digital platform on 25-09-21.

Code Heist - The Social Hackathon where a total of 75 teams participated in the event during 2nd - 20-10-21.

JUNOON under PRERNA 14.0, a socio-cultural event on 22-03-22 which encourages specially-abled children to showcase their passion, courage and talent by performing various art forms.

NATIONAL UNITY DAY, as an endeavour to solidify the bond of oneness and unification, we celebrated the birth anniversary of Sardar Vallabhbhai Patel on 31-10-21.

Voter's ID Registration Drive was organized on 21-11-21 under the scheme of SVEEP (Systematic Voter's Education and Electoral Participation program) for the students.

World AIDS Day where we took the initiative and conducted a poster making competition on 1st December 2021 which encouraged students to promote socialism through their elegant art.

Mega Blood Donation Campaign was organized on 25-02-22 in collaboration with Dr. Hedgewar Blood Bank, Nagpur.

Gram Sampark, a village visit camp under the Prerna 14.0 was organized 28-03-22 in which more than 80 NSS volunteers and two faculty members visited a village named Muradpur, adopted by the NSS Unit, RCOEM for community development and to raise awareness amongst the villagers.

SAHYOG Computer Learning Centre for Underprivileged Children which aims to make children computer literate.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://www.rknec.edu/Students/NSSReports.a spx

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

283

File Description	Documents
Number of awards for extra activities in during the year	
e-copy of the award letters	s <u>View File</u>
Any additional informatio	n 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)

23

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

3379		
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

749

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	No File Uploaded

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)

22

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	No File Uploaded

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 adequate infrastructure with ICT enabled classrooms which promote a healthy teaching learning environment. The Institute has built ICT enabled classrooms for better content delivery and provision of LCD projector and internet connectivity exists in every laboratory as per the curriculum requirements and are above norms of statutory/regulatory bodies like UGC / AICTE.There are 8 academic blocks consisting of 66 classrooms, 6 seminar halls, 95 laboratories and air conditioned auditoriums. The campus is Wi-Fi enabled with a bandwidth of 1.1Gbps. The Institute has a total number of 2479 computers and 145 laptops which is above prescribed AICTE norm.

The Institute has state of the art laboratories with computing and research facilities. 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 laboratory also form a part of modern teaching facilities available in the Institute.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 and provides opportunities for overall development of students through various sports activities. The Institute has appointed a certified Yoga Teacher.

There is a separate gymnasium for boys and girls in the hostel. Both men and women teams of the Institute have brought laurels in various intercollegiate and All India University Tournaments in various sports .Realizing the significance of sports, the Institute has established a separate sports complex at Dorli, Katol road, Nagpur with an area of 43 Acres which includes facilities for outdoor games.Sports day is celebrated every year for faculty and students by organizing different sporting events.

Students' Representative council (SRC) organizes wide range of activities through various students' societies/ clubs . It gives the students a chance to showcase their talent at institute, state and national level. The Institute organizes annual social gathering 'Pratishruti' which includes conduction of intercollegiate cultural events.

The Institute provides financial and non-financial incentives to the students who achieve excellence in sports and other extracurricular activities based on the following parameters.

- Participation in Intercollegiate activities / NSS regular volunteers / NSS
- Securing III/II/I Place in University, Sport-NSS Joint Secretary, Sports-NSS Secretary
- West Zone/National Level Participation (Sports/NSS/NCC)
- Completion of Swachcha Bharat Summer Internships (Allowed once per Year)

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	http://rknec.edu/Docs/Important%20Document s/SPORTS%20REPORT%2021-22.pdf

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

72

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

381.09

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 was established in 1984 and 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 e-journals 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

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

Search catalogTechnical Proces	sing			
• CIRCULATION				
 Check out (Issue Check in (Return Emails and SMS f 	s)			
• WEB OPAC	WEB OPAC			
• Reserve & cancel	Various types of searches. Reserve & cancel items on line. List of new arrivals.			
• REPORTS				
 List of titles Stock verificati Detailed Circula Users List Daily attendance Current arrivals 	 List of titles Stock verification Detailed Circulation Transaction Users List Daily attendance Current arrivals 			
File Description	Documents			
Unload any additional	View File			

PP						
Upload any additional information	<u>View File</u>					
Paste link for additional information	http://www.	<u>rknec.ed</u> <u>tralLi</u>				y/Cen
4.2.2 - Institution has access to e-journals e-ShodhSindhu Shoo Membership e-books Database access to e-resources	lhganga	A. Any 4	or I	more o	f the ab	ove

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)

50.49

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

368

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 high-
end core switches (D-Link DGS3620-28SC), distribution switches (D-
Link DGS 1500-28/1510-28), and access switches in various
departments.
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The College internet gateway is protected with UTM Firewall

(Sophos SG450 full guard licence). To cater for the increasing need for computing facilities, in the year 2021-22 it was further increased to 1.1 Gbps from BSNL and Tata Teleservices.

The Institute has a total number of 2079 desktops exclusively for student use in the year 2021-2022. Institute has 1722 licensed system software. Realizing the importance of soft skills for technocrats, the department of Humanities hosts a language laboratorythat 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 2021-22, wi-fi at the boy's hostel is upgraded and 40 access points were installed.

The up-gradation of IT facilities is carried out periodically. 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	Nil	

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
4793	2079

File Description	Documents	
Upload any additional information	<u>View File</u>	
4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus		A. ?50 Mbps

File Description	Documents	
Details of bandwidth available in the Institution	<u>View File</u>	
Upload any additional information	<u>View File</u>	
4.3.4 - Institution has facilities development: Factor for e-content development Med Audio-Visual Centre Lecture O System (LCS) Mixing equipme software for editing	ilities available lia Centre Capturing	

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional information	http://rknec.edu/Imp%20Links/MediaCenter.a spx	
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)

838.14

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 are 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 Maintenance contract for maintenance of lifts,water purifier Security, Gardens 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 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 manages laboratories along with the technical assistant. Yearly stock verification is supervised by the administrative officer and equipments are identified for repair / write-off purpose periodically.

Sports: Physical education department manages the sports section and staff maintains open play ground and gymnasiums.

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

Other academic facility: The building supervisor and construction department is responsible for the maintenance of the buildings and physical facilities including washrooms.

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional information	http://www.rknec.edu/Imp%20Links/Certifica teofRegistrationISO.aspx	

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

2004

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

200	2	5	Э.
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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	es are nts'	

Physical fitness, Health and Hygiene) Awareness of Trends in Technology

Communication Skills Life Skills (Yoga,

File Description	Documents	
Link to Institutional website		
	http://www.rknec.edu/Placement/Placements.	
	aspx	
Details of capability	<u>View File</u>	
development and schemes		
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

2705

	NAG		
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 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		A. All of the above	
File Description	Documents	1	
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	No File Uploaded		

Upload any additional information

5.2 - Student Progression

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

1173

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

View File

5.2.2 - Number of outgoing students progressing to higher education

102	
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

162

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

27

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) of the college has been functioning in accordance with the guidelines led down in the Government of Maharashtra University's act 1994. Its office bearers include General Secretary, Cultural Secretary,Student Welfare Head (Boys and Girls), Event Manager (Boys and Girls) and overall Club Coordinators.

SRC organizes various activities and events throughout the year to give a platform to the students to showcase their talent, capacity and skills in various domains.

SRC organises Induction program, (Gyanodaya) to welcome the First Year students. A Three day Annual cultural event, (Pratishruti) of the college has earned the distinction of being the largest inter collegiate cultural fest in entire central INDIA. SRC organizes various events and activities in accordance with the directions from the Institute, RTM Nagpur University, State and Central Government.

Students' participation is actively sought in various committees including Internal Quality Assurance Cell (IQAC), College Development Committee (CDC), and Board of Studies (BoS) of the department.

It is ensured that at least one girl representative is nominated on Women Empowerment Cell. Two students representative (one Girl and one Boy) are nominated on Anti ragging committee of college. Internal Complaint Committee of the college nominates one student each from under graduate, post graduate and Ph.D. programs.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://www.rknec.edu/Students/StudentsLand ing.aspx

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

66

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 association is a registered body. The Alumni Network ensures alumni participation in various institutional initiatives in the form of mentoring the students, conducting workshops and guest lectures, providing placement and internship opportunities. Alumni are also represented on various bodies of the institution. The Institute observes annual Alumni Day 'Conclave' and publishes Annual Alumni Newsletter to highlight the contributions and activities of Alumni.

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.

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. Alumni across batches are regularly donating funds to alma mater for this purpose also. 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	htt	ps://www.rknecalumni.org/
5.4.2 - Alumni's financial contr during the year	ibution	D. 2 Lakhs - 5 Lakhs
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 new strategic plan development is initiated in view of NEP2020 and in context of the acceptance of the proposal for self financed university involving all stakeholders.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	http://www.rknec.edu/About/Vision- Mission.aspx

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

The Institution has a practice of participative management providing equal opportunity to all participating in the decision making process. The case study related to such participative management is stated as follows:

Academic Planning/Restructuring of programmes: The generous freedom and flexibility exist to the Principal together with the Heads of various departments to lead all the academic activities of the Institute and take necessary steps to implement the perspective plan of the Institution .This is evident through the proposal of restructuring of existing undergraduate programmes (to be started from 2021-22) as well as variation in intake of the programmes introduced in the emerging areas proposed by Academic Performance Evaluation Committee(APEC) after viewing the existing programs (UG+PG) with regard to graduate outcomes. The proposal was subsequently discussed in meeting of concerned Heads of departments by Chairman APEC, chaired by Principal. After approval from the concerned Heads of department, 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 theme No. 4 in specific whose objective is to build a lifelong connection with alumni for the enrichment of curriculum and fostering industry relationships, following are the deployment details:

Tangible actions towards ecosystem creation:

- Establishment of Ramdeobaba Alumni Connect Association(RACA), a Section 8 Company
- Expert lectures/workshops in emerging and inter /crossdisciplinary areas from Alumni
- Involvement of Alumni in curriculum design and Co-teaching

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

- Nomination of Alumni on Board of Studies
- Donations/Scholarships from Alumni
- Guidance for projects, support for industry visits , internships , placements and startups
- Alumni Chapters around the globe

Outcomes:

- Scholarship received from alumni in rupees: 2,59314/-
- Workshops conducted by alumni: 14
- Number of Expert Lectures delivered by alumni:23
- Number of Internships by alumni: 18
- Number of Placements facilitated by alumni: 26
- Number of Startups facilitated by alumni: 05
- Number of alumni Nominated for Institute perception: NA
- Number of Awareness Programs organized: 04
- Number of alumni invited on various boards: 21
- Number of Industries visits organized by alumni: 07
- Number of Industry projects undertaken through alumni: 03
- Donations received from alumni: 7,87,400/-
- Number of alumni Chapters established: 12
- Number of alumni Meets conducted: 18

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://www.rknecalumni.org/page/RACA-Khoj -Mentorship-Funding-Market-Launch- Assistance.dz
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: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 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

Service Rules, Promotion Policies are as per UGC / State Government norms. In addition, the Institute has adopted the service conditions as per Ordinance 24 of RTMNU for faculty and Maharashtra Civil Services rules for supporting staff.

File Description	Documents
Paste link to Organogram on the institution webpage	http://www.rknec.edu/About/Administration/ College.aspx
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	<u>View File</u>

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	http://www.rknec.edu/Registrar%20office/Re gistrarOffice.aspx

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

41

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

22

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.)

156	
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 transparent policy with regards to external and internal financial audit. The internal audits are carried out quaterly. 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 2021-22 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 2021-22 M/s S. D. Paranjpe and Co. Yearly

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://www.rknec.edu/Finance%20office/Fina nceOffice.aspxspx

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	No File Uploaded
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	http://www.rknec.edu/Finance%20office/Fina nceOffice.aspx

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. Following two practices have been institutionalized during 2021-22:

1.Research as a part of Curriculum: Institutionalization of Research Internship at Undergraduate Levels is expected to play a pivotal role in catalyzing interdisciplinary/multidisciplinary/transdisciplinary and translational research culture and is presented in NEP 2020 also. IQAC contributed towards the formulation of an internship policy that provides an opportunity for conducting research, implementing ideas, and helping write technical papers thereby enabling students for higher studies and pursue career in research. The one-semester internship policy was approved for implementation in the IQAC meeting held on 20/01/2022.

2. Value added Courses Policy: In pursuance of the commitment to ensure the holistic development of the students,IQAC initiated the practice of promoting valued-added courses designed toprovide necessary skills increase the employability quotient and equip the students with essential skills to succeed in life. Specific guidelines related to the blended mode of conduction, student enrolment, and evaluation were institutionalized. The policy was approved in the IQAC meeting dated 09/12/2021 for implementation.

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

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:

Review of Learning Outcomes: IQAC reviewed the student learning outcomes with reference to the training &internships offered and placement offers bagged by students. Feedback sought from industries is discussed and utilized to improve the skills so that the students are prepared for future challenges. IQAC discussed and decided that in order to explore career alternatives prior to graduation, the career development and placement cell/departments should conduct various tests to assess the interests and abilities of the students in their field of study and value added courses to increase employability quotient.

External and Internal Academic Audit: 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 makes assessment of the quality of teaching or student learning, thereby the interaction between the quality assurance policies and the activities of the academic unit is traced. External academic and administrative audit of the institution also takes place and the recommendations of the audit committee is used to improve the teaching-learning process and learning outcomes. The efficiency and effectiveness of the administrative procedures are also assessed to evaluate the optimum utilization of resources.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil
6.5.3 - Quality assurance initiatives of the A. Any 4 or all of the above	

6.5.3 - Quality assurance initiatives of the
institution include Regular meeting of the
IQAC Feedback collected, analysed and used
for improvement of the institution
Collaborative quality initiatives with other
institution(s) Participation in NIRF Any
other quality audit recognized by state,
national or international agencies (such as
ISO Certification)A.

File Description	Documents
Paste the web link of annual reports of the Institution	http://www.rknec.edu/Imp%20Links/IQACAnnua lReports.aspx
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	<u>View File</u>

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. The curriculum includes 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 course curriculum.The gender equity promotion initiatives include Women Health awareness program, Female Self Défense workshop, Sanitation and Hygiene for female, Financial Planning Workshop, My Story Session of Women Entrepreneur, Cyber Security for female nonteaching and teaching staff. Orientation programme for sensitizing students at entry level, Self-defence, Sanitation and Hygiene and Cyber security webinars 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	http://www.rknec.edu/Imp%20Links/Women Emp owerReports.aspx			
7.1.2 - The Institution has facilit alternate sources of energy and conservation: Solar energy plant Wheeling to the Grid Ser energy conservation Use of LED	energy Biogas nsor-based			

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)

power-efficient equipment

1) The solid waste management system of the Institute consists of the collection, transportation, treatment, disposal of waste, Vermicompost is produced on the campus using horticulture waste. All the dry leaves are collected in a specially designed pit measuring 12'x 3'x2'. Every three months, around 20 kg of vermicompost is produced which is utilized as fertilizer. It benefits the environment by decreasing the amount of waste going to landfills.

2)The Institute has developed a liquid waste management system dedicated to the collection, transportation, recycling, reclamation, and disposal of wastewater. A 200 KL/D advanced waste

treatment plant, Moving Bed Biological Reactor (MBBR), is constructed. The MBBR is efficient, effective, compact, and easy to operate. The liquid waste generated in the campus is supplied to the MBBR unit which gets filtered through a series of filter beds and clear water is obtained. The treated water is then chlorinated and used for gardening, toilet flushing, and other such purposes. The sludge is also used in gardening as good manure.

3) Bins are provided in the laboratories of each department to collect the e-waste. The waste management process being employed at the Institute helps in reducing the ill effects on the environment and human health. The Institute periodically transfers e-waste to organisations that have been licenced by the government to handle it.

File Description	Documents			
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded			
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 er recycling			

File Description	Documents
Geotagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for	A.	Any	4	or	All	of	the	above	
greening the campus are as follows:									

- **1. Restricted entry of automobiles**
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

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	<u>View File</u>

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
 Green audit Energy audit Environment audit Clean and green campus recognitions/awards Beyond the campus environmental promotional activities 								

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	<u>View File</u>					
Any other relevant information	<u>View File</u>					
7.1.7 - The Institution has a dis and barrier-free environment:						

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 materials, screen reading, etc.

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	<u>View File</u>

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).

The institute is proactively taking efforts in providing an inclusive environment. The initiatives are to promote better education, economic upliftment of the needy and setting communal harmony.

- Unnat Bharat Abhiyaan (Under Ministry of HRD)-Adopted 4 villages in region to conduct activities for their socioeconomic development
- Providing Scholarships to economically weak students
- Celebration of Independence Day, Republic Day, National Youth Day, Yoga Day, Constitution Day and other such activities to provide for an inclusive environment by bringing students and teachers with diverse background on single platform for creating inclusive environment.
- The course on Constitution of India and Indian traditional Knowledge is embedded in the curriculum
- Initiatives like Blanket Donation, Grocery donation, Road safety awareness, Blood and Plasma Donation, webinar on Ancient Traditional Water Management System in India help in developing harmony towards culture and contribute towards noble cause of serving society.

• Prerana Events like Jash and Junoon aims at sensitizing students on various issues related to people with disabilities and also on an inclusive society for such people.

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 various courses that sensitize students with the concepts that encourage the building of universal human values like sensitivity about gender, environment, sustainability, ethics etc. While some of the courses like 'Organizational Behaviour' and 'Human Relationship Dynamics' introduce students to concepts like understanding values, attitudes, job- satisfaction, and multiculturalism while Constitution of India, talks about fundamental rights and duties along with the Directive Principles of State policy that strongly advocate human values. The course 'Human Relationship Dynamics' introduces the concepts of values and ethics, Education, Technology and Society throws light on ethical issues in use of technology. 'Basic Ornithology for Engineers' course sensitizes students about the importance of environment, its conservation and the ethics that has to be followed while interacting with nature. Course like Technical Communication introduce importance and use of gender-neutral language as well as following ethical principles in writing. Some courses on Leadership skills stress on the role of human values as integral part of the qualities of a good leader. Other extension activities that inculcate values necessary to transform students into responsible citizens include Junoon, Prayas, Speak Streak, Reflection, webinars on '1% formula for success', 'Open Mic' etc.

	NAG			
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 proof conduct for students, teacher administrators and other staff a periodic sensitization programmeregard: The Code of Conduct is the website There is a committee adherence to the Code of Cond- organizes professional ethics pro- students, teachers, administrate staff Annual awareness programered	rs, and conducts mes in this is displayed on ee to monitor luct Institution rogrammes for tors and other immes on the			

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 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 21,2021
- Birth anniversary of Swami Vivekananda which is observed as National Youth Day is celebrated on January 12,2022.
- 'National Sports Day' on August 29,2021(birth anniversary of Major Dhyanchand)
- Constitution day celebis rated on November 26,2021 to create awareness about the values of constitutional democracy among students.
- National Unity Day was celebrated on October 31,2021.
- NSS Foundation Day celebrated on September 24,2021.

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

1. Title of the Best Practice

Inspiring Innovation and Entrepreneurial spirit

- 2. Objectives of the Practice
 - To catalyse start-up cultureand be a part ofStart-up India, a flagship initiative of the Government of India

? To encourage entrepreneurial solutions to meet societal needs.

3. The Context

Since the most crucial element of launching a business is cultivating an entrepreneurial attitude. Nurturing of entrepreneurial spirit to encourage students to not only see problems, solutions and opportunities but to come up with ideas to do something about them. The NEP2020 reforms also concentrate on fostering students' talents to ensure that they render, effective leaders, and entrepreneurs.

4. The Practice

- The Institute emphasizes on inculcating students the entrepreneurial spirit, through year round conduction of Entrepreneurship Development Programs, Design Thinking, Ideation Workshops, Pitch Your Idea, Business Plan Competitions, Transprimer, Change Makers etc.
- Through RCOEM TBI Foundation, necessary support for new venture creation, product development, technology commercialization, seed funding, networking and value-added support services is provided.
- Courses on Creativity and Innovation, Innovation and Entrepreneurship etc.are included in the curriculum and provision for six months RCOEM TBI Foundation Start-up Internship in the final semester for the students.
- Seed funding for start-ups.

5. Evidence of Success

- Student start-ups incubated
- Venture Capital funding for student start-up
- Funding for student start-up from Meity
- Introduction of professional courses related to skill development and entrepreneurship
- 6. Problems encountered and Resources Required
 - Hiring the right faculty with entrepreneurship experience
 - Active Collaboration with the industry
 - Securing Funding for Start-up Business

File Description	Documents
Best practices in the Institutional website	http://www.rknec.edu/Imp%20Links/BestPract ices.aspx
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. This policy has resulted in a major outcome in the form of improved institutional performance.

Some distinctive activities undertaken in this direction include:

Excellence in Academics:

- Use of Effective Pedagogy for Online Teaching-Learning
- Restructuring of programmes based on emerging trends
- Credit transfer through MOOCs
- Co-teaching by industry experts
- Skill enhancement through Experiential Learning:
- Campus Recruitment Training and Career Guidance
- Webinar
- Expert Lectures by Alumni and Industry experts from India and
- Abroad
- Industry Internship and projects

Exploration of Knowledge through Research:

- Technology development and transfer initiatives
- Centres of Excellence to encourage consultancy and multidisciplinary research
- Research Internship
- Seed Funding
- Research and Teaching Awards

Promote Social Commitment:

- Mental health Counselling
- Bamboo Plantation drive
- Blood donation camps
- Cleanliness drive under Swatch Bharat Abhiyan
- Old garment distribution and Stationary distribution for underprivileged students
- Tree plantation drive
- Visit to Deaf and Dumb School
- Swatch Bharat Summer Internship Program

Excellent Placements and Internships:

The institute has seen a consistent progression in the number of placements and internships leading to highest number of offers in the region during pandemic too.

File Description	Documents	
Appropriate link in the institutional website	http://www.rknec.edu/Imp%20Links/docs/Inst itutional%20Distinctiveness.pdf	
Any other relevant information	No File Uploaded	
7.3.2 - Plan of action for the next academic year		
Future Plan		
1. Examination reforms		
2. Promoting Green Initiatives and waste management in the institute		
3. NBA Accreditation for UG/PG programmes		
4. Value added courses in the emerging areas to cater the need of the changing society		
5. To increase Ph. D enrollment		
6. To enhance research visibility and IPRs		
7. Improve NIRF ranking		