



YEARLY STATUS REPORT - 2020-2021

Part A					
Data of the Institution					
1.Name of the Institution	RAAJDHANI ENGINEERING COLLEGE				
Name of the Head of the institution	Prof. (Dr.) Bimal Sarangi				
• Designation	PRINCIPAL				
Does the institution function from its own campus?	Yes				
Phone no./Alternate phone no.	06742972892				
Mobile no	9437123892				
Registered e-mail	bimal_binit@yahoo.com				
Alternate e-mail	rec_bbsr@yahoo.co.in				
• Address	ear Mancheswar Railway Station, Mancheswar				
• City/Town	BHubaneswar				
• State/UT	Odisha				
Pin Code	751017				
2.Institutional status					
Affiliated /Constituent	Affiliated				
Type of Institution	Co-education				
• Location	Urban				
Financial Status	Self-financing				
Name of the Affiliating University	Biju Patnaik University of Technology				
Name of the IQAC Coordinator	Dr. Sanjay Kumar Behera				

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 Phone No. 		8327	8327717210						
 Alternate pho No. 	ne	8763	8763173320						
• Mobile		8763	3173320						
IQAC e-mail address		iqao	c.rec123@g	ma:	il.com				
Alternate Ema address	ail	sanj	jaybeherac	ec	@gmail.com	n			
3.Website address (Web link of the A (Previous Academ Year)	QAR	http	os://www.r	ec	.ac.in/ima	ages/ilovepdf_me	erged.pdf		
4. Whether Acader Calendar prepared during the year?		Yes							
 if yes, whether is uploaded in Institutional website Web 	the	https://www.rec.ac.in/images/Academic%20Calendar%20for%20Even%20Semester%202021-22.pdf							
5.Accreditation De	etails								
Cycle	Grade	9	CGPA	Ye	ar of Accred	itation	Validity from Validity to		
Cycle 1	В		2.50	2	014		21/02/2014 20/02/2019		.9
Cycle 2	В		2.30	2	019		04/03/2019 03/03/2024		2.4
6.Date of Establishment of I	QAC	10/1	10/2010						
7.Provide the list	of fun	ds by (Central / Sta	ite	Governmen	t UGC/CSIR/DBT/ICM	R/TEQIP/World Bank/	CPE of UGC etc.,	
Institutional/Depa	rtmen	t /Fac	ulty		Scheme	Funding Agency	Year of award with duration Ar		Amount
Nil					Nil	Nil	Nil		Nil
8. Whether compo of IQAC as per late NAAC guidelines	per latest Yes								
Upload latest notification o formation of	f	View File							
9.No. of IQAC mee		6							
 Were the min of IQAC meet and complian the decisions been uploade the institution website? 	ing(s) ce to have d on	Yes	Yes						
10.Whether IQAC	rom								

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

received funding from any of the funding

agency to support its activities during the

year?

No

• IQAC has successfully guided the departments to conduct the online Workshops /FDPs /Seminars/Webinars /Conferences in the emerging areas technologies.

- IQAC has helped the stakeholders and conducted orientation for implementing NEP-2020.
- ullet Students of all the branches have attended internship programmes in various Organisations.
- Students are motivated to participate in Smart India Hakathtan competitions, etc.,
- Upgradation of ICT smart class

12.Plan of action chalked out by the IQAC in 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	
Add on courses for students	Semester wise one add on courses provided	
Focus on Teaching-Learning All faculty members took the virtual classes with enthusiasm and the students' participation was quite encouraging.		
Alumni Engagement through Webinars	During the pandemic, virtual webinars were organized by several engineering as well as management department and on several occasion, the distinguished Alumni were invited as Speakers to share their expertise and hands-on experience to the present students.	
Conduct the online Workshops /FDPs /Seminars/Webinars /Conferences in the emerging areas technologies.	Several webinars were conducted.	

13. Whether the AQAR was placed before statutory body?

Yes

· Name of the statutory body

Name	Date of meeting(s)
Governing Body	30/03/2021

14. Whether institutional data submitted to AISHE

Year	Date of Submission
2020 - 21	25/03/2022

15. Multidisciplinary / interdisciplinary

The institute adheres to the curriculum provided by the University. The curriculum covers different multidisciplinary subjects and interdisciplinary subjects. This helps the students to gain knowledge in different subjects besides the core subjects.

Multidisciplinary

In real life situations, a graduate requires not only to have a thorough understanding of the knowledge required to discharge professional duties in a most effective manner, but also of the entire ecosystem of political, sociological, legal, historical, cultural, and technological. Therefore, the graduates coming out of our institution need to have a holistic understanding of the world around them which in turn calls for multidisciplinary approach to education.

In developed parts of the world, higher education is multidisciplinary which exposes students to diverse disciplines, thoughts, perspectives and skill sets. Exposure to diverse disciplines enables one to amalgamate different perspectives of the subject matter, leading into a wholesome personality.

To deliver quality higher education, the new policy envisions a complete overhaul and reenergizing of the higher education system to overcome the challenges and problems being faced by
HEIS. One of the problems reported by the new policy being currently faced by the higher education
system in India is, a rigid separation of disciplines, with early specialization and streaming of
students into narrow areas of study. To do away with this problem, the new policy lays greater
emphasis on multidisciplinary system of education. Such an education is aimed to develop wellrounded individuals, possessing critical 21st century capacities in fields across the arts,
humanities, languages, sciences, social sciences, professional, and vocational fields. As per the
new policy the engineering institutions, will have to move towards multidisciplinary education
with more arts and humanities subjects.

Introduction of multidisciplinary education at undergraduate level is one of the important features of the NEP-2020.

College Core: It include a series of courses that the students across all streams shall have to learn, as are essential ingredients of a wholesome personality. These courses generally are aimed to harness critical thinking, logic and analysis; mathematics and quantitative reasoning; communication skills, and sound grounding in humanities, management, economy, and entrepreneurship.

Discipline Core: The discipline refers to a branch of academic study having varied functional areas. Therefore, discipline core includes the courses that are compulsorily to be learned by the students of a particular discipline regardless of their areas of specialisation. It is not necessary that all disciplines' will have same number of core courses, rather would vary depending upon the nature of each discipline. The core courses of different disciplines' are generally well defined, however, additions and deletions takes place with the changing phenomenon of the discipline.

Subject Core: Subject in academics refers to a specific or specialised branch of knowledge of a discipline. The courses which are specifically related to a specific speciality, are referred to as subject core. These vary from subject to subject and are necessary to learn to gain a specialised knowledge or skill sets of a specialised branch.

Typically, in order to graduate with Bachelor's degree in Engineering, students are required to complete 120-130 credit hours, every year 30-40 credits. Generally, Engineering streams require 140 credits and all other streams 120 credits. The credit hour should vary between 3 - 4 hours for each course. For all those courses, where lab work is involved, such courses typically carry 4 credit hours and all other courses are assigned 3 credits only. Besides, a Bachelor's degree of 120-130 credits is generally a 4-year programme. For Master's degree, generally, a student is required to complete 70- 80 credits. Given the universal practices, the break-up of the total credits for Bachelor's degree should be 30- 36 credits for College Core, 48-54 credits for Discipline Core and 24-30 credits for Subject Core which would include an option of internship or research project of 9-10 credits.

The other question concerning the implementation of Choice Based Multidisciplinary Education is that, "Should a certain number of selected courses be offered per semester or should the students have the freedom to choose the courses for each semester within the framework of maximum and minimum course ceilings, and course prerequisites? Given the spirit of choice based credit system (CBCS), the choice to select the courses in a particular semester should rest with the students, therefore, it would be appropriate to only identify the total number of courses for each group viz; College Core, Discipline Core and Subject Core and allow freedom to the students to choose the courses for each semester.

Under the new policy, the undergraduate programme will be of either 3 or 4-year duration, with multiple exit options. After 1st year, a certificate in a discipline, or a diploma after 2 years of study, or a bachelor's degree after a 3-year would be awarded. The 4-year programme will also be in the offing leading to a degree with 'Research' if the students complete a rigorous research project in his or her major area(s) of study. Allowing multiple exit options with appropriate certifications and also an option of a sabbatical leave to rejoin after some time to complete the degree, would offer greater flexibility to the students to pursue their studies. More appropriate would be to make Bachelor's degree programme of 4-year duration, and both the years of Masters programme devoted to the gaining of subject knowledge, with last semester both at the UG and PG levels meant for undertaking internship or research project of 9 -10 credits. The new policy also has envisioned internships with local industry, artists, crafts persons, etc., as well as research internships with faculty and researchers at their own or other HEIs/research institutions, so that students may actively engage with the practical side of their learning and, as a by-product, further improve their employability.

Interdisciplinary

Engineering students frequently aspire to work in areas and domains that are key topics in the industry. In response to their desires, the Institute has created multidisciplinary programmes that students can choose from as conventional degree programmes or Micro Specializations. This provides current and future students with an academic opportunity to gain cross-disciplinary competencies and to make career decisions regardless of their qualifying degree. Interdisciplinary subjects cover a wide range of highly relevant topics and take advantage of the diversity of academic units and research capability. The Core departments of engineering such as the Mechanical Department have started with some of the interdisciplinary courses for students such as Artificial Intelligence, Internet of Things, Data structure and other software or other relatable courses.

Importance Of Interdisciplinary Courses

Interdisciplinary subjects and projects have received a lot of attention in engineering education in recent years. Students can choose interdepartmental subjects based on their preferences, thanks to the UGC and AICTE's Credit-Based Choice System (CBCS). Any engineering graduate should be technically proficient in relevant fields, have clear conceptions, be strong at the fundamentals, and be able to apply their talents in problem-solving. Other courses' knowledge, on the other hand, can assist engineering graduates to deal with any scenario more effectively.

Interdisciplinary knowledge is critical for connecting students with current industry trends, where multitasking is the norm. Interdisciplinary knowledge aids in the bridge-building process between academic institutions and industry. It aids students in expanding their knowledge and innovating by allowing them to create something new. While core engineering courses provide students with a strong foundation, evolving technology necessitates new methods and approaches to progress, prosperity, and the inculcation of problem-solving techniques. The demand for in-depth multidisciplinary specialisation has never been greater. Interdisciplinary courses may be one approach to address such needs, as they can aid in the enhancement of engineering education and the integration of desirable specialised subjects into the current engineering education system. This will enable students to fulfil the current industry demands. Students with multidisciplinary knowledge and projects are more likely to be placed in top industries, according to the placement trend. The future of developing engineers will be influenced by their understanding of emerging technology and interdisciplinary approaches such as big data, machine learning, and 3-D printing by introducing value added courses in the institution.

Interdisciplinary Skills Engineers Need

Engineering, whether Mechanical, Civil, Electrical, is a fast-growing and in-demand sector that requires extensive skills and interdisciplinary understanding across various fields of science and technology.

Rapid technological advancements and the onset of the Fourth Industrial Revolution have resulted in a massive revival in the way engineering works in the industry. Projects necessitate the integration of knowledge and abilities from a diverse variety of engineering specialities, with the barriers between them becoming increasingly blurred.

There are a few essential cross-disciplinary abilities that businesses are searching for if they want to work in the industry.

Software literacy

When it comes to solving the frequently difficult problems of engineering design, the software is a huge help. From Computer-Aided Design (programmes like AutoCAD and CATIA) to Systems Design (programmes like MatLab and SimProcess), Process Simulation (programmes like ANSYS and Flow3D), and the ability to programme one's own analysis using programmes like C++, VBA, and Python, today's most popular computer programmes are critical knowledge for any engineer.

Automation and data

It is becoming increasingly clear that automation and robotics are no longer only the domain of electronic and mechanical experts.

The breakthroughs in creating machine elements capable of acting "smart" are affecting every facet of life, let alone any engineering that supports it, in some way. Understanding the design and operation of automated systems, as well as how to make them "smart," is a core skill for any engineer. From intelligent buildings for civil engineers to advanced process control for chemical engineers to robotic operation of processes in a food factory, understanding the design and operation of automated systems, as well as how to make them "smart," is a core skill for any engineer. The ability to acquire and analyse data allows us to 'tell' the automated system how to 'experience its surroundings and, as a result, how to 'behave,' making data analytics a core topic across all disciplines of engineering.

Strategic Planning

Engineers from all disciplines must be familiar with conventional management practises and know-how, as well as when to prioritise resources. The finest engineers will also be aware of potential hazards and plan accordingly, as well as to conduct frequent evaluations of all procedures. Whatever engineering project it is, it will only be successful if the engineers are able to deploy resources in a timely and effective manner to support the strategic objectives.

Quality systems

Modern industry and regulatory agencies around the world demand verifiable, robust, consistent, and effective quality systems in place to ensure not only the quality promised to clients and consumers, but also the safety of company employees, product or service users, and the environment and society at large.

Every engineer, regardless of their field of expertise, must possess fundamental competencies in the implementation of effective quality systems, risk assessments, and environmental implications, as well as the development and implementation of correct Standard Operating Procedures.

INTE	RDISCIPLINARY AND MULTIDISCIPLINARY SUBJECT		
SL	Subject	Interdisciplinary Multidisci	iplinary
No		Subject Subject	

		Credit	Credit Hour	Credit	Credit Hou
	Mathmatics-I			3	3
	hemistry-I			3	3
	physics			3	3
	asic Electrical Engineering	2	2		
В	asic Electronics Engineering	3	3		
В	asic Mechanical Engineering	2	2		
С	communicative English			2	2
M	Mathmatics-II			3	3
Ε	ngineering Mechanics	3	3		
0 C	hemistry			3	3
	susiness and Financial Management	3	3		
	Invironmental Studies			2	2
3 P	rogramming C	2	3		
	Mathematics-III	3	3		
	bject Oriented Programming Using JAVA	3	3		
	Organisational Behaviour		<u> </u>	3	3
	Pata structure	3	3		
	rata structure rigital Electronis Circuit	3	3	1	1
	rigital Logic Design	3	3		+
	rigital Logic Design Pisaster Management	7	J	2	2
	Industrial Psychology	2	2		
	ndustriai Psychology Invironmental Science	3	2	0	2
				0	3
	rigital VLSI Design	4	4		
	nalog Digital Communication	4	4		
	dvanced DSP	4	4		
	nalog Electronics Circuit	3	3		
	Ingineering Economics			3	3
	ntroduction to Physical Metallurgy and	3	3		
E	ngineering Materials	9	5		
	Discrete Mathematics			3	3
) C	Computer Organisation and Architecture	3	3		
1 D	esign and Analysis Algorithm	3	3		
2 D	igital Electronics	3	3		
3 N	etwork Theory	3	3		
1 M	Microprocessor and Microcontroller	3	3		
	rigital Signal Processing	3	3		
	Marketing			1	1
	lanagement Information System	3	1		
	Constitution of India			0	3
	ormal Language and Automata Theory	3	3	•	
	Patabase Management System	3	3		
	'undamental Communication	3	3		1
	perating Systems	3	3		+
	Iniversal Human Values		~	0	3
		-		3	3
	ptimization Engineering Tuman Resources Management		1	-	
	-	2	2	3	3
	rtificial Intelligence and Machine Learning	3	3		-
	Compiler Design	3	3		
	oftware Engineering	3	3		
	eal Time System	3	3		
	nalog and Digital Communication	3	3		
	ssence of India Knowledge Tradition-I			0	3
	ntellectual Property Rights			3	3
3 I	nternet of Things	3	3		
1 E	ntrepreneurship Development			3	3
	oftware Project Management	3	3		
	sig Data Analytics	3	3		
	rigital VLSI Design	3	3		
	mart Grid	3	3		
3 S					

16.Academic bank of credits (ABC):

Acdemic Bank of Credit

The Institute has enrolled the students in ABC to enable them to take the advantage of flexiblility for multiple entries and exit options in academic programme and helping the students to have better opportunity for employment and upgrade qualification.

The Academic bank of credit (ABC) has been set up by the <u>University Grants Commission (UGC)</u>, in which students will be given multiple entries and exit options. This will allow students enrolled in undergraduate (UG) and postgraduate (PG) programmes to exit the course and enter within a stipulated period.

"The flexibility in academic programmes will enable students to seek employment after any level of award and join back as and when feasible to upgrade qualification and also curtail dropout rate and improve Gross Enrolment Ratio (GER) in higher education,".

ABC will provide learners to open unique or individual Academic Bank Accounts in digital form, after which they will be given a unique ID and access to the Standard Operating Procedure (SOP).

The ABC regulations will encourage a blended learning mode in which students will be allowed to earn credits from various HEIs registered under this scheme and through SWAYAM. Under this scheme, the student can secure up to 50 per cent credits from outside their college or university.

Students who are enrolled in the courses offered by National Schemes like SWAYAM, NPTEL, shall also be considered for credit transfer and credit accumulation under this provision. Those admitted in skill-courses from registered higher education institutions offering vocational degree or diploma or postgraduate diploma or certificate programmes are also eligible for accrual and redemption of credits under ABC.

Once the certificate/degree will be collected by the students, all the credits earned by them till then will be deleted from the respective account. The commission has request the vice-chancellors of the universities and principals of the colleges to take appropriate measures to implement these quidelines to facilitate multiple entries and exit points in their academic programmes.

17.Skill development:

Skill development

The institute has given more emphasize in skill development of the students by providing the knowledge of problem solving capabilities, improving their computer skill, technical knowledge, help them to know the benefits of team work and ultimately grooming the students to do their academic activities confidently.

Engineering is a rewarding and exciting career. Engineering is a broad career choice and opportunities vary greatly depending on which area you choose to specialise in. A high-level engineering career requires a strong background in engineering, including academics.

Engineering skills describe the knowledge, expertise and experience that an engineer possesses or needs to acquire to advance in an engineering career.

The exact skills that the students need will vary depending on the field of engineering that you work in.

Problem-solving

In a sense, all engineering projects are a form of problem-solving. An engineer will be given a goal or problem, then they will need to use their expertise and problem-solving abilities to determine the best way of performing construction, manufacturing or repair work.

Computer skills (IT skills)

The use of computers is increasing in almost every profession and engineering is no exception. Digital technology allows engineers to plan, develop and manufacture projects more intricately than ever before. 3D modelling, for example, allows an engineer to gain a more complete understanding of what they are working.

Technical knowledge

Technical knowledge is something that is learned both through study and experience. Even the most extensive academic education won't be able to prepare you for every situation that will arise during an engineering career, but it is important to have the foundations of technical knowledge in place before starting your work.

Problems will arise during an engineering project, whether they are minor or major, but engineers who can work through them will be indispensable in such situations.

Teamwork

This teamwork might be a case of delegating particular tasks to the most suitable engineer or it might be working together to devise a solution to a particular problem that you are unable to overcome alone. Any engineering project will be more successful if the members of a team can work together as a cohesive unit.

Creativity

Creativity is essential for any engineer. Creativity is a quality that can't be taught, so it is highly valued by prospective employers. The creative members of an engineering team play a crucial role in providing solutions to challenges.

Analytical ability

Analytics skills are crucial for engineers, allowing them to evaluate a project and site to decide whether a possible plan is safe. An engineering student needs to examine their work and that of other people and determine the best course of action. Analytical work is an ongoing process during engineering projects and an engineering students should always be willing to take the time to analyse their work and consider whether they are using the right strategy.

Communication skills

Just as teamwork is a key component of an engineering career, communication is essential for ensuring the members of a team can interact with their teammates and other people. There are many forms of communication, from one on one conversations to body language and writing emails. Working on each of these skills will benefit the other aspects of your job and will encourage others to come to you with questions or tasks.

Continued education

Engineering techniques and technology are constantly evolving, and it is the responsibility of an engineering student to ensure that they are up to date with the latest developments. Even engineers who have completed their education relatively recently might be surprised by how quickly technology and regulations have changed in just a few years.

Leadership

Leadership skills are important for anyone working in engineering, even if they don't explicitly occupy a leadership role within a company. In some situations, having the ability to give instructions to others and explain them comprehensively will be of great benefit to the engineer and the project as a whole.

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

The institute follows the curriculum of the university which covers Indian knowledge system. The traditional knowledge about works of literature, rich Indian culture, art, customs helps the students to gain traditional knowledge and provide more confidence with more competitive spirit and loyality.

Indian knowledge system

India is a treasure trove of culture, developed over thousands of years and manifested in the form of arts, works of literature, customs, traditions, linguistic expressions, artefacts, heritage sites, and more. Crores of people from around the world partake in, enjoy, and benefit from this cultural wealth daily, in the form of visiting India for tourism, experiencing Indian hospitality, purchasing India's handicrafts and handmade textiles, reading the classical literature of India, practicing yoga and meditation, being inspired by Indian philosophy, participating in India's unique festivals, appreciating India's diverse music and art, and watching Indian films, amongst many other aspects. It is this cultural and natural wealth that truly makes India, "Incredible !ndia", as per India's tourism slogan. The preservation and promotion of India's cultural wealth must be considered a high priority for the country, as it is truly important for the nation's identity as well as for its economy.

The promotion of Indian arts and culture is important not only for the nation but also for the individual. Cultural awareness and expression are among the major competencies considered important to develop in children, in order to provide them with a sense of identity, belonging, as well as an appreciation of other cultures and identities. It is through the development of a strong sense and knowledge of their own cultural history, arts, languages, and traditions that children can build a positive cultural identity and self-esteem. Thus, cultural awareness and expression are important contributors both to individual as well as societal well-being.

A number of initiatives to foster languages, arts, and culture in school children have been discussed in Chapter 4, which include a greater emphasis on music, arts, and crafts throughout all levels of school; early implementation of the three-language formula to promote multilingualism; teaching in the home/local language wherever possible; conducting more experiential language learning; the hiring of outstanding local artists, writers, crafts persons, and other experts as master instructors in various subjects of local expertise; accurate inclusion of traditional Indian knowledge including tribal and other local knowledge throughout into the curriculum, across humanities, sciences, arts, crafts, and sports, whenever relevant; and a much greater flexibility in the curriculum, especially in secondary schools and in higher education, so that students can choose the ideal balance among courses for themselves to develop their own creative, artistic, cultural, and academic paths.

HEIS, and more programmes in higher education, will use the mother tongue/local language as a medium of instruction, and/or offer programmes bilingually, in order to increase access and GER and also to promote the strength, usage, and vibrancy of all Indian languages. Private HEIs too are encouraged and incentivized to use Indian languages as medium of instruction and/or offer bilingual programmes.

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

The institute follows Outcome-Based Education (OBE) which is a student-centric teaching and learning methodology in which the course delivery, assessment are planned to achieve stated objectives and outcomes. It focuses on measuring student performance i.e. outcomes at different levels.

Some important aspects of the Outcome Based Education

- 1. Course is defined as a theory, practical or theory cum practical subject studied in a semester. For Eg. Engineering Mathematics
- 2. Course Outcome (CO) Course outcomes are statements that describe significant and essential learning that learners have achieved, and can reliably demonstrate at the end of a course. Generally three or more course outcomes may be specified for each course based on its weightage.
- 3. Programme is defined as the specialization or discipline of a Degree. It is the interconnected arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the awarding of a degree.
- 4. Programme Outcomes (POs) Program outcomes are narrower statements that describe what students are expected to be able to do by the time of graduation. POs are expected to be aligned closely with Graduate Attributes.
- 5. Program Educational Objectives (PEOs) The Programme Educational Objectives of a program are the statements that describe the expected achievements of graduates in their career, and also in particular, what the graduates are expected to perform and achieve during the first few years after graduation.
- 6. Programme Specific Outcomes (PSO) Programme Specific Outcomes are what the students should be able to do at the time of graduation with reference to a specific discipline. Usually there are two to four PSOs for a programme.
- 7. Graduate Attributes (GA): The graduate attributes, 12 in numbers are exemplars of the attributes expected of a graduate from an accredited programme.

Knowledge levels for assessment of Outcomes based on Blooms Taxonomy

Level	Parameter	escription			
		It is the ability to			
K1	K1 Knowledge	remember the previously learned			
		material/information			
К2	Comprehension	It is the ability to grasp the meaning of			
1\Z	Comprehension	material.			
кз	Application	It is the ability to use learned material in new			
I/ 2	Application	and concrete situations			
		It is the ability to break down material/concept			
		into its component parts/subsections so that its			
K4	Analysis	organizational structure may be			
		understood			
K5	Synthesis	It is the ability to put parts/subsections			

		together to form a new whole				
		materi	al/idea/cond	cept/inform	ation	
К6	Evaluation	/resea	is judge erial/concep rch report) purpose		ability value t/creative materia	al

The 12 Graduate Attributes in Outcome Based Education

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.
- 2. Problem analysis: Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: The problems:
- * that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.
- \star $\,$ that may not have a unique solution. For example, a design problem can be solved in many ways and lead to multiple possible solutions.
- * that require consideration of appropriate constraints/requirements not explicitly given in the problem statement. (like: cost, power requirement, durability, product life, etc.)
- * which need to be defined (modeled) within appropriate mathematical framework.
- * that often require use of modern computational concepts and tools.
 - Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities, with an understanding of the limitations
 - 2. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice
 - 3. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
 - 4. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 5. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 6. Communication: Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 7. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 8. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

20. Distance education/online education:

The institute has conducted value added courses as a part of online course in virtual mode and provided the students with course curriculum. requiste materials, submission of assignments and conducted examination. Presently the Institute do not erun any distance education course.

Distance Education

Distance education is traditionally known as the 'correspondence course' where study material and learning resources are sent to students through the post and now in the age of the internet through email. In fact, in the modern day and age, the material is often in the form of video tutorials along with PDFs and other documents.

In this format of learning, there is no interaction between a student and his mentor. Students are completely on their own with a self-paced time schedule to complete the course. You just have to

adhere to the exam deadlines and submission dates. Such kind of studying requires a lot of self-motivation and discipline as there is no one watching over.

Online Learning

Online learning is a more modern way of studying. It utilizes the Virtual Learning Environment (VLE) — such as Moodle, Collaborate or Blackboard to share multimedia lectures, have discussions, send student resources, and conduct exams. The lectures are prerecorded or are held live. It is a more interactive teaching method where the teacher and student often meet through the digital medium.

The VLE is like a communication medium or an interactive learning tool through which group projects, discussion forums, and quizzes are held for peer interaction and to give it a more oncampus feel.

During the COVID-19 pandemic, online learning gained significant momentum, in professional colleges offering students virtual classes. In fact, today, many students prefer to go in for an online program as it gives them the flexibility to pursue jobs or any other interests (sports/music) alongside.

Though online learning and distance education are similar in many ways, there are key differences that one should know before deciding on any one learning medium.

1. Student-teacher interaction

The main difference between online education and distance learning is that the former has proper classes conducted through the digital medium. This learning format that borrows from both regular on-campus teaching and distance learning education. There are prerecorded or live classes that ensure that there is some amount of student-teacher interaction. In the live classes, students can interact with each other too. This gives a more regular classroom feel.

However, in distance education, the course material is either couriered or sent via email to the student. They have to study from it and appear for exams and submit assignments based on it. There is no formal or informal interaction between the student and the teacher. In fact, there is limited or no interaction with peers too.

2. Course curriculum and timelines

The course structure of the online learning programs is akin to the regular on-campus courses with ease in assignment submission timelines. It is basically the same course, but the teaching is done through the virtual medium. However, students need to attend virtual classes, participate in discussions, submit assignments on time and write the exams as per the given schedule. While distance education offers a simpler course curriculum with relaxed timelines, students can prolong the course in case of any problem and submit the assignments at their own pace. Distance learning courses are apt for students with family commitments or a very busy career.

	Extended Profile
1.Programme	
1.1	100
Number of courses offered by the institution across all	programs during the year
File Description	Documents
Data Template	View File
2.Student	
2.1	0710
Number of students during the year	2719
File Description	Documents
Institutional Data in Prescribed Format	View File

106

Number of seats earmarked for reserved category as per GOI/ State Govt. r	ule during the year	İ
File Description	Documents	
Data Template	<u>View File</u>	
2.3		
Number of outgoing/ final year students during the year		709
File Description	Documents	
Data Template	<u>View File</u>	
3.Academic		
3.1		165
Number of full time teachers during the year		165
File Description	Documents	
Data Template	<u>View File</u>	
3.2		165
Number of sanctioned posts during the year		165
File Description	Documents	
Data Template	<u>View File</u>	
4.Institution		
4.1		58
Total number of Classrooms and Seminar halls		36
4.2		1670
Total expenditure excluding salary during the year (INR in lakhs)		1678
4.3		658
Total number of computers on campus for academic purposes		030

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

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

The Institute is duly approved by AICTE and affiliated to BPUT, Odisha and follow the syllabus prescribed by the university. Institute has formed an Academic Committee consisting of Principal and Heads of the Departments, who are responsible for planning and monitoring of overall academic activities and its functioning as per University guidelines.

At the beginning of every semester, the courses are assigned to the competent faculty members by department HOD towards preparing the necessary course materials. The courses will be allotted to faculty members based on their expertise and preferences. All faculty members are involved in the preparation of lesson plan documents for their respective courses involving the topics to be discussed in every lecture class, mode of course delivery, text/reference books to be followed, etc., and the lecture notes are approved by the Head of the Department before the beginning of the semester. The class timetable is prepared well before the start of the semester by the timetable coordinator and displayed on the college website.

- Time table coordinators of different departments prepare the Time Table.
- The university provides the syllabus with assessment schemes and course outcomes for each course.
- Performance in experiments are timely evaluated and graded.
- As per the guidelines of the evaluation system, two class tests, quiz tests, surprise test per semester are conducted.
- Faculty members maintain the course files basically contains Individual timetable Academic calendar, Assignments, Lesson plan, Internal and semester question papers etc.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

Before the commencement of each semester, University notifies an academic calendar for all the programs, which contains the date of commencement, last working day of the semester, Internship schedule and dates for semester-end examinations. Institute calendar of events includes details like the total number of working days and holidays, Continuous Internal evaluation dates, dates for the Institute's flagship programs.

The academic activities, Continuous Internal Evaluation and all other activities are conducted as per the calendar of events except unforeseen circumstances.

- Department heads closely supervise and monitor the completion of the syllabus as per the lesson plan prepared by faculty members.
- Internal Assessment tests, assignments, quizzes, surprise tests and seminars are part of the Continuous Internal Evaluation of students.
- The faculty members used to prepare internal question papers based on the modules provided in the prescribed syllabus as per university followed by review and approval of the respective department head.
- Evaluation of answer scripts and calculation of CO-PO/PSO attainment are carried out by respective subject faculty members.
- Continuous evaluation and assessments are also done for laboratory course, project work, seminars, and internships.
- The institution adheres to the academic calendar for the conduct of Continuous Internal Evaluation (CIE) and final semester examination.

File Description	Documents	
Upload relevant supporting document	<u>View File</u>	
Link for Additional information	https://drive.google.com/file/d/1Tfnl_3jgaQapmfAqC38iGlvFRaC9l_Wg/view	

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

A. All of the above

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View File</u>
Any additional information	No File Uploaded

1.2 - Academic Flexibility

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

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

13

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

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

45

File Description	Documents
Any additional information	No File Uploaded
Brochure or any other document relating to Add on /Certificate programs	No File Uploaded
List of Add on /Certificate programs (Data Template)	<u>View File</u>

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

2358

File Description	Documents
Any additional information	No File Uploaded
Details of the students enrolled in Subjects related to certificate/Add-on programs	<u>View File</u>

1.3 - Curriculum Enrichment

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

To integrate the cross-cutting issues relevant to gender, environment, and sustainability, human values, and professional ethics, Institute has imbibed different types of courses in the curriculum which is prescribed by the University

Professional Ethics and Human Values: A course on "Professional Ethics" is offered as a
mandatory course to all the students to take at least once during the program of study. In view
of social development activities, blood donation camps, health check-up camps, environment
awareness camps, etc., are organized and monitored by different clubs as Red ribbon club, YRC
etc.

Gender Sensitivity: The College has a Women Cell, Internal complain cell and Grievance Redressal Cell to provide counseling to students, promote gender equity among students and also deal with related issues of safety and security of female students, staff, and faculty. This cell aims to enable lady faculty and girl students to explore their imminent potential in all aspects, providing a congenial working environment for them.

Environment and Sustainability: The course "Environmental Science" is related to ecosystems and its balance with sustainability is an integral part of the curriculum as a mandatory course. Students are encouraged to participate in activities related to the environment, climate change, and biodiversity organized by the college. Students are taken for industrial visits to effluent and water treatment plants and other places that will educate them on environmental issues..

• Presently illuminai has been formed with collaborration from TATA STEEL LTD

File Description	Documents
Any additional information	No File Uploaded
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

86

File Description	Documents
Any additional information	No File Uploaded
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<u>View File</u>
MoU's with relevant organizations for these courses, if any	No File Uploaded
Institutional Data in Prescribed Format	<u>View File</u>

1.3.3 - Number of students undertaking project work/field work/ internships

1946

File Description	Documents
Any additional information	No File Uploaded
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<u>View File</u>

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its
transaction at the institution from the following stakeholders
Students Teachers Employers Alumni

A. All of the above

File Description	Documents
URL for stakeholder feedback report	https://www.rec.ac.in/studentfeedbackmain.php
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View File
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as A. Feedback collected, analyzed and action taken follows

and feedback available on website

File Description	Documents	
Upload any additional information	<u>View File</u>	
URL for feedback report	https://www.rec.ac.in/studentevalution.php	

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

721

File Description	Documents	
Any additional information	No File Uploaded	
Institutional data in prescribed format	<u>View File</u>	

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

103

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

2.2 - Catering to Student Diversity

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

The institute has created an organized system for evaluating students' learning levels. The Institute uses a variety of student-centered teaching-learning and pedagogical strategies to help students learn more effectively. Teachers use experiential learning, problem-solving approaches, classroom seminars, project works, field visits, field projects, and NPTEL course in addition to traditional classroom instruction. Students are provided extensive orientation in Mathematics, Physics, and Chemistry during the induction programme.

STRATEGIES FOR SLOW LEARNERS

- · Remedial classes are conducted for slow learners after regular class schedules.
- Mentors assess Mentees' learning aptitude based on their academic achievements, conduct, social, and psychosocial characteristics.
- Provide extra lab hours to improve their practical knowledge.
- · The performance of the students is discussed with their parents on a regular basis by their respective faculty advisors.
- · Bridge courses are conducted for students joining in the first year of a program and also for second year lateral entry students. In addition, special classes are conducted for lateral

students in English to improve communication skills.

STRATEGIES FOR ADVANCE LEARNERS

- Encourage students to go for additional courses like NPTEL, MOOCs and certificate courses.
- Motivate them to attend conferences, workshops, paper presentations and other co-curricular activities. Encourage to take up mini projects to enrich their technical skills.
- · Encourage students to attend competitive examinations. Encourage to become members of professional bodies.
- Expose them to new technologies like IoT, AI & ML, and Data science.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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

Number of Students	Number of Teachers

2719 165

File Description	Documents
Any additional information	<u> View File</u>

2.3 - Teaching- Learning Process

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

All the departments have implemented activity-based assignments in every course for continuous assessment of the students. These are employed to enhance participative learning, and to achieve various course outcomes. Minor-projects are included in the curriculum of the UG programme. This course is intended to train the students to develop working models. Students are advised to attend online certification courses / workshops NPTEL lecture material, video lecture materials are made accessible to students. industrial visit in every semester is organized for the students to enhance the technical competency. Also, Internships are completed by the students in each academic year. The working model of the project are displayed and assessed by the external experts. National level technical seminars, conferences are arranged. This helps the students to develop technical skills and personality development. The institute has signed an MoU with different institutes and industries which help the students to do internship.

Course Delivery Methods

- Group discussions
- Seminars
- Minor projects
- Lab experimental work
- Class Assignments / Quizzes / Surprise test
- E-learning tools like NPTEL videos, SWAYAM, etc. to let students learn independently and enhance classroom learning.

Experiential learning

- · Student-centric learning is provided in the practical sessions to apply concepts learned in the classroom. Internships
- Final Year group Projects,
- · Technical Fest and Workshops.
- Short Visit to nearby industries / labs

Participative /collaborative learning

- · Exhibiting at intra-college, state, and national project competitions and technical festivals for R&D projects
- Invited talks by experts and alumni from the industry and academia.
- MOUs are signed with leading industries.

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional information	Nil

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The institute uses Information and Communication Technology (ICT) to ensure effective teaching-Projectors and Audio system in addition to the chalk black board. Also, well configured

Desktops and laptops are available in the computer labs and Faculty member's cabin. The other

tools like smart boards, printers, scanners are available to facilitate the ICT enabled teachinglearning. To enhance the learning the institute has Seminar rooms, Auditorium and Conference halls to carry out the additional learning activities. Students and faculty members have access to huge volume of Digital Library resources and MOOC platforms are also used for effective learning. Faculties are encouraged to use power-point presentations in their teaching by using LCD's and projectors. They are also equipped by digital library, online search engines and websites to prepare effective presentations.

ICT Tools:

- · Projectors: Projectors are available in different classrooms/labs
- · Desktop and Laptops: Arranged at Computer Lab and Faculty cabins all over the campus.
- Seminar Rooms: Seminar halls are equipped with all digital facilities.
- Online Classes through Zoom, Google Meet,

- MOOC Platform (NPTEL / SWAYAM)
- Digital Library resources (DEL NET), Video Conferencing: Video lecture: Recording of video lectures is made available to students for long term learning and future referencing

File Description	Documents
Upload any additional information	No File Uploaded
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<u>View File</u>

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

2.3.3.1 - Number of mentors

160

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	No File Uploaded
Mentor/mentee ratio	<u>View File</u>

2.4 - Teacher Profile and Quality

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

165

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

47

File Description	Documents
Any additional information	No File Uploaded
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File

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

2.4.3.1 - Total experience of full-time teachers

165

File Description	Documents
Any additional information	No File Uploaded
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Institute prepares its own academic calendar well before the semester commences based on the University's Academic Calendar. These include completion of syllabus coverage and CAs for theory, PCAs for sessional and laboratory papers.

- Changes in schedules, patterns, and methods are communicated to students forthwith via online class briefings and Notifications.
- Syllabus for the test is communicated to students by subject teachers well in advance.
- Internal assessment for theory and lab papers is done through Continuous Assessments like Quiz test, surprise test, internal examinations etc.
- The institute has prepared standard formats for question papers depending upon the type of the subject based on Course Outcomes (COs) for Continuous Assessment (CA).

- Departmental committees evaluate the quality of question papers and coverage of the entire COs in the CAs.
- Institute has implemented digital evaluation of internal examination papers, which has helped in speeding up the evaluation process and increasing transparency.
- · Students can raise about any discrepancy found in the assessment.

Adoption of the above method as per University guidelines ensures complete transparency in the system of internal assessment, strengthens the bond between faculty and students.

File Description	Documents
Any additional information	No File Uploaded
Link for additional information	https://www.rec.ac.in/images/1253Acadmic%20regulation%20updated.pdf

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

Mechanism to deal with internal examination related grievances

- Institute carefully adheres to the affiliating University's norms at the time of conducting Internal Tests and Semester Exams.
- The marks for Theory, Practical and Sessional are uploaded into the university portal and notice boards for student's information and submitting grievances.
- After publication of the results, a student can apply for Post-Publication Scrutiny (PPS) and Post-Publication Review (PPR) for internal examinations through the concerned subject teacher or HOD.
- Viva-voce and lab copy evaluations are shown to students to keep the process transparent and minimize grievances.
- The student's performance in Project and Seminars are evaluated by conducting presentations by the students in Google Meet/Seminar halls.

File Description	Documents
Any additional information	No File Uploaded
Link for additional information	https://www.rec.ac.in/images/1253Acadmic%20regulation%20updated.pdf

2.6 - Student Performance and Learning Outcomes

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

AAll courses of the curriculum have well defined COs, the CO-PO mapping with its strength and is included in the syllabus. The hardcopy of the syllabus is made available to every student and also available in institute and university portal. The assessment questions are framed to reflect one of the set COs. The COs are mapped to POs and PSOs. From evaluation of CO attainment, PO and PSO attainment is calculated. The attainment of POs and PSOs through individual subjects are thus calculated. The curricular gap is identified from this evaluation and necessary steps are taken to bridge the same. A Microsoft Excel file is designed to enter and calculate the CO/PO attainments. The Programme outcomes, Programme specific outcomes and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students The Programme Specific Outcomes (PSO) were defined collectively by stakeholders. The defined POs and PSOs are displayed in Website, class rooms, laboratories and the department block. The POs, PSOs and the COs are listed in the lesson plan of individual course file and lab manuals. The POs and PEOs are listed in the respective department web pages.

File Description	Documents	
Upload any additional information	No File Uploaded	
Paste link for Additional information	https://www.rec.ac.in/images/PO,PSO%20&%20CO.pdf	
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>	

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

Assessment is a departmental process that identifies, gathers, and analyzes data to evaluate the achievement of POs and COs. Attainment is described as the standard of academic achievement as measured by examination results. Each Course has a set of Course Outcomes. The college has established a systematic assessment process, and a set of assessment tools to evaluate the attainment of the outcomes. The assessment of attainment of the outcomes is done through Continuous Assessment Tests (CAT), assignments, multiple choice Questions (MCQs) and end semester examination. The attainment of POs and PSOs through individual subjects is thus calculated taken to bridge the

Methods for Assessment, Evaluation and Measurement of POs/PSOs

Direct Assessment methods:

1. Continuous Assessment: COs are assessed through Sessional & Assignment Examinations and Lab records. The COs are mapped against each question and CO analysis is carried out by faculty for each course and documented.

Semester-end Theory Examinations: The questions in semester-end examinations are tested pertaining to all Cos. Laboratory Records: Both continuous and semester-end examinations are conducted to test the COs attainment.

Indirect Assessment Methods:

- 1. Programme Exit survey: This survey taken from the final year students at the completion of their programme stands as the comprehensive feedback for the PO/PSO assessment.
- 2. Alumni Survey: This survey is conducted annually through Google link or mail with the Alumni to obtain the inputs and suggestions on PO. Employer Survey: This survey is taken from the employer to measure the PO attainments.

File Description	Documents	
Upload any additional information	No File Uploaded	
Paste link for Additional information	Nil	

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

679

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	Nil

2.7 - Student Satisfaction Survey

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

https://www.rec.ac.in/studentbestpractice.php

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

- 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)
- 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

11.12

File Description	Documents
Any additional information	No File Uploaded
e-copies of the grant award letters for sponsored research projects /endowments	No File Uploaded
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

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

3.1.2.1 - Number of teachers recognized as research guides

1

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	View File

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

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

8

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>

Any additional information	No File Uploaded
Supporting document from Funding Agency	No File Uploaded
Paste link to funding agency website	Nil

3.2 - Innovation Ecosystem

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

Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge by inculcating research and innovative approach amongst the students and staff by taking several initiatives at management and college level through financial, technological and infrastructural support and at faculty level by providing platforms through events, programmes, seminars. The research committee at college level play a major role for making policy related to research and innovation.

MOU have been signed with industries for developing awareness, training of staff. The central library provides facilities for research support through reference books, research journals, encyclopedia, and reading room. The laboratories, computers, internet and all other ICT facilities are available to support and develop Innovative approach and scientific temper amongst students.

The institution has separate Research & Development cell, Entrepreneurship development cell and innovation and incubation cell. Most of the students apply their knowledge based on the societal needs. Awareness meets, workshops, seminars and guest lectures on Entrepreneurship are organized by the EDC. Vast Alumnus supports the students by sharing their experience on their entrepreneurship in their fields.

The key objective of Incubation Centre is to collect innovative ideas from students and adapt their innovative ideas into Technological Innovations. Students develop their innovative ideas that can be useful for Development. Intra-level competition have been held among students to participate in HACKTHONs through IIC cell.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rec.ac.in/r&dcell.php

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

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

8

File Description	Documents
Report of the event	No File Uploaded
Any additional information	No File Uploaded
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

0

File Description	Documents	
URL to the research page on HEI website	https://www.rec.ac.in/areaofresearch.php	
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	<u>View File</u>	
Any additional information	No File Uploaded	

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

165

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

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/international

conference proceedings per teacher during the year

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

152

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

3.4 - Extension Activities

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

The vision of the Institute is to produce not only good engineers but good human beings also. Therefore, we are taking efforts to add values of good citizenship in our students by the teachers and student peer groups. The Institute organizes various activities through which students are equipped with appropriate skills for their holistic development. In the Institute, the extension activities for social causes are carried out through different cells and clubs. Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year are - Blood donation camp, tree plantation, Swachh Bharat Abhiyan, NSS camp for rural development, Celebration of Days-Yoga Day, International Youth day, Independence Day, Engineers day, NSS day. All the above activities lead towards overall development of the students. etc. Due to the pandemic, online programs were conducted during this year to aware the students and staffs. Activities are also carried out in the Institute involving the students with the objective of sensitizing various social issues and strengthening community participation for holistic development are carried out inside the campus under the banner of Women Cell, Yoga club, YRC, Red Ribbon Club etc..Women's Day is celebrated as part of Gender Sensitization programs. "International Yoga Day" was celebrated too for making the students mentally and physically fit. Due to the pandemic, online programs were conducted during this year to aware the students and staff members.

File Description	Documents	
Paste link for additional information	Nil	
Upload any additional information	No File Uploaded	

- 3.4.2 Number of awards and recognitions received for extension activities from government / government recognized bodies during the year
- 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

02

File Description	Documents
Any additional information	No File Uploaded
Number of awards for extension activities in last 5 year (Data Template)	<u>View File</u>
e-copy of the award letters	No File Uploaded

- 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year
- 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non-Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

12

File Description	Documents
Reports of the event organized	No File Uploaded
Any additional information	No File Uploaded
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

- 3.4.4 Number of students participating in extension activities at 3.4.3. above during year
- 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

File Description	Documents
Report of the event	No File Uploaded
Any additional information	No File Uploaded
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

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

2

File Description	Documents
e-copies of related Document	No File Uploaded
Any additional information	No File Uploaded
Details of Collaborative activities with institutions/industries for research, Faculty	<u>View File</u>

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

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

11

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	No File Uploaded
Any additional information	No File Uploaded
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

The Institution has always strived for the attainment of mission by providing the best possible infrastructure in order to introduce effective teaching-learning environment through extensive use of ICT.

Teaching Learning activities - Seminar halls, classrooms, smart class, tutorial spaces, laboratories and equipments for teaching, learning and research etc are used to improve the teaching-learning activities. All the classrooms have been renovated on modern lines with comfortable and space saving furniture, Wi-Fi connectivity, Vitrified floor tiles, power back up by generator etc. Technology enabled learning spaces. Most of the classrooms the students are exposed to conducive environment for study. The institute has a dedicated Library equipped with computers for use by faculty members.

Seminar hall- A dedicated seminar hall with state of the art audio-visual facilities is in place for regular use.

Laboratories- All departments have state of the art equipments to create facilities that cater to the need of students, faculty members. The laboratories are used for conducting experimental work, research work, project and consultancy work.

The management has a contributing approach towards the development and enhancement of the infrastructure facilities of the institution. The campus has technology-enabled classrooms, libraries, student hostels, seminar halls fitted with LCD projector and video conference halls and auditorium. Annual budget is allocated for enhancement and up gradation of infrastructure facilities. The college has provided separate room TO IQAC cell, ED cell for conducting different activities. A placement cell, headed by a Placement Officer, is available on campus. Wi-Fi hot spots cover the entire campus.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rec.ac.in/infrastructure.php

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

The institution has adequate physical facilities which are augmented from time to time for conducting curricular, co-curricular and extracurricular activities efficiently. Facilities are provide to student activities like cultural, sports, indoor and outdoor games, gymnasium, auditorium, NSS,NCC, cultural activities, public speaking, communication skills development, yoga, health and hygiene etc.

The auditorium is available for extracurricular activities of the institution like cultural functions, orientation programmes, medical camps, college fest and awareness programme and seminars.

A stage in the common ground is also used for cultural activities and functions like celebration of Independence day, Republic day etc..

Sports - The ground of the Institution are used for the Annual Sports meet of the institution. A quadrangle within the premises is used for sporting activities like throw ball, badminton, basketball. Games (Indoor) - Common Room cum Gymnasium is equipped with Carrom board, Table Tennis board and Chess board. Yoga cum Activity.

A quadrangle within the premises is used for sporting activities like cricket, badminton, throw-ball, badminton, basketball. Gymnasium-Common Room cum Gymnasium is equipped with modern gym equipments for exercising practicing dance and other co-curricular activities.

There is a dedicated space for career counseling and placement unit. A dedicated medical room with adequate facilities is available for students, faculty and staff where a medical practitioner visits and also available on emergency basis.

NSS: Camps and other activities are carried out regularly. The college provides infrastructure and funds for all NSS activities.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rec.ac.in/sports.php

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

52

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rec.ac.in/smartclassroom.php
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

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

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

1678

File Description	Documents
Upload any additional information	No File Uploaded
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

4.2 - Library as a Learning Resource

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

The college has registered in e-Shodh Sindhu. Under this initiative, the College has access to many online e-journal link such as IEEE, Springer Nature, John Willey & Sons, Elesvier Scinces. Libraries has access to e-books through EBBSCO and receive print journal copies from IE society. More than 10000 (Ten thousand) e-journal Link are now available online as a result of this. The proceedings from the Back Volume and other articles from 2010 are also available. Library is equipped with the latest PCs for downloading the journals.

Book Bank:

For one semester, each student is issued nine textbooks from the book bank as per institute rule.

Reprographic Facility:

The library has one photocopier to meet the needs of students and faculty, such as logos, content papers, and text papers.

Reading Room:

The library comprises two big reading rooms on the first floor, totaling 1000 sq.m.

Library Working Hours:

All working days: 08.00 AM to 08.00 PM Sunday and other holiday: 08.00 AM to 02.00 PM

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for Additional Information	https://www.rec.ac.in/centralliabrary.php

4.2.2 - The institution has subscription for the following eresources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources

A. Any 4 or more of the above

File Description	Documents
Upload any additional information	No File Uploaded
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<u>View File</u>

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

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

30

File Description	Documents
Any additional information	No File Uploaded
Audited statements of accounts	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

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

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

1680

File Description	Documents
Any additional information	No File Uploaded
Details of library usage by teachers and students	No File Uploaded

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The computer center of the Raajdhani Engineering College was established with the objective of providing computational environment for the academic and research community of the institute and also caters to the computational needs of other organization. The center offer training and software development apart from being a support service for the faculty, students and staff.

Institution frequently updates its IT facilities including Wi-Fi. The entire college computing facility is networked through high end fiber connectivity (Wifi). CAT6e cables are used to connect the computers within the campus. All the fiber active components belong to BSNL. The entire network is configured with different VLANs to manage the networks for security purposes. Tree topology is applied in the complete network design. The network components are:

- 1. Sonic Wall-01
- 2. L3 & L2 networks switches more than 30
- 3. Access points 05

All the hostels, class rooms, laboratories, common areas such as canteen, auditoriums and Open Air Theatre are networked through fibre cables. Students can access internet from any place in the campus. Internet service is available to all students and staff members 24*7 with a proper monitoring setup and appropriate firewall and site restrictions. A dedicated mail service with our college domain is run for all students and staff members. Group mails are channelled based on the purpose and subject matter for students and members of staff.

File Description	Documents
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Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rec.ac.in/computercenter.php

4.3.2 - Number of Computers

658

File Description	Documents
Upload any additional information	No File Uploaded
List of Computers	No File Uploaded

4.3.3 - Bandwidth of internet connection in the Institution A. ≥ 50MBPS

File Description	Documents
Upload any additional Information	No File Uploaded
Details of available bandwidth of internet connection in the Institution	No File Uploaded

4.4 - Maintenance of Campus Infrastructure

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

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

1678

File Description	Documents
Upload any additional information	No File Uploaded
Audited statements of accounts	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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

There are established systems and procedures for maintaining and utilizing physical, academic and support facilities. The central facilities like classrooms, seminar halls, video hall, function hall, multipurpose hall and conference hall are maintained by the maintenance office. The sewage treatment plant in the campus uses Ultra filtration technique to purify the water. Break down register is maintained in the laboratories. As per the requirement minor repairs are carried out by the technical staff. Major repairs are outsourced. Periodic stock maintenance is done by internal auditors from other department every year and the report is submitted to the IQAC. Guidelines for operations and maintenance of sports facilities are given by the sports committee. The campus has a Medical Centre unit with a residential medical officer to take care of staff and students physical and mental health. It also has 24x7 Ambulance service. Annual budget is allocated for the purchase, repair and maintenance and housekeeping facility. scrutiny Budget is approved after by the head of the institute. The Lab In charge or the concerned teacher maintains the record of Laboratory equipments and maintenance. In case of any breakdown / repair works the Lab In charge through the HOD contact the vendor from whom the equipment is purchased.1. The library in charge invites the book and journal requisition from the Department. Each faculty and students are issued the library cards for issue of books. Cleanliness and hygiene are maintained in class rooms and all the places through housekeeping staff regularly.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.rec.ac.in/images/Action%20taken%20report.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

734

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	No File Uploaded
Upload any additional information	No File

	Uploaded
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	View File
5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- g during the year	overnment agencies
5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year	
1675	
File Description	Documents
Upload any additional information	No File

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

Uploaded

View File

File Description	Documents
Link to Institutional website	https://www.rec.ac.in/gym.php
Any additional information	No File Uploaded
Details of capability building and skills enhancement initiatives (Data Template)	View File

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

Number of students benefited by scholarships and free ships institution / non-government agencies in last 5 years

(Date Template)

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

1797

File Description	Documents
Any additional information	No File Uploaded
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View File</u>
Upload any additional information	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

591

File Description	Documents
Self-attested list of students placed	No File Uploaded
Upload any additional information	No File Uploaded
Details of student placement during the year (Data Template)	<u>View File</u>

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

76

File Description	Documents
Upload supporting data for student/alumni	No File Uploaded
Any additional information	No File Uploaded
Details of student progression to higher education	<u>View File</u>

- 5.2.3 Number of students qualifying in state/national/international level examinations during the year (eg: JAM/CLAT/GATE/GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)
- 5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

76

File Description	Documents
Upload supporting data for the same	No File Uploaded
Any additional information	No File Uploaded
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File

5.3 - Student Participation and Activities

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

07

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	No File Uploaded
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	View File

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

Each department has student council. The members of the student organize Fresher's Welcome, Teachers' Day, College Annual Fest, Students participate to organise Farewell. Academic programmes like workshop, seminars and conferences. The members play active role in College Annual function, College Inputs and suggestions are sought from Students' Council members when organizing student related events. The council acts as a liaison between teachers and students. The institute has constituted various committees and clubs and involve the students to organize different academic and cultural activities. In today's pandemic situation, where direct interaction with students is difficult, the role of class representatives (C.Rs) selected by fellow classmates is greatly increased to disseminate information by coordinating between faculty members and students.

Student Clubs: Departments organize various academic and non-academic activities through student clubs such as YRC Club, VIPNET Club, Team Wash club, Sports and Cultural Committee, Anti-Ragging Committee, Library Committee, Sports Committee, Team Wash, Transport Committee, Library Committee, Canteen Committee, Industry Institute Interaction Cell, Entrepreneurship Development Cell, Anti-Ragging Committee, IQAC

File Description	Documents	
Paste link for additional information	Nil	
Upload any additional information	No File Uploaded	

- 5.3.3 Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)
- 5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated during the year

File Description	Documents
Report of the event	No File Uploaded
Upload any additional information	No File Uploaded
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	View File

5.4 - Alumni Engagement

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

The alumni association of the institution has been registered under societies act and having a remarkable network that assist in engaging alumni by sharing a obsession and obligation to the institution. The alumni meet is held habitually and intermingle with the Management regularly on a range of academic and nonacademic matters. Alumni association of our institute are directly involved in different activities such as Financial aid for research work, training of students and volunteer to represent as resource person in various professional development activities like Conferences/Seminars/Workshops etc.

File Description	Documents	
Paste link for additional information	https://www.rec.ac.in/alumnicorner.php	
Upload any additional information	No File Uploaded	

5.4.2 - Alumni contribution during the year (INR in Lakhs) A. ≥ 5Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

QUALITY POLICY

Raajdhani Engineering College, Bhubaneswar is committed to creating, supporting and improving the learning process through an established quality management system, complying with legal and regulatory requirements and making it a learning center of science and technology. Continuous improvement and teamwork will be our strength to achieve the goal set with our core value "Creativity and Innovation".

The institution maintains high academic standards and has developed flexibility to deal with changing scenarios and has worked hard to adapt to growing technology. The institute has well-equipped laboratories, experienced teachers, coaching and training, hostels, and social life activities such as NSS. Under the guidance of the administration, Principal constitutes various committees that include faculty from various departments for the successful running of the institution.

File Description	Documents	
Paste link for additional information	https://www.rec.ac.in/vision.php	
Upload any additional information	No File Uploaded	

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

The organization follows the detailed mandate of the decentralized authority as follows. At the beginning of each academic year, each department proposes a budget. The budget presented by the department is based on the action plan, considering the infrastructure requirements presented by the faculty responsible for the various laboratories, courses, activities and clubs, consolidated by the head of the department, subject to the approval of the proposed budget. Whenever a proposal for financing an activity is initiated by the management, depending on the amount of the proposal, approval can be obtained at various levels.

Another example is when there is a specific need for additional funding beyond the annual budget allocation, the management does not hesitate to offer such when there are good reasons to support the Institute's Vision. Faculty members participate in knowledge sharing by discussing the latest trends. This clearly shows the participatory nature of the management and their commitment to the growth and development of the institute. The management has a participatory management system with collective decision making involving Principal, HODs, IC (Examination). Because the departments are

so important to the organization, each department developed its own vision, mission, and short, medium, and long-term goals.

File Description	Documents	
Paste link for additional information	https://www.rec.ac.in/management.php	
Upload any additional information	No File Uploaded	

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The institution has successfully implemented its overall strategic plan in an effective manner. The institute's academic plan, according to which several committees improve the quality of both academic and extracurricular activities. IQAC formulates and implements many academic quality policies through several committees. The institution has continuously worked with various committees to strengthen and improve academic work to respond to changing requirements and needs. In order to maintain the core competence, a strategic plan/vision is created. The five-year strategic plan consists of reiteration the vision and mission statements, the strategic plan and the implementation strategies based on the SWOC analysis.

When creating the plan and implementation document, Care has been made to include all stakeholders so that they can each participate in their own unique way. For the efficient implementation of the curriculum and the teaching-learning process, an advisory committee was established. The university offers the curriculum. To achieve the goal of teaching and learning, feedback from alumni, industry professionals, subject matter experts from other top schools, and student stakeholders is also taken into account and implemented.

- 1. To improve the curriculum
- 2. To use a digital platform to enhance teaching and learning
- 3. To promote entrepreneurship, industry institute connection, research, and consulting.
- 4. To enhance student experience and increase alumni connection.
- 5. To increase contribution to the environment and society.
- 6. To create development strategies to raise the institute's overall quality of the institute

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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

In order to enable decision-making procedures that are transparent, consistent with its goals, and support successful decision-making, the institute has a well defined organisational hierarchy and structure. The organizational structure supports institutional capacity and educational efficacy through the involvement of stakeholders. The main pillars of the institution's organizational structure consists of academic council, principal, department heads, and faculty members. It analyzes the institutional strategic plan, which in turn defines the institution's academic aims and goals and approves the curriculum's and funding requirements. Through the inclusion of external members on various Committees and Boards, the organizational structure supports institutional capacity and educational efficacy. Members of the several committees that the institute has established represent a variety of institute stakeholders. The organizational hierarchy's appropriate levels determine the decision-making processes. The institution has an IQAC Cell, an Antiragging Cell, etc. in place in accordance with university/government rules. The institution is led academically and administratively by a number of committees with clearly defined roles.

File Description	Documents
Paste link for additional information	https://www.rec.ac.in/images/Employee%20Handbook%20pdf
Link to Organogram of the institution webpage	Nil
Upload any additional information	No File Uploaded

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

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	No File Uploaded

Screen shots of user inter faces	No File Uploaded
Any additional information	No File Uploaded
Details of implementation of e-governance in areas of operation, Administration etc(Da	ta Template) No File Uploaded

6.3 - Faculty Empowerment Strategies

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

The Institute offers both teaching and non-teaching staff members efficient welfare scheme. Faculty members are entitled to all statutory leaves, and teaching staff members are allowed "On Duty Leaves" so they can attend Orientation Programs and Refresher Courses. The College promotes faculty participation in conferences and seminars at all levels. The institution encourages departments to submit applications for major and minor research projects. All staff members have access to the grievance redressal system. All staff members have access to free medical checkups once in six month.

The list of existing welfare measures for teaching and non-teaching staff:

- 1. Service benefits like PF, Study leave, Maternity leave etc.
- 2. All Teaching and Non-Teaching Staff are covered under General Insurance
- 3. Non-Teaching Staff are covered under EPF
- 4. Non-Teaching Staff are provided with ESI facilities
- 5. Maternity and Medical leaves are sanctioned
- 6. Full time Medical facility with Qualified Doctor and Nurse in the Campus
- 7. Providing 15 Casual Leaves for all the teaching and non-teaching staff for one academic year
- 8. Study Leaves are sanctioned for higher education and qualification improvement for all the teaching and non-teaching staff.
- 9. Financial Support to all the Staff members for their professional development activities.
- 10. Availability of Free transport for all the staff.
- 11. Financial encouragement for all the staff, who published their papers in reputed journals and patents
- 12. Providing Financial support to attend conferences / workshop and towards membership fee of professional bodies for all the staff.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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

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

142

File Description	Documents
Upload any additional information	No File Uploaded
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 programs organized by the institution for teaching and non-teaching staff during the year

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

14

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	No File Uploaded
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

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

157

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	No File Uploaded
Details of teachers attending professional development programmes during the year (Data Template)	<u>View File</u>

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

The institute has a internal performance appraisal system to meet the following objectives

- 1. To integrate the institutional and individual goals.
- 2. To increase awareness of duties and responsibilities of the performers to achieve institutional goals
- 3. To ensure fulfillment of curriculum and extracurricular activities and
- 4. Growth of institution.
- 5. To ensure objective assessment of performance and potential factors.
- 6. To identify the strengths and weakness of the performer.

The relevant HODs / Section Heads conduct performance evaluations each year following the conclusion of the academic year to evaluate the performance of the professors and staff during that time. Three categories of evaluation are used to conduct the assessment. Evaluation form

- 1) For Professors and Associate professors
- 2) For Assistant professors and
- 3) Non-Teaching staff.

Through teaching and learning, student feedback, evaluation, research-related activities, cocurricular and extension activities, the appraisal for teaching staff measures and assesses performance. The work activities of non-teaching personnel are evaluated in a similar manner. The form has two parts Part-A where the faculty and staff declare his or her performance through qualitative and quantitative metrics, while Part-B is the potential assessment by the Head of the department for teaching and non teaching staff appraisal will be reviewed by the Principal. Further Improvements are suggested to perform well and good performance is appreciated and rewarded.

File Description	Documents
Paste link for additional information	Nil
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 Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The college is an accredited, privately-funded organisation. In addition to maintaining an open record of all financial activities, it asks for routine internal and external auditing. There are two internal audits per semester. The first audit is performed at the beginning of the semester, while the second one is conducted near the end. Chartered Accountants undertake external surveillance audits. The auditors go into invoices, TDS, bills, quotes, purchase orders, and payment authorizations. Before choosing the vendors, quotes are requested from potential suppliers, authentic ones are found, and the Chairman's consent is obtained. The Chairman has final approval authority over all financial transactions. The payrolls, attendance, Form 16, TDS deduction, documentation of tax proofs, etc. are all reviewed by the internal and external auditors. The external audit team has the option to notify top management if it is dissatisfied with the compliance report. Any audit complaints will be amicably resolved during this procedure before the board of trustees is presented with the financial information.

File Description	Documents	
Paste link for additional information	Nil	
Upload any additional information	No File Uploaded	

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

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

9.9

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

The process of collecting fees follows a set timetable. Students are informed of the timetable via text messages, announcements posted on college notice boards, and the college website. For the upcoming financial year, a budget is made in the month of February, All acquisitions are made after soliciting the necessary number of quotes and carefully evaluating them. Transparency in the handling of financial resources is ensured by the robust internal checks and controls that are in place. The resources are carefully allocated to suit the general administrative needs, such as hiring employees as needed, maintaining and updating the infrastructure, improving the teaching and learning environment, and supporting faculty development. Research proposals are written and sent to several funding organisations, including the AICTE and Industries. Specialized equipment is purchased for research purposes using a portion of the grants received from these organisations.

The administration has invested a sizable sum of money to develop improved equipment, which includes buildings for various departments, administrative blocks, lab equipment, and buildings for the women's and men's hostels, a library, a restaurant, and sporting facilities. Regarding recurring expenditures, REC is a moral organisation because it depends on student fees to pay for expenses like instructor salaries, maintenance of the buildings and equipment, and other regular costs. All unpaid balances are added to the institution's fund.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

6.5 - Internal Quality Assurance System

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

The institution's mission is to teach, advance, and disseminate a holistic education to girls in order to develop their sense of responsibility and independence as contributing members of society. With this objective in mind, the IQAC has concentrated on Mental Well-Being workshops and programmes, especially for students. These programmes have made an effort to address the various mental health challenges that students from multicultural backgrounds and various cities may experience. The programmes run by experts in the subject provide insight into the typical anxieties and uncertainties that cloud young adults' thoughts. The interactive sessions allow the students the chance to express their worries and anxieties while the conversations assist them in identifying their areas of worry. The helpful advice provided by the resource people helps the students get over their struggles, brings out their finest qualities, gives them the courage to take on difficulties, and prepares them to accept successes and failures, academic or otherwise, with grace. The students' overall growth has definitely benefited from these mental health programmes. These events, which were started by the IQAC, are now scheduled on a regular basis and constitute an important component of the academic calendar. Such sessions were held online to support the kids' mental health and lift their spirits even amid the pandemic and the accompanying lockdown. The IQAC has also taken the initiative to introduce gender sensitization programmes, which aim to educate students about issues of gender equality and justice.

File Description	Documents
Paste link for additional information	https://www.rec.ac.in/iqaccell.php
Upload any additional information	No File Uploaded

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

According to standards, the college has a functioning IQAC structure with representatives from the following groups: Teachers, Members of Management, Administrative Staff, Students, Alumni, Employers, Industry, and Parents. A committee for feedback has been established by IQAC, and it frequently solicits input from all parties involved. Based on the feedback, a message is sent to the concerned teachers advising them to conduct bridge courses, add-on courses, remedial courses, and use ICT-based teaching methods to enhance the teaching and learning process. IQAC organises an induction programme and a trainer's training on teaching pedagogies for newly hired instructors. Additionally, IQAC hosts training programmes for both creating and achieving learning objectives. Every teacher is required to present work-done reports on the teaching and learning process, as well as co-curricular and extracurricular activities, on a regular basis. Every year, teachers are required to complete a Performance Based Appraisal Form, which is reviewed by IQAC.

File Description	Documents	
Paste link for additional information	https://www.rec.ac.in/images/minutes%20of%20meeting%202020%20- %2021.pdf	
Upload any additional information	No File Uploaded	

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	Nil
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<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

As a conscious society we all know that gender equity promotes balanced development of a sustainable future. This year owing to COVID-19 pandemic situation, we have organized programme on online mode on gender sensitization. Breaking the boundaries' for students and teachers of our institute with the gender experts from various area to address the 'Gender Equity'aspect. The institute promotes gender sensitivity by taking various initiatives and actions for creating and developing safe, healthy and secured atmosphere in the campus.

Safety & Security:

- 1. Resident lady's warden in the ladies' hostel and resident warden for boys' hostel are engaged separately for the purpose.
- 2. CCTV cameras have been installed in the different places like hostel, front offices, corridor, main campus building and administrative building common places and canteen.
- 3. The institute has constituted different Statutory committees like Anti-Sexual harassment committee, Women Welfare Committee, Grievance Redressal Committee with representative from female faculty members has been constituted as per the guidelines of AICTE/University and is working effectively for the cause.
- 4. Anti-ragging committee regularly vigilant and take stake of any ragging incidents.
- 5. Suggestion/complaint are received from students and faculty regularly through suggestion/complaint boxes provided at definite locations for the students and faculty members that help them to drop in the box in the form of a written complaint.
- 6. The institute has appointed a doctor and has provided a 24x7 ambulance service in the college to meet the emergency health care need for students and staff.

File Description	Documents
Annual gender sensitization action plan	https://www.rec.ac.in/womenscell.php
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	Nil

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensorbased energy conservation Use of LED bulbs/ power efficient equipment

A. 4 or All of the above

File Description	Documents
Geo tagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste

Waste Management system

1. Solid waste management:

The institute has introduced an effective system for solid waste management. All types of solid waste like vegetable waste and left over waste from the hostel and canteen is segregated into biodegradable and non-bio degradable waste. The bio-degradable waste is put into a pit and left to ferment which will be used later as fertilizer for the plants inside the campus.

1. Non-bio degradable waste:

The non-bio degradable wastes are placed into prescribed dustbins which are further collected by the municipal authorities (BMC). An effective sewage treatment plant (STP) is also functioning inside the college.

1. E-waste management:

The e-waste generated in the Institute are collected together from all departments and handed over to an external -waste recycling agency.

1. Waste Recycling System:

The bio-degradable solid waste is put into a pit and left to ferment which will be used later as organic fertilizer to plants inside the campus. The treated water from the STP is used for watering gardens and lawns.

1. Rain water harvesting

The rain water harvesting unit is also installed in the campus to preserve the rain water during rainy season and use it whenever required.

File Description	
Relevant documents like agreements / MoUs with Government and other approved agencies	
Geo tagged photographs of the facilities	<u>View File</u>

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for 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

A. Any 4 or All of the above

File Description	Documents
Geo tagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	No File Uploaded
Any other relevant documents	No File Uploaded

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1. Green audit 2. Energy audit 3. Environment audit 4. Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

File Description	Documents	

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

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

A. Any 4 or all of the above

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

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

The institute provides an amiable environment for both students and faculties to observe National festivals like Republic Day, Independence Day and are celebrated every year to mark the occasions. Students organize and celebrate the teachers' day every year in the institute campus to felicitate the teachers and show their honour and gratitude towards a great teacher and legend Dr. Sarvepalli Radhakrishna. Institute organizes Engineer's Day every year on 15th September to commemorate the birth anniversary in honour of Bharat Ratna Sri. Mokshagundam Visvesvaraya. Eminent personalities are invited from different spheres of life to promote the importance of tolerance and harmony in cultural, regional, linguistic, communal socioeconomic and other prevailing diversities. NSS activities of our institute eliminate the socioeconomic diversities and leading them to a tolerant and harmonious living. Cultural committee, through various clubs organizes different programme and competitions and invited personalities to educate our students and apprise them their social responsibilities and help them to beaware of the implications of their actions.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	No File Uploaded
Any other relevant information	No File Uploaded

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

The college strives to take effective measures to develop the institute into a center of excellence in technology by sincerely adopting creative and innovative practices in teaching & learning, promoting to academic excellence, research excellence to make the students fit into the competitive scenario of a challenging professional career and a successful professionals with a strong and emotionally balanced social consciousness and ethical values. The college conducts Induction Program both for Staff and Students at the starting of the Academic Year. Conducting such programme in the institute introduce both the staff and students to their rights and responsibilities. The courses like Professional ethics, Constitution of India, has been a part of UG syllabus and its study create a awareness and sensitize the students to constitutional obligation and to promote the democratic values. The institute commemorates all national festival day by hoisting the national flag and invites socially established people and personalities from different walk of life to the campus to urge the students to follow the good qualities of the freedom fighter and to understand the social responsibilities as citizen of India. All mandatory committees like Anti Ragging cell, Internal Complaints Cell, Anti Sexual Harassment Cell are actively engaged in carrying out programmes. There is also a coordination committee constituted to plan and execute activities to familiarize and implement ethical behavior and code of conduct in the campus.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://www.rec.ac.in/studentshandbook.php
Any other relevant information	Nil

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and

A. All of the above

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

File Description	Documents
Code of ethics policy document	<u>View</u> <u>File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<u>View</u> <u>File</u>
Any other relevant information	<u>View</u> <u>File</u>

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

The institute celebrates National and International commemorative days, festivals and events. National festivals like Republic Day, Independence Day and are celebrated every year with pride and sincerity. Students organize the teachers' day on 5th September every year in the College campus and create a congenial atmosphere of honor and respect to felicitate the teachers and also to show their gratitude towards a great teacher and a legend Dr. Sarvepalli Radhakrishnan. Every year Institute organizes Engineer's Day on 15th September, to commemorate the birth anniversary of Bharat Rathna Sri. Mokshagundam Visvesvaraya. The Constitution day is marked

on 26th November by reading out the Preamble as stated in the Constitution of India. B R Ambedkar Jayanti is celebrated every year on 14th April during which eminent personalities address the staff members on various aspects of the life of Dr.Ambedkar. The institute strives to inculcate values of ethics and nationalism in the mind of students by celebrating the national day and birth anniversaries of great Indian personalities in the institute campus every year. The celebrations is followed by flag-hoisting, Project model Exhibitions, Essay and poem writing, and speeches. Distinguished personalities are invited to inspire employees and students with their presentations.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<u>View File</u>
Geo tagged photographs of some of the events	No File Uploaded
Any other relevant information	No File Uploaded

7.2 - Best Practices

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

BEST PRACTICE 1

- 1. Title of the Practice: Professional and technical quality enhancement for various
- Competitive exam by incorporating various methods.
- 2. Goal:
- a) To keep up with cutting-edge technologies that is not included in academic curriculum.
- b) Industrial exposure to the students through industry visits and to induce entrepreneurial spirit.
- 2. The Context

Any engineering student who aspires to be successful must go beyond theoretical education. Students receive the essential exposure through experiments and practical's based on the curriculum.

- 3. The Practice
- a) Regular Conduction of various programme such as seminar/ workshop/ induction/short term training programs/ Faculty development program/ conferences improve the confidence of students in achieving a successful technical career.
- 4. Evidence of Success
- a) A remarkable success is observed in the successful placement of students in various

Companies

BEST PRACTICE -2

1. Title of the Practice: incorporating of value based professional ethics within students

- 2. Goal:
- a) To inculcate the environmentally consciousness and professional ethics within students.
- 3. The Context

Only good understanding of a technological subject and the related experimental research cannot create a decent person or a responsible citizen.

- 4. The Practice
- a) Introducing numerous activities that promote environmental awareness to the students...
- b) Conduction of blood donation camps.
- 5. Evidence of Success

Most of our faculty members have been able to provide training on human values and professional ethics as trainer to our students.

6. Problems Encountered and Resources Required The effective time management is a major concern since a no of academic and non academic activities are going on in parallel.

File Description	Documents	
Best practices in the Institutional website	https://www.rec.ac.in/images/BEST%20PRACTICE.pdf	
Any other relevant information	Nil	

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Proactive management, dedicated faculty members and staff, with well established infrastructural facilities are the distinctive attributes of the Institution. The Institution has always strived and initiated steps in grooming the students to achieve excellence through participation in different events and programs leading to the pursuit of knowledge, values, and social responsibility. The Institute has established successfully its distinctive approach in different forms towards achieving comprehensive vision by modeling it for the overall development of students and in turn the society. This distinction is achieved through different training programmes conduct of events and inspiring the students to organize events to develop their skills through solving real life problems.

Skill development

The Institution arranges skill development programs to develop students skills like

Entrepreneurial development, Employability skill development,, Language skill development etc. Projects Students are encouraged to develop projects and working models to improve their fundamentals in technical knowledge and taking Internships in different industries which gives them confidence to work in their field of interest.

Entrepreneurial Development

ED Cell of the institute involved in generating the excitement in the young mind to work in the direction for developing innovative idea and encourages them to become entrepreneurs. Ethical and human value development. Developing ethical values in the students are the prime and foremost interest of the institution, Students are motivated to visit and serve the local villages periodically to observe real life problems and issues relating to people and provide solution working through student various clubs like YRC, NSS, Red Ribbon club etc.

File Description	Documents
Appropriate web in the Institutional website	No File Uploaded
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

Action Plan for the next academic year Institutional Distinctiveness-

- 1. To achieve higher academic excellence through designing curriculum beyond syllabus which will be tuned to meet the global need and expectation and blended with innovative teaching -learning methods.
- 2. To achieve the desired academic and career goals, students to go through various technical programs with activities, workshops, expert talk, industrial visit through technical associations with professional body which enable them to become industry

ready.

- 3. To enhance Research and Consultancy activities.
- 4. To participate in MOOCs (NPTEL /SWAYAM etc.,) and Participation in Workshops/Seminars, Industrial Training.
- 5. To enhance Alumni Association Activities.
- 6. To prepare the students more rigorously for competitive exam and higher studies.