

# YEARLY STATUS REPORT - 2020-2021

Part A			
Data of the	Data of the Institution		
1.Name of the Institution	R.M.D. ENGINEERING COLLEGE		
Name of the Head of the institution	Dr. ANBUCHEZHIAN N		
• Designation	Principal		
• Does the institution function from its own campus?	Yes		
• Phone no./Alternate phone no.	04467919104		
Mobile No:	9790670444		
Registered e-mail	principal@rmd.ac.in		
Alternate e-mail	ac@rmd.ac.in		
• Address	R. S. M. NAGAR, KAVARAIPETTAI		
• City/Town	Thiruvallur		
• State/UT	Tamil Nadu		
• Pin Code	601206		
2.Institutional status			
• Type of Institution	Co-education		
• Location	Rural		
• Financial Status	Self-financing		

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Name of the Affiliating University	Anna University
Name of the IQAC Coordinator	Dr. D. RUKMANIDEVI
• Phone No.	04467919114
Alternate phone No.	04467919142
• Mobile	9566264728
IQAC e-mail address	iqaccoordinator@rmd.ac.in
Alternate e-mail address	ac@rmd.ac.in
3.Website address (Web link of the AQAR (Previous Academic Year)	https://rmd.ac.in/igac/AQAR/AQAR2 019-2020.pdf
4. Whether Academic Calendar prepared during the year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://rmd.ac.in/academiccalendar.pdf

### **5.**Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B++	2.82	2017	30/10/2017	29/10/2022

# 6.Date of Establishment of IQAC 04/12/2015

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Year of award

with duration

Amount

RMDEC/ECE	MODROB	AIC	TE	2019, 730	204000
RMDEC/IT	MODROB	AIC	TE	2019, 730	1003922
RMDEC/ECE	Skill and Personality Development Centre for SC/ST Students	AIC	TE	2019, 730	548333
RMDEC/CSE	Skill and Personality Development Centre for SC/ST Students	AIC	TE	2019,730	250000
RMDEC/CSE	AICTE-ISTE I nduction/Ref resher Scheme	AICTE	-ISTE	2020,6	93000
RMDEC/EIE	AICTE-ATAL FDP	AIC	TE.	2021,5	93000
8.Whether composition of IQAC as per latest NAAC guidelines		Yes			
Upload latest notification of formation of IQAC		View File	2		
9.No. of IQAC meetings held during the year		2			
Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?		Yes			
If No, please upload the minutes of the meeting(s) and Action Taken Report		View File	2		

Funding Agency

Institutional/Depa rtment /Faculty

Scheme

10. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No
• If yes, mention the amount	

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

1. Preparation and Submission of AQAR for the Academic Year 2020-2021 2. Preparation of DCS data, steps to Improve parameter Quantity values and Participation in NIRF 2022 3. ISO 9001:2015 Certification renewal 4. Preparation of Documents and Participation in AICTE -CII Award 5. Preparation of Documents and Participation in ARIIA Ranking

# 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
Academic Activities:  1.Preparation of Digital Course material 2.Edwisely APP - AI Powered Learning Platform ( Mobile Application) 3.Blended Learning 4.Real Time Applications - Video Lectures By Our Faculty 5.Practical examples via online video sessions 6.Technical Skills are developed 7.Multiple Choice Questions - Skill Rack Portal and Edwisely APP 8.Online quizzes 9.Activity- based Learning and Mini Projects 10.Hands-on training sessions are handled by subject experts from inter and intra colleges 11.Online Certification Courses	1.Digital Course Material was Prepared by the faculty for all the subjects and uploaded on the website 2.Edwisely AI Powered Learning system is used for first and second year students to enrich their technical and fundamental knowledge. Students attended MCQ test for all the subjects through this Platform. 3.Real time application videos were prepared by the faculty for all the subjects and uploaded on the Website. 4.4680 On Line Courses Completed by students under Coursera, NPTEL, Udemy, Edx and other Platforms 5.1611 On Line Courses Completed by Faculty under Coursera, NPTEL, Udemy, Edx and other Platforms.
Academic results 2020-2021	Pass Percentage Odd Semester - 99.85%, Even Semester - 99.89%
Placement	Placement Percentage :86.43% , Received National Employability award at National for the Year 2021 by Aspiring Minds

Higher Education Cell	Number of Events Organized through Online Mode -12; 48 students Pursuing higher Studies in India and Abroad
Entrepreneurship Development Cell	Four Events Organized related to Startup and IPR
Institution Innovation Cell	Institution Innovation Cell organized 118 events under various categories and received Four star Rating
Club Activities	English Club, Math Club, Coding Club and Science & Innovation Club Conducted 20 events to enrich students skills based on 17 UN SDG Goals .NSS , YRC , ECO Club, Photography Club, Cultural Club, UHV club, YOGA Club and TEDx Club conducted 25 events related to 17 UN SDG Goals.
Research activities	1. Ph.D Graduated :17; Ph.D Registered :6 2. Paper Published : 220; WOS/SCI & Scopus :147 :Others: 73 3. Research proposals Submitted in DST SERB, DST TIDE& TNSCST -9 4. Consultancy Projects- 45 5. Patents : 29
Organized and attended Conferences/workshop/Seminar/Webinar/IPR Webinar STTP/FDP	1.Webinars /Seminars /workshops /FDP Organized : 265 2.Webinars /Seminars /workshops / FDP Attended : 1452 3.AICTE STTP Organized : 04 4.AICTE ATAL FDP attended : 11 5.AICTE ATAL FDP Organized : 02 6.Books / Book Chapters Published : 26 7.Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices : 135 8.International /National Conference Paper Presented : 35 9.Special Lecture Delivered : 05

Parent-Teacher Meeting	Parent -Teacher Meetings (PTMs) were organised by all the departments of the college on 6. 05.2021,7.05.2021,28.05.2021,11. 11.2021 and 12.11.2021 through Zoom Meet. Feedback collected from the parents and analyzed.
Extra-curricular activities organized through ECO Club, NSS, and YRC	During Pandemic Period 16 events organized through online Zoom Meet
NBA Accreditation	NBA Accreditation valid up to June 2023
AQAR	Prepared AQAR for the Academic Year 2019-2020 and Submitted on 26.05.2021
Autonomous Grant	Conferred Autonomous Status during the session 2020-2021 to 2029-2030 for the Period of Ten Years
ISO Certification	ISO 9001-2015 valid up to March 2022
NIRF Participation	NIRF 2021 - In Engineering Category Rank Band 201-250
ARIIA Ranking	Received Excellent Band Ranking in 2021
AICTE-CII Award	CYIENT Award for Best Industry - Linked Computer & IT Engineering and Allied Institute (Established-Degree) by AICTE - CII (Confederation of Indian Industry) Survey of Industry -Linked Technical Institutes 2020
Institution Recognitions and Awards	Received Eat Right Campus Award - Hygiene Rating by FSSAI
13. Whether the AQAR was placed before statutory body?	Yes
Name of the statutory body	

Name	Date of meeting(s)
IQAC	30/03/2022
14.Whether institutional data submitted to A	AISHE
Year	Date of Submission
2022	28/02/2022
Exter	nded Profile
1.Programme	
1.1	328
Number of courses offered by the institution adduring the year	cross all programs
File Description	Documents
Data Template	<u>View File</u>
2.Student	
2.1	1997
Number of students during the year	
File Description	Documents
Data Template	<u>View File</u>
2.2	186
Number of seats earmarked for reserved category. The court of seats earmarked for reserved category.	ory as per GOI/ State
File Description	Documents
Data Template	<u>View File</u>
2.3	523
Number of outgoing/ final year students during	o the year

File Description	Documents
Data Template	<u>View File</u>
3.Academic	
3.1	150
Number of full time teachers during the year	
File Description	Documents
Data Template	<u>View File</u>
3.2	148
Number of Sanctioned posts during the year	
File Description	Documents
File Description  Data Template	Documents  View File
-	
Data Template	
Data Template  4.Institution	View File
Data Template  4.Institution  4.1	View File
Data Template  4.Institution  4.1  Total number of Classrooms and Seminar halls	View File  63  1605.83863
Data Template  4.Institution  4.1  Total number of Classrooms and Seminar halls  4.2	View File  63  1605.83863

### 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

Academic activities of the institution are well planned and an effective documentation process is in place. RMDEC follows the curriculum and syllabi prescribed by Anna University. The academic calendar is prepared in line with the University calendar for effective curriculum delivery. Every department has a defined vision

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and mission on par with Institution'svision and mission. Program Specific Outcomes are articulated for each program and Course Objectives and course outcomes(CO) are defined for each course. Based on the competency, willingness, experience, and performance of the faculty in the previous year, subjects were allotted to the Faculty Members. Timetable framed for the curriculum is well planned.

The documentation process comprises a course file for each course, with the following documents: Syllabus, Lesson plan, a Question bank, Internal exam question papers with answer key, sample assessment papers, and performance details of the students, identification of root cause for student backlog and remedy sessions conducted. The Head of the department and the Principal do a periodical review of the status of every course in terms of syllabus covered by the faculty and the performance of the students.

The students will give their inputs on the progress of the course, issues on learning, and give suggestions for further improvement during the class committee meetings held thrice a semester. The online feedback system is used to assess the effectiveness of curriculum delivery and is documented. Every faculty is given the responsibility of mentoring 25 students on academic and personal issues resulting in healthier teacher - student's relationships and ensuring an effective Teaching-Learning Process. The faculty prepare and publish lecture notes, video lectures, on the college website and youtube. Question papers are prepared to facilitate the assessment of the attainments of the course outcomes in line with Bloom's Taxonomy.

The students are encouraged to execute projects/mini-projects, which ensures effective curriculum delivery and leads to a good understanding of the course / enhances the application skill.

Students are motivated to participate in a national-level Hackathon/corporate contest that develops their potential to critically analyze, solve problems, and create new products/processes. Industry internship, Centers of Excellence, NPTEL, Certificate programs, facilities like smart classrooms, provide rich learning experiences and effective curriculum delivery.

Faculty are sponsored to attend FDP organized by AICTE, NITTTR, and Anna University to update their knowledge. Good library facilities

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with e-journals are available for learning. Faculty and students are encouraged to actively pursue research, publish papers and apply for patents. Few of the senior faculty are members of the Board of studies of Anna University and make suitable recommendations to the university.

The gap in the curriculum is addressed through demonstrating experiments beyond the curriculum and conducting tutorial classes, value-added courses, seminars, conferences, arranging guest lectures, and industrial visits to supplement the curricular inputs. Student chapters of professional bodies are actively functioning on the campus. Soft skill training programs are provided through Skill Rack Portal, AMCAT, BEC, Centre of Excellence.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://rmd.ac.in/dept/ece/notes.html

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

The Academic Calendar is prepared to match the prescribed number of working days specified by Anna University. The Academic Calendar contains a total number of working days month-wise, schedule of University theory and practical examination, schedule of two internal Assessment tests for each of the courses, and model examination. The Academic Calendar is prepared by the Academic Coordinator in consultation with the heads of the departments and due approval of the Principal. The institution strictly adheres to the Academic Calendarincluding for the conduct of continuous internal evaluation (CIE).

The Academic Calendar is issued well in advance of the ensuing semester to all the department faculty members and students. This enables effective planning by the faculty for each course and all curricular, co-curricular, and extracurricular activities. Based on the academic calendar, the lesson plan is prepared by the course coordinator, which includes unit-wise topics with content beyond the syllabus, teaching aids used for effective course delivery.

A committee nominated by the head of the department of each

programme frames the academic timetable adhering to the academic calendar to ensure effective curriculum delivery of both theory and laboratory courses.

The institution's academic calendar provides the information and scheduled timetable for continuous internal evaluation(CIE) and model examinations to enable the students to frame their action plan for the entire semester.

Continuous Internal Evaluation process(CIE)

The subject-wise Continuous Internal Evaluation process (CIE) timetable par with the schedule given in the academic calendar is announced to the students one week prior to the commencement of the internal evaluation test schedule.

Continuous internal evaluation (CIE) for theory courses:

Table 1: Evaluation Tools and content

Evaluation Tools

content

Marks

Duration

Internal Assessment 1

Units 1 and 2

100

Three hours

Internal Assessment 2

Units 3 and 4

100

Model Examination

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#### All Five Units

100

 The Internal evaluation tests are conducted after the completion of every 2 units. The subject-wise Internal evaluation test schedule and staff invigilation schedule for the test are prepared by the Exam-cell and circulated to all the departments.

Continuous internal evaluation (CIE) for laboratory courses:

- Regular monitoring of the student's performance and ability to conduct the experiment during lab sessions.
- Evaluation of the student's observation book and record notebook.
- Oral examination by the faculty members on the student's knowledge of the experiment
- Conduct Model practical examination.

Internal mark is awarded to each student based on performance in the evaluation process.

File Description	Documents
Upload relevant supporting documents	<u>View File</u>
Link for Additional information	https://rmd.ac.in/academiccalendar.pdf

1.1.3 - Teachers of the Institution participate in B. Any 3 of the above 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

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	<u>View File</u>

### 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

7

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)

378

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

1565

# 1.2.3.1 - Number of students enrolled in subject related Certificate or Add-on programs during the year

48

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

Anna University has integrated cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment, and Sustainability into the Curriculum through the Subjects: Environmental Science and Engineering in II Year, Universal Human values as a part of Professional Ethics in Engineering in III year or IV Year. AICTE has mandated a program on Universal Human Values for the first-year students as a part of the induction programme.

#### Professional Ethics

The topics covered under Professional Ethics are:

- 1. ENGINEERING ETHICS: Senses of Engineering Ethics, Consensus and Controversy, Models of professional roles, Uses of Ethical Theories.
- 2. ENGINEERING AS SOCIAL EXPERIMENTATION: Engineering as Experimentation, Engineers as responsible Experimenters, Codes of Ethics, A Balanced Outlook on Law.
- 3. SAFETY, RESPONSIBILITIES, AND RIGHTS: Safety and Risk, Assessment of Safety and Risk, Respect for Authority, Confidentiality, Conflicts of Interest, Professional Rights, Employee Rights, Intellectual Property Rights (IPR).
- 4. GLOBAL ISSUES: Multinational Corporations, Environmental Ethics, Computer Ethics, Engineers as Managers, Moral Leadership, Code of Conduct, Corporate Social Responsibility.

Human Values:

Topics covered in Universal Human values are:

- 1. Morals, Values and Ethics, Integrity
- 2. Work ethic, Service learning, Civic virtue
- 3. Respect for others, Living peacefully, Caring, Sharing -
- 4. Honesty, Courage, Valuing the time
- 5. Cooperation, Commitment, Empathy.
- 6. Self-confidence, Character, Spirituality
- 7. Introduction to Yoga and meditation for professional excellence and stress management.

Environment and Sustainability

The topics covered under environmental Science and Engineering are:

- 1. Environment, Ecosystems And Biodiversity environmental pollution: Study the nature and facts about the environment.
- 2. Natural Resources: Use and over-exploitation, deforestationFind and implement scientific, technological, economic, and political solutions to environmental problems.
- 3. Social Issues And The Environment: Study the interrelationship between living organisms and the environment.
- 4. Human Population And The Environment: Study the integrated themes and biodiversity, natural resources, pollution control, and waste management.

#### Gender

RMDEC believes in maintaining a healthy environment for all its students and ensures gender equality in admissions, employment, training, sports, and all other activities. All committees/cells have been constituted as per the statuary requirement of UGC/AICTE/Anna University.

Women Empowerment Cell: Women Empowerment Cell was constituted on 01-07-2014 as mandated by Anna University regarding the security

purpose for Girl students and Women Staff in the College campus. The members of the cell are all women, consisting of a coordinator, two faculty members, and one girl student from each department. Regular review meetings are conducted.

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

# ${\bf 1.3.2 - Number\ of\ courses\ that\ include\ experiential\ learning\ through\ project\ work/field\ work/internship\ during\ the\ year}$

328

File Description	Documents
Any additional information	<u>View File</u>
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	<u>View File</u>
Number of courses that include experiential learning through project work/field work/internship (Data Template)	<u>View File</u>

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

1569

File Description	Documents
Any additional information	<u>View File</u>
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	<u>View File</u>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	<u>View File</u>
Any additional information(Upload)	<u>View File</u>

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

and action taken and feedback available on website

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://rmd.ac.in/feedback.pdf

## 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 sanctioned seats during the year

558

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

#### 201

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

#### 2.2 - Catering to Student Diversity

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

### INSTITUTION ASSESSMENT PROCESS

Assessments occur at various levels in the institution: course and program from the first year entry of new graduates through the final year students career to inculcate the desired graduate attributes. The entry-level assessment involves collecting quantitative and qualitative information about students' learning levels at the entry itself. The processes involve collecting systematic evidence from each student by an assessment tool, a questionnaire consisting of a set of questions to collect information on their family background, educational background of students and their parents, computational and communication skills, assessment of their attitude, emotional status, their motivational and confidence levels, extra-curricular talents, identification of their goals and aspirations.

Students are encouraged to enroll in various online courses. Many of our students have enrolled for such courses and secured different certifications from various online course platforms including ICT Learnthon, Coursera, Edx, NPTEL, Udemy, etc.

Critical analysis of the data enables assessing the learning level of each student at the entry itself, also assessing individual

goals, self-learning ability, areas for personal improvements, and tracking of progress for successiveyears.

- 1. One counselor is appointed for every 20students.
- 2. First-year and Second-year class strength is limited to a maximum of 45for better student-teacher relationships.
- 3. An induction programme is organized for the first-year students to make them adjust to the campus environment and acquaint with the university educational system. As the part of student induction programme Universal Human Values are taught to the students.
- 4. Bridge course is conducted for the students in basic Mathematics, Sciences, English, and Computer Programming to acquaint them with the curriculum.
- 5. Students are given opportunities to be part of innovative projects and other technology initiatives of the institute.
- 6. Students are motivated to present and publishpapers regularly in their areas of study under the guidance of the teaching faculty.
- 7. Students are initiated to participate in Hackathons, Learnathon, and Corporate Content. The college has adopted this programme as part of its strategy to encourage advanced learners.

Continuous internal assessment of theory and practical courses are done: Two internal Assessment tests and model exam are conducted during each semester.

All the assessment processes are conducted following Bloom's Taxonomy. An action plan for continuous improvement is developed based on the analysis of test results for both advanced learners and slow learners:

Special facilities for advanced learners:

- 1. Awards for Meritorious students.
- 2. Books for Meritorious students.
- 3. Practical training with scope for mini-projects.
- 4. Value Added Courses and Online e-Learning courses relevant to respective discipline.
- 5. Motivation for participation in co-curricular activities
  -Seminar, Paper Presentation, Quiz, and Competitions.
- 6. Facility to become a member of Centre of Excellence / Entrepreneurship Development Cell.
- 7. Motivation for Industry Internship.
- 8. Financial support for participating in various

- competitions/conferences in India and Abroad.
- 9. Facilities to learn Foreign Languages.
- 10. Encouragement in sports and games.
- 11. Organizing extra classes for slow learners and assistance from Faculty Members are arranged through google meet.
- 12. Encouraging them to participate in various activities to develop social skills.
- 13. Studentsare directed to take MCQs regularly through the Edwisely app.
- 14. Students are regularly counseled through the Pragati app.

#### Special initiatives for slow learners:

- 1. Slow learners are segregated into small groups.
- 2. They are monitored and counseled on regular basis.
- 3. Discussions with the parents on assessing the reason for poor performance and remedial measures to improve academic performance.
- 4. Special and remedial classes are arranged for individual subjects on one-to-one teaching and coachingby the preparation of a special timetable.
- 5. Distribution of relevant course materials and class notes.
- 6. Tagging the slow learners with the advanced learner, peer learning is practiced.
- 7. Video lectures by faculty members are also made available for students to facilitate repeated training and practice.

File Description	Documents
Link for additional Information	https://rmd.ac.in/naac/Criteria2/2020-2021/2 .2.1%20special%20Programmes%20for%20advanced %20learners%20and%20slow%20learners.pdf
Upload any additional information	<u>View File</u>

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

Number of Students	Number of Teachers
1997	150

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

The institution has evolved over a period in implementing a student-centric approach to teaching as an alternative to the conventional teacher-centric approach. Student-centric methods serve as an integral part of the pedagogical techniques employed by the faculty of the college. The methodology involves project-based/experiential learning, participative learning and problem-solving methodologies with more responsibility and autonomy for the student to deeply study and understand the subject with the role of a teacher as a facilitator rather than an instructor.

#### Experiential learning:

The college has established several centres of excellence in collaboration with industry. The centres functioning in the college are Embedded Systems, Automotive Electronics, Telecom, Artificial Intelligence, Big Data Analytics, Robotic Process Automation, Cyber Security, Cloud Computing, Front End Technology and Internet of Things.

Certification Courses (Value Added Courses) Conducted by the CISCO to develop their expertise.

Project development on latest technologies by students where they showcase their working model in the Mini project contest. It is organized every year for the students where selected projects are displayed on the larger platform. Virtual Industrial Visits to engage them in experiential learning while visiting the organization.

The students are grouped as per their choice, into one of these centres of Excellence(CoEs). The training didactics for these CoEs are provided by the industry. In addition, the faculty of the college are trained on the technology by the industry through faculty training Programmes following train the trainer model. The faculty in turn trains the students in the above technology areas. The students are encouraged to demonstrate their knowledge and practical skill by undertaking mini-projects through simulation and hardware development and participating in project contests. A panel

of experts from the industry review the projects. The objective is to promote a variety of options and opportunities encompassing both enhanced student choice and a thought-provoking student experience. The above process facilitates experiential learning and enhances domain-specific placement in the industry.

#### Participative Learning:

The Students are encouraged to participate in professional society activities, Technical Workshops, Intra Department Project Contests, Seminars, Symposiums, Paper presentations in Conferences. In addition, Industry visits, In-Plant Training, and Internship are also arranged for the students.

The role of the faculty is to function as a facilitator who supports self-development of knowledge, holistic development and skill formation through participatory learning activities such as:

- 1. Group Discussion, Peer learning, Case studies, Tutorials, Roleplay and webinars to enhance the demonstration skills of students.
- 2. The students are encouraged to use online platforms such as Skill Rack, AMCAT to hone their Programming skills.
- 3. The students are encouraged to study and obtain certification on e-learning portals such as NPTEL, and several other MOOCS portals.
- 4. The faculty of the college also keep in connection with the students in the virtual mode by social networks to answer their queries at any time.
- 5. A Symposium/Conference is organized every year for the students to give a vent to their creativity.
- 6. Quizzes are conducted through Mentimeter, Google forms, Kahoot to enhance their knowledge and develop new skills in recent emerging areas.

To bridge the gap between industry and academia, industry experts from reputed corporate are invited to deliver guest lectures and interact with the students on current technology practice. All the above activities promote participative learning.

#### Problem Solving:

The students are motivated to participate in the Smart India Hackathon (an initiative by Govt. of India) and various Corporate Competitions such as Hackwithinfy by Infosys Ltd, Big Idea and Master code by Cognizant Technology Solutions, Hack Challenge by IBM, EnQuode, code vita by TCS. All these involve complex problemsolving. Students work on giving solutions to real-time problems enumerated in the contests. Students are encouraged to participate in Case Studies, Group Discussions, Class presentations, Debates, and also in Inter-college events.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	https://rmd.ac.in/naac/Criteria2/2020-2021/1

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

The primary focus of RMDEC is to move away from the lecture-based classroom to more interactive teaching facilitated by the use of ICT-enabled tools. The teaching-learning strategy adopted is to create opportunities for multidisciplinary activities and for students' interaction with teachers, with each other, and with the industry. The objective is to embrace more interactive teaching and create a more supportive and challenging classroom setting for the students to learn actively.

For efficient implementation of interactive teaching techniques, the faculty members are encouraged to use ICT-enabled tools such as digital and online technology. Power-point presentations and animations, smart classrooms, interactive whiteboards, guided web tours, learning Online resources, virtual labs, educational interactive audio-video chats, webinars, Course material, YouTube videos posted by the faculty of RMDEC, etc. are regularly used by the faculty members.

The students are constantly encouraged to access E-Resources such as E-Books, digital libraries, online free simulation tools, and MOOC (massive open online courses such as NPTEL). The college provides facilities to use online platforms such as Skill Rack, AMCAT for the students to improve their programming skills. Quiz questions are also posted by the faculty on the Skill Rack platform, for the students to practice online.

The teaching resource material and YouTube videos published online by the faculty of RMDEC have transformed the teaching-learning process from confined classroom delivery to open, flexible delivery for the benefit of students to learn independently by adopting ICT-enabled tools for effective teaching-learning. The necessary links for the teaching resources and YouTube videos are provided on the college website.

The use of ICT tools for teaching-learning at RMDEC provides an affable atmosphere, inspiration, and impact on the process of learning. Thus, offering new possibilities for students as well as the teachers to be in touch constantly through social media at any time for enhanced learning.

The institution provides the complete infrastructure for ICT-enabled teaching-learning processes and for content development by the faculty members. Facilities such as seminar halls, smart classrooms, equipped with smart boards, LCD projectors, video cameras, Internet and Wi-Fi facility, etc.

During Pandemic, ICT played a vital role in facilitating teaching and learning. Students had experienced a different version of the Teaching and Learning process are

- 1. Online Education
- 2. Use of Apps
- 3. Various Platforms for Online Education
- 4. Use of unique E-Content

Online Education: The teaching and learning process had continued without any interruption during lockdown through online education. Classes including Laboratory classes had been scheduled online using various platforms.

Use of Apps: Different Apps had been used to facilitate online education. Classes were scheduled using Google Meet, Webinars were conducted using Google Meet, Zoom, Microsoft Teams. Materials and announcements for the students were shared in Google Classroom. The quiz was conducted by Google form, Kahoot, and Mentimeter. Online MCQ tests were conducted in Edwisely App.

Various Platforms for Online Education: Apart from the regular teaching, students were motivated to do courses from ICT Learnthon, Coursera, Udemy, NPTEL, Mathworks, IBM, and so on. The college provides facilities to use online platforms such as Skill Rack, AMCAT for the students to improve their programming skills.

E-Content:College had provided the Digital Course Materialto students for all the academic subjects. Digital Course Material was

prepared exclusively for our students by our subject expert which has course objective, course outcomes, CO/PO mapping, Activity-based learning, Lecture notes, Assignments, Part A & B Question bank, supportive online certification course, Real-time applications in day to day life and to industry, Content beyond the syllabus to bridge the curriculum gap & Mini-Project suggestions.

File Description	Documents
Upload any additional information	<u>View File</u>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	https://rmd.ac.in/dept/cse/notes.html

# 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

103

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	<u>View File</u>
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

150

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

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# 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

57

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

# 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

928

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

Robust and Transparent system of internal assessment, the frequency and mode are very clearly stipulated in Anna University regulation 2017 (section 11 & 12, Page 8,9) and it is mandatory for the college to follow the system. The regulation is published for transparency on the University website under the head Academic, for the public.

Transparency initiatives at the college level

RMDEC on its part, to ensure awareness and transparency among

students conducts a special orientation programme on the examination system both university and internal assessment, and awards of internal marks, frequency, and mode to all the students at entry level itself.

The controller of examinations, Anna University notifies the academic schedule for each semester to the college. Based on this schedule, an academic calendar is prepared by the college which includes schedules for two Internal Assessment Tests, Model Examination, and the tentative date for the commencement of university examinations. A hard copy of the academic calendar is provided to each and every student and faculty of the college to ensure transparency. The Internal Assessment Tests and Model Examination are conducted as scheduled in the academic calendar.

The timetable for the Assessment test is prepared by the Exam cell and displayed on the department Notice Boardin advance. It is also circulated to students. A proper Seating plan is followed for internal assessment tests and it is displayed on the notice board as well as on the respective classrooms. Changes in schedules, patterns, methods if any, are immediately notified to the students through notice boards and also through classroom briefing by the concerned subject teacher.

Two internal assessment tests and one model exam are conducted per semester. Exam cell allocates experienced faculty as overall course coordinator. Detailed instructions about the format of the question paper are given by notification from the Principal.

#### SMART PICK SYSTEM OF QUESTION PAPER SETTING:

The question bank is prepared for each course by an experienced course coordinator nominated for each course by extracting and consolidating the questions prepared by different faculty handling the same course. The question bank covers Part - A, Part - B, and Part C questions. The final question paper is generated using Smart Pick Software.

Internal assessment test answer papers are evaluated by the concerned course teachers whereas model exam answer papers are shuffled and evaluated by different teachers handling the same course thereby eliminating any bias. It is the practice of the college, to give the internal examination answer books after evaluation, to the students in the class for self-evaluation.

The Internal Assessment marks are entered periodically in Anna

University Web Portal in four scheduled phases in a semester specified by the University. The students can view their internal assessment marks in the web portal through Anna University Student login.

Thus the mechanism of the internal assessment system followed by the college guarantees transparency and is robust in terms of frequency and mode.

In the pandemic period, the timetable for the Assessment test is prepared by the Exam cell and a circular is sent to the student's mail one week in advance.

Online Test - Through Google Classroom was conducted. The question paper for the exam was posted in the classroom as an assignment created for the students. The student gets the question from the classroom and joins the google meet link mentioned for them.

The student writes the exam with their camera on and the sessions were recorded, so as to ensure transparency in the conduction of the internal exams. The invigilators give the instructions for them. After completion on time, the students submit their scanned answer papers in their respective classrooms for the subject assigned to them.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	https://rmd.ac.in/naac/Criteria2/2020-2021/2
	.5%200verall%20Schedule%202020-2021.pdf

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

Transparent and Time-Bound Internal examination related grievance redressal mechanism:

A grievance concerning the internal assessment tests is handled by the respective subject teacher and the Heads of departments concerned immediately at the department level. They shall have initial authority over grievances related to Internal Assessment. The college has a Grievance Redressal Committee comprising of the Principal, Deans, and HODs for escalation of any grievance.

- 1. Timetable for the internal assessment prepared by the exam cell is displayed in the department notice board in advance.
- 2. During internal assessments, if students find discrepancies in question paper such as missing/ insufficient data, options are repeated, out-of syllabus questions they may report it to the concerned course teacher. The faculty after discussing with the overall course coordinator and department head and with the approval of the Principal corrections are made in the question paper immediately.
- 3. It is the practice of the college, to give the internal examination answer books after evaluation, to the students for self-evaluation. Students are free to interact with the faculty to resolve grievances if any.
- 4. If a student is not able to appear for an assessment test due to medical or any genuine reason, a retest is conducted.
- 5. The evaluation of the answer scripts is completed within 2 days time after completion of the assessment of a particular subject.
- 6. Distribution of answer scripts to the students and resolving of grievances is done within 3 days time after the completion of the assessments test.
- 7. In the pandemic period, the timetable for the Assessment test is prepared by the Exam cell and a circular is sent to the student's mail one week in advance through Google Classroom. The students may get clarification for data missing questions, out of syllabus questions, etc to their concerned subject staff, who joins the Google Meet and clarifies it immediately. The scanned answer papers in their respective classrooms for the subject assigned to them are corrected by the faculty and Marks are returned to the students in their respective classrooms. The evaluation of the answer scripts is completed within 2 days time after completion of the assessment of a particular subject.

#### University examination Level grievance redressal:

- 1. Anna university examination pattern, revaluation, and review procedure are explained to the students at entry level itself by the subject handling faculty and HOD.
- 2. Common grievances of students before the examination are submission of late application, non-receipt of hall-ticket, or wrong entries in the same. Such grievances are communicated to the Controller of Examinations(COE)of the University by the Principal and resolved much before the commencement of the examination.
- 3. Respective subject teachers instantly report to the COE of the

- University through the Principal, any grievances about question papers. Grievances related to question paper including out of syllabus questions, typing errors, etc.
- 4. Malpractice by the student during examination is reported to the COE adhering to the specified procedure of Anna University. The University appoints a committee to expeditiously deal with such cases before the publication of semester results.
- 5. Students are entitled to revaluation within fifteen days from the declaration of results, as a mechanism for redressal of grievances with reference to evaluation.
- 6. A student is entitled to obtain the photocopy of the answer script, if not satisfied with the grades allotted. After review of the answer script and recommendation of the subject teacher application for revaluation may be submitted paying the prescribed fee.
- 7. If the student is not satisfied with the grades allotted after revaluation, an application may be submitted for review. The fee paid is refunded to the students who obtain pass marks after review.
- 8. In the pandemic period, Anna University Conducted End Semester Examinations through an online MCQ test. For the benefit of the Students, re-examination was conducted. This was done because of the difficulty faced by the students during the new exam pattern which was MCQ and due to the new platform which was AI-powered.
- 9. Malpractice by the student during examination is reported to the COE adhering to the specified procedure of Anna University. The University appoints a committee to expeditiously deal with such cases before the publication of semester results.
- 10. In autonomous mode, Proctored online Examination was conducted for the Even semester 2020-2021

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	NIL

### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

Programme and course outcomes for all Programmes offered by

theinstitution are stated and displayed on the website and communicated to

teachers and students.

Programme Outcomes (POs)

POs are assertions about the knowledge, skills, and approach or attributes that the graduate of a recognized engineering program should possess. POs deal with the broad characteristics of graduation for a particular program, and the competencies and proficiency a graduate will possess after completion of the program. Program Outcomes to match the global competency levels and desired qualities a graduate engineer should possess. The Program Outcomes reflect:

1. Engineering Knowledge, 2. Problem Analysis 3. Design/development of solutions, 4. Conduct investigations of complex problems, 5. Modern tool usage, 6. The engineer and society, 7. Environment and sustainability, 8. Ethics, 9. Individual and teamwork, 10. Communication, 11. Project management and finance, 12. Life-long learning.

Program Specific Outcomes (PSOs)

These are affirmations about the students' capability at the time of graduation. The PSOs are program-specific. PSOs are written by the department offering the program.

Course Outcomes (COs)

POs are achieved through program-specific fundamental/core courses generally about 44 theory courses, 18 practical courses, and project work during an 8-semester B.E./B.Tech. programme. Each of these courses has its own specified course outcomes (COs) to attain. Each course is designed to meet (about 5-6) course outcomes. The course outcomes are fixed in such a way that they can be essentially measured. COs are set at RMDEC, by the department heads and faculty, in accordance with the course outcomes specified by Anna University. RMDEC weblink for COs of all programmes are given below:

Computer science and Engineering:

https://rmd.ac.in/dept/cse/co.html

Electronics and Communication Engineering:

https://rmd.ac.in/dept/ece/cos.html

Electrical and Electronics Engineering:

https://rmd.ac.in/dept/eee/CO.html

Electronics and Instrumentation Engineering:

https://rmd.ac.in/dept/eie/cos.html

Informatiom Technology:

https://rmd.ac.in/dept/it/cos.html

First Year ( All Programmes):

https://rmd.ac.in/dept/snh/co.html

POs and COs for all the programmes are displayed on the college website and are communicated to all teachers and students.

Following are the methods adopted by RMDEC to communicate to the teachers and students:

- 1. Displayed on the college website College website
- 2. PEOs and POs are printed in the Academic calendar and distributed to allteachers and students
- 3. PEOs and POs are displayed as Posters in the departments.
- 4. COs are explained to all the students in the class by the course teachers.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://rmd.ac.in/dept/cse/peo.html
Upload COs for all courses (exemplars from Glossary)	<u>View File</u>

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

The assessment tools and processes used for evaluating the attainment of each of the Program Outcomes and Program Specific Outcomes, course outcomes are given below:

#### Method of assessment of POs / PSOs

The program outcomes and Program Specific outcomes are evaluated with the help of course outcomes of the relevant courses through direct and indirect methods. The direct method involves conducting examinations. Two internal assessment tests, one model examination by the college, and finally university examination for each course. The evaluation of the answer books provides a direct measurable course outcome of the student's knowledge or skills. The knowledge and skills, specified by the course outcomes (CO) are mapped to programme outcomes (PO) criteria-wise. The Average attainment indirect method stipulated by the university is University Examination (80%) + Internal assessment (20%). Anna University Regulation-2017 Curriculum & Syllabi specifies the broad relationship of Mapping of PEO with PO, Mapping of PSO With POMapping of CO With POfor all programmes. This information is displayed by the University on its web portal. The college adopts these with few additions.

The indirect assessment process followed at RMDEC is as follows: 1. Student Exit Survey, 2. Employer Survey, 3. Alumni Survey and 4. extra/co-curricular activities. The attainment of program outcomes is evaluated by analyzing the data collected by the above-mentioned processes and the PO attainment level is computed. Average attainment in the indirect method is the Average of Alumni survey, Employer survey, and Exit survey.

Following is the procedure used to calculate the average attainment of each PO: PO / PSO Attainment (%) = (weightage: 80%) x (Average attainment in all courses indirect method) + (weightage: 20%) x (Average attainment in indirect method).

Summary of the direct and indirect tools used for the assessment of POs/PSOs/COs and their frequency are given below:

- 1. Two assessment tests and one model examination are conducted by the college for each course per semester for the purposes of direct assessment to ensure that students have achieved the desired level of COs at the unit level.
- 2. At the end of each semester, university examinations are conducted by Anna University based on the result published by the university, the COs are measured.
- 3. An Alumni survey is conducted once a year to evaluate the relevance of the curriculum with the industry's expectations and the level of attainment of objectives for the specified program.

- 4. Employer surveys are conducted for ensuring whether the knowledge, skill, and attitude acquired from RMDEC are adequately satisfying the corporate expectations.
- 5. A student Exit survey is conducted once a year to identify factors for improvement and future strategy. To comprehend the impact of various training programmes that they had undergone and the relevance of value-added courses, domain-specific training was imparted.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://rmd.ac.in/naac/Criteria2/2020-2021/2 .6.2%20Attainment%20of%20po%20&%20co.pdf

#### 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

522

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	https://rmd.ac.in/naac/Criteria2/2020-2021/F inal%20Year%20Results%20compresses%202020-20 21.pdf

#### 2.7 - Student Satisfaction Survey

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

https://rmd.ac.in/feedback.pdf

#### 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)

00

File Description	Documents
Any additional information	<u>View File</u>
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

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

00

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	NIL

- 3.1.3 Number of Seminars/conferences/workshops conducted by the institution during the year
- 3.1.3.1 Total number of Seminars/conferences/workshops conducted by the institution during the year

103

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

#### 3.2 - Research Publications and Awards

# 3.2.1 - Number of papers published per teacher in the Journals notified on UGC website during the year

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

#### 124

File Description	Documents
Any additional information	<u>View File</u>
List of research papers by title, author, department, name and year of publication (Data Template)	<u>View File</u>

# 3.2.2 - Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during the year

# 3.2.2.1 - Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings during the year

38

File Description	Documents
Any additional information	<u>View File</u>
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

#### 3.3 - Extension Activities

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

An extensive range of events to promote the welfare of the students during thepandemic to strengthen the self-esteem, confidence, teamwork, the ability to thinkbeyond boundary along with an overall

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development through Various club activities likeEco club, Science club, Photography club, Maths Club, Cultural Club, Coding Club, Englishclub, Eco club, Sports Club, etc.

Three activities per club per semester in the form of quizzes, poster presentations, mini-projectexpo, essay writing, Webinars by inviting experts, etc. were conducted with thetheme of 17 UN Sustainable Development Goals(SDGs) as the key perspective.

In addition, Exercise and Yoga are trained by our Physical Directors through onlinemode thrice a week to our students.

Students participated very actively in all club activities, excelled, and won prizes.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/extra.html
Upload any additional information	<u>View File</u>

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

File Description	Documents
Any additional information	<u>View File</u>
Number of awards for extension activities in last 5 year(Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

- 3.3.3 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
- 3.3.3.1 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

### 16

File Description	Documents
Reports of the event organized	<u>View File</u>
Any additional information	<u>View File</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last year (Data Template)	<u>View File</u>

### 3.3.4 - Number of students participating in extension activities at 3.3.3. above during the year

# 3.3.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/NCC/ Red Cross/ YRC etc., during the year

183

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

### 3.4 - Collaboration

# 3.4.1 - The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the-job training, research etc during the year

224

File Description	Documents
e-copies of linkage related Document	<u>View File</u>
Details of linkages with institutions/industries for internship (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>

# 3.4.2 - Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the year

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

13

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

### INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

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

The campus is spread over an area of 26.2 acres of land as against the prescribedminimum required area of 7.5 acres as mandated by the statutory body, the AICTEvide its Approval Process Handbook: Academic Year: 2020-2021. The academic facilities such as the Classrooms, tutorial rooms, laboratories, workshops; the administrative facilities such as the seminar halls, auditorium, hostels, Principal cabin, HODs cabin, Faculty cabins, Board room, the office area, and other administrative facilities are all housed in different permanent buildings.

Thus RMDEC has more than adequate infrastructure and physical facilities, computing facilities, library, and laboratory equipment for teaching-learning asspecified by statutory bodies AICTE and Anna University.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/building.html

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

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### Cultural Activities & Facilities

RMDEC encourages students to participate in cultural activities and provides them with adequate facilities. The Institution has the following musical instruments along with all its accessories such as the audio amplifiers and Mixer units etc:

- Magnum Drum Set
- Digital Guitar Processor
- Infty Egg Shaker
- IBANEZ GRG Lead Guitar
- Roland Electro Drum
- Triple Congo Single Stand
- Yamaha PSR S500 Key Board
- Maracus

### SPORTS & GAMES

RMDEC is spread over an area of 26.2 acres and the open area excluding the constructed area, pathways, and garden & plantation area is spread over 40% of the total area giving ample space to establish sports facilities.

### **GYMNASIUM:**

Multi Hydraulic Gym is installed in the Boys Hostel as well as in the Girls Hostel for the exclusive use of students.

### Yoqa:

RMDEC celebrates International Day of Yoga on the 21st of June every year.

RMDEChas been inculcating among the students a passion for Yoga and hence has established a Centre for Yoga on the Campus.

- 1. DEMO on yoga is conducted on the College Campus by trained personnel. the relevance and significance of practicing YOGA in maintaining healthy day-to-day life are explained to students and staff.
- Department of Physical Education is directed to explain to the students and staff Yogic postures are on display at the Centre.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/sports/events.html,

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

12

### 4.1.3.1 - Number of classrooms and seminar halls with ICT facilities

12

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/naac/Criteria4/2020-2021/4 .1.3%20Number%20of%20classrooms%20and%20semi nar%20halls%20with%20ICT.pdf
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

# 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)

### 226.89862

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template)	<u>View File</u>

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### 4.2 - Library as a Learning Resource

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

The RMDEC Library Services are automated using the standard library software package called "AutoLib 5.2 Version". The circulation services are fully computerized and all the documents are bar-coded.

Intranet and Books-Cataloguing for Automated Book Repository Administration System permits the administrator to insert, update, delete and view the details such as book, member, author, subject, department, supplier/publisher, book bank, reports in the cataloguing module. It is developed using Visual Basic, Back end MS ACCESS and SQL Server 2000.

The system is to maintain the Library Information System which controls over all the transactions of the library. The book repository here indicated that all book types can be stored in the database, and can be referred back by the admin very easily. This will be an added advantage such that members can enquire the availability of books here itself. All the transactions made during the particular day are being stored perfectly, such that they can be viewed or can be taken as a day to day report whenever needed. The reports are generated as crystal one.

The main advantage in this system is that, admin has the privilege to select the fields in the books type which is very much needed to be updated in the database.

It provides various levels of search such as simple, advanced, restricted to view the book details. Simple search is used to search all the documents. By default book document will be selected. The Advanced search allows more than one fields and query builder is used to build search condition using Boolean variables. In Restricted search only important fields are used to search about the book such as author, subject, availability and publisher.

The system generates all kinds of reports. It mainly provides bibliography reports, Collection statistics report, periodical Report, and user due report.

The modules used in this software are as follows:

- Cataloguing
- Counter Service
- Administration

- Acquisition and Serial Control
- Search
- Reports

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://rmd.ac.in/library/digital.html

4.2.2 - The institution has subscription for the A. Any 4 or more of the above following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources

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

### 37.33949

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

# 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

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

### 4.3 - IT Infrastructure

- 4.3.1 Institution frequently updates its IT facilities including Wi-Fi
- 4.3.1 (5) Institution frequently updates its IT facilities including Wi-Fi

RMDEC updates its IT facilities including Wi-Fi facilities frequently and is equipped with recent Intel i9, Intel i7 processors&Apple iMac computer systems in the computer centre and laboratories.

### Computer Centre

- 1. R.M.D. Engineering College Computer Centre provides computing facilities to the students through well-equipped labs.
- 2. This is a central facility and provides computing support to the user community consisting of students, faculty, research scholars and office staff for academic and office automation purposes.
- 3. All the academic departments, library, administrative office and other central facilities are connected through a campuswide fiberoptic network with a capacity of 1GB to the computer centre.
- 4. All the computer laboratories are air-conditioned and well equipped with state-of-the art computing facilities, equipped with adequate UPS backup, having covered area of more than 1000 Sq.M with about 670 computer systems with latest configuration along with updated versions of latest software.
- 5. Excellent lighting facility and good ventilation is available in all the labs. The labs are well equipped to conduct the experiments as per the university curriculum and for research work. Computer Centre is equipped with the licensed software such as Microsoft Windows, Microsoft office, SQL server and Microsoft Visual Studio Development Environment. It also equipped with the licensed application software such as IBM Rational suit and open source software tools to run programme specific curriculum and beyond programme curriculum.

- 6. The centre has 30 NosApple IMAC "Quad-Core-I5", 2.7GHZ / 8 GB / 1 TB / Intel IRIS Pro Graphics/WLMKB, 30 NosIntel i9 processor with 16GB RAM, 1TB HDD, 27 Inch Monitor. 450 Intel i7 processor with 8 GB RAM, 500 GB& 1 TB HDD, 20Inch Monitor.
- 7. The centre has two numbers of Dell Power Edge T620 and one number of Dell Power Edge T420 servers. It has licensed Application software's and Operating System.
- 8. The working environment is open and it facilitates smooth functioning of the centre and effective utilization of the resources.
- 9. The Computer Centre coordinates the acquisition, maintenance, and operation of the computing equipment's and network services. The centre provides system administration and technical support which include software installation, network monitoring, internet connection and hardware maintenance.
- 10. Each department of R.M.D. Engineering College has smart classrooms, one modern seminar hall with LCD and multimedia facilities for the purpose of education, training and placement and they are well maintained by computer centre.
- 11. It provides support in conducting on line mock aptitude test and BEC communication skills lab test.
- 12. Recently, RMK Nextgeninstalled at RMDEC. This will be transforming RMK group into AI Powered Personalized Learning Campus.

### Internet Facilities

- 1. The centre is connected to leased line internet connection of 520 Mbps (500 Mbps leased line internet connection from AIRTEL and 20 Mbps leased line from TATA TELE Business Services).
- 2. The centre provides internetservices to all the systems in the Computer Centre and all the departments in campus.
- 3. The centre provides Wi-Fi facility to all the departments in campus and provides 24 HrsWi-Fi facility to all the Hostel students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/computercenter/index.html

### **4.3.2 - Number of Computers**

### 640

File Description	Documents
Upload any additional information	<u>View File</u>
Student – computer ratio	<u>View File</u>

# **4.3.3 - Bandwidth of internet connection in the** A. ? 50MBPS Institution

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

### 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)

### 1143.47911

File Description	Documents
Upload any additional information	<u>View File</u>
Audited statements of accounts.	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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.

### Lab Maintenance:

The equipment and consumable inventory of every lab are taken care of by a faculty assisted by a trained Lab Assistant and the Head of the Department oversees the adequacy of the Lab Equipments & overall

maintenance of the Labs as per the norms of the AICTE. The team also ensures and draws a maintenance plan for the Lab taking into account the AMC and calibration schedule.

### Library Maintenance:

Books, journals, periodicals, etc are added to the library as per the AICTE norms every academic year. Books are arranged as per the Universal Decimal Classification. Accession register, stationery register, periodical inward, periodical tracking register/chart are maintained.

Library stock verification and audit are conducted every year.

### Sports Complex Maintenance:

The sports complex is maintained under the supervision of the Physical Directors. A trained designated marker maintains the multiplay grounds, outdoor fields & courts and maintains them to the standard specifications.

### Computer & Its Accessory Maintenance:

The requirednumber of computers; software; peripherals & accessories such as printers, wifi equipment are forecast as per the norms of the AICTE. The Department of Computer Science and Engineering & Information Technology draws out a year plan for maintenance under AMC or Call on Basis and follows a schedule of maintenance.

### Campus, Buildings & Hostel Maintenance:

The physical infrastructure of the buildings, Laboratory, computer center, classrooms, toilets, and all other facilities are cleaned & maintained twice a day by a team of 30 supporting staff allocated to the building. A cleaning maintenance register is maintained.

The Garden across the campus is maintained by 32 gardeners ably supervised by a Full-time Supervisor.

There are about 32 sanitary workers tomaintain the toilets & restroom facilities twice a day under supervision.

Electrical Maintenance: All electrical fittings including Air Conditioners and UPS backup kit, 500 KVA transformer, 02 stand-by Generators with a capacity of 380 KVA & 180 KVA are maintained by the Electrical Department of the Institution and any maintenance

done by them are entered in a logbook.

Plumbing Maintenance: Borewells, total plumbing lines are maintained by a team of trained plumbers. Maintenance details are recorded in a register.

Transport Maintenance: A separate transport department is functioning which takes care of the entire transport maintenance of buses vans and cars.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/campus/facilities.html

### 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

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

- 5.1.2 Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year
- 5.1.2.1 Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

15

File Description	Documents
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>

# 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

File Description	Documents
Link to institutional website	https://rmd.ac.in/placement/training.html
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

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

457

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

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

# 5.1.5 - The Institution 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	<u>View File</u>
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

### 415

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

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

### 5.2.2.1 - Number of outgoing student progression to higher education

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

42

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	<u>View File</u>

### 5.3 - Student Participation and Activities

- 5.3.1 Number of awards/medals for outstanding performance in sports/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.

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at univer sity/state/national/international level (During the year) (Data Template)	<u>View File</u>

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

The Institution encourages students' active participation in relevant & important academic and administrative committees and councils where their ideas and opinions are heard and considered in all decision making. This facilitates students' representation and engagement in important decision-making inappropriate matters.

### Department student's Association:

Each department has a student's association consisting of a President, Secretary, Treasurer, and other Office-bearers. All the students of the department are members of the association. The office-bearers of the association are vested with the responsibility of organizing all the co /extracurricular activities and organizing events such as guest lectures, workshops, seminars, symposia, conferences, etc of the department.

### Class Committee:

A class committee comprises of six student representatives, a faculty as Chairperson; Year Coordinator, all faculty handling courses for the class & the Head of the Department as the special invitee. The committee is convened thrice in a semester. Quality of content delivery by faculty, syllabus completion, etc are discussed in the committee and any welfare points raised by the students are recorded and appropriate remedial actions are initiated.

### Internal Quality Assurance Cell:

Student representatives are members of the Internal Quality Assurance Cell actively participate and deliberate on quality perspectives.

### Institute Innovation Council:

RMDEC IIC's objective is to create a vibrant innovation ecosystem and Start-up supporting Mechanism. RMDEC IIC is headed by the Principal as President and council of Staff and student members in the areas of Startup, IPR, NIRF, ARIIA, Incubation.

### Anti Ragging Committee:

The Institution has constituted Anti Ragging Committee to counter

the menace of ragging on the Campus, in accordance with the guidelines issued by Anna University and AICTE/UGC. Two students of the Institution are included as members to represent the students as per the guidelines of AICTE.

### Internal Complaints Committee:

Internal Complaints Committee is constituted to look into the cases of Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 / AICTE Regulations 2016, Section 4 & based on the guidelines of Vishaka Committee. As per the guidelines, 3 student members (02 girl students & 01 boy student) are included in the Committee.

### Professional Societies:

There are student chapters of Professional Societies established in each department. Department of Information Technology: Association of Computing Machinery (ACM), The Institution of Engineers (INDIA), (IEI)

Department of Computer Science & Engineering: Computer Society of India (CSI); IEI

Department of Electrical and Electronics Engineering: Institute of Electrical and Electronics Engineers(IEEE)

Department Electronics and Communication Engineering: Institution of Electronics and Telecommunication Engineers (IETE)

And Department of Electronics and Instrumentation Engineering: Instrument Society of India (ISOI)

Besides the Indian Society for Technical Education (ISTE) and The Institution of Engineers in India (IEI) are common for all students.

### Co curricular & Extra Curricular :

A unit of NSS, YRC, Echo club are established in RMDEC and students become members of these establishments and students can exercise their societal obligations voluntarily.

### Club Activities:

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria5/2020-2021/5 .3.2%20Students%20Representation%20various%2  OCommittees.pdf
Upload any additional information	<u>View File</u>

# 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

5

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
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)	<u>View File</u>

### 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 of RMDEC are our brand ambassadors and they keep the name and fame of the college flying high. They are spread all over the world and are employed in leading corporate Nationally and Internationally. RMDEC maintains a strong and positive relationship with its alumni and has benefitted socially, academically, and professionally. Likewise, the alumni appreciate the significance of their association with their alma mater as a sign of their gratitude and affinity towards the college.

The main objective of the Association is to foster a lifelong cordial relationship between the college and alumni and provide an effective platform for networking for the benefit of the college, alumni, and current students. The alumni association is responsible for keeping complete track of alumni with all contact details, their current assignments, and achievements and in addition keeping the alumni updated about the current developments and achievements of the college.

The Alumni meet is conducted twice a year, one on Graduation Day and the other at a famous star hotel in Chennai. The meetings provide an opportunity for networking and in addition, plans for the future development of the college and the alumni contribution to the college are discussed in the meetings. Alumni contributions happen in various non-financial forms for the benefit of the college and the students, such as membership in department academic advisory committee, guest lectures, conducting mock personal interviews, discussing business and entrepreneurship opportunities, FDP, and other academic and co-curricular activities. During the interaction, alumni highlight the importance of current trends in the corporate world and guide the students about career opportunities in different domains. They also share their personal experiences with students. Alumni visit campus at regular intervals to support the existing batch of students in planning and organizing events, extend support and guidance for the functioning of various students' forums. Alumni who are entrepreneurs provide inputs on how to start a new profitable venture and motivate students to become job providers. Some of the alumni are keenly contributing as mentors for the student teams participating in all India level competitions such as Hackathon and other corporate competitions with innovative and creative ideas. The active interaction and participation with alumni are highly motivational and create enthusiasm among the current batch of students resulting in increased knowledge sharing, industrial visits, internship opportunities, increased placement, participating, and winning national competitions. Alumni are easily accepted by students as effective role models.

The alumni's opinion in developing the college and proposed solutions to the challenges faced by the college is highly valued by the college in achieving its vision and mission. The alumni are an asset to the college, and their contributions and involvement can significantly increase the reputation of the college nationally and internationally.

Finally, in order to further strengthen the relationship and create a strong bond with the alumni the college organizes lateral placement during the alumni meet for the benefit of the alumni and open up opportunities for growth and development.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/alumni/index.html
Upload any additional information	<u>View File</u>

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

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

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

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

VISION RMDEC aspires to be a premier institution offering quality Technical Education andResearch with application expertise in Engineering and Technology. MISSION Develop the students as outstanding professionals by creating an environment that wouldnurture creativity, academic excellence, professionalism, a high standard of ethics, a sense ofresponsibility, and respect for individuals. Provide an efficient academic and research environment. Interact with corporates, industries, and research institutions to work on collaborative projects and sponsored research. Establish centers of excellence to impart Domain-Specific industry skills. Encourage the faculty to excel in their teaching and research careers. Contribute more to the education and training of rural folk as a societal obligation.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/aboutus/vision.html
Upload any additional information	<u>View File</u>

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

RMDEC has a well-defined organizational structure for the decentralized and participative management systems. The Principal is

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vested with all Powers relating to day today running of the college. The Principal has Deans, HODs, Administrative officer anddifferent committees to suggest/help him in administering the college.

Committees functioning in RMDEC are: Statutory committees o IQAC o Governing Council o Examination Cell o Finance Committee Non-Statutory Committees o Grievance Redressal Committee o Internal Complaints Committee o Anti-Ragging Committee o Anti-Ragging Squad o Planning and Monitoring Committee o SC-ST Committee Various committees are constituted by the Principal after discussing with the Deans andHeads of the Department for conducting institutional activities such as Graduation day, College day, Sports day, Induction day, Alumni meet and Extension activities, etc. The committees are given powers to manage the smooth conduct of the respective activities.

The Head of the Department is delegated with the following powers:
(i) Annual budget preparation for the department and utilizing the funds as per budgetallotment. (ii) Convening departmental meetings where the prospective plans for the entire semesterare decided.
(iii) Empowered to allot subjects and evaluation duties to faculty.
(iv) Oversees the Teaching Plans of the departmental faculty. (v) Planning seminars, workshops, guest lectures, and industrial visits for students and Faculty Members. (vi) Recommend faculty for FDPs, conferences, training programs, etc. (vii) Recommend equipment purchase (viii) Conduct counseling sessions, remedial measures, parent-teacher meetings, etc. (ix) Introduce creative and innovative measures for the benefit of the students. (x) Recommend faculty to publish research papers in WOS and Scopus journals &Patents (xi) Recommend faculty to get funds from Government and Non-GovernmentOrganizations.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/Grievance/index.html
Upload any additional information	<u>View File</u>

### 6.2 - Strategy Development and Deployment

### 6.2.1 - The institutional Strategic/perspective plan is effectively deployed

The institute has a clear vision of providing quality technicaleducation with application expertise to the student community. The missionstatements are formulated to achieve the Institute vision. Each missionstatements focus on different aspects of providing quality education that covers the overall expectations

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of the stakeholders. The institute has certain strategic plans in order to drive the necessary implementations of the different processes established toward continuous improvement. The Academic Year 2020-21 was the year plagued by Covid 19 and hence the Campus remained closed for all physical activities. Thus, the Institutions were on Covid Protocol and the academic activities had to be carried out on 'Online Mode of Teaching Learning'.

Teaching and Learning Process

### ?Digital Course material

? RMK Nextgen-AI Powered Learning Platform ? Virtual Based Learning ? Real-Time Applications - Video Lectures By Our Faculty ? Practical examples via online video sessions ? Technical Skills are developed through Multiple Choice Questions inSkill Rack Portal and Edwisely APP ? Online quizzes ? Activity-based Learning ? Hands-on training sessions are handled by Industry experts and academicians from reputed Institutions ? On line Certification Courses

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/dept/ece/notes.html
Upload any additional information	<u>View File</u>

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.

### Administrative System

Principal The Principal is the Head of the Institution and he is the authority for all academic and administrative matters. Dean Research Dean Research plans research activities of various departments and with the research coordinators of the departments. He guidesthe departments in applying for various projects with agencies such as AICTE, DST, UGC, etc. Dean Academic To support the Principal in preparing reports and other special communications to besubmitted to the Government, AICTE, NBA, University, DOTE, DST, CSIR, TamilnaduState Council for Science and Technology, and other authorities. Head of the Department Heads of the departments guide the faculty of their respective departments and timetable preparation, lessons plans, syllabus completion, maintenance of Labs

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as per the norms, guidethe faculty in all academic and examinationrelated activities. HoD assists the Principal in all the academic activities.

The Administrative Office(AO) is headed by the Administrative Officer with his team of office andministerial staff. The AO assists the Principal in all the admin-related activities and executes the ordersof the Principal. Governing Body:

The College is run by Sri Swaminatha Naidu Educational Trust. The Trustcomprises the Chairman and five Trustees. The Meeting of the Trust members normally convened two times a year and take important policy decisions; discuss and approve all matters pertaining to the College for which specific approval is required from the Trust. Service Rules

The College has a detailed and comprehensive Service Rules in a bound book enumeratingthe service rules from Chapter - 1 to Chapter - 29 covering all aspects beginning with theRecruitment, Promotion, Increment, Incentive policies; Powers of various Persons; Discipline, Leave entitlement, etc. HR Policies / Recruitment & Promotion The Recruitment and Promotion policies are followed in accordance with the All IndiaCouncil for Technical Education and Anna University. The Regulations issued by the statutory body and its modification issued from time to time are monitored and adhered to.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria6/2020-2021/R MD%20Service%20rules.pdf
Link to Organogram of the Institution webpage	https://rmd.ac.in/administration/organogram. html
Upload any additional information	<u>View File</u>

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

C. Any 2 of the above

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

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

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

This Institution believes in building a strong fleet of faculty and staff with high morale by continuously motivating them by taking care of their legitimate welfare. Hence, the management has devised and put in place various welfare measures for both the Teaching and Non- Teaching Staff.

### Teaching Staff:

Best performing faculty are honored with awards and Certificates of Merit at the College Day function.

Faculty are motivated to do Ph.D. and are provided with Free course work; access to infrastructural facilities such as the use of a Library & Laboratory.

The wards of the faculty are given preference in admission in the schools & colleges run by the Trust and the wards are also given fees exemption varying from Rs.10000/- to full fee waiver.

Faculty are given subsidies on the purchase of Flats at the R.M.K. Constructions & Housing Projects owned by the Management of this College.

All Faculty are provided with free food & free Transport facilities from their residential area to the College and back are provided depending upon their designation. Cars/Jeep for the Head of the Institution & Deans - Air-Conditioned Tempo Travelers for all the Heads of the Departments, Professors & Buses for all other Faculty.

Faculty registering for Conferences / Seminars / Workshops / FDPs

etc are given On Duty facilities and are given TA/DA along with the Programme Registration Fees.

Faculty are also enrolled with Employees Provident Fund Scheme & the EPF sponsored Employee Pension Scheme.

Faculty are provided with the Career Advancement and are given Promotion as per the AICTE norms and are also given Annual Increments.

Faculty are entitled to 12 days of Casual Leave; Earned Leave 03 days per year & 07 to 30 days of Medical Leave with salary. This is in addition to the 60 days of vacation per Academic Year

Women Faculty are entitled to Maternity Leave.

Gratuity is given to staff on their retirement / premature retirement/resignation as per the prescribed norms.

Non-Teaching Staff:

Staff are motivated to pursue higher education in their preferred discipline

Wards of the staff are given preference in admission in the schools & colleges run by the Trust managing this college and the wards are also given fees exemption varying from Rs.10000/- to full fee waiver.

Staff is given subsidy on purchase of Flats at the R.M.K. Constructions & Housing Projects owned by the Management of this College

Staff is provided with free food & free Transport facilities.

Enrolled with Employees Provident Fund Scheme & are entitled to the EPF sponsored Employee Pension Scheme.

Entitled for 12 days of Casual Leave per Year; Earn Leave of 03 days per year & 07 days to 30 days of Medical Leave with salary & 21 days of summer vacation per Academic Year

Gratuity is given to staff on their retirement / premature retirement/resignation as per the prescribed norms

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria6/2020-2021/R MD%20Service%20rules.pdf
Upload any additional information	<u>View File</u>

- 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

2

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

- 6.3.3 Number of professional development /administrative training 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

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	<u>View File</u>
Reports of Academic Staff College or similar centers	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

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

### 111

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>
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

RMDEC follows the Performance Based Appraisal System (PBAS) as specified in UGC regulations on minimum qualifications for appointment of teachers and other academic staff in universities and colleges and other measures for the maintenance of standards in higher education, 2018. RMDEC has devised self-assessment-cumperformance appraisal forms for teachers in adherence to Appendix

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II, Table 1, 2, 3A, 3B, 4, and 5 specified in these Regulations.

The self-assessment form is circulated to all the teaching and non-teaching staff at the end of every academic year, to be filled in by the staff and submitted to the head of the department within a stipulated time, with all documentary evidence to the claims made. In addition, online feedback of the students is obtained for each subject teacher every semester. The head of the departments examines/verify the genuineness of the claim in the self-assessment report by the staff and consolidates the self-assessment and online feedback for each staff. Appropriate remarks and recommendations of the head of the department are also recorded in the space provided and are forwarded to the Principal.

An appraisal committee appointed by the Principal examines the appraisal of all the teaching and non-teaching staff of the college and gives its recommendation such as promotion, increment, appreciation letter, etc. to the Principal/Management. Promotion is given based on the available vacancy in a higher cadre after satisfying the qualification and experience norms specified by AICTE/UGC. The appraisal is also used as a tool to identify the improvement/training needs of the faculty and faculty are sponsored to attend faculty development programs (FDP).Complete transparency is maintained in the entire assessment process.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria6/2020-2021/Performance%20Appraisal%20Form.pdf
Upload any additional information	<u>View File</u>

### 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 has an established system for internal and external audits. The internal audit is an ongoing continuous process. There is an accounts section functioning in the college that maintains all the accounts of income and expenditure and reports to the Chief Accounts Officer (CAO) appointed by the Trust managing this college. The CAO has total Internal Financial Control by proper scrutiny for

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all financial transactions to ensure whether the Statutory and other accounting is properly followed. The Objections raised are rectified then and there.

The External Audit is conducted twice / thrice in a year by the Chartered Accountant Firm appointed by The Management to verify and certify the entire Income and Expenditure and the Capital Expenditure of the college each year. Qualified external Auditors from the Chartered Accountant Firm do a thorough check and verification of all vouchers of the transactions and relevant audit points raised are being settled then and thereby the accounts department / CAO.

- 1. The bills received for payment from suppliers, faculties for purchase of consumables and equipment, and towards Capital Expenditure are scrutinized and audited before payment.
- 2. All financial transactions are periodically checked and any omissions and mistakes etc are rectified then and there.
- 3. Proper check is done to ensure the financial transactions so as to comply with the statutory requirement and to fulfill its obligations etc.
- 4. External financial audit is being done by qualified Chartered Accountancy Firm twice/thrice in a Financial Year and the objections raised by them are settled mostly during the audit period itself or within a weak.
- 5. Annual financial statements of the Institution viz Income and Expenditure Statement and Balance Sheet are audited and certified by the Chartered Accountancy Firms.

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

- 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)

File Description	Documents
Annual statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
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

### Resource Mobilization

The Trust has provided initial funding during the formative years i.e. 2001-02 for the physical assets such as land, building, roads, and equipment for the various departments, furniture, water supply, sanitation, power supply, computers, networking, etc.

Over a period of time, as and when programs were added / Intake was varied, the additional infrastructure necessary was also funded by the Trust. Loans have also been taken from the Nationalized / Public Sector / Private Banks primarily from Indian Overseas Bank, whenever necessary.

The Institution is Self Financing and is unaided in all aspects. Hence the major source of income is the fee collections from the students by way of Tuition Fees and optional fees such as Hostel Fees; Bus fees for the facilities opted & availed by the student.

The college also receives funds from various agencies such as AICTE, DST, etc in the form of grants for the sponsored Projects; conducting FTTP, conducting seminars, workshops, short-term training programs, etc as sponsorship amounts. This amount is exclusively used for the intended purpose.

Interest accrued from the Bank Accounts maintained by the Trust is also a minor source of Income.

Term Loans have also been taken from the Nationalized / Public Sector / Private Banks primarily from Indian Overseas Bank, whenever there is a shortfall of funds while meeting out the budgetary requirements.

### Source of Income :

- 1. Fee collections
- 2. Receipt of grants for sponsored projects; FTTP, etc
- 3. Interest accrued from the Bank Accounts
- 4. Contributions from the Management
- 5. Term Loan from Nationalized / Public Sector / Private Banks

### Resource Management

The financial resources of the college are managed in a very effective and efficient manner.

Budget proposals are prepared by HoDs after consultation with teaching and technical staff members based on the requirements of the department and submitted to the Principal at the beginning of every financial year.

The Principal scrutinizes the budget and recommends the same to the Management Committee for approval.

The Management sanctions the required amount as per the budget.

The HODs of the respective departments are given the responsibility for the proper utilization of the sanctioned budget.

All transactions are supported by bills/invoices/vouchers which are scrutinized by the accountant and approved by the Administrative officer.

The details of the purchased items are entered in the stock register and the bill payments are passed after the physical verification/inspection of the items.

Audited financial statements including Income and Expenditure Account, Balance Sheet, etc. are audited by qualified auditors.

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

### 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

Good teaching practice has a key influence on student learning - a desired outcome and primary goal of higher educational institutions. RMDEC faculty ensure high-quality learning and teaching practice.

The Best Practices of Teaching and Learning followed at RMDEC are given below:

- Comprehensive orientation is given to freshers during First Year Induction Programme.
- The teaching-learning materials, video lectures on the college website, ICT facilities, and guidance from the Centre for Online Courses are provided for the benefit of the students and are utilized by the students.
- Effective delivery of Course Contents through ICT Tools
- Industry participation in content delivery
- Project-based learning
- A problem-solving approach to learning
- Activity-based Learning
- Competition based Learning
- Participative Learning
- Peer Learning
- Mini Projects
- The institution has a comprehensive feedback system in place through which relevant data/information is collected and collated.
- The institution employs ICT extensively in assessment and evaluation.
- Institution plans and provides additional value-added courses in relevant areas of specialization and remedial programmes as per the requirements of the Industry through the Centres of Excellence.
- The institution has a well-structured, organized, proactive guidance and Mentoring system for the holistic development of the students.
- Adequate preparation for the practice of teaching is provided through various Faculty Development Programs in collaboration with Industries.

The Best Practices of Teaching and Learning followed at RMDEC during Pandemic Period,

Google Classroom to create an online classroom area in which they can manage all the documents that their students need.

MCQ Tests conducted through Google forms, RMK NEXTGEN APP, and Skillrack Portal

Zoom app - Audio conferencing, webinars, live chats, screen-sharing, and other collaborative capabilities.

Online Certification Courses - Swayam NPTEL, Coursera, Udemy, Edx and ICT Learnthon

File Description	Documents
Paste link for additional information	https://rmd.ac.in/igac/aboutus.html
Upload any additional information	<u>View File</u>

- 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
  - The Academic Year 2020-21 was the year plagued by Covid 19 and hence the Campus remained closed for all physical activities. Thus, the Institutions were on Covid Protocol and the academic activities had to be carried out on 'Online Mode of Teaching Learning'.
  - The IQAC organizes regular academic audits to ensure effective implementation of the teaching-learning process and maintenance of course files.
  - At the beginning of every year, IQAC gives guidelines about the distribution of workload for each of the faculty for every department.
  - Regular internal and external audits are conducted to ensure quality.
  - Corrective action plans are put in place to ensure better systems and plug gaps.
  - The IQAC encourages the use of Audio-visual aids in the classrooms for effective learning.
  - The organization of academic activities like guest lectures, competitions, and programmes for students and faculty is planned by IQAC with the help of the concerned committee.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/igac/agar.html
Upload any additional information	<u>View File</u>

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	https://rmd.ac.in/igac/agar.html
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

Gender Equity & Sensitization in academic and curricular activities:

The College is committed to the fundamental rights of Women and gives equal opportunity to the women students to perform well in academics and placement

(i) Girl Students received University Rank

Ms.Amalasweena M 2016-2020 Batch - ECE

Ms.Shruthi J 2016-2020 Batch - EEE

(ii) There are Committees such as the Internal Quality Assurance Cell, Women Empowerment Cell, and Internal Complaints Committee that ensures the safety and security of women (staff & students) on the campus. While the Women Empowerment Cell looks into the safety aspects of the girl students on the campus, the Internal Complaints Committee resolves the grievances, if any, with regard to sexual harassment of women in the college premises and its related areas.

An Essay Writing Competition on the topic "Ways to Achieve Prevention of Sexual Violence and Harassment in the workplace" was conducted in online mode by the Women Empowerment Cell of RMDEC to students from 25-09-2020 to 30-09-2020. A panel of Judges with Senior Faculty Members was formed by the Principal to evaluate the essays. The results were consolidated and the prize winners were identified. The response from the students for this competition was overwhelming. Nearly eighty students participated in the competition.

### Counseling:

Faculty counselors are appointed for every 20 students. The counselors also look into their welfare-related issues and help them resolve their grievances if any. Girl students who desire to get Counseling for any specific issues are also referred to appropriate women faculty. Students of both genders are treated at par in all issues pertaining to all curricular, co-curricular, and extracurricular activities

File Description	Documents
Annual gender sensitization action plan	https://rmd.ac.in/naac/Criteria7/2020-2021/Annual%20gender%20sensitization%20action%20plan.pdf
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	https://rmd.ac.in/naac/Criteria7/2020-2021/7 .1.1Specific%20facilities%20provided%20for%2 0women%20in%20terms%20of%20Safety%20and%20se

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

D. Any 1 of the above

### Biogas plant Wheeling to the Grid Sensorbased energy conservation Use of LED bulbs/ power efficient equipment

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 recycling system Hazardous chemicals and radioactive waste management

Waste Management is given serious thought and RMDEC understands the need to keep the campus clean while attributing equal importance to recycling & reusing by adopting technological solutions. This Institution strives hard to realize the National Policy on waste management 'Reduce - Recycle - Reuse '

The Institution has been adopting various activities in managing Solid Waste; Liquid Waste and E-waste.

### Solid waste management

An adequate number of waste bins are provided on each floor. And dust bins are also available in each building separately for Biodegradable and Non-biodegradable wastes though the non-biodegradable waste is negligible on the campus. The solid waste is collected and taken to a centrally located collection point.

### Liquid waste management

The campus is free of an open drainage system. Wastewater from all sources such as the hand wash area, washbasins, bathrooms, and toilets are connected through underground drainage/sewerage lines to a central collection sump. Grey and Blackwater both are taken to the sump through separate dedicated pipelines for further disposal.

### Bio-medical waste management

There is zero generation of biomedical waste in the campus and if any arising out of emergency medical treatments towards first aid is disposed of through the local primary health centres / Govt Hospitals

#### E-waste management

E-waste is another huge form of waste on the campus that contains old computers, peripherals, PCBs, etc that are worn out due to fear, wear and tear. The disposal of this category of waste needs to be done through careful and licensed & government approved companies since the emissions arising out of its disposal are environmentally unsafe. RMDEC disposes of its e-waste through a licensed company.

Hazardous chemicals and radioactive waste management

Hazardous chemicals and radioactive waste are collected in an exclusive collection point and taken to the Treatment Plant where a facility is available to dispose of the chemical and radioactive waste.

#### Waste Recycling System:

Solid wastes are collected by a dedicated team of staff from all the buildings and taken to a centrally located point. The waste including the food and waste is transported to a secluded place away from the Campus to the agricultural fields owned by the Trust. It issegregated and processed for composting by landfill method after which it is used for agriculture purposes as manure.

The wastewater centrally collected at a sump is pumped to the massive Sewage Treatment Plant (STP) installed in the campus that caters to the treatment of over 10 Lakh Litres of wastewater. The large facility is managed and maintained by a trained team of personnel. Further, the treated water is used for watering the lawns and gardens. And the sludge beds are cleared to the landfill area for composting for manure.

E-waste is disposed of through licensed companies for further recycling; biomedical waste is disposed of through primary health centres/Govt Hospitals.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>
Geo tagged photographs of the facilities	https://rmd.ac.in/naac/Criteria7/2020-2021/7 _1.3.pdf
Any other relevant information	<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	<u>View File</u>

#### 7.1.5 - Green campus initiatives include

# 7.1.5.1 - The institutional initiatives for greening the campus are as follows:

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

File Description	Documents
Geo tagged photos / videos of the facilities	<u>View File</u>
Any other relevant documents	<u>View File</u>

#### 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

C. Any 2 of the above

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

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has 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

B. Any 3 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	<u>View File</u>
Details of the Software procured for providing the assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

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

In education, it is important to promote understanding among

cultures- local, national, regional, linguistic and global for ensuring a peaceful, and sustainable world. An Integrated, values-based approach to education, should ensure cultural, economic, and environmental factors and the socio-political issues, peace, equality, human rights, and quality of life. The central theme in education should ensure the value of respect for sustainable development: respect for self, for others, and for all life on earth. The emphasis should be on environmental sustainability as well.

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

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

The Institution besides imparting Quality Technical Education also inculcates values and responsibilities to the students and Faculty Members. The Institution encourages faculty and staff to take all-out efforts to comply with the constitutional provisions and to display sincere attempts to live by the virtue of values & ethics in life. The Institution in its code of conduct has been demanding from the students and staff an upright honesty and sense of discipline in their day-to-day walk of life. Inculcating discipline in the students during the entire period of study is believed to be an ideal foundation in shaping up their life ahead.

#### Gender Equality:

Students of both gender peacefully coexist on the campus without any disregard or disrespect to each other. There have been appreciable mutual trust and compliments.

#### Human Values:

The Anna University has incorporated an exclusive Course on Human Values known as "Professional Ethics" in its curriculum for Engineering Graduates, covering the following valuable topics:

- 1. Morals, Values and Ethics, Integrity
- 2. Work ethic, service learning, civic virtue
- 3. Respect for others, living peacefully, caring & sharing
- 4. Honesty & courage
- 5. Cooperation, Empathy
- 6. Character & spirituality
- 7. And Yoga and meditation for professional excellence.

These topics on ethics invariably cover the finer points of Constitutional duties that bind the citizens of India.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	<u>View File</u>
Any other relevant information	<u>View File</u>

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

#### A. All of the above

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

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

Independence Day Celebrations: 15th AUGUST

Independence Day is celebrated on the 15th of August every year on the Campus. The Management Team heads the event with the participation of staff and students assembling on the day. The Chairman hoists the national flag after a smart parade. Cultural events are organized for the students and motivational speeches are delivered by prominent persons in the Management highlighting the finer aspects of our Constitution and the Constitutional Rights accorded to the people of the Nation that guarantees sacrifices made by National Leaders while spearheading the struggle for Independence.

Republic Day: 26th JANUARY

Republic Day is celebrated on the 26th of January every year on the Campus. The Management Team heads the event with the participation of staff and students assembling on the day. The Chairman hoists the national flag after a smart parade. Cultural events are organized for the students and motivational speeches are delivered by prominent persons in the Management highlighting the sacrifices made by National Leaders while spearheading the struggle for Independence.

National Science Day: 28th of February

National Science Day is celebrated every year on 28th February to honor the discovery of the Raman Effect by the Popular Sir C V Raman. Department of Science and Humanities organizes this event involving students and encourages the students to do Science Projects.

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

#### 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 PRACTICES:** 

#### PRACTICE 1:

#### RMK NEXTGEN -AI POWERED LEARNING SYSTEM

#### **OBJECTIVE:**

RMK Next gen Education app is India's First AI-Powered Learning and Career Companion, a one-stop solution for the Students of RMD Engineering College. This app is based on the mission to bridge the gap between tutors and students using the power of Knowledge Graph and AI in order to personalize and optimize learning for every student to reach their fullest potential.

#### THE CONTEXT

The Pandemic has hastened the importance of digital footprints in the fast-evolving field of Education, whether be it home assignments, doubt clearing session, text book solutions, video lessons, mock tests, easy revision notes and test series, to empower the learners outside the classrooms as well.

#### EVIDENCE OF SUCCESS

The AI powered App enables the learners to empower themselves and it helps the faculty to support and monitor the continuous progress. This perfect online platform provides test series, mock tests and comprehensive coverage of topics solved all problems related to online teaching and learning.

Its detailed performance analysis feature helps students to improve their performance. Further, Subject experts and mentors are freely accessible to help the students if they need personalized guidance.

#### PROBLEM ENCOUNTERED AND RESOURCES REQUIRED

E-learning has emerged as the biggest savior in the wake of the closure of educational institutions, though it comes with its own set of challenges. All stakeholders, including students, teachers and institutions are forced to overcome challenges that have come with these sudden and often hastily executed online learning programmes. Many students with inaccessible high bandwidth or the strong internet connection and a few of those who do not even possess computers or lap tops, are equipped to access this AI powered App through their mobile. As Self-motivation is an eLearning essential requirement, Students were motivated to follow the new educational trends and also properly equip themselves for future

challenges in their education and careers.

#### PRACTICE 2 : DIGITAL COURSE MATERIALS:

#### **OBJECTIVE:**

An initiative of RMD Engineering College is digitalizing all the study materials in order to ensure that materials could be handy with the click of a button and to enable students to access, irrespective of their skill levels.

#### THE CONTEXT

Proliferation of electronic gadgets and continuous dependence on these devices are enabling students like never before to meet the diverse needs of learning, thus allowing them to prepare for their future careers in a more realistic way. To cater to the growing needs, breaking the norms and extending education beyond the classroom is definitely the right way to move forward. To augment this perspective, RMD Engineering College has been transformed into an AI powered Institution.

#### EVIDENCE OF SUCCESS

The younger generation is tech-savvy, to meet out the demand of evolving digitalized professional, RMD Engineering College envisions to encompass the course content to digital repository. Digital material gives an outline of the course inclusive of Assignments, Activities, Question and answers, quizzes and mini projects. Students get access to data easily, with the provision of more relevant content and thus keep them engaged.

#### PROBLEM ENCOUNTERED AND RESOURCES REQUIRED

Blended Learning is a pedagogical approach that combines traditional classroom methods with effective and socializing opportunities together with online learning activities. To develop a methodology, the existing content is developed into a digital material to enhance their learning activities. Furthermore, probabilities and difficulties were identified while phasing in all the notes online.

Students envisioned a new world of education which experiences phenomenal changes with the teaching and learning process with more opportunities.

File Description	Documents
Best practices in the Institutional web site	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 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

During the Pandemic Period, our college offers open online courses along with certificates from the NPTEL, Coursera, Udemy, ICT Learnthon, Edx etc. to Students for providing an affordable and flexible way to learn new skills in emerging areas, advance their career and deliver quality educational experiences at scale. It enables the student to directly engage and learn from the best faculty in the country in that particular subject. This strengthens the fundamentals of the student in the course and also brings out their self-learning initiative. This fosters the habit of keeping them updated. Numerous courses on current and cutting-edge technology are available, which will improve the employability of the students. These certificates are valuable additions when the student becomes industry ready.

- 1807 courses completed through NPTEL
- 3520 courses completed through Coursera
- 614 courses completed through Udemy
- o 281 courses completed through Edx
- 1069 courses completed through other Platforms

#### 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

Academic activities of the institution are well planned and an effective documentation process is in place. RMDEC follows the curriculum and syllabi prescribed by Anna University. The academic calendar is prepared in line with the University calendar for effective curriculum delivery. Every department has a defined vision and mission on par with Institution'svision and mission. Program Specific Outcomes are articulated for each program and Course Objectives and course outcomes(CO) are defined for each course. Based on the competency, willingness, experience, and performance of the faculty in the previous year, subjects were allotted to the Faculty Members. Timetable framed for the curriculum is well planned.

The documentation process comprises a course file for each course, with the following documents: Syllabus, Lesson plan, a Question bank, Internal exam question papers with answer key, sample assessment papers, and performance details of the students, identification of root cause for student backlog and remedy sessions conducted. The Head of the department and the Principal do a periodical review of the status of every course in terms of syllabus covered by the faculty and the performance of the students.

The students will give their inputs on the progress of the course, issues on learning, and give suggestions for further improvement during the class committee meetings held thrice a semester. The online feedback system is used to assess the effectiveness of curriculum delivery and is documented. Every faculty is given the responsibility of mentoring 25 students on academic and personal issues resulting in healthier teacher - student's relationships and ensuring an effective Teaching-Learning Process. The faculty prepare and publish lecture notes, video lectures, on the college website and youtube. Question papers are prepared to facilitate the assessment of the attainments of the course outcomes in line with Bloom's Taxonomy.

The students are encouraged to execute projects/mini-projects, which ensures effective curriculum delivery and leads to a good understanding of the course / enhances the application skill. Students are motivated to participate in a national-level Hackathon/corporate contest that develops their potential to critically analyze, solve problems, and create new products/processes. Industry internship, Centers of Excellence, NPTEL, Certificate programs, facilities like smart classrooms, provide rich learning experiences and effective curriculum delivery.

Faculty are sponsored to attend FDP organized by AICTE, NITTTR, and Anna University to update their knowledge. Good library facilities with e-journals are available for learning. Faculty and students are encouraged to actively pursue research, publish papers and apply for patents. Few of the senior faculty are members of the Board of studies of Anna University and make suitable recommendations to the university.

The gap in the curriculum is addressed through demonstrating experiments beyond the curriculum and conducting tutorial classes, value-added courses, seminars, conferences, arranging guest lectures, and industrial visits to supplement the curricular inputs. Student chapters of professional bodies are actively functioning on the campus. Soft skill training programs are provided through Skill Rack Portal, AMCAT, BEC, Centre of Excellence.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://rmd.ac.in/dept/ece/notes.html

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

The Academic Calendar is prepared to match the prescribed number of working days specified by Anna University. The Academic Calendar contains a total number of working days month-wise, schedule of University theory and practical examination, schedule of two internal Assessment tests for each of the courses, and model examination. The Academic Calendar is prepared by the

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Academic Coordinator in consultation with the heads of the departments and due approval of the Principal. The institution strictly adheres to the Academic Calendarincluding for the conduct of continuous internal evaluation (CIE).

The Academic Calendar is issued well in advance of the ensuing semester to all the department faculty members and students. This enables effective planning by the faculty for each course and all curricular, co-curricular, and extracurricular activities. Based on the academic calendar, the lesson plan is prepared by the course coordinator, which includes unit-wise topics with content beyond the syllabus, teaching aids used for effective course delivery.

A committee nominated by the head of the department of each programme frames the academic timetable adhering to the academic calendar to ensure effective curriculum delivery of both theory and laboratory courses.

The institution's academic calendar provides the information and scheduled timetable for continuous internal evaluation(CIE) and model examinations to enable the students to frame their action plan for the entire semester.

Continuous Internal Evaluation process(CIE)

The subject-wise Continuous Internal Evaluation process (CIE) timetable par with the schedule given in the academic calendar is announced to the students one week prior to the commencement of the internal evaluation test schedule.

Continuous internal evaluation (CIE) for theory courses:

Table 1: Evaluation Tools and content

**Evaluation Tools** 

content

Marks

Duration

Internal Assessment 1

Units 1 and 2
100
Three hours
Internal Assessment 2
Units 3 and 4
100
Model Examination
All Five Units
100

• The Internal evaluation tests are conducted after the completion of every 2 units. The subject-wise Internal evaluation test schedule and staff invigilation schedule for the test are prepared by the Exam-cell and circulated to all the departments.

Continuous internal evaluation (CIE) for laboratory courses:

- Regular monitoring of the student's performance and ability to conduct the experiment during lab sessions.
- Evaluation of the student's observation book and record notebook.
- Oral examination by the faculty members on the student's knowledge of the experiment
- Conduct Model practical examination.

Internal mark is awarded to each student based on performance in the evaluation process.

File Description	Documents
Upload relevant supporting documents	<u>View File</u>
Link for Additional information	https://rmd.ac.in/academiccalendar.pdf
	iiceps.//ima.ac.iii/academiceatemat.par

# 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

#### B. Any 3 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	<u>View File</u>

#### 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

7

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

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#### requirement for year: (As per Data Template)

378

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

1565

# 1.2.3.1 - Number of students enrolled in subject related Certificate or Add-on programs during the year

48

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

Anna University has integrated cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment, and Sustainability into the Curriculum through the Subjects: Environmental Science and Engineering in II Year, Universal Human values as a part of Professional Ethics in Engineering in III year or IV Year. AICTE has mandated a program on Universal Human Values for the first-year students as a part of the induction programme.

Professional Ethics

The topics covered under Professional Ethics are:

- 1. ENGINEERING ETHICS: Senses of Engineering Ethics, Consensus and Controversy, Models of professional roles, Uses of Ethical Theories.
- 2. ENGINEERING AS SOCIAL EXPERIMENTATION: Engineering as Experimentation, Engineers as responsible Experimenters, Codes of Ethics, A Balanced Outlook on Law.
- 3. SAFETY, RESPONSIBILITIES, AND RIGHTS: Safety and Risk, Assessment of Safety and Risk, Respect for Authority, Confidentiality, Conflicts of Interest, Professional Rights, Employee Rights, Intellectual Property Rights (IPR).
- 4. GLOBAL ISSUES: Multinational Corporations, Environmental Ethics, Computer Ethics, Engineers as Managers, Moral Leadership, Code of Conduct, Corporate Social Responsibility.

#### Human Values:

Topics covered in Universal Human values are:

- 1. Morals, Values and Ethics, Integrity
- 2. Work ethic, Service learning, Civic virtue
- 3. Respect for others, Living peacefully, Caring, Sharing -
- 4. Honesty, Courage, Valuing the time
- 5. Cooperation, Commitment, Empathy.
- 6. Self-confidence, Character, Spirituality
- 7. Introduction to Yoga and meditation for professional excellence and stress management.

Environment and Sustainability

The topics covered under environmental Science and Engineering are:

- 1. Environment, Ecosystems And Biodiversity environmental pollution: Study the nature and facts about the environment.
- Natural Resources: Use and over-exploitation, deforestationFind and implement scientific, technological,

economic, and political solutions to environmental problems.

- 3. Social Issues And The Environment: Study the interrelationship between living organisms and the environment.
- 4. Human Population And The Environment: Study the integrated themes and biodiversity, natural resources, pollution control, and waste management.

#### Gender

RMDEC believes in maintaining a healthy environment for all its students and ensures gender equality in admissions, employment, training, sports, and all other activities. All committees/cells have been constituted as per the statuary requirement of UGC/AICTE/Anna University.

Women Empowerment Cell: Women Empowerment Cell was constituted on 01-07-2014 as mandated by Anna University regarding the security purpose for Girl students and Women Staff in the College campus. The members of the cell are all women, consisting of a coordinator, two faculty members, and one girl student from each department. Regular review meetings are conducted.

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

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

328

File Description	Documents
Any additional information	<u>View File</u>
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	<u>View File</u>
Number of courses that include experiential learning through project work/field work/internship (Data Template)	<u>View File</u>

#### ${\bf 1.3.3 - Number\ of\ students\ undertaking\ project\ work/field\ work/\ internships}$

#### 1569

File Description	Documents
Any additional information	<u>View File</u>
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	A. All of the above
syllabus and its transaction at the institution	
from the following stakeholders Students	
Teachers Employers Alumni	
<b>Teachers Employers Alumni</b>	

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File Description	Documents
URL for stakeholder feedback report	<u>View File</u>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	<u>View File</u>
Any additional information(Upload)	<u>View File</u>

# **1.4.2 - Feedback process of the Institution** may be classified as follows

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://rmd.ac.in/feedback.pdf

#### 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 sanctioned seats during the year

558

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

201

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

#### 2.2 - Catering to Student Diversity

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

#### INSTITUTION ASSESSMENT PROCESS

Assessments occur at various levels in the institution: course and program from the first year entry of new graduates through the final year students career to inculcate the desired graduate attributes. The entry-level assessment involves collecting quantitative and qualitative information about students' learning levels at the entry itself. The processes involve collecting systematic evidence from each student by an assessment tool, a questionnaire consisting of a set of questions to collect information on their family background, educational background of students and their parents, computational and communication skills, assessment of their attitude, emotional status, their motivational and confidence levels, extra-curricular talents, identification of their goals and aspirations.

Students are encouraged to enroll in various online courses. Many of our students have enrolled for such courses and secured different certifications from various online course platforms including ICT Learnthon, Coursera, Edx, NPTEL, Udemy, etc.

Critical analysis of the data enables assessing the learning level of each student at the entry itself, also assessing individual goals, self-learning ability, areas for personal improvements, and tracking of progress for successiveyears.

- 1. One counselor is appointed for every 20students.
- 2. First-year and Second-year class strength is limited to a maximum of 45for better student-teacher relationships.
- 3. An induction programme is organized for the first-year students to make them adjust to the campus environment and acquaint with the university educational system. As the part of student induction programme Universal Human Values are taught to the students.
- 4. Bridge course is conducted for the students in basic

- Mathematics, Sciences, English, and Computer Programming to acquaint them with the curriculum.
- 5. Students are given opportunities to be part of innovative projects and other technology initiatives of the institute.
- 6. Students are motivated to present and publishpapers regularly in their areas of study under the guidance of the teaching faculty.
- 7. Students are initiated to participate in Hackathons, Learnathon, and Corporate Content. The college has adopted this programme as part of its strategy to encourage advanced learners.

Continuous internal assessment of theory and practical courses are done: Two internal Assessment tests and model exam are conducted during each semester.

All the assessment processes are conducted following Bloom's Taxonomy. An action plan for continuous improvement is developed based on the analysis of test results for both advanced learners and slow learners:

Special facilities for advanced learners:

- 1. Awards for Meritorious students.
- 2. Books for Meritorious students.
- 3. Practical training with scope for mini-projects.
- 4. Value Added Courses and Online e-Learning courses relevant to respective discipline.
- 5. Motivation for participation in co-curricular activities
  -Seminar, Paper Presentation, Quiz, and Competitions.
- 6. Facility to become a member of Centre of Excellence / Entrepreneurship Development Cell.
- 7. Motivation for Industry Internship.
- 8. Financial support for participating in various competitions/conferences in India and Abroad.
- 9. Facilities to learn Foreign Languages.
- 10. Encouragement in sports and games.
- 11. Organizing extra classes for slow learners and assistance from Faculty Members are arranged through google meet.
- 12. Encouraging them to participate in various activities to develop social skills.
- 13. Studentsare directed to take MCQs regularly through the Edwisely app.
- 14. Students are regularly counseled through the Pragati app.

Special initiatives for slow learners:

- 1. Slow learners are segregated into small groups.
- 2. They are monitored and counseled on regular basis.
- Discussions with the parents on assessing the reason for poor performance and remedial measures to improve academic performance.
- 4. Special and remedial classes are arranged for individual subjects on one-to-one teaching and coachingby the preparation of a special timetable.
- 5. Distribution of relevant course materials and class notes.
- 6. Tagging the slow learners with the advanced learner, peer learning is practiced.
- 7. Video lectures by faculty members are also made available for students to facilitate repeated training and practice.

File Description	Documents
Link for additional Information	https://rmd.ac.in/naac/Criteria2/2020-2021 /2.2.1%20special%20Programmes%20for%20adva nced%20learners%20and%20slow%20learners.pd f
Upload any additional information	<u>View File</u>

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

Number of Students	Number of Teachers
1997	150

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

The institution has evolved over a period in implementing a student-centric approach to teaching as an alternative to the conventional teacher-centric approach. Student-centric methods serve as an integral part of the pedagogical techniques employed by the faculty of the college. The methodology involves project-based/experiential learning, participative learning and problem-

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solving methodologies with more responsibility and autonomy for the student to deeply study and understand the subject with the role of a teacher as a facilitator rather than an instructor.

#### Experiential learning:

The college has established several centres of excellence in collaboration with industry. The centres functioning in the college are Embedded Systems, Automotive Electronics, Telecom, Artificial Intelligence, Big Data Analytics, Robotic Process Automation, Cyber Security, Cloud Computing, Front End Technology and Internet of Things.

Certification Courses (Value Added Courses) Conducted by the CISCO to develop their expertise.

Project development on latest technologies by students where they showcase their working model in the Mini project contest. It is organized every year for the students where selected projects are displayed on the larger platform. Virtual Industrial Visits to engage them in experiential learning while visiting the organization.

The students are grouped as per their choice, into one of these centres of Excellence(CoEs). The training didactics for these CoEs are provided by the industry. In addition, the faculty of the college are trained on the technology by the industry through faculty training Programmes following train the trainer model. The faculty in turn trains the students in the above technology areas. The students are encouraged to demonstrate their knowledge and practical skill by undertaking mini-projects through simulation and hardware development and participating in project contests. A panel of experts from the industry review the projects. The objective is to promote a variety of options and opportunities encompassing both enhanced student choice and a thought-provoking student experience. The above process facilitates experiential learning and enhances domain-specific placement in the industry.

#### Participative Learning:

The Students are encouraged to participate in professional society activities, Technical Workshops, Intra Department Project Contests, Seminars, Symposiums, Paper presentations in Conferences. In addition, Industry visits, In-Plant Training, and Internship are also arranged for the students.

The role of the faculty is to function as a facilitator who supports self-development of knowledge, holistic development and skill formation through participatory learning activities such as:

- Group Discussion, Peer learning, Case studies, Tutorials, Role-play and webinars to enhance the demonstration skills of students.
- 2. The students are encouraged to use online platforms such as Skill Rack, AMCAT to hone their Programming skills.
- 3. The students are encouraged to study and obtain certification on e-learning portals such as NPTEL, and several other MOOCS portals.
- 4. The faculty of the college also keep in connection with the students in the virtual mode by social networks to answer their queries at any time.
- 5. A Symposium/Conference is organized every year for the students to give a vent to their creativity.
- 6. Quizzes are conducted through Mentimeter, Google forms, Kahoot to enhance their knowledge and develop new skills in recent emerging areas.

To bridge the gap between industry and academia, industry experts from reputed corporate are invited to deliver guest lectures and interact with the students on current technology practice. All the above activities promote participative learning.

#### Problem Solving:

The students are motivated to participate in the Smart India Hackathon (an initiative by Govt. of India) and various Corporate Competitions such as Hackwithinfy by Infosys Ltd, Big Idea and Master code by Cognizant Technology Solutions, Hack Challenge by IBM, EnQuode, code vita by TCS. All these involve complex problemsolving. Students work on giving solutions to real-time problems enumerated in the contests. Students are encouraged to participate in Case Studies, Group Discussions, Class presentations, Debates, and also in Inter-college events.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	https://rmd.ac.in/naac/Criteria2/2020-2021 /1.2.2%20Certification%20courses.pdf

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

The primary focus of RMDEC is to move away from the lecture-based classroom to more interactive teaching facilitated by the use of ICT-enabled tools. The teaching-learning strategy adopted is to create opportunities for multidisciplinary activities and for students' interaction with teachers, with each other, and with the industry. The objective is to embrace more interactive teaching and create a more supportive and challenging classroom setting for the students to learn actively.

For efficient implementation of interactive teaching techniques, the faculty members are encouraged to use ICT-enabled tools such as digital and online technology. Power-point presentations and animations, smart classrooms, interactive whiteboards, guided web tours, learning Online resources, virtual labs, educational interactive audio-video chats, webinars, Course material, YouTube videos posted by the faculty of RMDEC, etc. are regularly used by the faculty members.

The students are constantly encouraged to access E-Resources such as E-Books, digital libraries, online free simulation tools, and MOOC (massive open online courses such as NPTEL). The college provides facilities to use online platforms such as Skill Rack, AMCAT for the students to improve their programming skills. Quiz questions are also posted by the faculty on the Skill Rack platform, for the students to practice online.

The teaching resource material and YouTube videos published online by the faculty of RMDEC have transformed the teaching-learning process from confined classroom delivery to open, flexible delivery for the benefit of students to learn independently by adopting ICT-enabled tools for effective teaching-learning. The necessary links for the teaching resources and YouTube videos are provided on the college website.

The use of ICT tools for teaching-learning at RMDEC provides an affable atmosphere, inspiration, and impact on the process of learning. Thus, offering new possibilities for students as well as the teachers to be in touch constantly through social media at any time for enhanced learning.

The institution provides the complete infrastructure for ICTenabled teaching-learning processes and for content development by the faculty members. Facilities such as seminar halls, smart classrooms, equipped with smart boards, LCD projectors, video cameras, Internet and Wi-Fi facility, etc.

During Pandemic, ICT played a vital role in facilitating teaching and learning. Students had experienced a different version of the Teaching and Learning process are

- 1. Online Education
- 2. Use of Apps
- 3. Various Platforms for Online Education
- 4. Use of unique E-Content

Online Education: The teaching and learning process had continued without any interruption during lockdown through online education. Classes including Laboratory classes had been scheduled online using various platforms.

Use of Apps: Different Apps had been used to facilitate online education. Classes were scheduled using Google Meet, Webinars were conducted using Google Meet, Zoom, Microsoft Teams.

Materials and announcements for the students were shared in Google Classroom. The quiz was conducted by Google form, Kahoot, and Mentimeter. Online MCQ tests were conducted in Edwisely App.

Various Platforms for Online Education: Apart from the regular teaching, students were motivated to do courses from ICT Learnthon, Coursera, Udemy, NPTEL, Mathworks, IBM, and so on. The college provides facilities to use online platforms such as Skill Rack, AMCAT for the students to improve their programming skills.

E-Content:College had provided the Digital Course Material students for all the academic subjects. Digital Course Material was prepared exclusively for our students by our subject expert which has course objective, course outcomes, CO/PO mapping, Activity-based learning, Lecture notes, Assignments, Part A & B Question bank, supportive online certification course, Real-time applications in day to day life and to industry, Content beyond the syllabus to bridge the curriculum gap & Mini-Project suggestions.

File Description	Documents
Upload any additional information	<u>View File</u>
Provide link for webpage describing the ICT enabled tools for effective teaching- learning process	https://rmd.ac.in/dept/cse/notes.html

# 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

103

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	<u>View File</u>
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

150

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
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

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57

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

# 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

928

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

Robust and Transparent system of internal assessment, the frequency and mode are very clearly stipulated in Anna University regulation 2017 (section 11 & 12, Page 8,9) and it is mandatory for the college to follow the system. The regulation is published for transparency on the University website under the head Academic, for the public.

Transparency initiatives at the college level

RMDEC on its part, to ensure awareness and transparency among students conducts a special orientation programme on the examination system both university and internal assessment, and awards of internal marks, frequency, and mode to all the students at entry level itself.

The controller of examinations, Anna University notifies the

academic schedule for each semester to the college. Based on this schedule, an academic calendar is prepared by the college which includes schedules for two Internal Assessment Tests, Model Examination, and the tentative date for the commencement of university examinations. A hard copy of the academic calendar is provided to each and every student and faculty of the college to ensure transparency. The Internal Assessment Tests and Model Examination are conducted as scheduled in the academic calendar.

The timetable for the Assessment test is prepared by the Exam cell and displayed on the department Notice Boardin advance. It is also circulated to students. A proper Seating plan is followed for internal assessment tests and it is displayed on the notice board as well as on the respective classrooms. Changes in schedules, patterns, methods if any, are immediately notified to the students through notice boards and also through classroom briefing by the concerned subject teacher.

Two internal assessment tests and one model exam are conducted per semester. Exam cell allocates experienced faculty as overall course coordinator. Detailed instructions about the format of the question paper are given by notification from the Principal.

#### SMART PICK SYSTEM OF QUESTION PAPER SETTING:

The question bank is prepared for each course by an experienced course coordinator nominated for each course by extracting and consolidating the questions prepared by different faculty handling the same course. The question bank covers Part - A, Part - B, and Part C questions. The final question paper is generated using Smart Pick Software.

Internal assessment test answer papers are evaluated by the concerned course teachers whereas model exam answer papers are shuffled and evaluated by different teachers handling the same course thereby eliminating any bias. It is the practice of the college, to give the internal examination answer books after evaluation, to the students in the class for self-evaluation.

The Internal Assessment marks are entered periodically in Anna University Web Portal in four scheduled phases in a semester specified by the University. The students can view their internal assessment marks in the web portal through Anna University Student login.

Thus the mechanism of the internal assessment system followed by

the college guarantees transparency and is robust in terms of frequency and mode.

In the pandemic period, the timetable for the Assessment test is prepared by the Exam cell and a circular is sent to the student's mail one week in advance.

Online Test - Through Google Classroom was conducted. The question paper for the exam was posted in the classroom as an assignment created for the students. The student gets the question from the classroom and joins the google meet link mentioned for them.

The student writes the exam with their camera on and the sessions were recorded, so as to ensure transparency in the conduction of the internal exams. The invigilators give the instructions for them. After completion on time, the students submit their scanned answer papers in their respective classrooms for the subject assigned to them.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	https://rmd.ac.in/naac/Criteria2/2020-2021
	/2.5%200verall%20Schedule%202020-2021.pdf

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

Transparent and Time-Bound Internal examination related grievance redressal mechanism:

A grievance concerning the internal assessment tests is handled by the respective subject teacher and the Heads of departments concerned immediately at the department level. They shall have initial authority over grievances related to Internal Assessment. The college has a Grievance Redressal Committee comprising of the Principal, Deans, and HODs for escalation of any grievance.

1. Timetable for the internal assessment prepared by the exam cell is displayed in the department notice board in advance.

- 2. During internal assessments, if students find discrepancies in question paper such as missing/ insufficient data, options are repeated, out-of syllabus questions they may report it to the concerned course teacher. The faculty after discussing with the overall course coordinator and department head and with the approval of the Principal corrections are made in the question paper immediately.
- 3. It is the practice of the college, to give the internal examination answer books after evaluation, to the students for self-evaluation. Students are free to interact with the faculty to resolve grievances if any.
- 4. If a student is not able to appear for an assessment test due to medical or any genuine reason, a retest is conducted.
- 5. The evaluation of the answer scripts is completed within 2 days time after completion of the assessment of a particular subject.
- 6. Distribution of answer scripts to the students and resolving of grievances is done within 3 days time after the completion of the assessments test.
- 7. In the pandemic period, the timetable for the Assessment test is prepared by the Exam cell and a circular is sent to the student's mail one week in advance through Google Classroom. The students may get clarification for data missing questions, out of syllabus questions, etc to their concerned subject staff, who joins the Google Meet and clarifies it immediately. The scanned answer papers in their respective classrooms for the subject assigned to them are corrected by the faculty and Marks are returned to the students in their respective classrooms. The evaluation of the answer scripts is completed within 2 days time after completion of the assessment of a particular subject.

#### University examination Level grievance redressal:

- 1. Anna university examination pattern, revaluation, and review procedure are explained to the students at entry level itself by the subject handling faculty and HOD.
- 2. Common grievances of students before the examination are submission of late application, non-receipt of hall-ticket, or wrong entries in the same. Such grievances are communicated to the Controller of Examinations(COE)of the University by the Principal and resolved much before the commencement of the examination.
- 3. Respective subject teachers instantly report to the COE of the University through the Principal, any grievances about

- question papers. Grievances related to question paper including out of syllabus questions, typing errors, etc.
- 4. Malpractice by the student during examination is reported to the COE adhering to the specified procedure of Anna University. The University appoints a committee to expeditiously deal with such cases before the publication of semester results.
- 5. Students are entitled to revaluation within fifteen days from the declaration of results, as a mechanism for redressal of grievances with reference to evaluation.
- 6. A student is entitled to obtain the photocopy of the answer script, if not satisfied with the grades allotted. After review of the answer script and recommendation of the subject teacher application for revaluation may be submitted paying the prescribed fee.
- 7. If the student is not satisfied with the grades allotted after revaluation, an application may be submitted for review. The fee paid is refunded to the students who obtain pass marks after review.
- 8. In the pandemic period, Anna University Conducted End Semester Examinations through an online MCQ test. For the benefit of the Students, re-examination was conducted. This was done because of the difficulty faced by the students during the new exam pattern which was MCQ and due to the new platform which was AI-powered.
- 9. Malpractice by the student during examination is reported to the COE adhering to the specified procedure of Anna University. The University appoints a committee to expeditiously deal with such cases before the publication of semester results.
- 10. In autonomous mode, Proctored online Examination was conducted for the Even semester 2020-2021

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	<u>NIL</u>

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

Programme and course outcomes for all Programmes offered by theinstitution are stated and displayed on the website and communicated to

teachers and students.

Programme Outcomes (POs)

POs are assertions about the knowledge, skills, and approach or attributes that the graduate of a recognized engineering program should possess. POs deal with the broad characteristics of graduation for a particular program, and the competencies and proficiency a graduate will possess after completion of the program. Program Outcomes to match the global competency levels and desired qualities a graduate engineer should possess. The Program Outcomes reflect:

1. Engineering Knowledge, 2. Problem Analysis 3.

Design/development of solutions, 4. Conduct investigations of complex problems, 5. Modern tool usage, 6. The engineer and society, 7. Environment and sustainability, 8. Ethics, 9.

Individual and teamwork, 10. Communication, 11. Project management and finance, 12. Life-long learning.

Program Specific Outcomes (PSOs)

These are affirmations about the students' capability at the time of graduation. The PSOs are program-specific. PSOs are written by the department offering the program.

Course Outcomes (COs)

POs are achieved through program-specific fundamental/core courses generally about 44 theory courses, 18 practical courses, and project work during an 8-semester B.E./B.Tech. programme. Each of these courses has its own specified course outcomes (COs) to attain. Each course is designed to meet (about 5-6) course outcomes. The course outcomes are fixed in such a way that they can be essentially measured. COs are set at RMDEC, by the department heads and faculty, in accordance with the course outcomes specified by Anna University. RMDEC weblink for COs of all programmes are given below:

Computer science and Engineering:

https://rmd.ac.in/dept/cse/co.html

Electronics and Communication Engineering:

https://rmd.ac.in/dept/ece/cos.html

Electrical and Electronics Engineering:

https://rmd.ac.in/dept/eee/CO.html

Electronics and Instrumentation Engineering:

https://rmd.ac.in/dept/eie/cos.html

Informatiom Technology:

https://rmd.ac.in/dept/it/cos.html

First Year ( All Programmes):

https://rmd.ac.in/dept/snh/co.html

POs and COs for all the programmes are displayed on the college website and are communicated to all teachers and students.

Following are the methods adopted by RMDEC to communicate to the teachers and students:

- 1. Displayed on the college website College website
- 2. PEOs and POs are printed in the Academic calendar and distributed to allteachers and students
- 3. PEOs and POs are displayed as Posters in the departments.
- 4. COs are explained to all the students in the class by the course teachers.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://rmd.ac.in/dept/cse/peo.html
Upload COs for all courses (exemplars from Glossary)	<u>View File</u>

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

The assessment tools and processes used for evaluating the attainment of each of the Program Outcomes and Program Specific Outcomes, course outcomes are given below:

#### Method of assessment of POs / PSOs

The program outcomes and Program Specific outcomes are evaluated with the help of course outcomes of the relevant courses through direct and indirect methods. The direct method involves conducting examinations. Two internal assessment tests, one model examination by the college, and finally university examination for each course. The evaluation of the answer books provides a direct measurable course outcome of the student's knowledge or skills. The knowledge and skills, specified by the course outcomes (CO) are mapped to programme outcomes (PO) criteriawise. The Average attainment indirect method stipulated by the university is University Examination (80%) + Internal assessment (20%). Anna University Regulation-2017 Curriculum & Syllabi specifies the broad relationship of Mapping of PEO with PO, Mapping of PSO With POMapping of CO With POfor all programmes. This information is displayed by the University on its web portal. The college adopts these with few additions.

The indirect assessment process followed at RMDEC is as follows:

1. Student Exit Survey, 2. Employer Survey, 3. Alumni Survey and

4. extra/co-curricular activities. The attainment of program

outcomes is evaluated by analyzing the data collected by the

above-mentioned processes and the PO attainment level is

computed. Average attainment in the indirect method is the

Average of Alumni survey, Employer survey, and Exit survey.

Following is the procedure used to calculate the average attainment of each PO: PO / PSO Attainment (%) = (weightage: 80%) x (Average attainment in all courses indirect method) + (weightage: 20%) x (Average attainment in indirect method).

Summary of the direct and indirect tools used for the assessment of POs/PSOs/COs and their frequency are given below:

- 1. Two assessment tests and one model examination are conducted by the college for each course per semester for the purposes of direct assessment to ensure that students have achieved the desired level of COs at the unit level.
- 2. At the end of each semester, university examinations are conducted by Anna University based on the result published by the university, the COs are measured.
- 3. An Alumni survey is conducted once a year to evaluate the relevance of the curriculum with the industry's expectations and the level of attainment of objectives for the specified program.

- 4. Employer surveys are conducted for ensuring whether the knowledge, skill, and attitude acquired from RMDEC are adequately satisfying the corporate expectations.
- 5. A student Exit survey is conducted once a year to identify factors for improvement and future strategy. To comprehend the impact of various training programmes that they had undergone and the relevance of value-added courses, domain-specific training was imparted.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://rmd.ac.in/naac/Criteria2/2020-2021/2.6.2%20Attainment%20of%20po%20&%20co.pdf

#### 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

522

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	View File
Paste link for the annual report	https://rmd.ac.in/naac/Criteria2/2020-2021 /Final%20Year%20Results%20compresses%20202 0-2021.pdf

#### 2.7 - Student Satisfaction Survey

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

https://rmd.ac.in/feedback.pdf

#### 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)

00

File Description	Documents
Any additional information	<u>View File</u>
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

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

00

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	NIL

- 3.1.3 Number of Seminars/conferences/workshops conducted by the institution during the year
- 3.1.3.1 Total number of Seminars/conferences/workshops conducted by the institution during the year

103

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

# 3.2 - Research Publications and Awards

# 3.2.1 - Number of papers published per teacher in the Journals notified on UGC website during the year

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

124

File Description	Documents
Any additional information	<u>View File</u>
List of research papers by title, author, department, name and year of publication (Data Template)	<u>View File</u>

# 3.2.2 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

# 3.2.2.1 - Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings during the year

38

File Description	Documents
Any additional information	<u>View File</u>
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

# 3.3 - Extension Activities

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

An extensive range of events to promote the welfare of the students during thepandemic to strengthen the self-esteem,

confidence, teamwork, the ability to thinkbeyond boundary along with an overall development through Various club activities likeEco club, Science club, Photography club, Maths Club, Cultural Club, Coding Club, Englishclub, Eco club, Sports Club, etc.

Three activities per club per semester in the form of quizzes, poster presentations, mini-projectexpo, essay writing, Webinars by inviting experts, etc. were conducted with thetheme of 17 UN Sustainable Development Goals(SDGs) as the key perspective.

In addition, Exercise and Yoga are trained by our Physical Directors through onlinemode thrice a week to our students.

Students participated very actively in all club activities, excelled, and won prizes.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/extra.html
Upload any additional information	<u>View File</u>

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

1

File Description	Documents
Any additional information	<u>View File</u>
Number of awards for extension activities in last 5 year(Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

- 3.3.3 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
- 3.3.3.1 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

16

File Description	Documents
Reports of the event organized	<u>View File</u>
Any additional information	<u>View File</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last year (Data Template)	<u>View File</u>

# 3.3.4 - Number of students participating in extension activities at 3.3.3. above during the year

# $3.3.4.1 - Total \ number \ of \ Students \ participating \ in \ extension \ activities \ conducted \ in \ collaboration \ with \ industry, \ community \ and \ Non- \ Government \ Organizations \ through \ NSS/NCC/\ Red\ Cross/\ YRC\ etc., \ during \ the \ year$

183

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

# 3.4 - Collaboration

# 3.4.1 - The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the-job training, research etc during the year

224

File Description	Documents
e-copies of linkage related Document	<u>View File</u>
Details of linkages with institutions/industries for internship (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>

- 3.4.2 Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the year
- 3.4.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. during the year

13

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

### INFRASTRUCTURE AND LEARNING RESOURCES

# 4.1 - Physical Facilities

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

The campus is spread over an area of 26.2 acres of land as against the prescribedminimum required area of 7.5 acres as mandated by the statutory body, the AICTEvide its Approval Process Handbook: Academic Year: 2020-2021. The academic facilities such as the Classrooms, tutorial rooms, laboratories, workshops; the administrative facilities such as the seminar halls, auditorium, hostels, Principal cabin, HODs cabin, Faculty cabins, Board room, the office area, and other administrative facilities are all housed in different permanent buildings.

Thus RMDEC has more than adequate infrastructure and physical facilities, computing facilities, library, and laboratory equipment for teaching-learning asspecified by statutory bodies AICTE and Anna University.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/building.html

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

### Cultural Activities & Facilities

RMDEC encourages students to participate in cultural activities and provides them with adequate facilities. The Institution has the following musical instruments along with all its accessories such as the audio amplifiers and Mixer units etc:

- Magnum Drum Set
- Digital Guitar Processor
- Infty Egg Shaker
- IBANEZ GRG Lead Guitar
- Roland Electro Drum
- Triple Congo Single Stand
- Yamaha PSR S500 Key Board
- Maracus

### SPORTS & GAMES

RMDEC is spread over an area of 26.2 acres and the open area excluding the constructed area, pathways, and garden & plantation area is spread over 40% of the total area giving ample space to establish sports facilities.

### **GYMNASIUM:**

Multi Hydraulic Gym is installed in the Boys Hostel as well as in the Girls Hostel for the exclusive use of students.

### Yoga:

RMDEC celebrates International Day of Yoga on the 21st of June every year.

RMDEChas been inculcating among the students a passion for Yoga and hence has established a Centre for Yoga on the Campus.

- 1. DEMO on yoga is conducted on the College Campus by trained personnel. the relevance and significance of practicing YOGA in maintaining healthy day-to-day life are explained to students and staff.
- 2. Department of Physical Education is directed to explain to the students and staff Yogic postures are on display at the Centre.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/sports/events.html,

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

12

# 4.1.3.1 - Number of classrooms and seminar halls with ICT facilities

12

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/naac/Criteria4/2020-2021 /4.1.3%20Number%20of%20classrooms%20and%20 seminar%20halls%20with%20ICT.pdf
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)

226.89862

File Description	Documents
Upload any additional information	<u>View File</u>
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 RMDEC Library Services are automated using the standard library software package called "AutoLib 5.2 Version". The circulation services are fully computerized and all the documents are bar-coded.

Intranet and Books-Cataloguing for Automated Book Repository Administration System permits the administrator to insert, update, delete and view the details such as book, member, author, subject, department, supplier/publisher, book bank, reports in the cataloguing module. It is developed using Visual Basic, Back end MS ACCESS and SQL Server 2000.

The system is to maintain the Library Information System which controls over all the transactions of the library. The book repository here indicated that all book types can be stored in the database, and can be referred back by the admin very easily. This will be an added advantage such that members can enquire the availability of books here itself. All the transactions made during the particular day are being stored perfectly, such that they can be viewed or can be taken as a day to day report whenever needed. The reports are generated as crystal one.

The main advantage in this system is that, admin has the privilege to select the fields in the books type which is very much needed to be updated in the database.

It provides various levels of search such as simple, advanced, restricted to view the book details. Simple search is used to search all the documents. By default book document will be selected. The Advanced search allows more than one fields and query builder is used to build search condition using Boolean variables. In Restricted search only important fields are used to

search about the book such as author, subject, availability and publisher.

The system generates all kinds of reports. It mainly provides bibliography reports, Collection statistics report, periodical Report, and user due report.

The modules used in this software are as follows:

- Cataloguing
- Counter Service
- Administration
- Acquisition and Serial Control
- Search
- Reports

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://rmd.ac.in/library/digital.html

# 4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership ebooks Databases Remote access toeresources

A. Any 4 or more of the above

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

37.33949

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

# 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

56

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

### 4.3 - IT Infrastructure

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

# 4.3.1 (5) Institution frequently updates its IT facilities including Wi-Fi

RMDEC updates its IT facilities including Wi-Fi facilities frequently and is equipped with recent Intel i9, Intel i7 processors&Apple iMac computer systems in the computer centre and laboratories.

# Computer Centre

- 1. R.M.D. Engineering College Computer Centre provides computing facilities to the students through well-equipped labs.
- 2. This is a central facility and provides computing support to the user community consisting of students, faculty, research scholars and office staff for academic and office automation purposes.
- 3. All the academic departments, library, administrative office and other central facilities are connected through a campus-wide fiberoptic network with a capacity of 1GB to the computer centre.

- 4. All the computer laboratories are air-conditioned and well equipped with state-of-the art computing facilities, equipped with adequate UPS backup, having covered area of more than 1000 Sq.M with about 670 computer systems with latest configuration along with updated versions of latest software.
- 5. Excellent lighting facility and good ventilation is available in all the labs. The labs are well equipped to conduct the experiments as per the university curriculum and for research work. Computer Centre is equipped with the licensed software such as Microsoft Windows, Microsoft office, SQL server and Microsoft Visual Studio Development Environment. It also equipped with the licensed application software such as IBM Rational suit and open source software tools to run programme specific curriculum and beyond programme curriculum.
- 6. The centre has 30 NosApple IMAC "Quad-Core-I5", 2.7GHZ / 8 GB / 1 TB / Intel IRIS Pro Graphics/WLMKB, 30 NosIntel i9 processor with 16GB RAM, 1TB HDD, 27 Inch Monitor. 450 Intel i7 processor with 8 GB RAM, 500 GB& 1 TB HDD, 20Inch Monitor.
- 7. The centre has two numbers of Dell Power Edge T620 and one number of Dell Power Edge T420 servers. It has licensed Application software's and Operating System.
- 8. The working environment is open and it facilitates smooth functioning of the centre and effective utilization of the resources.
- 9. The Computer Centre coordinates the acquisition, maintenance, and operation of the computing equipment's and network services. The centre provides system administration and technical support which include software installation, network monitoring, internet connection and hardware maintenance.
- 10. Each department of R.M.D. Engineering College has smart classrooms, one modern seminar hall with LCD and multimedia facilities for the purpose of education, training and placement and they are well maintained by computer centre.
- 11. It provides support in conducting on line mock aptitude test and BEC communication skills lab test.
- 12. Recently, RMK Nextgeninstalled at RMDEC. This will be transforming RMK group into AI Powered Personalized Learning Campus.

### Internet Facilities

1. The centre is connected to leased line internet connection

- of 520 Mbps (500 Mbps leased line internet connection from AIRTEL and 20 Mbps leased line from TATA TELE Business Services).
- 2. The centre provides internetservices to all the systems in the Computer Centre and all the departments in campus.
- 3. The centre provides Wi-Fi facility to all the departments in campus and provides 24 HrsWi-Fi facility to all the Hostel students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/computercenter/index.htm  1

# 4.3.2 - Number of Computers

640

File Description	Documents
Upload any additional information	<u>View File</u>
Student – computer ratio	<u>View File</u>

# **4.3.3 - Bandwidth of internet connection in the Institution**

A. ? 50MBPS

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

# 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)

### 1143.47911

File Description	Documents
Upload any additional information	<u>View File</u>
Audited statements of accounts.	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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.

### Lab Maintenance:

The equipment and consumable inventory of every lab are taken care of by a faculty assisted by a trained Lab Assistant and the Head of the Department oversees the adequacy of the Lab Equipments & overall maintenance of the Labs as per the norms of the AICTE. The team also ensures and draws a maintenance plan for the Lab taking into account the AMC and calibration schedule.

### Library Maintenance:

Books, journals, periodicals, etc are added to the library as per the AICTE norms every academic year. Books are arranged as per the Universal Decimal Classification. Accession register, stationery register, periodical inward, periodical tracking register/chart are maintained.

Library stock verification and audit are conducted every year.

# Sports Complex Maintenance:

The sports complex is maintained under the supervision of the Physical Directors. A trained designated marker maintains the multi-play grounds, outdoor fields & courts and maintains them to the standard specifications.

# Computer & Its Accessory Maintenance:

The requirednumber of computers; software; peripherals & accessories such as printers, wifi equipment are forecast as per the norms of the AICTE. The Department of Computer Science and

Engineering & Information Technology draws out a year plan for maintenance under AMC or Call on Basis and follows a schedule of maintenance.

Campus, Buildings & Hostel Maintenance:

The physical infrastructure of the buildings, Laboratory, computer center, classrooms, toilets, and all other facilities are cleaned & maintained twice a day by a team of 30 supporting staff allocated to the building. A cleaning maintenance register is maintained.

The Garden across the campus is maintained by 32 gardeners ably supervised by a Full-time Supervisor.

There are about 32 sanitary workers tomaintain the toilets & restroom facilities twice a day under supervision.

Electrical Maintenance: All electrical fittings including Air Conditioners and UPS backup kit, 500 KVA transformer, 02 stand-by Generators with a capacity of 380 KVA & 180 KVA are maintained by the Electrical Department of the Institution and any maintenance done by them are entered in a logbook.

Plumbing Maintenance: Borewells, total plumbing lines are maintained by a team of trained plumbers. Maintenance details are recorded in a register.

Transport Maintenance: A separate transport department is functioning which takes care of the entire transport maintenance of buses vans and cars.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/campus/facilities.html

### 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

584

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

# 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

# 5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

15

File Description	Documents
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>

# 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

File Description	Documents
Link to institutional website	https://rmd.ac.in/placement/training.html
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

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

457

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

457

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

# 5.1.5 - The Institution 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

12-04-2022 09:54:16

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	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	View File

# 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

### 415

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

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

# 5.2.2.1 - Number of outgoing student progression to higher education

42

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

42

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	<u>View File</u>

# 5.3 - Student Participation and Activities

- 5.3.1 Number of awards/medals for outstanding performance in sports/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.

00

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at univ ersity/state/national/internationa l level (During the year) (Data Template)	<u>View File</u>

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

The Institution encourages students' active participation in relevant & important academic and administrative committees and councils where their ideas and opinions are heard and considered in all decision making. This facilitates students' representation and engagement in important decision-making inappropriate matters.

Department student's Association:

Each department has a student's association consisting of a

President, Secretary, Treasurer, and other Office-bearers. All the students of the department are members of the association. The office-bearers of the association are vested with the responsibility of organizing all the co /extracurricular activities and organizing events such as guest lectures, workshops, seminars, symposia, conferences, etc of the department.

# Class Committee:

A class committee comprises of six student representatives, a faculty as Chairperson; Year Coordinator, all faculty handling courses for the class & the Head of the Department as the special invitee. The committee is convened thrice in a semester. Quality of content delivery by faculty, syllabus completion, etc are discussed in the committee and any welfare points raised by the students are recorded and appropriate remedial actions are initiated.

### Internal Quality Assurance Cell:

Student representatives are members of the Internal Quality Assurance Cell actively participate and deliberate on quality perspectives.

### Institute Innovation Council:

RMDEC IIC's objective is to create a vibrant innovation ecosystem and Start-up supporting Mechanism. RMDEC IIC is headed by the Principal as President and council of Staff and student members in the areas of Startup, IPR, NIRF, ARIIA, Incubation.

### Anti Ragging Committee:

The Institution has constituted Anti Ragging Committee to counter the menace of ragging on the Campus, in accordance with the guidelines issued by Anna University and AICTE/UGC. Two students of the Institution are included as members to represent the students as per the guidelines of AICTE.

### Internal Complaints Committee:

Internal Complaints Committee is constituted to look into the cases of Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 / AICTE Regulations 2016, Section 4 & based on the guidelines of Vishaka Committee. As per

the guidelines, 3 student members (02 girl students & 01 boy student) are included in the Committee.

### Professional Societies:

There are student chapters of Professional Societies established in each department. Department of Information Technology: Association of Computing Machinery (ACM), The Institution of Engineers (INDIA), (IEI)

Department of Computer Science & Engineering: Computer Society of India (CSI); IEI

Department of Electrical and Electronics Engineering: Institute of Electrical and Electronics Engineers(IEEE)

Department Electronics and Communication Engineering: Institution of Electronics and Telecommunication Engineers (IETE)

And Department of Electronics and Instrumentation Engineering: Instrument Society of India (ISOI)

Besides the Indian Society for Technical Education (ISTE) and The Institution of Engineers in India (IEI) are common for all students.

### Co curricular & Extra Curricular :

A unit of NSS, YRC, Echo club are established in RMDEC and students become members of these establishments and students can exercise their societal obligations voluntarily.

# Club Activities:

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria5/2020-2021 /5.3.2%20Students%20Representation%20vario us%20Committees.pdf
Upload any additional information	<u>View File</u>

# 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

5

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
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)	<u>View File</u>

# 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 of RMDEC are our brand ambassadors and they keep the name and fame of the college flying high. They are spread all over the world and are employed in leading corporate Nationally and Internationally. RMDEC maintains a strong and positive relationship with its alumni and has benefitted socially, academically, and professionally. Likewise, the alumni appreciate the significance of their association with their alma mater as a sign of their gratitude and affinity towards the college.

The main objective of the Association is to foster a lifelong cordial relationship between the college and alumni and provide an effective platform for networking for the benefit of the college, alumni, and current students. The alumni association is responsible for keeping complete track of alumni with all contact details, their current assignments, and achievements and in addition keeping the alumni updated about the current developments and achievements of the college.

The Alumni meet is conducted twice a year, one on Graduation Day and the other at a famous star hotel in Chennai. The meetings provide an opportunity for networking and in addition, plans for

the future development of the college and the alumni contribution to the college are discussed in the meetings. Alumni contributions happen in various non-financial forms for the benefit of the college and the students, such as membership in department academic advisory committee, guest lectures, conducting mock personal interviews, discussing business and entrepreneurship opportunities, FDP, and other academic and cocurricular activities. During the interaction, alumni highlight the importance of current trends in the corporate world and guide the students about career opportunities in different domains. They also share their personal experiences with students. Alumni visit campus at regular intervals to support the existing batch of students in planning and organizing events, extend support and guidance for the functioning of various students' forums. Alumni who are entrepreneurs provide inputs on how to start a new profitable venture and motivate students to become job providers. Some of the alumni are keenly contributing as mentors for the student teams participating in all India level competitions such as Hackathon and other corporate competitions with innovative and creative ideas. The active interaction and participation with alumni are highly motivational and create enthusiasm among the current batch of students resulting in increased knowledge sharing, industrial visits, internship opportunities, increased placement, participating, and winning national competitions. Alumni are easily accepted by students as effective role models.

The alumni's opinion in developing the college and proposed solutions to the challenges faced by the college is highly valued by the college in achieving its vision and mission. The alumni are an asset to the college, and their contributions and involvement can significantly increase the reputation of the college nationally and internationally.

Finally, in order to further strengthen the relationship and create a strong bond with the alumni the college organizes lateral placement during the alumni meet for the benefit of the alumni and open up opportunities for growth and development.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/alumni/index.html
Upload any additional information	<u>View File</u>

5.4.2 - Alumni contribution during the year

A. ? 5Lakhs

# (INR in Lakhs)

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

# GOVERNANCE, LEADERSHIP AND MANAGEMENT

# 6.1 - Institutional Vision and Leadership

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

VISION RMDEC aspires to be a premier institution offering quality Technical Education andResearch with application expertise in Engineering and Technology. MISSION Develop the students as outstanding professionals by creating an environment that wouldnurture creativity, academic excellence, professionalism, a high standard of ethics, a sense ofresponsibility, and respect for individuals. Provide an efficient academic and research environment. Interact with corporates, industries, and research institutions to work on collaborative projectsand sponsored research. Establish centers of excellence to impart Domain-Specific industry skills. Encourage the faculty to excel in their teaching and research careers. Contribute more to the education and training of rural folk as a societal obligation.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/aboutus/vision.html
Upload any additional information	<u>View File</u>

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

RMDEC has a well-defined organizational structure for the decentralized and participative management systems. The Principal is vested with all Powers relating to day today running of the college. The Principal has Deans, HODs, Administrative officer and different committees to suggest/help him in administering the college. Committees functioning in RMDEC are: Statutory committees o IQAC o Governing Council o Examination Cell o Finance Committee Non-Statutory Committees o Grievance Redressal Committee o Internal Complaints Committee o Anti-Ragging Committee o Anti-Ragging Squad o Planning and Monitoring

Committee o SC-ST Committee Various committees are constituted by the Principal after discussing with the Deans and Heads of the Department for conducting institutional activities such as Graduation day, College day, Sports day, Induction day, Alumni meet and Extension activities, etc. The committees are given powers to manage the smooth conduct of the respective activities.

The Head of the Department is delegated with the following powers: (i) Annual budget preparation for the department and utilizing the funds as per budgetallotment. (ii) Convening departmental meetings where the prospective plans for the entire semesterare decided. (iii) Empowered to allot subjects and evaluation duties to faculty. (iv) Oversees the Teaching Plans of the departmental faculty. (v) Planning seminars, workshops, guest lectures, and industrial visits for students and Faculty Members. (vi) Recommend faculty for FDPs, conferences, training programs, etc. (vii) Recommend equipment purchase (viii) Conduct counseling sessions, remedial measures, parent-teacher meetings, etc. (ix) Introduce creative and innovative measures for the benefit of the students. (x) Recommend faculty to publish research papers in WOS and Scopus journals &Patents (xi) Recommend faculty to get funds from Government and Non-GovernmentOrganizations.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/Grievance/index.html
Upload any additional information	<u>View File</u>

# 6.2 - Strategy Development and Deployment

# 6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The institute has a clear vision of providing quality technicaleducation with application expertise to the student community. The missionstatements are formulated to achieve the Institute vision. Each missionstatements focus on different aspects of providing quality education that covers the overall expectations of the stakeholders. The institute has certain strategic plans in order to drive the necessary implementations of the different processes established toward continuous improvement. The Academic Year 2020-21 was the year plagued by Covid 19 and hence the Campus remained closed for all physical activities. Thus, the Institutions were on Covid Protocol and the academic activities had to be carried out on 'Online Mode of Teaching Learning'.

Teaching and Learning Process

?Digital Course material

? RMK Nextgen-AI Powered Learning Platform ? Virtual Based
Learning ? Real-Time Applications - Video Lectures By Our Faculty
? Practical examples via online video sessions ? Technical Skills
are developed through Multiple Choice Questions inSkill Rack
Portal and Edwisely APP ? Online quizzes ? Activity-based
Learning ? Hands-on training sessions are handled by Industry
experts and academicians from reputed Institutions ? On line
Certification Courses

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://rmd.ac.in/dept/ece/notes.html
Upload any additional information	<u>View File</u>

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.

### Administrative System

Principal The Principal is the Head of the Institution and he is the authority for all academic and administrative matters. Dean Research Dean Research plans research activities of various departments and with the research coordinators of the departments. He guidesthe departments in applying for various projects with agencies such as AICTE, DST, UGC, etc. Dean Academic To support the Principal in preparing reports and other special communications to besubmitted to the Government, AICTE, NBA, University, DOTE, DST, CSIR, TamilnaduState Council for Science and Technology, and other authorities. Head of the Department Heads of the departments guide the faculty of their respective departments and timetable preparation, lessons plans, syllabus completion, maintenance of Labs as per the norms, guidethe faculty in all academic and examination-related activities. HoD assists the Principal in all the academic activities.

The Administrative Office(AO) is headed by the Administrative Officer with his team of office andministerial staff. The AO assists the Principal in all the admin-related activities and

executes the ordersof the Principal. Governing Body:

The College is run by Sri Swaminatha Naidu Educational Trust. The Trustcomprises the Chairman and five Trustees. The Meeting of the Trust members normally convened two times a year and take important policy decisions; discuss and approve all matters pertaining to the College for which specific approval is required from the Trust. Service Rules

The College has a detailed and comprehensive Service Rules in a bound book enumeratingthe service rules from Chapter - 1 to Chapter - 29 covering all aspects beginning with theRecruitment, Promotion, Increment, Incentive policies; Powers of various Persons; Discipline, Leave entitlement, etc. HR Policies / Recruitment & Promotion The Recruitment and Promotion policies are followed in accordance with the All IndiaCouncil for Technical Education and Anna University. The Regulations issued by the statutory body and its modification issued from time to time are monitored and adhered to.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria6/2020-2021 /RMD%20Service%20rules.pdf
Link to Organogram of the Institution webpage	https://rmd.ac.in/administration/organogram.html
Upload any additional information	<u>View File</u>

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

C. Any 2 of the above

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

# 6.3 - Faculty Empowerment Strategies

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

This Institution believes in building a strong fleet of faculty and staff with high morale by continuously motivating them by taking care of their legitimate welfare. Hence, the management has devised and put in place various welfare measures for both the Teaching and Non- Teaching Staff.

# Teaching Staff:

Best performing faculty are honored with awards and Certificates of Merit at the College Day function.

Faculty are motivated to do Ph.D. and are provided with Free course work; access to infrastructural facilities such as the use of a Library & Laboratory.

The wards of the faculty are given preference in admission in the schools & colleges run by the Trust and the wards are also given fees exemption varying from Rs.10000/- to full fee waiver.

Faculty are given subsidies on the purchase of Flats at the R.M.K. Constructions & Housing Projects owned by the Management of this College.

All Faculty are provided with free food & free Transport facilities from their residential area to the College and back are provided depending upon their designation. Cars/Jeep for the Head of the Institution & Deans - Air-Conditioned Tempo Travelers for all the Heads of the Departments, Professors & Buses for all other Faculty.

Faculty registering for Conferences / Seminars / Workshops / FDPs etc are given On Duty facilities and are given TA/DA along with the Programme Registration Fees.

Faculty are also enrolled with Employees Provident Fund Scheme & the EPF sponsored Employee Pension Scheme.

Faculty are provided with the Career Advancement and are given Promotion as per the AICTE norms and are also given Annual Increments.

Faculty are entitled to 12 days of Casual Leave; Earned Leave 03 days per year & 07 to 30 days of Medical Leave with salary. This is in addition to the 60 days of vacation per Academic Year

Women Faculty are entitled to Maternity Leave.

Gratuity is given to staff on their retirement / premature retirement/resignation as per the prescribed norms.

Non-Teaching Staff:

Staff are motivated to pursue higher education in their preferred discipline

Wards of the staff are given preference in admission in the schools & colleges run by the Trust managing this college and the wards are also given fees exemption varying from Rs.10000/- to full fee waiver.

Staff is given subsidy on purchase of Flats at the R.M.K. Constructions & Housing Projects owned by the Management of this College

Staff is provided with free food & free Transport facilities.

Enrolled with Employees Provident Fund Scheme & are entitled to the EPF sponsored Employee Pension Scheme.

Entitled for 12 days of Casual Leave per Year; Earn Leave of 03 days per year & 07 days to 30 days of Medical Leave with salary & 21 days of summer vacation per Academic Year

Gratuity is given to staff on their retirement / premature retirement/resignation as per the prescribed norms

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria6/2020-2021 /RMD%20Service%20rules.pdf
Upload any additional information	<u>View File</u>

- 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

2

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

- 6.3.3 Number of professional development /administrative training 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

10

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	<u>View File</u>
Reports of Academic Staff College or similar centers	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

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

# 111

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>
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

RMDEC follows the Performance Based Appraisal System (PBAS) as specified in UGC regulations on minimum qualifications for appointment of teachers and other academic staff in universities and colleges and other measures for the maintenance of standards

in higher education, 2018. RMDEC has devised self-assessment-cumperformance appraisal forms for teachers in adherence to Appendix II, Table 1, 2, 3A, 3B, 4, and 5 specified in these Regulations.

The self-assessment form is circulated to all the teaching and non-teaching staff at the end of every academic year, to be filled in by the staff and submitted to the head of the department within a stipulated time, with all documentary evidence to the claims made. In addition, online feedback of the students is obtained for each subject teacher every semester. The head of the departments examines/verify the genuineness of the claim in the self-assessment report by the staff and consolidates the self-assessment and online feedback for each staff. Appropriate remarks and recommendations of the head of the department are also recorded in the space provided and are forwarded to the Principal.

An appraisal committee appointed by the Principal examines the appraisal of all the teaching and non-teaching staff of the college and gives its recommendation such as promotion, increment, appreciation letter, etc. to the Principal/Management. Promotion is given based on the available vacancy in a higher cadre after satisfying the qualification and experience norms specified by AICTE/UGC. The appraisal is also used as a tool to identify the improvement/training needs of the faculty and faculty are sponsored to attend faculty development programs (FDP).Complete transparency is maintained in the entire assessment process.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/naac/Criteria6/2020-2021 /Performance%20Appraisal%20Form.pdf
Upload any additional information	<u>View File</u>

# 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 has an established system for internal and external audits. The internal audit is an ongoing continuous process.

There is an accounts section functioning in the college that maintains all the accounts of income and expenditure and reports to the Chief Accounts Officer (CAO) appointed by the Trust managing this college. The CAO has total Internal Financial Control by proper scrutiny for all financial transactions to ensure whether the Statutory and other accounting is properly followed. The Objections raised are rectified then and there.

The External Audit is conducted twice / thrice in a year by the Chartered Accountant Firm appointed by The Management to verify and certify the entire Income and Expenditure and the Capital Expenditure of the college each year. Qualified external Auditors from the Chartered Accountant Firm do a thorough check and verification of all vouchers of the transactions and relevant audit points raised are being settled then and thereby the accounts department / CAO.

- 1. The bills received for payment from suppliers, faculties for purchase of consumables and equipment, and towards Capital Expenditure are scrutinized and audited before payment.
- 2. All financial transactions are periodically checked and any omissions and mistakes etc are rectified then and there.
- 3. Proper check is done to ensure the financial transactions so as to comply with the statutory requirement and to fulfill its obligations etc.
- 4. External financial audit is being done by qualified Chartered Accountancy Firm twice/thrice in a Financial Year and the objections raised by them are settled mostly during the audit period itself or within a weak.
- 5. Annual financial statements of the Institution viz Income and Expenditure Statement and Balance Sheet are audited and certified by the Chartered Accountancy Firms.

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

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)

00

File Description	Documents
Annual statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
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

# Resource Mobilization

The Trust has provided initial funding during the formative years i.e. 2001-02 for the physical assets such as land, building, roads, and equipment for the various departments, furniture, water supply, sanitation, power supply, computers, networking, etc.

Over a period of time, as and when programs were added / Intake was varied, the additional infrastructure necessary was also funded by the Trust. Loans have also been taken from the Nationalized / Public Sector / Private Banks primarily from Indian Overseas Bank, whenever necessary.

The Institution is Self Financing and is unaided in all aspects. Hence the major source of income is the fee collections from the students by way of Tuition Fees and optional fees such as Hostel Fees; Bus fees for the facilities opted & availed by the student.

The college also receives funds from various agencies such as AICTE, DST, etc in the form of grants for the sponsored Projects; conducting FTTP, conducting seminars, workshops, short-term training programs, etc as sponsorship amounts. This amount is exclusively used for the intended purpose.

Interest accrued from the Bank Accounts maintained by the Trust is also a minor source of Income.

Term Loans have also been taken from the Nationalized / Public

Sector / Private Banks primarily from Indian Overseas Bank, whenever there is a shortfall of funds while meeting out the budgetary requirements.

### Source of Income:

- 1. Fee collections
- 2. Receipt of grants for sponsored projects; FTTP, etc
- 3. Interest accrued from the Bank Accounts
- 4. Contributions from the Management
- 5. Term Loan from Nationalized / Public Sector / Private Banks

### Resource Management

The financial resources of the college are managed in a very effective and efficient manner.

Budget proposals are prepared by HoDs after consultation with teaching and technical staff members based on the requirements of the department and submitted to the Principal at the beginning of every financial year.

The Principal scrutinizes the budget and recommends the same to the Management Committee for approval.

The Management sanctions the required amount as per the budget.

The HODs of the respective departments are given the responsibility for the proper utilization of the sanctioned budget.

All transactions are supported by bills/invoices/vouchers which are scrutinized by the accountant and approved by the Administrative officer.

The details of the purchased items are entered in the stock register and the bill payments are passed after the physical verification/inspection of the items.

Audited financial statements including Income and Expenditure Account, Balance Sheet, etc. are audited by qualified auditors.

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

# 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

Good teaching practice has a key influence on student learning - a desired outcome and primary goal of higher educational institutions. RMDEC faculty ensure high-quality learning and teaching practice.

The Best Practices of Teaching and Learning followed at RMDEC are given below:

- Comprehensive orientation is given to freshers during First
   Year Induction Programme.
- The teaching-learning materials, video lectures on the college website, ICT facilities, and guidance from the Centre for Online Courses are provided for the benefit of the students and are utilized by the students.
- Effective delivery of Course Contents through ICT Tools
- Industry participation in content delivery
- Project-based learning
- A problem-solving approach to learning
- Activity-based Learning
- Competition based Learning
- Participative Learning
- Peer Learning
- Mini Projects
- The institution has a comprehensive feedback system in place through which relevant data/information is collected and collated.
- The institution employs ICT extensively in assessment and evaluation.
- Institution plans and provides additional value-added courses in relevant areas of specialization and remedial programmes as per the requirements of the Industry through the Centres of Excellence.
- The institution has a well-structured, organized, proactive guidance and Mentoring system for the holistic development

- of the students.
- Adequate preparation for the practice of teaching is provided through various Faculty Development Programs in collaboration with Industries.

The Best Practices of Teaching and Learning followed at RMDEC during Pandemic Period,

Google Classroom to create an online classroom area in which they can manage all the documents that their students need.

MCQ Tests conducted through Google forms, RMK NEXTGEN APP, and Skillrack Portal

Zoom app - Audio conferencing, webinars, live chats, screensharing, and other collaborative capabilities.

Online Certification Courses - Swayam NPTEL, Coursera, Udemy, Edx and ICT Learnthon

File Description	Documents
Paste link for additional information	https://rmd.ac.in/igac/aboutus.html
Upload any additional information	<u>View File</u>

- 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
  - The Academic Year 2020-21 was the year plagued by Covid 19 and hence the Campus remained closed for all physical activities. Thus, the Institutions were on Covid Protocol and the academic activities had to be carried out on 'Online Mode of Teaching Learning'.
  - The IQAC organizes regular academic audits to ensure effective implementation of the teaching-learning process and maintenance of course files.
  - At the beginning of every year, IQAC gives guidelines about the distribution of workload for each of the faculty for every department.
  - Regular internal and external audits are conducted to ensure quality.
  - Corrective action plans are put in place to ensure better systems and plug gaps.

- The IQAC encourages the use of Audio-visual aids in the classrooms for effective learning.
- The organization of academic activities like guest lectures, competitions, and programmes for students and faculty is planned by IQAC with the help of the concerned committee.

File Description	Documents
Paste link for additional information	https://rmd.ac.in/igac/agar.html
Upload any additional information	<u>View File</u>

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	https://rmd.ac.in/igac/agar.html
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

Gender Equity & Sensitization in academic and curricular activities:

The College is committed to the fundamental rights of Women and gives equal opportunity to the women students to perform well in academics and placement

(i) Girl Students received University Rank

Ms.Amalasweena M 2016-2020 Batch - ECE

Ms.Shruthi J 2016-2020 Batch - EEE

(ii) There are Committees such as the Internal Quality Assurance Cell, Women Empowerment Cell, and Internal Complaints Committee that ensures the safety and security of women (staff & students) on the campus. While the Women Empowerment Cell looks into the safety aspects of the girl students on the campus, the Internal Complaints Committee resolves the grievances, if any, with regard to sexual harassment of women in the college premises and its related areas.

An Essay Writing Competition on the topic "Ways to Achieve Prevention of Sexual Violence and Harassment in the workplace" was conducted in online mode by the Women Empowerment Cell of RMDEC to students from 25-09-2020 to 30-09-2020. A panel of Judges with Senior Faculty Members was formed by the Principal to evaluate the essays. The results were consolidated and the prize winners were identified. The response from the students for this competition was overwhelming. Nearly eighty students participated in the competition.

#### Counseling:

Faculty counselors are appointed for every 20 students. The counselors also look into their welfare-related issues and help them resolve their grievances if any. Girl students who desire to get Counseling for any specific issues are also referred to appropriate women faculty. Students of both genders are treated at par in all issues pertaining to all curricular, co-curricular, and extracurricular activities

File Description	Documents
Annual gender sensitization	
action plan	https://rmd.ac.in/naac/Criteria7/2020-2021
	/Annual%20gender%20sensitization%20action%
	<u>20plan.pdf</u>
Specific facilities provided for	
women in terms of: a. Safety	https://rmd.ac.in/naac/Criteria7/2020-2021
and security b. Counseling c.	/7.1.1Specific%20facilities%20provided%20f
Common Rooms d. Day care	or%20women%20in%20terms%20of%20Safety%20an
center for young children e.	<u>d%20security.pdf</u>
Any other relevant information	

# 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

D. Any 1 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 recycling system Hazardous chemicals and radioactive waste management

Waste Management is given serious thought and RMDEC understands the need to keep the campus clean while attributing equal importance to recycling & reusing by adopting technological solutions. This Institution strives hard to realize the National Policy on waste management 'Reduce - Recycle - Reuse'

The Institution has been adopting various activities in managing Solid Waste; Liquid Waste and E-waste.

#### Solid waste management

An adequate number of waste bins are provided on each floor. And dust bins are also available in each building separately for Biodegradable and Non-biodegradable wastes though the non-biodegradable waste is negligible on the campus. The solid waste is collected and taken to a centrally located collection point.

# Liquid waste management

The campus is free of an open drainage system. Wastewater from all sources such as the hand wash area, washbasins, bathrooms, and toilets are connected through underground drainage/sewerage lines to a central collection sump. Grey and Blackwater both are taken to the sump through separate dedicated pipelines for further disposal.

#### Bio-medical waste management

There is zero generation of biomedical waste in the campus and if any arising out of emergency medical treatments towards first aid is disposed of through the local primary health centres / Govt Hospitals

#### E-waste management

E-waste is another huge form of waste on the campus that contains old computers, peripherals, PCBs, etc that are worn out due to fear, wear and tear. The disposal of this category of waste needs to be done through careful and licensed & government approved companies since the emissions arising out of its disposal are environmentally unsafe. RMDEC disposes of its e-waste through a licensed company.

Hazardous chemicals and radioactive waste management

Hazardous chemicals and radioactive waste are collected in an exclusive collection point and taken to the Treatment Plant where a facility is available to dispose of the chemical and radioactive waste.

# Waste Recycling System:

Solid wastes are collected by a dedicated team of staff from all the buildings and taken to a centrally located point. The waste including the food and waste is transported to a secluded place away from the Campus to the agricultural fields owned by the Trust. It issegregated and processed for composting by landfill method after which it is used for agriculture purposes as manure.

The wastewater centrally collected at a sump is pumped to the massive Sewage Treatment Plant (STP) installed in the campus that caters to the treatment of over 10 Lakh Litres of wastewater. The large facility is managed and maintained by a trained team of

personnel. Further, the treated water is used for watering the lawns and gardens. And the sludge beds are cleared to the landfill area for composting for manure.

E-waste is disposed of through licensed companies for further recycling; biomedical waste is disposed of through primary health centres/Govt Hospitals.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	View File
Geo tagged photographs of the facilities	https://rmd.ac.in/naac/Criteria7/2020-2021 /7.1.3.pdf
Any other relevant information	<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	<u>View File</u>

# 7.1.5 - Green campus initiatives include

# 7.1.5.1 - The institutional initiatives for greening the campus are as follows:

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

File Description	Documents
Geo tagged photos / videos of the facilities	<u>View File</u>
Any other relevant documents	<u>View File</u>

# 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
- C. Any 2 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	<u>View File</u>
Any other relevant information	<u>View File</u>

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, screenreading software, mechanized equipment 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

B. Any 3 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	<u>View File</u>
Details of the Software procured for providing the assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

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

In education, it is important to promote understanding among cultures- local, national, regional, linguistic and global for ensuring a peaceful, and sustainable world. An Integrated, values-based approach to education, should ensure cultural, economic, and environmental factors and the socio-political issues, peace, equality, human rights, and quality of life. The central theme in education should ensure the value of respect for sustainable development: respect for self, for others, and for all life on earth. The emphasis should be on environmental sustainability as well.

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

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

The Institution besides imparting Quality Technical Education also inculcates values and responsibilities to the students and Faculty Members. The Institution encourages faculty and staff to take all-out efforts to comply with the constitutional provisions

and to display sincere attempts to live by the virtue of values & ethics in life. The Institution in its code of conduct has been demanding from the students and staff an upright honesty and sense of discipline in their day-to-day walk of life. Inculcating discipline in the students during the entire period of study is believed to be an ideal foundation in shaping up their life ahead.

### Gender Equality:

Students of both gender peacefully coexist on the campus without any disregard or disrespect to each other. There have been appreciable mutual trust and compliments.

#### Human Values:

The Anna University has incorporated an exclusive Course on Human Values known as " Professional Ethics" in its curriculum for Engineering Graduates, covering the following valuable topics:

- 1. Morals, Values and Ethics, Integrity
- 2. Work ethic, service learning, civic virtue
- 3. Respect for others, living peacefully, caring & sharing
- 4. Honesty & courage
- 5. Cooperation, Empathy
- 6. Character & spirituality
- 7. And Yoga and meditation for professional excellence.

These topics on ethics invariably cover the finer points of Constitutional duties that bind the citizens of India.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.10 - The Institution has a prescribed code | A. All of the above of conduct for students, teachers, administrators and other staff and 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 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 File</u>
Any other relevant information	<u>View File</u>

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

Independence Day Celebrations: 15th AUGUST

Independence Day is celebrated on the 15th of August every year on the Campus. The Management Team heads the event with the participation of staff and students assembling on the day. The Chairman hoists the national flag after a smart parade. Cultural events are organized for the students and motivational speeches are delivered by prominent persons in the Management highlighting the finer aspects of our Constitution and the Constitutional Rights accorded to the people of the Nation that guarantees sacrifices made by National Leaders while spearheading the struggle for Independence.

Republic Day: 26th JANUARY

Republic Day is celebrated on the 26th of January every year on the Campus. The Management Team heads the event with the participation of staff and students assembling on the day. The Chairman hoists the national flag after a smart parade. Cultural events are organized for the students and motivational speeches are delivered by prominent persons in the Management highlighting the sacrifices made by National Leaders while spearheading the struggle for Independence.

National Science Day: 28th of February

National Science Day is celebrated every year on 28th February to honor the discovery of the Raman Effect by the Popular Sir C V Raman. Department of Science and Humanities organizes this event involving students and encourages the students to do Science Projects.

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

#### 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 PRACTICES:** 

PRACTICE 1:

RMK NEXTGEN -AI POWERED LEARNING SYSTEM

#### **OBJECTIVE:**

RMK Next gen Education app is India's First AI-Powered Learning and Career Companion, a one-stop solution for the Students of RMD Engineering College. This app is based on the mission to bridge the gap between tutors and students using the power of Knowledge Graph and AI in order to personalize and optimize learning for every student to reach their fullest potential.

#### THE CONTEXT

The Pandemic has hastened the importance of digital footprints in the fast-evolving field of Education, whether be it home assignments, doubt clearing session, text book solutions, video lessons, mock tests, easy revision notes and test series, to empower the learners outside the classrooms as well.

EVIDENCE OF SUCCESS

The AI powered App enables the learners to empower themselves and it helps the faculty to support and monitor the continuous progress. This perfect online platform provides test series, mock tests and comprehensive coverage of topics solved all problems related to online teaching and learning.

Its detailed performance analysis feature helps students to improve their performance. Further, Subject experts and mentors are freely accessible to help the students if they need personalized guidance.

#### PROBLEM ENCOUNTERED AND RESOURCES REQUIRED

E-learning has emerged as the biggest savior in the wake of the closure of educational institutions, though it comes with its own set of challenges. All stakeholders, including students, teachers and institutions are forced to overcome challenges that have come with these sudden and often hastily executed online learning programmes. Many students with inaccessible high bandwidth or the strong internet connection and a few of those who do not even possess computers or lap tops, are equipped to access this AI powered App through their mobile. As Self-motivation is an eLearning essential requirement, Students were motivated to follow the new educational trends and also properly equip themselves for future challenges in their education and careers.

#### PRACTICE 2 : DIGITAL COURSE MATERIALS:

#### **OBJECTIVE:**

An initiative of RMD Engineering College is digitalizing all the study materials in order to ensure that materials could be handy with the click of a button and to enable students to access, irrespective of their skill levels.

#### THE CONTEXT

Proliferation of electronic gadgets and continuous dependence on these devices are enabling students like never before to meet the diverse needs of learning, thus allowing them to prepare for their future careers in a more realistic way. To cater to the growing needs, breaking the norms and extending education beyond the classroom is definitely the right way to move forward. To augment this perspective, RMD Engineering College has been transformed into an AI powered Institution.

#### EVIDENCE OF SUCCESS

The younger generation is tech-savvy, to meet out the demand of evolving digitalized professional, RMD Engineering College envisions to encompass the course content to digital repository. Digital material gives an outline of the course inclusive of Assignments, Activities, Question and answers, quizzes and mini projects. Students get access to data easily, with the provision of more relevant content and thus keep them engaged.

#### PROBLEM ENCOUNTERED AND RESOURCES REQUIRED

Blended Learning is a pedagogical approach that combines traditional classroom methods with effective and socializing opportunities together with online learning activities. To develop a methodology, the existing content is developed into a digital material to enhance their learning activities. Furthermore, probabilities and difficulties were identified while phasing in all the notes online. Students envisioned a new world of education which experiences phenomenal changes with the teaching and learning process with more opportunities.

File Description	Documents
Best practices in the Institutional web site	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 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

During the Pandemic Period, our college offers open online courses along with certificates from the NPTEL, Coursera, Udemy, ICT Learnthon, Edx etc. to Students for providing an affordable and flexible way to learn new skills in emerging areas, advance

their career and deliver quality educational experiences at scale. It enables the student to directly engage and learn from the best faculty in the country in that particular subject. This strengthens the fundamentals of the student in the course and also brings out their self-learning initiative. This fosters the habit of keeping them updated. Numerous courses on current and cutting-edge technology are available, which will improve the employability of the students. These certificates are valuable additions when the student becomes industry ready.

- 1807 courses completed through NPTEL
- 3520 courses completed through Coursera
- 614 courses completed through Udemy
- 281 courses completed through Edx
- 1069 courses completed through other Platforms

File Description	Documents
Appropriate web in the Institutional website	<u>View File</u>
Any other relevant information	<u>View File</u>

# 7.3.2 - Plan of action for the next academic year

Plan of action for the next academic year

- 1. To improve the NIRF Ranking over the years to be one among Top 50 Institutions
- 2. Quality of the research
  - Research publications in Web of Science and SCOPUS Journals
  - Citation index
- 3. Focus on Patents Grant
- 4. Consultancy projects by interacting with the relevant industries in order to maximize their potential and to develop their skill set.
- 5. Funded Research Projects from various Government and nongovernment Organizations
- 6. Focus on the Student Mini projects, these mini projects converted into Papers
- 7. Motivate students to Present in Conferences and convert them into patents or Product for Commercialization
- 8. Focus on Start-ups
- 9. Books /Book Chapters Published in reputed Publishers
- 10. Encourage Students to get Placement in higher Salary Package Companies

- 11. Inculcate Sustainable Social Responsibility among the students and Faculty
- 12. Encourage Faculty and Students to get National awards