

# FOR

# **1st CYCLE OF ACCREDITATION**

# ROHINI COLLEGE OF ENGINEERING AND TECHNOLOGY

NEAR ANJUGRAMMAM JUNCTION, PALKULAM 629401 www.rcet.org.in

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Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

# BANGALORE

# January 2023

# **<u>1. EXECUTIVE SUMMARY</u>**

# **1.1 INTRODUCTION**

Rohini college of Engineering and Technology (RCET) was started in the year 2012 by Shri.K.Neela Marthandan, a great Industrialist and philanthropist and now managing by his son Dr.N.NeelaVishnu.RCET is approved by All India Council for Technical Education (AICTE), New Delhi & affiliated to ANNA University, Chennai since 2012. It offers 7 UG programs 4 PG programs in Engineering technology, MBA and Ph.D in Mechanical Engineering.

The College has been effectively practicing Outcomes Based Education (OBE). The college has one of the largest student populations amongst engineering colleges in South Tamilnadu. Currently more than 2600 students are pursuing their higher studies in the College. The College continues to be the most preferred destination not only for the students of the state but also from various parts of the country. RCET has a strong alumni base of over 3500.

# Uniqueness of Rohini college of Engineering and Technology

- An ISO Certified institution
- Project cost of Rs.26,75,000/- sanctioned by AICTE under the Modernization and removal of Obsolescence Aspirational-(**MODROB-ASP**)
- Project sanctioned worth Rs.5, 00,000/- by Tamil Nadu State Council for science and Technology (TNSCST) for the proposal "Mapping of Science and Technology needs of Tamil Nadu".
- Ministry of Human Resource and Development (MHRD) has selected RCET in Unnat Bharat Abhiyan with a fund of 1.5 Lakhs.
- The Institute boasts of about 25 patents including 1 Australian patent
- All the departments have set up Product Development Centre to inculcate research practices in the student community.
- The Institute facilitates the placement training activities with the help of industry experts and corporate trainers to prepare the students industry-ready, apart from providing placement training right from First year in the regular schedule for the Distinctive Syllabus framed.
- Over 90% of the eligible students are placed in reputed companies such as Cognizant Technology Solutions (CTS), Capgemini, Infosys, Tata Consultancy Services, Wipro India Limited, Ramco Systems, Nggawe Nirman Technologies etc., with a salary package ranging from 2.5 LPA to 4 LPA.
- RCET has signed Memorandum of Understanding(MoU) with certain leading industries and Premier Institutes to attain symbiosis and to reduce the gap between Industry expectations and Academics.

# Vision

• To be an academic institute of continuous excellence towards education and research in rural regime and provide service to nation in terms of nurturing potentially higher social, ethical and engineering

companion graduands.

### Mission

- To foster and promote technically competent graduands by imparting the state of art Engineering education in rural regime.
- To enunciate research assisted scientific learning by dissemination of knowledge towards science, agriculture, industry and national security.

# **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

# **Institutional Strength**

# STRENGTH: EXCELLENT INFRASTRUCTURE

Excellent working ambience with friendly faculty maintaining cordial relations.

- Academic excellence is exemplified by excellent faculty members and backed up with infrastructure.
- College is equipped with 15 multi-spec computer laboratories and high speed internet connectivity.
- Strategic location of the campus besides the National Highway.
- Well-equipped technical labs with latest equipment and software.
- Fully upgraded class rooms and tutorial rooms equiped with modern pedagogical tools.
- Effective student counselling service and mentoring system.
- Successful alumnus and excellent reputation with industry.
- Well equipped library functioning round the year.
- Strong and good rapport with society through CSR programs or Clubs.

# **Technical learning**

• The structure and composition of the current curriculum is very flexible and favourable to build up an integral and comprehensive content of courses through major, minor and co-curricular areas.

• Our college environment acts as a catalyst for students, research scholars to undergo environmental research, focusing on green future.

• Campus placements and career counselling for students are well organised and structured to help students avail all possible opportunities on a continuous basis.

- Adequate, qualified, motivated and committed faculty.
- Enlightened and productive management with an excellent corporate reputation.

• Infrastructure meets the academic research and student support needs. The college is second to none with the state of the art laboratories, well equipped library and universal access to Wi-Fi facility.

- High percentage of pass and placement of students.
- Strong faculty with a balance of interest in research and teaching.
- Effective function of value added courses for all disciplines.

• Emphazing the importance of education in student's life, National Educational Policy

is followed in our institution.

• We have a league of most qualified faculty with Doctoral degree and Industrial

Experiences who impart premier technical education to students.

# **Institutional Weakness**

# WEAKNESS:

- Insufficient duration for industrial visit and internship.
- No faculty exchange programmes
- Funding/Grants from agencies are not being sufficient.
- Lack of experienced faculty in research.
- Underutilization of technology.
- Inspite of good academic records, limited diversity/ depth of research activities..
- Not being located in a metropolitan or a cosmopolitan city

# **Institutional Opportunity**

# **OPPORTUNITIES:**

- Involve more faculty members in research through incentives.
- External funding is an opportunity to increase revenue through indirect cost recovery.
- Establish strong relationship with R&D department.
- Demand for e-learning program.
- Campus can be transformed as e-campus/ eco-friendly.
- Reward system can be revised on the basis of academic performance
- The strong alumni base of the college can be involved to contribute towards the excellence of the institution
- Enrolment of student and staff in research work.
- Tie up with EDI cell of government bodies for encouraging student entrepreneurs.
- Tie up with tier I or II companies for professional growth of students and faculty.
- Willingness of industries for exchange of experts and faculty.
- Increasing demand for skill development courses for rural people.
- The college management values positive relationships with business big wigs and utilizes it to maintain the esteemed reputation of Rohini group.
- Exhibits the traits required for higher educational institution.
- Conduct various outreach programs like blood donation, social works through NSS, NCC.
- Science club of the college conducts competitions and quiz programme frequently for school students to create a scientic awareness among budding scientists.
- 'Sizzle' of the college brings out the talents of our students.
- 'SPECTRA" is the tech-fest conducted every year by the departments of the college with a motto of instilling leadership qualities organising skills and technical skills of the students.
- 'TARCET' trains our young and budding technocrats for paper presentations and technical competitions.

### **Institutional Challenge**

# CHALLENGES:

- Ensuring the quality of the faculty by attracting distinguished faculty willing to take an academic career path.
- Poor schooling of the students and lack of basic knowledge on some subjects creates a problem in progress of the curriculum.
- Enhancing the communication and employability skills of the student has become a major challenge in the present day industry requirement.
- Finding more funded research projects.
- Inhibition to growth and development.
- Overall effect of global recession on the department placements.
- Providing more industrial exposure.
- Braindrain
- Network issues experienced at times hinder the progress of time bound work.
- Maintaining discipline of students
- Maintaining the decorum of the students.

# **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

Criteria 1: Curricular Aspect

Rohini College of Engineering and Technology focusses the educational needs of rural and unprivileged class of Kanyakumari population with a motto of catering and uplifting their socio economic background. The vision of the college explicitly states and displays its aim and continuous social committed contribution towards providing service to our nation and engineering graduands.

1.1 Curriculum design and development

The academic schedule of the college is well planned before the commencement of every semester taking in to consideration the possible number of working days and holidays including weekends, national and local. Schedule for workshops, seminars, cultural programs, industrial visits, internal assessments, continuous assessments, model assessments, syllabus coverage, tentative dates for practical examinations, university examinations etc. are planned in advance. Planning in advance helps with the execution of curricular as well as co-curricular and extra-curricular activities without any hassles.

1.2 Academic flexibility

Learners have the privilege to select their electives as per their area of interest. Extra courses, Massive open online courses and add on courses that support learners' skills are promoted within the campus. Coordinators and mentors expert in the respective fields offer guidelines to them. Faculty members are meticulously assigned after considering their experience and expertise in the field for the learners to receive optimum results for the time they spent for their academics. Systematic approach, planning and documentation eases the process. Course outcome, syllabus, timetable, assessment rubrics and certification are decided before starting the course for its smooth conduct.Frequent meetings and auditing are conducted to assess the implementation and progress of the process. Learners are explained the significance of workplace skills and are educated based on the skill requirements and industrial applications.

# 1.3 Curriculum Enrichment

Learners are made autonomous by providing an enriching learning ambience. They get sponsored projects, internships content beyond curriculum, industrial visits, where interactive learning methods are adapted to cover the syllabus gap and make them employable.

### 1.4 Feedback system

Effective feedback system helps to analyse and improvise the performance of the institution. Annual auditing, Alumni meetings, feedbacks from students, employees, parents and stakeholders are collected for decision making.

### **Teaching-learning and Evaluation**

# Criteria II: Teaching- learning and Evaluation

As far as this criterion is concerned, it deals with the efforts of an institution to serve students hailing from different backgrounds and abilities, through effective teaching-learning experiences. Interactive instructional techniques like group discussions, debates, projects, presentations, experiments, practicum, internship and application of ICT resources are inculcated to the students. Innovative techniques are used for betterment and carrier pursuit of the students.

### 2.1 Student Enrolment and Profile

As per the norms assigned by the University students are being admitted to the courses available in the institution. The key aspects considers the efforts of the institution in ensuring equity among students community descending from different geographical area and socio-economic, cultural and educational backgrounds.

### 2.2 Catering to Student Diversity

In order to satisfy the needs of the students from different communities and different locales, various technical programmes and innovative creativities are being introduced. Our institution considers gender equity and admission opportunities are given to differentially – abled students.

### 2.3 Teaching-Learning Process

The teaching learning process plays vital role in shaping the students by imparting various techniques of lessons and gives inspiration to their learning. The teaching-learning modalities which are relevant to the students are rendered incessantly. Lectures provide their vast learning experiences including individual and collaborative learning. For making learning process successful, the lectures make the students indulge in interactive and creative activities.

### 2.4 Teacher Profile and Quality

Quality education is very important in academic curriculum. In order to render quality education, lecture quality is need of the hour as far as the institutes are concerned. This institution has meritorious, efficient and well experienced teaching faculties share their quality education effectively for the development of young and budding engineers.

### 2.5 Evaluation Process and Reforms

For increasing the efficiency and effectiveness of the system it supports the teaching learning and evaluation process. Evaluation helps analyze student feedback which also provides adequate support to enhance student performance.

### 2.6 Student Performance and Learning Outcomes

Learning outcomes is a process in which we can judge what a students should learn and give output after the successful completion of the concerned course.

### **Research, Innovations and Extension**

# CRITERION III: RESEARCH AND EXTENSION

The college management gives due importance and has taken intensive steps for Innovation, Research and development activities. The departments in the college encourages the faculty members to indulge in research oriented programmes and faculty development programmes to update themselves so as to transact quality education to the students. The Department of mechanical engineering excels the college as a research Centre of Anna University to offer M.S (by Research) and Ph.D. Programs.

Product Development Center (PDC) of the college aims in strengthening industry oriented research activities, industry interaction to foster research. Faculty and students who take up research and innovative development relevant to industry as well as society are provided with funds, seed money, support and guidance at PDC

PDC Establishes and Nurtures Research culture, Develops and Augments Research labs, Encourages Sponsored Research, Enhances research facilities, Provides Ambience for State-of-the-Art Research, Collaborates in Research, Pursues focused International Expertise research.

The institution has actively pursued collaborations with leading Universities around the world including University of Dar es Salaam, Dar es Salaam (UDSM), Tanzania and Jillin University, China.

Patent applications are processed and filed by students as well as faculty members with the support of PDC .Numerous applicants receive project fund from Tamilnadu State Council For Science And Technology

(TNSCST). Faculty members are given ODs as well as TA/DA for attending conferences, seminars, workshops.

The institution displays its social commitment through blood donation, eye donation, pain and palliative care for cancer patients, flood relief and other outreach programmes. Blood donation is considered a great way to give back to the community and help those in need. The Youth Red Cross conducts blood donation camps and RCET students and staff are always there for the needy. Students and staff have also have consented Eye donation to restore a ray of hope to someone suffering from blindness. Monetary donations to cancer charities, volunteering at cancer centers, and attending cancer awareness events are part of RCET's outreach programmes. RCET has also donated to flood relief commendably. Under the institution's National Service Scheme, support is extended to nearby villages during their camps.

# Infrastructure and Learning Resources

### **Criteria 4.Infrastructure and learning resources**

The institution has a clear objective in extending the infrastructural activities which could help in academic growth. The institution has about 12.8 acres with excellent infrastructure. These structures have 72 class rooms ,4 seminar halls and a grand arena auditorium with proper lighting, seating and ventilation. The institution has sufficient well efficient faculties to develop the academic activities. The infrastructure of the institution is highly excellent with spacious classrooms, administrative block, auditoriums, automated libraries, faculty rooms, highly equipped laboratories, seminar halls. Excellent facilities are made available in the girls and boys hostel and medicinal plants are available.

Inside the campus and hostel the institution has provided a safe drinking water facility. Transport facilities are provided for students as well as faculties from different areas. Continual electricity supply is warranted in the campus with the help of generator sets, inverters and UPS systems. The college has an excellent gardening with green lush lawns to create a beautiful environment. LCD Projectors are set in three seminar halls and auditorium. The college has sports kit facilities and playground for the students to take practice and participate in international tournaments.

Various cultural events are organized inside the institution throughout the year. Wi-fi facilities are provided effectively for both faculty and students. Neat washrooms separately arranged for boys and girls are provided. Canteen and Bike stand are made available by the institution for the students and faculties. A high-class gymnasium with necessary equipment is offered for the faculties and students. The library has a seating capacity of 60 number of students. Totally 26176 books, 136 print journals, 85299 e-books and 19521 e-journals, are accessible in the library along with daily newspapers. The Library is member of KNIMBUS, DELNET – (Developing Library Network – Delhi ), SWAYAM Prabha Channel, OXFORD University Press and National Digital Library.

400 CCTV cameras are installed inside the institution from 2015 to 2022. 66 CCTV Cameras are installed inside the bus to monitor the students and buses along with the bus tracking systems in the year 2022

### **Student Support and Progression**

# **Criteria 5.Student support and progression**

The students once entered in to the college, they are taken care by supplying different indoor and outdoor sports facilities. The students are provided financial support from the college and supporting them to benefit from the State Govt. and Central Govt. sponsored scholarship schemes. To support the education of poor students various schemes have been developed. The institution distributes its upgraded plan which high spot the services accessible within the college that provide the information about the diverse committees of the college, NCC, NSS, Scholarship for the sports, availing free transport facilities, library support, college yearly calendar etc.

The students are monitored from the first day till their completion of the programme. Every class is mentored and counselled properly by the respective faculties. Hostel students can access the facilities at any time. The other state students are also given proper guidance regarding the on campus facilities and the admissions. The students can avail all sorts of support and service regarding their education, financial support, carrier guidance and different activities. The academic schedule and curriculum details are mentioned clearly in the academic calendar. The students can make use of network facilities and also library for their reference. The SC/ST students are given equal importance by providing financial support, conducting special care towards education and extracurricular activities. They are also given special care in placement training to get placed in the reputed companies.

The girl students can get guidance from the Women Grievance cell in need of sexual harassment cases, ragging etc. Special Professional counselors are accessed by the students to get proper counselling in all aspects. Medical facilities are freely made available for the students for their benefits. The students are encouraged to participate in sports activities and also they are given financial support to indulge in state level programmes. Students are well trained by the professional faculties and they won prizes also. They are also involved in special extension programmes such as NCC,NSS etc.

# Governance, Leadership and Management

# **Criterion - VI: Governance and Leadership**

# 6.1 Institutional Vision and Leadership

The college has a clear vision and mission which are innovative in nature. The institutional vision and mission aims in providing quality education towards rural regime. The institution is top ranked in education by providing proper governance and leadership. The principal is the head of the institute and he is assisted by the Vice Principal, Administrative heads, all heads of department, Class coordinators, mentors and various cells to make decision in the institute. The teaching and non teaching faculties are provided with different responsibilities and roles to work transparency in the institutional environment. To ensure Quality benchmarks, IQAC has been well established in terms of educational and administrative activities.

# 6.2 Strategy Development and Deployment

The quality of the institution is developed based on the vision and mission by providing the work culture harmonically, excellence in education and creative teaching environment. The policies are framed by collecting the feedbacks from the students.

6.3 Faculty Empowerment Strategies

The faculty who realize the vision and work hard for the institution is identified and given importance for the dedicated faculty. Based on the qualification enhancement the faculties are given performance appraisal and free medical facilities. The performance appraisal is given every year based on their enhancement. At the top priority the women safety and security is ensured.

6.4 Financial Management and Resource Mobilization

The institutional account section plans in all activities based on the financial matters. The administrative and academic activities are based on the requirement of preparing budget from the Heads of the department and the account section. Fixed deposit in terms of is maintained by the institute. Internal auditors and consultations for the finance is appointed by the management to monitor the financial transactions in the institute.

### 6.5 Internal Quality Assurance System

The IQAC provides supportive quality in terms of research, incentives, administrations and admissions. Every year the quality is assured and its performance is evaluated to effectively develop the functioning of the college.

### **Institutional Values and Best Practices**

### **Criterion-VII - Innovation and Best Practices**

### 7.1 Environment Consciousness

The institution has taken innovative steps to develop the environment in all aspects. Audit committee is arranged in the institute to check its progress. This committee is well active to develop the institutional eco system. The few things conscious about the environment is energy saving, rain water harvesting, disposal of waste and visual environment. To make the campus ecofriendly internal as well as external audit committees are arranged which help in maintaining the environment ecofriendly.

Students are given priority to involve in maintaining the environmental ecosystem. Also the students are encouraged in participating in social activities by creating awareness in public, donating eye, blood donation etc.

### 7.2 Innovations

Innovative techniques have been established to develop the institution which help in notable achievements. The various innovations are provided by practicing in governance, teaching and evaluation which helps in flexible teaching at different levels. The student's continuous assessment and discipline are regularly monitored by the principal to develop a disciplined environment. Based on the social, psychological and academic aspects students are focused. Women Grievance cell tries to secure the students from ragging and creates a secured environment.

### 7.3 Best Practices

The best practices of the college are facilitating the healthy bonds between the faculties and the students. Also in participating social relevance activities to serve the nation and to gain experiences. The students are given induction programme by all faculties to get necessary information regarding the college, faculty and students.

Certification courses are added weightage to the students every year and they have the opportunity to choose their subject based on their interest.

# <u>2. PROFILE</u>

# **2.1 BASIC INFORMATION**

| Name and Address of the College |   |
|---------------------------------|---|
| Name                            | ROHINI COLLEGE OF ENGINEERING AND<br>TECHNOLOGY |
| Address                         | Near Anjugrammam Junction, Palkulam             |
| City                            | Kanyakumari                                     |
| State                           | Tamil Nadu                                      |
| Pin                             | 629401  |
| Website                         | www.rcet.org.in                                 |

| Contacts for Communication |                     |                            |            |     |                                 |
|----------------------------|---------------------|----------------------------|------------|-----|---------------------------------|
| Designation                | Name                | Telephone with<br>STD Code | Mobile     | Fax | Email                           |
| Principal                  | R.rajesh            | 04652-218888               | 9894218888 | -   | principalrcet4670<br>@gmail.com |
| IQAC / CIQA<br>coordinator | S.mohanaleks<br>hmi | -                          | 8344938888 | -   | principal@rcet.org.<br>in       |

| Status of the Institution |                |
|---------------------------|----------------|
| Institution Status        | Self Financing |

| Type of Institution |              |
|---------------------|--------------|
| By Gender           | Co-education |
| By Shift            | Regular      |

| <b>Recognized Minority institution</b>     |    |
|--|----|
| If it is a recognized minroity institution | No |

#### **Establishment Details**

| State      | University name | Document      |
|------------|-----------------|---------------|
| Tamil Nadu | Anna University | View Document |

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

| Statutory<br>Regulatory<br>Authority | Recognition/App<br>roval details Inst<br>itution/Departme<br>nt programme | •          | Validity in<br>months | Remarks   |
|--------------------------------------|---|------------|-----------------------|---|
| AICTE                                | View Document   | 07-07-2022 | 12                    | The details of<br>AICTE approval<br>pertaining to the<br>year Two<br>Thousand and<br>Twenty Two |

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

| Location and Area of Campus |  |           |                         |                          |
|-----------------------------|--|-----------|-------------------------|--------------------------|
| Campus Type                 | Address                                | Location* | Campus Area<br>in Acres | Built up Area in sq.mts. |
| Main campus<br>area         | Near Anjugrammam Junction,<br>Palkulam | Rural     | 12.8                    | 25000                    |

# **2.2 ACADEMIC INFORMATION**

|                    | ogrammes Offe   | -                     | -                          |                          |                        |                               |
|--------------------|---|-----------------------|----------------------------|--------------------------|------------------------|-------------------------------|
| Programme<br>Level | Name of Pr<br>ogramme/C<br>ourse                        | Duration in<br>Months | Entry<br>Qualificatio<br>n | Medium of<br>Instruction | Sanctioned<br>Strength | No.of<br>Students<br>Admitted |
| UG                 | BE,Agricultu<br>ral<br>Engineering                      | 48                    | HSC                        | English                  | 60                     | 60                            |
| UG                 | BE,Civil<br>Engineering                                 | 48                    | HSC                        | English                  | 60                     | 60                            |
| UG                 | BE,Compute<br>r Science<br>And<br>Engineering           | 48                    | HSC                        | English                  | 120                    | 120                           |
| UG                 | BE,Electrical<br>And<br>Electronics<br>Engineering      | 48                    | HSC                        | English                  | 60                     | 60                            |
| UG                 | BE,Electroni<br>cs And Com<br>munication<br>Engineering | 48                    | HSC                        | English                  | 60                     | 60                            |
| UG                 | BE,Mechani<br>cal<br>Engineering                        | 48                    | HSC                        | English                  | 120                    | 120                           |
| UG                 | BE,Bio<br>Medical<br>Engineering                        | 48                    | HSC                        | English                  | 60                     | 58                            |
| PG                 | ME,Civil<br>Engineering                                 | 24                    | B.E                        | English                  | 24                     | 22                            |
| PG                 | ME,Comput<br>er Science<br>And<br>Engineering           | 24                    | B.E                        | English                  | 24                     | 10                            |
| PG                 | ME,Electron<br>ics And Com<br>munication<br>Engineering | 24                    | B.E                        | English                  | 24                     | 16                            |
| PG                 | ME,Mechani<br>cal<br>Engineering                        | 24                    | B.E                        | English                  | 24                     | 9                             |

| PG                 | MBA,Master<br>Of Business<br>Administrati<br>on | 24 | Any UG<br>Degree | English | 60 | 60 |
|--------------------|---|----|------------------|---------|----|----|
| Doctoral<br>(Ph.D) | PhD or DPhi<br>l,Mechanical<br>Engineering      | 48 | Any PG<br>Degree | English | 36 | 12 |

# Position Details of Faculty & Staff in the College

|  | Teaching Faculty |           |        |       |                     |        |        |                     |      |        |        |       |
|--|------------------|-----------|--------|-------|---------------------|--------|--------|---------------------|------|--------|--------|-------|
|  | Profe            | Professor |        |       | Associate Professor |        |        | Assistant Professor |      |        |        |       |
|  | Male             | Female    | Others | Total | Male                | Female | Others | Total               | Male | Female | Others | Total |
| Sanctioned by the<br>UGC /University<br>State<br>Government                  |                  | 1         | 1      | 18    |                     |        | 1      | 27                  |      | 1      | 1      | 89    |
| Recruited  | 12               | 6         | 0      | 18    | 18                  | 9      | 0      | 27                  | 59   | 30     | 0      | 89    |
| Yet to Recruit   |                  |           | 1      | 0     |                     | _      |        | 0                   |      |        |        | 0     |
| Sanctioned by the<br>Management/Soci<br>ety or Other<br>Authorized<br>Bodies |                  |           |        | 15    |                     |        |        | 27                  |      |        |        | 102   |
| Recruited  | 7                | 7         | 0      | 14    | 16                  | 11     | 0      | 27                  | 56   | 46     | 0      | 102   |
| Yet to Recruit   |                  |           |        | 1     |                     |        |        | 0                   |      |        |        | 0     |

| Non-Teaching Staff   |      |        |        |       |  |  |
|--|------|--------|--------|-------|--|--|
|  | Male | Female | Others | Total |  |  |
| Sanctioned by the<br>UGC /University State<br>Government                 |      |        |        | 24    |  |  |
| Recruited  | 16   | 8      | 0      | 24    |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |
| Sanctioned by the<br>Management/Society<br>or Other Authorized<br>Bodies |      |        |        | 52    |  |  |
| Recruited  | 28   | 24     | 0      | 52    |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |

| Technical Staff  |      |        |        |       |  |  |
|--|------|--------|--------|-------|--|--|
|  | Male | Female | Others | Total |  |  |
| Sanctioned by the<br>UGC /University State<br>Government                 |      |        |        | 24    |  |  |
| Recruited  | 16   | 8      | 0      | 24    |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |
| Sanctioned by the<br>Management/Society<br>or Other Authorized<br>Bodies |      |        |        | 28    |  |  |
| Recruited  | 20   | 8      | 0      | 28    |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |

# **Qualification Details of the Teaching Staff**

| Permanent Teachers             |           |        |                     |      |        |                     |      |        |        |       |
|--------------------------------|-----------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n   | Professor |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |
|                                | Male      | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 0         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| Ph.D.                          | 7         | 7      | 0                   | 16   | 11     | 0                   | 0    | 0      | 0      | 41    |
| M.Phil.                        | 0         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| PG                             | 0         | 0      | 0                   | 0    | 0      | 0                   | 50   | 42     | 0      | 92    |
| UG                             | 0         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |

|                                | <b>Temporary Teachers</b> |        |                     |      |        |                     |      |        |        |       |
|--------------------------------|---------------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n   | Professor                 |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |
|                                | Male                      | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 0                         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| Ph.D.                          | 0                         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| M.Phil.                        | 0                         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| PG                             | 0                         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| UG                             | 0                         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |

|                                | Part Time Teachers |        |                     |      |        |                     |      |        |        |       |
|--------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n   | Professor          |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |
|                                | Male               | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| Ph.D.                          | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| M.Phil.                        | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| PG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| UG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |

| Details of Visting/Guest Faculties |      |        |        |       |  |
|------------------------------------|------|--------|--------|-------|--|
| Number of Visiting/Guest Faculty   | Male | Female | Others | Total |  |
| engaged with the college?          | 0    | 0      | 0      | 0     |  |

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

| Programme       |        | From the State<br>Where College<br>is Located | From Other<br>States of India | NRI Students | Foreign<br>Students | Total |
|-----------------|--------|---|-------------------------------|--------------|---------------------|-------|
| UG              | Male   | 332   | 34                            | 0            | 0                   | 366   |
|                 | Female | 178   | 8                             | 0            | 0                   | 186   |
|                 | Others | 0   | 0                             | 0            | 0                   | 0     |
| PG              | Male   | 32  | 2                             | 0            | 0                   | 34    |
|                 | Female | 69  | 0                             | 0            | 0                   | 69    |
|                 | Others | 0   | 0                             | 0            | 0                   | 0     |
| Doctoral (Ph.D) | Male   | 1   | 0                             | 0            | 0                   | 1     |
|                 | Female | 1   | 0                             | 0            | 0                   | 1     |
|                 | Others | 0   | 0                             | 0            | 0                   | 0     |
| Diploma         | Male   | 0   | 0                             | 0            | 0                   | 0     |
|                 | Female | 0   | 0                             | 0            | 0                   | 0     |
|                 | Others | 0   | 0                             | 0            | 0                   | 0     |

| Category |        | Year 1 | Year 2 | Year 3 | Year 4 |
|----------|--------|--------|--------|--------|--------|
| SC       | Male   | 20     | 18     | 29     | 19     |
|          | Female | 12     | 21     | 15     | 7      |
|          | Others | 0      | 0      | 0      | 0      |
| ST       | Male   | 0      | 1      | 0      | 0      |
|          | Female | 0      | 0      | 0      | 0      |
|          | Others | 0      | 0      | 0      | 0      |
| OBC      | Male   | 318    | 316    | 270    | 227    |
|          | Female | 154    | 147    | 160    | 179    |
|          | Others | 0      | 0      | 0      | 0      |
| General  | Male   | 51     | 37     | 43     | 76     |
|          | Female | 11     | 13     | 5      | 28     |
|          | Others | 0      | 0      | 0      | 0      |
| Others   | Male   | 0      | 0      | 0      | 0      |
|          | Female | 0      | 0      | 0      | 0      |
|          | Others | 0      | 0      | 0      | 0      |
| Total    | ·      | 566    | 553    | 522    | 536    |

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

# Institutional preparedness for NEP

| 1. Multidisciplinary/interdisciplinary: | RCET, specially emphasize on providing students<br>with the necessary skills and knowledge to become<br>self-reliant and independent. A holistic education<br>approach enables students to reach their full potential,<br>make intelligent decisions and achieve academic<br>excellence. It boosts students; self-confidence so they<br>can face lifes challenges confidently and<br>courageously. The college introduces<br>multidisciplinary and interdisciplinary studies to<br>conform with the first pillar of the National<br>Education Policy 2020 "Education for All" and |
|---|---|
|   | ensures access to quality education. Short-term and vocational courses are established to equip students  |
|   | with the necessary skills and knowledge to become   |

|  | self-sufficient.   |
|--|--|
| 2. Academic bank of credits (ABC):   | The institution is open to create the digital<br>infrastructure proposed by NEP to store its students'<br>academic credits earned from various higher<br>education institutes within the country. However,<br>before implementation, the institution needs approval<br>from the university. As a student-centred institution,<br>the faculty adopts a constructive, research- based,<br>reflective, collaborative and integrative approach to<br>pedagogy.   |
| 3. Skill development:  | RCET prioritises the development of students skills.<br>Students are given opportunities to organise<br>workshops and seminars to develop technical skills.<br>They participate in corporate internships and job<br>shadowing to develop their entrepreneurial skills.<br>Field trips and visits to industry and local businesses<br>are organised to give students an insight into the<br>corporate world. Team building activities and<br>problem-solving exercises help students develop life<br>skills. RCET encourages students to participate in<br>extracurricular activities to develop their creativity<br>and social skills. Guest speakers are invited to talk to<br>students about their experiences and give them advice<br>on how to develop their skills. Mentorship<br>programmes, Collaborations and partnerships with<br>numerous organisations help students develop their<br>skills and gain valuable insights from experienced<br>professionals. Access to career guidance and training<br>and internships from Semester 1 helps them identify<br>their strengths and weaknesses and develop a plan for<br>their future. RCET also encourages its students to<br>participate in community service projects to develop<br>their leadership and communication skills. |
| 4. Appropriate integration of Indian Knowledge<br>system (teaching in Indian Language, culture, using<br>online course): | Tamil culture is the oldest and most influential in the<br>world known for its literature and art. The college<br>offers 'Heritage of Tamil', a paper in semester 1 as a<br>part of curriculum for the learners to appreciate<br>legacy of this state. Spoken English and advanced<br>English courses are also offered as the certification<br>courses.  |
| 5. Focus on Outcome based education (OBE):   | Outcome-Based Education (OBE) has been<br>implemented in our Institute since 2017 to impart<br>education through student centric approach and<br>follow outcome oriented teaching learning process. In<br>line with OBE, Program Outcomes (POs), Program   |

|   | Specific Outcomes (PSOs), Program Educational<br>Objectives (PEOs) and Course Outcomes (COs) have<br>been formulated for all the UG programs as well as<br>for PG programs except PSO.PEOs are broad<br>statements that describe the graduates' career<br>accomplishment after 3 to 5 years of graduation. POs<br>are aligned with the Graduate Attributes defined by<br>NBA. PSOs are specific and relevant to a particular<br>program. COs are direct statements drafted for every<br>course that describe the competencies gained by the<br>student through the course. POs, PSOs and COs are<br>published in the college website, syllabus book,<br>Course Plan and laboratory manuals and briefed at<br>the start of the semester in the classes and class<br>committee meetings. POs and PSOs are also<br>displayed at prominent places in the classrooms,<br>laboratory, faculty rooms and department library. It is<br>also disseminated to the stake holders such as<br>Faculty, Alumni, Parents and Employers through<br>surveys. Every CO is aligned to one or more POs,<br>and is measured at the end of the course, which<br>contributes to the PO that it is mapped to. COs for a<br>course is measured by the Evaluation Scheme, where<br>the assessment tools are categorized into Direct and<br>Indirect. |
|---|--|
| 6. Distance education/online education: | RCET offers study materials and lecture notes to<br>students via the college website and Google<br>Classrooms. Flipped classrooms and blended learning<br>are encouraged at RCET.  |

# **Extended Profile**

# 1 Students

# 1.1

# Number of students year wise during the last five years

| 2021-22              | 2020-21                | 2019-20 |       | 2018-19  | 2 | 2017-18 |  |
|----------------------|------------------------|---------|-------|----------|---|---------|--|
| 2645                 | 2319                   | 2317    |       | 2275     | 2 | 2021    |  |
| File Description     |                        |         | Docum | nent     |   |         |  |
| Institutional data i | n the prescribed forma | at      | View  | Document |   |         |  |

# **2** Teachers

# 2.1

# Number of teaching staff / full time teachers during the last five years (Without repeat count):

| Response: 216 | File Description                            | Document      |
|---------------|---|---------------|
|               | Upload supporting document                  | View Document |
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# 2.2

# Number of teaching staff / full time teachers year wise during the last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 177     | 162     | 158     | 154     | 149     |

# **3** Institution

# 3.1

# Expenditure excluding salary component year wise during the last five years (INR in lakhs)

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 689.5   | 599.11  | 706.76  | 715.12  | 567.30  |

# 4. Quality Indicator Framework(QIF)

# Criterion 1 - Curricular Aspects

# **1.1 Curricular Planning and Implementation**

**1.1.1** The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

### **Response:**

Rohini College of Engineering and Technology affiliated to Anna University, Chennai follows the curriculum and syllabi approved by the academic council of the affiliated University ensuring effective curriculum delivery methods. The institute primarily aims to ensure the extent of compliance for attaining the program outcomes and program specific outcomes.

The Institution plans the academic calendar at the beginning of the each semester. The institution calendar comprising academic, co-curricular and extra- curricular activities is prepared in consonance with the **University academic schedule**.

Objectives of the curriculum are achieved by preparing course file and framing the teachinglearning plans, centralized internal assessment tests, skill oriented assessments, conducting class committee meetings, using feedback system and verifying course files and assessment record.

Course file verification process and approval process are scrutinized by the academic audit committee and Principal at the end of the each semester. The audit committee members are appointed by the Principal.

Content beyond syllabus is planned and conducted by the course in-charges in consultation with the experts to fill the gap in the curriculum and the industry needs.

Value-added courses, Add-on Courses, certification courses are designed and offered to the students in each department for fulfilling the gaps in the curriculum.

Syllabus for the value-added courses are planned and prepared, based on the requirements and discussions with staff and students and implemented by our trained faculty and experts from outside.

Students are encouraged and motivated to attend various internship/in-plant training programmes to gain practical knowledge and to make them aware of the opportunities and nature of work in the industries.

Internal assessment tests are conducted using a centralized system by the Exam Cell. After the internal assessment test, results of the test are analyzed in department meeting. Slow learners are identified and coaching classes are arranged after the regular working hours. Advanced learners are motivated to do socially relevant projects in the area of interest, present and publish technical papers in international conferences and journals.

Results of class test, internal assessment test, assignments, quiz, online test, university examinations, project reviews, outcomes of group discussions and feedbacks from various stakeholders are used to measure and ensure the attainment of objectives of the curriculum.

Class committee meetings are conducted three times in a semester to improve the teaching-learning process. Preventive and corrective measures are taken if necessary

The quality of teaching-learning and evaluation process is improved by obtaining Mid-Semester Feedback from students by course in-charge and at the end of the semester by the institution, which are discussed in department meetings and corrective actions are made, if needed.

Faculty and students of RCET are members of various professional bodies such as ISTE, IET, which help to enrich themselves by organizing many technical events.

RCET has an local chapter for National Programme on Technology Enhanced Learning (NPTEL) for quality learning of students.

RCET is an official Nodal Centre of virtual Laboratories at IIT Kanpur under MHRD'S initiative of virtual lab project.

| File Description                        | Document      |
|---|---------------|
| Upload Additional information           | View Document |
| Provide Link for Additional information | View Document |

# **1.2 Academic Flexibility**

| 1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years |               |  |  |  |
|---|---------------|--|--|--|
| Response: 79  |               |  |  |  |
| File Description     Document   |               |  |  |  |
| Upload supporting document     View Document  |               |  |  |  |
| Institutional data in the prescribed format   | View Document |  |  |  |

# **1.2.2** Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Response: 90.23

1.2.2.1 Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years

|   | 2021-22                                      | 2020-21  | 2019-20 |       | 2018-19          | 2017-18 |  |
|---|--|----------|---------|-------|------------------|---------|--|
|   | 2169   | 2093     | 2086    |       | 2062             | 1818    |  |
|   |  |          |         |       |                  |         |  |
|   |  |          |         |       |                  |         |  |
| F | ile Description                              |          |         | Docun | nent             |         |  |
|   | <b>ile Description</b><br>pload supporting o | document |         |       | nent<br>Document |         |  |

# **1.3 Curriculum Enrichment**

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

# **Response:**

# Vision of the Institution is

"To be an academic institute of continuous excellence towards education and research in rural regime and provide service to nation in terms of nurturing potentially higher social, ethical and engineering companion graduands."

Education for Life is offered to 100% of students both as value-added optional courses and also as coursework integrated into the curriculum.

# **Environment & Sustainability:**

- Environmental Science and Engineering course in the curriculum deals with environmental issues to educate the students with a view to saving the universe.
- The NSS unit of the college organizes clean and green programs in nearby villages to create awareness among public.
- Ministry of Human Resources Department (MHRD) has launched the national program called Unnat Bharat Abhiyan (UBA) aiming to involve professionals and higher educational institutions in the development process of rural areas in the country to achieve sustainable development and better quality of life. Rohini College of Engineering & Technology is registered with UBA. A cluster of five following villages have been adopted under this program:
- 1. Agatheeswaram
- 2. Kanyakumari
- 3. Thovalai
- 4. Myladi
- 5. Murungoor
- In RCET campus different varieties of plants are labelled to raise awareness about indigenous plant species.

- Awareness programs are organized on diseases like Dengu and Cancer by NSS, NCC, YRC, RRC and Women's Cell of our institution.
- The college has 1 kVA solar power energy powered by sunlight.
- The institution has arranged special drives like "Save Electricity" with the help of students to switch off the lights during bright day time which contributes to the reduction of global warming.

# Gender:

- Rohini College of Engineering and Technology is a co-educational institution. The institution has given equal opportunity to both the genders to involve in all the curricular, co-curricular and extracurricular activities.
- The ratio of female to male students has averaged around 45.4% showing high inclusivity amongst our programs.
- If gender bias is seen, the principal recommends policy changes to the governing council and coorganizes activities with students to raise awareness about gender sensitization within the campus and in outlying communities.
- Women's cell focusses women empowerment and conducts awareness programmes for all women students and faculty.

# Human Values & Ethics:

- Values are not just the cornerstone but the culture that cements the entire educational system at RCET. Many facets of ethical issues are covered in curriculam courses, particularly, professional ethics which instill a kind of mental resolve amongst the young learners and researchers that they should adhere to responsible, straight-forward and disciplined conduct in personal, professional and social walks of life.
- Research courses stress the relevance and need for intellectual ethics, best practices, and etiquettes involved in respective fields along with insights into issues such as protection of IPR, zero-plagiarism, etc

| File Description                        | Document      |  |
|---|---------------|--|
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# **1.3.2** Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 62.44

# 1.3.2.1 Number of students undertaking project work/field work / internships

| Response: 1501                              |               |  |  |  |
|---|---------------|--|--|--|
| File Description                            | Document      |  |  |  |
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# 1.4 Feedback System

**1.4.1** Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website (Yes or No)

Response: Yes

| File Description           | Document      |
|----------------------------|---------------|
| Upload supporting document | View Document |

# **<u>Criterion 2 - Teaching-learning and Evaluation</u>**

# 2.1 Student Enrollment and Profile

| 1.1.1 <b>Numbe</b>            | r of students admit | ted year wise durin         | g last five years       |                |
|-------------------------------|---------------------|-----------------------------|-------------------------|----------------|
| 2021-22                       | 2020-21             | 2019-20                     | 2018-19                 | 2017-18        |
| 735                           | 663                 | 640                         | 662                     | 687            |
|                               |                     | ts year wise during         |                         | 2017 10        |
| 1.1.2 <b>Numbe</b><br>2021-22 | r of sanctioned sea | ts year wise during 2019-20 | last five years 2018-19 | 2017-18        |
|                               |                     |                             |                         | 2017-18<br>717 |
| 2021-22<br>777                | 2020-21<br>717      | 2019-20 717                 | 2018-19<br>717          |                |
| 2021-22<br>777                | 2020-21<br>717      | 2019-20 717                 | 2018-19                 |                |
| 2021-22                       | 2020-21<br>717<br>n | 2019-20<br>717              | 2018-19<br>717          |                |

2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

# Response: 70.91

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

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 236     | 293     | 299     | 284     | 225     |

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

|   | 2021-22                                     | 2020-21 | 2019-20 |               | 2018-19  | 2017-18 |  |
|---|---|---------|---------|---------------|----------|---------|--|
|   | 334   | 418     | 406     |               | 410      | 350     |  |
|   |   |         |         |               |          |         |  |
| F | File Description                            |         |         | Docum         | nent     |         |  |
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| I | Institutional data in the prescribed format |         |         | View I        | Document |         |  |

# 2.2 Student Teacher Ratio

2.2.1 Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 13.58

# **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 using ICT tools

# **Response:**

Our prime motto is "Learn today for a Better Tomorrow". To match with our motto, we are shifted from teacher centric learning approach to student centric methods. To cope up with the growing needs of students, our faculty members have initiated various pedagogical activities. Before commencing classes academic calendar is prepared and distributed among faculty members & students. To improve teaching & Learning process faculty members are trained from time to time to implement the student-centric methods. Slow learners & weak learners are properly identified and separately trained to achieve their goals. In an effort to enhance professional competency and update their knowledge, faculty members have undergone courses in the MOOC platform: NPTEL, Coursera, Udemy etc.

The Institute hosts an annual technology festival, **SPECTRA**, where students present their learning in the form of **innovative projects, technical events**. We also encourage students to participate in **intercollegiate competitions** as well as level national competitions.

# Learning Practices Adopted at RCET:

# **Experiential learning**

The process of learning through experience through doing is called as experiential learning. Students are motivated to take part in **Internship and In-plant training** in reputed industries namely IREL, PRS BUILD INDIA Ltd, NSIC – Technical service Centre, Nuclear power Corporation of India Limited etc. **Field trips, Survey Camps, Industrial Visits** are regularly arranged to give practical exposure related to Industry. As part of curriculum both **mini projects & major projects** are carried out by each student.

Value added courses & certification courses are arranged regularly to give them experience on various technologies. Value added and certificate courses not only arranged in their relevant field, additionally training and placement related certificate courses are also conducted. These courses include soft skill training, Aptitude skill development. Reasoning skill enhancement. Guest Lectures and workshops, hand on trainings are organized by every department to supplement experiential learning. Every year through Spectra, Project Expo is conducted and all the students are encouraged to exhibit their projects.

# **Participatory Learning**

Various interactive and participatory approaches are introduced by faculty members to improve the learning experience in class. Methods include **Think-Pair-Share (TPS)**, **Flipped Classroom and group discussion**. Faculty members motivate the students to participate in **national & international conferences**, **Project Expos**. Through **VALUE ADDED COURSES** and technical events like **SPECTRA**, **ASPIRE2018**, **INTER COLLEGIATE COMPETITION –IGCAR**, **SALES DAY**, **RIPPLE** students are engaged in participatory learning

# Problem Solving Methodologies

By solving **real world problems, case studies, innovative assignments** students are given a chance to learn various problem solving methodologies. Open ended tasks are given to them. Such problems have implicit goals and limitations, and some correct solutions. Such problem-solving activities not only enable students to apply the concepts they have learned, but also develop skills related to problem and sub-problem formulation, alternative solution generation, constraint identification, solution analysis and choice and useful for development. Each department organizes **technical symposium** every year through which students are motivated to participate in technical **quiz, debugging, Model development** etc. for improving their problem solving skill.

| File Description              | Document      |
|-------------------------------|---------------|
| Upload Additional information | View Document |

# **2.4 Teacher Profile and Quality**

2.4.1 Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

2.4.1.1 Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 177     | 162     | 158     | 154     | 149     |

| File Description           | Document      |
|----------------------------|---------------|
| Upload supporting document | View Document |

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

Response: 25

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

| 2021-22                | 2020-21            | 2019-20 | 2018-19                   | 2017-18 |  |
|------------------------|--------------------|---------|---------------------------|---------|--|
| 38                     | 34                 | 42      | 43                        | 43      |  |
|                        |                    |         |                           |         |  |
|                        |                    |         |                           |         |  |
| ile Descriptio         | n                  |         | Document                  |         |  |
| <b>File Descriptio</b> | on<br>ing document |         | Document<br>View Document |         |  |

# 2.5 Evaluation Process and Reforms

**2.5.1** Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

# **Response:**

The institute has devised an efficient mechanism to deal with examination related grievances which transparent in the pattern and conduction of Internal assessment Test (IAT) and rectification of grievances is time bound. Internal assessments as well as end semester assessments are conducted strictly as per the guidelines and rules issued by the affiliating university.

At Institute level: At Institute level, an examination committee, comprising of a senior teacher as convener and other teaching and non-teaching staff as members, is constituted to handle the issues regarding evaluation process. Evaluated answer scripts are distributed to the students, and any clarifications or grievances are taken care by the instructor. Marks obtained by the student for the internal examination are displayed on the notice board. Discrepancies like question paper mistakes, mark allocation, correction are noticed by the students, the concerned teacher will resolve the discrepancy, and the necessary corrections will be made. If a student is not satisfied with the marks awarded even after resolved by the teacher, then he may represent the same to the HOD concerned. Such representations are viewed positively and reassessed by another teacher if required. Parents are informed their ward's performance via SMS and letter. Students who failed to clear the examinations are counselled and remedial classes are arranged for them by the faculty mentor. Retests for the Internal Assessment are conducted for Students who were absent for internal exams due to valid reasons. Within a time bound the Internal Assessment marks are

entered in the University web portal, students can individually view their performance in the University portal through the student's login.

At University level: Students grievances related to assessment of university answer papers can be intimated to the faculty handling the subject and the head of department if required, for further action. Students can bring their grievances, adhering to the evaluation procedure of the university:

Re-Evaluation: In a weeks' time after the declaration of the results learners get an opportunity to reevaluate their answer scripts if they are not contented with their results. Re-evaluation results would take place as per the norms set by the university and the results would also be published accordingly.

Challenge Evaluation: Learner's also get one week period to challenge the evaluation if they are unsatisfied with the revaluation results. This would be carried out by two subject experts and the results would be announced before the next university examination. Learner is eligible for the refund of the fee incurred for this if he/ she gets a pass mark. Thus maximum chances are given to students to clear a subject .It is time bound and transparency is maintained throughout the process by the university.

| File Description              | Document      |
|-------------------------------|---------------|
| Upload Additional information | View Document |

# 2.6 Student Performance and Learning Outcomes

**2.6.1** Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated

# **Response:**

Outcome-Based Education (OBE) has been implemented in our Institute since 2017 to impart education through student centric approach and follow outcome oriented teaching learning process. In line with OBE, Program Outcomes (POs), Program Specific Outcomes (PSOs), Program Educational Objectives (PEOs) and Course Outcomes (COs) have been formulated for all the UG programs as well as for PG programs except PSO.

PEOs are broad statements that describe the graduates' career accomplishment after 3 to 5 years of graduation. POs are aligned with the Graduate Attributes defined by NBA. PSOs are specific and relevant to a particular program. COs are direct statements drafted for every course that describe the competencies gained by the student through the course.

POs, PSOs and COs are published in the college website, syllabus book, Course Plan and laboratory manuals and briefed at the start of the semester in the classes and class committee meetings. POs and PSOs are also displayed at prominent places in the classrooms, laboratory, faculty rooms and department library. It is also disseminated to the stake holders such as Faculty, Alumni, Parents and Employers through surveys.

Every CO is aligned to one or more POs, and is measured at the end of the course, which contributes to the

PO that it is mapped to. COs for a course is measured by the Evaluation Scheme, where the assessment tools are categorized into Direct and Indirect. The evaluation tools and frequency of evaluation are detailed below.

# Direct Assessment:

| Courses offered    | Evaluation tools Frequency of Evalua |                         | n    |  |
|--------------------|--------------------------------------|-------------------------|------|--|
| Theory Courses     | Cumulative Internal Assessment (CIA) | i                       |      |  |
|                    | Internal Assessment Test             | Three per semester      |      |  |
|                    | Assignment                           | Five per semester       |      |  |
|                    | End Semester Examination (ESE)       | One per semester        |      |  |
| Laboratory Courses | Cumulative Internal Assessment (CIA) |                         |      |  |
| -                  | Continuous Assessment                | Assessed for every expe | imen |  |
|                    | Model Examination                    | One per semester        |      |  |
|                    | End Semester Examination (ESE)       | One per semester        |      |  |
| Project work       | Project Reviews (IA)                 | Three periodic reviews  |      |  |
|                    | End Semester Examination (EA)        | One per semester        |      |  |

### Indirect Assessment:

Course end survey(CES) indirectly find the level of confidence of the students on the COs framed.

| Evaluation tools  | Frequency of Evaluation |  |
|-------------------|-------------------------|--|
| Course End Survey | One per semester        |  |

The overall attainment of COs is calculated as follows:

# Theory and Laboratory Courses:

*Direct attainment of COs* = 0.5\*CIA attainment+ 0.5\*ESE attainment

*Indirect attainment of COs = Attainment through CES* 

Overall attainment of COs=0.8\* Direct attainment+0.2\* Indirect attainment

# Mini Project and Project work:

Direct attainment of COs = 0.5\*IA attainment + 0.5\*EA attainment

*Indirect attainment of COs = Attainment through CES* 

*Overall attainment of COs=0.8\* Direct attainment+0.2\* Indirect attainment* 

At the end of the programme, the POs/PSOs are computed using direct and Indirect Assessment.

POs and PSOs attainment through direct assessment is:

# (CO-PO Mapping Strength \* Related CO Attainment Value)

\_\_\_\_\_

# (Average of CO-PO Mapping Strength)

### **Indirect Assessment:**

Surveys from Graduates, Alumni and Employers are recorded as attainment level of POs/PSOs.

The overall attainment values are calculated considering 80% weightage to direct assessment and 20% weightage to indirect assessment. After the computation of attainment levels, a detailed plan of action is recommended which help in the further attainment of the POs/PSOs.

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# 2.6.2 Pass percentage of Students during last five years

Response: 82.64

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

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 507     | 572     | 561     | 295     | 272     |

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

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |  |
|---------|---------|---------|---------|---------|--|
| 573     | 617     | 602     | 502     | 373     |  |

| File Description                            | Document      |
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| Institutional data in the prescribed format | View Document |

# 2.7 Student Satisfaction Survey

| 2.7.1 Online student satisfaction survey regarding teaching learning process |               |
|--|---------------|
| Response:  |               |
| File Description   | Document      |
| Upload database of all students on roll                                      | View Document |

#### Criterion 3 - Research, Innovations and Extension

#### **3.1 Resource Mobilization for Research**

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

#### Response: 21.45

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

| File Description | n       | Ι       | Document |         |  |
|------------------|---------|---------|----------|---------|--|
|                  |         |         |          |         |  |
|                  |         |         | l        |         |  |
| 9.7              | 2.5     | 3.75    | 1.5      | 4       |  |
| 2021-22          | 2020-21 | 2019-20 | 2018-19  | 2017-18 |  |

View Document

#### **3.2 Innovation Ecosystem**

Institutional data in the prescribed format

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

#### **Response:**

Rohini College of Engineering & Technology has created an eco-system for bringing innovation, research and promoting entrepreneurial sense among the students. This is evident from the following forums and activities which are functional inside the campus.has a robust ecosystem for nurturing innovation and entrepreneurship leading to patents, products and start-ups.

#### **Institution Innovation Council (IIC)**:

Institution Innovation Council is established in the Institute under the support of MHRD's Innovation Cell(MIC). It is established to engage large number of faculty and students in various pioneering entrepreneurial, Innovation and IPR activitiessuch as Leadership Talks Series, ideation sessions, Problem solving, Prototype Competition, Smart India HackathonProof of Concept development, Design Thinking ,IPR, Project and handling and management at Pre-incubation/Incubation stage.

#### Startup Cell:

Our institution is established with a Startup cell through IIC in order to inspire and nurture the younger minds towards innovation and entrepreneurship which results in wealth creation and technology-based

Startups.

Tamil Nadu startup and innovation mission government of Tamilnadu have sanctioned a startup TN Student Circle for Rohini college of engineering to create a strong innovation and entrepreneurship ecosystem at the campus through this initiative. startup TN will be hosting various innovation and entrepreneurship related events to promote student and faculty Entrepreneurs from Rohini college of Engineering and Technology.

This initiative brings various stakeholders of government, startup and entrepreneurship ecosystem together for knowledge dissemination and creating a Strong innovation network.

The mission of this cell is to Establish an ecosystem for support with Mentorship, Angel Investors and Venture Capitalists Integrating with organizations, such as government Industry and Alumni network to meet out emerging demands and needs.

**Entrepreneur Development Cell(EDC)**: The EDC was established in the year 2018 and it makes great effort to instill the passion and spirit among students emergence as entrepreneurs. The objective of this cell is to Identify and encourage students and guiding them to become self-starting skilled technocrats.

To create Entrepreneurial culture in the Institution.

For the past 6 years, we conducted around 20 programmes such as Entrepreneurship Awareness Camp (EAC), Women Entrepreneurship Development Programme(WEDP), Technology based Entrepreneurship Development Programme(TEDP) to promote entrepreneurship.

The academic and research expertise of the RCET continually contribute to the Innovation Ecosystem through breakthrough solutions and suggestion for solving critical problems, and motivating students to become a part of innovative environment

Tie-ups have been initiated with reputed R&D organizations .15 Technology Missions address the issues related to four thrust areas, namely, food, water, healthcare and sustainable energy. During the period of assessment, 33 products were developed, 25 patents published .

## The following are the activities of all the outfits related to innovation, incubation and entrepreneurship:

Innovation and entrepreneurship are integrated in the curriculum with 9 courses on entrepreneurship, IPR and business development and 2746 students trained.

Students have participated in national and international competitions such as Vickathon, Google Summer of Code etc.

Training, workshops, competitions and hackathons, including 12-hour and 24-hour hackathons a conducted in collaboration with Major League Hacking, encouraging students to develop innovative ideas and products

| File Description              | Document      |
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**3.2.2** Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 72

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

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18  |
|---------|---------|---------|---------|----------|
| 7       | 11      | 18      | 23      | 13       |
| L       | 1       | 1       | 1       | <u> </u> |

| File Description                            | Document      |
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| Upload supporting document                  | View Document |
| Institutional data in the prescribed format | View Document |

#### **3.3 Research Publications and Awards**

**3.3.1** Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 1.32

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 44      | 67      | 42      | 117     | 16      |

| File Description                            | Document      |
|---|---------------|
| Upload supporting document                  | View Document |
| Institutional data in the prescribed format | View Document |

3.3.2 Number of books and chapters in edited volumes/books published and papers published in

#### national/ international conference proceedings per teacher during last five years

| Response: 5.13                              |   |         |               |      |                             |  |
|---|---|---------|---------------|------|-----------------------------|--|
|   | number of books and<br>rnational conference | -       |               | -    | blished and papers in years |  |
| 2021-22                                     | 2020-21                                     | 2019-20 | 2018          | 5-19 | 2017-18                     |  |
| 111   | 243   | 226     | 231           |      | 297                         |  |
|   | ·   |         | · ·           |      | ·                           |  |
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#### **3.4 Extension Activities**

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

#### **Response:**

Our Institution is adopting various steps toward extension and outreach activities for the surrounding community, through numerous societies such as NSS, YRC, RRC, Rotaract Club, Leo club,Red Ribbon club etc. We encourage our students to help the local community living around our campus through these groups in order to instill social responsibility in them. Some of our institution's key operations for the benefit of local communities are noted below:

As part of the Unnat Bharat Abhiyan (UBA) scheme, five villages were adopted: Mylody, Marungoor, Agastheeswaram, Thovalai, and Kanyakumari. Survey camps, tree plantations, and medical camps were held for the benefit of the villagers. The RCET extension activity societies are passionate about tree planting. This project is ongoing at our institution. We have set a record by planting 5000 trees in the adopted villages. The Rotaract club and the NSS, YRC and RRC units participate in a variety of projects such as regular eye camps and medical camps for the adopted communities as well as on campus for the benefit of society.

A blood donation programme is conducted twice in a year in collaboration with Kanyakumari Medical College and Kanyakumari Blood Bank.

Approximately 200 to 300 students and staff used to donate blood as a result of these camps every year. Donated incinerators and first-aid kits to students at Government Higher Secondary Schools in the Kanyakumari District.

Carrier guidance and skill development programmes were conducted at various Government and

Government aided schools by our faculties every year. Computer training certificate programmes are offered by our faculties to neighborhood school students and rural youth to empower them in IT field. We have conducted Mega Job fair for Community Development in association with District Mission Management Unit-Tamilnadu state Rural Livelihoods Mission (DMMU-TNSRLM).

We had organised Space Expo, Nuclear Expo and Science and Technology Expo in collaboration with ISRO,IGCAR,NPCIL to create an awareness about space Technology, Nuclear Energy and safety aspects in Nuclear Power Plants among the people in Kanyakumari District.

The Department of Electrical Engineering has conducted trainings for Electrical wiring that helped many unemployed youth in getting employment in both India and abroad.

We Conducted awareness programmes like anti-tobacco awareness, Deaddiction program, cancer awareness, Dengue awareness etc., many times. We periodically visit orphanages and old age homes in and around Kanyakumari and provides clothes collected from our students, notebooks, accessories, stationeries, and so on.

Collecting Ockhi Storm and kerala flood relief money from students and faculty, and distributing this money and basic sanitaries to those impacted by the Ockhi flood .

Through our institution, an energy awareness campaign at Agastheeswaram village was conducted . HIV Awareness programme through the Red Ribbon Club in the year 2018-2019. An Election Awareness Program was conducted in Kanyakumari every year. Low cost solar lamps were installed as a humanitarian service in Agastheeswarm.

| File Description                        | Document      |
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## **3.4.2** Awards and recognitions received for extension activities from government / government recognised bodies

#### **Response:**

Total number of awards and recognitions received for extension activities from Government/ recognized bodies year-wise during the last five years - 20.

The details of the Awards are given below:

1. Outstanding Leader in Higher Education by ELETS technomedia Pvt.Ltd.

2. Best Placement Officer Award by Knowledge Research Academy (Goverment recognized body)

3. Appreciation for the Blood donation -2021 from District Blood transfusion Centre, Blood

Bank,Kanyakumari Goverment Medical College (Goverment body)

4. Appreciation for Service Rendering to the society M.R. Gandhi, M.L.A., Nagercoil constituency (Goverment body)

5.Lions youth empowerment service award-2020 from International association of Lions Club (Goverment recognized body)

6. Temple Cleaning from Devi Mutharramman temple Trust (Goverment recognized body)

7. Appreciation for Eye Camp from Joyra Traders (Goverment recognized body)

8. Outstanding service to the Community by Vivekanda Kendra, Kanyakumari

9.National Service Scheme Unit of RohiniCollege of Engineering & Technology received the Best NSS Unit Award from the Anna University Chennai.(Goverment body)

10. Social welfare for the year 2019 from Rotary Club of Nagercoil Town.(Goverment recognized body)

11.Social Awareness service Award-2019 from SreeRam Cancer Trust (Goverment recognized body)

12. Appreciation for the Blood donation -2019 from District Blood transfusion Centre,Blood Bank,Kanyakumari Goverment Medical College (Goverment body)

13. In. 2019 Rohini College of Engineering and Technology received the distinguished 'Bharat Excellence Award' for its exemplary dedication to enriching the lives of students .The awards which carried a Gold Medal and a Certificate of Excellence, was presented by Dr.Kiran Bedi, a retired Indian Police Service officer, and the Lieutenant Governor of Puducherry (Goverment recognized body)

14. Appreciation for the Blood donation -2018 from District Blood transfusion Centre, Blood Bank, Kanyakumari Goverment Medical College (Goverment body)

15. Appreciation Certificate for Cancer Awareness Campaigns from SreeRam Cancer Trust (Goverment recognized body)

16. Appreciation for Supporting Placement Related Programs for Rural People from District Mission Management Unit- Tamil Nadu State Rural Livelihood Mission.(Government body)

17. Excellent Institution in Professional Development Award by Innovative Scientific Research Professional Malaysia

18. Best Industry Institute South Indian ASDF Awards.(Goverment recognized body)

19. Rohini College of Engineering & Technology, received the Best Research Infrastructure Institute award from the most respected dignitaries of the 3rd ASDF SIAA 2018.(Government recognized body)

20. Appreciation for 500 Tree Plantation.Devi Mutharramman temple Trust (Goverment recognized body)

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3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years

Response: 81

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

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 12      | 7       | 26      | 27      | 9       |

| File Description                            | Document      |
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| Institutional data in the prescribed format | View Document |

#### **3.5 Collaboration**

3.5.1 Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

#### **Response:** 35

| File Description                            | Document      |
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| Institutional data in the prescribed format | View Document |

#### **Criterion 4 - Infrastructure and Learning Resources**

#### 4.1 Physical Facilities

**4.1.1** Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

#### **Response:**

RCET campus is spread over Land in 12.8 acres with adequate infrastructure. Sufficient supporting facilities are provided for an effective ambience in curricular, co-curricular and administrative activities. The institution has excellent infrastructural facilities like spacious classrooms, laboratories, workshops, library, faculty rooms, seminar halls, auditoriums administrative block. Excellent Hostel facilities for boys and girls Mineral Water Plant and Effluent Treatment Plants are available. Transport facilities are available to all students and staff from Various places.

More than 72 class rooms ,4 seminar halls and a grand arena auditorium are made available. Three airconditioned seminar halls and one auditorium are provided with LCD projectors. The air-conditioned auditorium "The Grand Arena" has a capacity of 750 seating and an excellent stage to be used for all common events.

Wi-Fi is enabled to all classrooms and seminar halls . Every class room and seminar hall has a provision for smartness, including LCD projector and interactive boards. For sound learning suitable furniture is available in the classroom. Availability of state of art laboratories are made for all the programs. Student – computer ratio is 4: 1 and the allotment ratio in the lab is 1: 1.

Well-stacked library functioning from 08.00 am to 6.00 pm. The Library has the subscription for online resources such as e-Journals, e-Books, Databases, etc., in addition to regular books, journals, magazines, newspapers etc., Digital Library is functioning up to 24x7.

Well-equipped Workshops and laboratories with advanced software and equipment are provided conforming to the syllabi norms. Instruction manuals of all laboratories are prepared and supplied to the students. They are given freehand to perform laboratory experiments, carry out project works under the supervision of qualified and skilled lab assistants beyond the syllabi.

The Department of Physical Education covers an area of two acres located in front of APJ Block and in the back side of Kalpana Chawla Block. The department has sufficient facilities for both indoor and outdoor games for the students to practice and to conduct Inter-Collegiate tournaments, Intramural Sports and Coaching Camps. The infrastructure includes Football field, Handball courts, Tennis court, Volleyball court, Throw ball court, Ball Badminton courts, Kho-Kho court, Cricket Ground. Athletic track space for field events like javelin throw, shot put, discus throw *etc*. is available. An indoor sports complex which provides space for practice of games like caroms, chess etc. Training provided to the students helped them to win medals and awards in state level, inter engineering collegiate events.

An exclusive gymnasium with required equipment is available for the students and faculty which provides an arena for body builders and interested students who wish to maintain fitness.

Yoga is being practiced in the college. Motivation is given to the students to do yoga exercises.

International Yoga Day is celebrated every year with a yoga trainer in the college.

The auditorium and seminar halls are utilized to conduct cultural programs. The students perform folk dances, banjara dances, music, plays, mono acting, traditional events. Participating in various cultural programmes the students have won many prizes.

| File Description                        | Document      |
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## **4.1.2** Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 39.28

4.1.2.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 161.46  | 190.87  | 196.29  | 226.56  | 314.14  |

| File Description                            | Document      |  |
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| Institutional data in the prescribed format | View Document |  |

#### **4.2 Library as a Learning Resource**

**4.2.1** Library is automated using Integrated Library Management System (ILMS), subscription to eresources, amount spent on purchase of books, journals and per day usage of library

**Response:** 

- The Dr.S.R.Ranganathan Central Library of Rohini College of Engineering and Technology is housed in an independent and spacious, well-equipped building, with a carpet area of 4625 square ft with a rich collection of books, scientific and technical journals in addition to a vast collection of electronic resources.
- The central library comprises reference, circulation, periodical, reprographic and newspaper sections, a discussion room, stacking area and digital library.
- The library has automated all its activities to provide better, effective and immediate services to user fraternity, fully automated with LIBSOFT software. The installed software has functionalities

that enable a library to manage its housekeeping operations like Issue, Return, Renewal, Reservation, Cataloguing and also for information Retrieval process.

- The Library is absolutely automatic from the year 2012. Currently, LIBSOFT is getting used as ILMS https://rcet.libsoft.net
- The Central Library is working from Monday to Saturday 08:00 am to 06:00 pm and during holidays 10:00 am to 04:00 pm
- The reading room capacity is for 60 students.
- Library OPAC (Online Public Access Catalogue) are often accessed through the internet. Hence, our user community will access the catalogue from anyplace at any time.
- A total of 26176 books, 136 print journals, 85299 e-books and 19521 e-journals, are available along with daily newspapers.
- All the books are bar-coded and bar-code laser scanners are utilized in circulation counter for book transactions.
- On renewal basis, each student is issued 3 textbooks for a borrowing period of 35 days,
- Security system of library resources is maintained with constant checking. Prompt entry-exit time is maintained. Through CCTV cameras Strict surveillance of the complete library is done.
- The college central library has various institutional memberships of prestigious libraries such as DELNET, national digital library for e-resources and e-journals with dedicated internet facilities connected to computers in the library.
- The Library is member of

KNIMBUS(E-books &Journals), OXFORD University Press DELNET – (Developing Library Network – Delhi ) The Library is also a member in National Digital Library https://ndl.iitkgp.ac.in/ (NDL). All our staff, students and research scholars have enrolled their membership to access the huge resources, offered by NDL, freely. SWAYAM Prabha Channel.

#### • Digital Library

The digital library is an additional facility for the benefit of the students and faculty consisting of NPTEL video lectures by many IIT and NIT professors, PPTs, course material files, e-journals, eBooks,GATE books, handbooks, projects, PDF notes, instructional guides, CDs etc.Direct access to online journals is available for staff and students to learn the latest research and developed techniques.

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#### **4.3 IT Infrastructure**

**4.3.1** Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

**Response:** 

#### **IT Service Management**

A team headed by the System and Network Administrators accomplishes the IT service management . The IT infrastructure of the institute is managed by the team and it also deploys the e-resources campuswide. In order to serve the computing needs of users to facilitate teaching, learning, research, and administration all the systems on the campus are connected through LAN with high-speed internet. All eresources and services can be accessed through Internet and FTP (File Transfer Protocol) at any point of time by all the stakeholders.

Computing and communication resources are continuously upgraded with the latest state of the art technologies to facilitate the students and staff to learn and update their technical skills.

Wi-Fi facility is continuously upgraded from the year 2015 until now.23 Wi-Fi devices were deployed across the campus in both academic blocks and hostel blocks providing internet service for enabling students and faculty to stay connected and access the academic content, anywhere in the campus. Regular monitorization is executed the websites browsed by students . While Wi-Fi facility has brought in more users on to the network, widespread technology adoption has further increased the load on the network.

Microtik Router Board-RB2011 UIAS-RM model routers two numbers are purchased to enhanced the LAN and Wi-Fi connectivity. 25 no's Intercom facility, 55 no's IP based phone was available

#### **MS Office**

- MS Office license is renewed periodically.
- Renewals are done on July 2022 for 2.44 Lakhs.

#### **Internet Bandwidth**

The details of the internet facility in our campus are

- 200 Mbps Airtel (1:1) leased line internet connectivity
- 150 Mbps BSNL (1:1) leased line internet connectivity

We have always stayed ahead in terms of Internet Bandwidth to cater to the needs of all stakeholders.

• 155Mbps in the academic year 2017 -2018

• 200Mbps in the academic year 2021 -2022

#### Servers

• Supermicro UP Tower Server was purchased for 93,000 on 23rd February 2012.

#### **CCTV Camera**

- 400 CCTV cameras are installed from 2015 to 2022.
- 66 CCTV Cameras are installed in students buses along with the bus tracking systems in the year 2022

| File Description              | Document      |  |
|-------------------------------|---------------|--|
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#### **4.3.2** Student – Computer ratio (Data for the latest completed academic year)

Response: 3.94

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 610

| File Description           | Document      |  |
|----------------------------|---------------|--|
| Upload supporting document | View Document |  |

#### 4.4 Maintenance of Campus Infrastructure

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

**Response:** 28.15

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

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 156.66  | 106.88  | 203.86  | 158.44  | 154.88  |

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#### **<u>Criterion 5 - Student Support and Progression</u>**

#### 5.1 Student Support

**5.1.1** Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

#### **Response:** 85.06

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government and Non-Government agencies year wise during last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 1995    | 1841    | 1879    | 2049    | 1878    |

| File Description                            | Document      |  |
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5.1.2 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

**Response:** A. All of the above

| File Description                            | Document      |  |
|---|---------------|--|
| Upload supporting document                  | View Document |  |
| Institutional data in the prescribed format | View Document |  |

**5.1.3** Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

**Response:** 30.17

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

|   | 2021-22          | 2020-21 | 2019-20 |          | 2018-19 | 2017-18 | ] |
|---|------------------|---------|---------|----------|---------|---------|---|
|   | 890              | 550     | 680     |          | 850     | 450     |   |
|   |                  |         |         |          |         |         | _ |
| F   | File Description |         |         |          | nent    |         |   |
| Upload supporting document                  |                  |         | View I  | Document |         |         |   |
| Institutional data in the prescribed format |                  |         | View I  | Document |         |         |   |

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

**1. Implementation of guidelines of statutory/regulatory bodies** 

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

Response: A. All of the above

| File Description           | Document      |
|----------------------------|---------------|
| Upload supporting document | View Document |

#### **5.2 Student Progression**

**5.2.1** Percentage of placement of outgoing students and students progressing to higher education during the last five years

**Response:** 64.17

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 375     | 378     | 352     | 310     | 203     |

#### 5.2.1.2 Number of outgoing students year wise during the last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 529     | 550     | 536     | 465     | 298     |

| File Description                            | Document      |
|---|---------------|
| Upload supporting document                  | View Document |
| Institutional data in the prescribed format | View Document |

# 5.2.2 Percentage of students qualifying in state/national/international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

#### Response: 45.95

5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 3       | 5       | 0       | 1       | 1       |

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

| 2021-22                 | 2020-21 | 2019-20 | 2018-19                   | 2017-18 |  |
|-------------------------|---------|---------|---------------------------|---------|--|
| 24                      | 7       | 1       | 3                         | 2       |  |
|                         |         |         |                           |         |  |
|                         |         |         |                           |         |  |
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| F <b>ile Descriptio</b> |         |         | Document<br>View Document |         |  |

#### **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 last five years

#### Response: 121

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

national/international level (award for a team event should be counted as one) year wise during the last five years

| 2021-22       | 2020-21               | 2019-20 | 2018-19                | 2017-18 |  |
|---------------|-----------------------|---------|------------------------|---------|--|
| 1             | 0                     | 23      | 37                     | 30      |  |
|               |                       |         |                        |         |  |
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## **5.3.2** Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

#### Response: 12.2

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

| 2021-22                 | 2020-21 | 2019-20 | 2018-19                   | 2017-18 |
|-------------------------|---------|---------|---------------------------|---------|
| 07                      | 01      | 16      | 16                        | 21      |
|                         |         |         |                           |         |
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#### **5.4 Alumni Engagement**

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

#### **Response:**

Alumni bring laurels to their juniors in many ways through a registred Rohini alumni (Rohini ALUMNI) association lead by Mrs.R.Aswini. The Institute established alumni cell in 2017 to maintain a goodlinkage between institute and alumni. Regular interaction with alumni is ensured to bring innovative change in the institute. Alumni meet is being conducted at various locations around the world lincluding college campus.

The Following are the activities carried out with the help of Alumni.

- Alumni members play a key role in
- Academic collaborations
- . Training and development
- Scholarships

Societal contribution

#### Academic collaborations

Alumni serving as **Departmental Advisory board Members (DAB)** in attaining our targets in Outcome Based Education (OBE). They are one of our stakeholders involved in assessing the various attainment criteria's in OBE. Their participation in finding the content beyond the syllabus to bridge the curriculum gap is most appreciable. The inputs provided by them about the research and technology currently used in the industry help us update to plan the value added courses.

They are also members of Internal Quality Assuarance cell for planning, guiding and monitoring Quality Assurance and Quality Enhancement activities of the college.

#### Alumni Meet:

The Alumni meet was organized in the respective departments. Through the meet they help the poor students to pay fees and contribute books. They handle motivational classes ,workshops and they act as resourse persons in departmental activities.

#### **Contribution to the Society:**

Laptop's were distributed to the Higher Secondary School Students of government schools. Also Carrier Awareness Programme was also providede to the school students. As a token of appreciation , Alumni Association sponsers cash prizes to the successful graduate students of the colleges. More than one thousand tress were planted in the near by villages.

#### Job Fair:

Alumni's conducted job fair in the college premises, various software industries were invited to put up there desk for an open interview with the students and other departments.

#### Financial Support:

Financial help was provided to construct a road near the college with the help of Alumni under the scheme "Namakku Namae Scheme".for the sum of Rs.4,00000

Financial suport to develop the scholls and conduct sports competitions.

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#### **<u>Criterion 6 - Governance, Leadership and Management</u>**

#### 6.1 Institutional Vision and Leadership

6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

#### **Response:**

#### Nature of Governance:

Rohini College of Engineering and Technology is an ISO certified institution founded by the Industrialist and Philanthropist, Shri. K. Neela Marthandan in 2012. The Management has a prompt vision and mission emphasising on transformational leadership to establish new trends with innovative training methodologies for guiding the students towards the road to success. The Institution's mission statements exhibit the necessary activities to achieve the vision in an ethical manner. The governance of the College, steered by a Governing council at the apex level, is participatory, decentralized, transparent and transformational. The day-to-day processes of the college is administrated by the Principal. Next to the principal in the hierarchy are the Heads of various departments, the faculty and the non-teaching: technical and non-technical staff to look after academic and administrative aspects. The librarian, physical director and the placement officer report directly to the principal. Establishment of the cells/committees with the hints of the diverse statutory bodies namely, Governing Council, Boards of Studies, IQAC, Class Committee, Internal Complaint Committee, SC-ST Committee, Anti-Ragging Committee is made.

#### **Perspective Plans:**

The college governance board reiterates the provisions manifested and is reflected through the implementation of the following plans:

- To structure an effective Teaching-Learning process
- To form a conducive learning ambience for the knowledge enrichment of the students
- To strengthen the academic potentiality and employability/entrepreneurship skills of students
- To promote research possibilities among faculties and students
- To enrich the quality of Teaching-Learning techniques
- To improvise the industry-institute interaction through student's projects, consultancy works, internships, career, etc
- To empower the quality assurance and sustainability in all activities

## DECENTRALIZATION PRACTICES AND PARTICIPATION OF THE FACULTIES AND STUDENTS IN THE DECISION MAKING BODIES:

The Institute disburses responsibilities from top-down by decentralizing duties and responsibilities for quick decision making. Faculty members actively take part in various committees like IQAC, Training and placement Cell, Admission Committee, Discipline Committee, Grievance Redressal Committee, Anti Ragging Committee, Examination Committee, Research Committee, Library Committee, Annual Day, Sports Day, Graduation Day etc., as part of organizing committee and are encouraged to give ideas pertaining to the growth and betterment of the institution. They are engaged in policy formulation,

planning, execution and monitoring. The nature of governance reflects a collective leadership of an administrative team honed out of years of experience.

At the student level, Departmental association entrust leadership qualities by encouraging them to participate in all academic and administrative responsibilities. Class committee and student's associations with representation from meritorious, average, slow learners from both male and female students. Organization of several activities by students to enhance the capabilities of students under the mentorship of faculty member, hone their event management skills.

The Institute gives liberty to handle operational autonomy to the departments in academic pursuits and decision making. HoDs are having the sovereignty to construct the budget, plan and execute activities at the department level. The faculty and students have the freedom for democratic participation in expressing requirement for additional laboratory equipment, library books, enhanced infrastructural facilities, facility to work beyond college hours, curricular enrichment etc. with the appropriate approval from management.

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#### **6.2 Strategy Development and Deployment**

6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

**Response:** 

#### **Response:**

A perspective/strategic plan is prepared to fulfill the academic and research development, extra-curricular activities, sports, culture, infrastructural facilities of the Institute. With a view of structuring the institution's educational and research aspects towards futuristic innovative environment at the national level, effective strategic planning is made. It is a continuous process which includes planning, implementing, assessing the outcomes and utilizing results and inferences made for future strategy's planning, revision, modification, etc.

- Stakeholder's (Management, Principal, Faculty, administrative staff, parents, students, alumni, employer) inputs are considered by the institution's Internal Quality Assurance Cell (IQAC) for preparing the perspective plan,
- IQAC thereby utilizes their expectations, institution's management policies, vision, mission and quality policy for enhancing the welfare of the institution.
- IQAC is responsible for providing adequate suggestions regarding the quality measures leading to the institution's betterment.
- Quality measures like faculty's performance appraisal, student's feedback, training programmes attended by faculty in other institutions and training programmes organized for faculty members in our institution are initiated with priority.

#### **Development of Strategic/perspective plan (2022 – 2030)**

- 1. To attain A++ status in NAAC grading
- 2. To attain accredited by NBA for all the departments of the institution
- 3. To attain autonomous status by 2026
- 4. To obtain NIRF ranking among the top 50 engineering institutions
- 5. To have Research Centre for all the departments
- 6. To enable online access of the offline classes (as recorded video) through student login
- 7. To enable flipped classroom pattern
- 8. To sign MOU's with central government organizations in order to promote industry-institute interaction at R&D level
- 9. To collaborate with foreign institutions to induce the student's higher education
- 10. To support students to become autonomous learners
- 11. To get students placed in Tier-I companies
- 12. To digitalize the administrative functioning of the institution
- 13. To tie-up with MNCs for offering placement training to the students

Strategic planning is a continuously updating process. It systematically focuses on the vision and mission of the institution. Among the south zone of Tamilnadu, RCET has satisfied 100% admission and so the student population is facilitated with all the necessary requirements for learning outcome. To conceptualize this in comprehensive terms, the institution's desire is to make the students to become a human with moral value, distinguished academic and personal abilities thereby to serve the nation for its betterment.

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| 6.2.2 Implementation of e-governance in areas of o   | peration      |
|--|---------------|
| <ol> <li>Administration</li> <li>Finance and Accounts</li> <li>Student Admission and Support</li> <li>Examination</li> </ol> |               |
| <b>Response:</b> A. All of the above   |               |
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#### **6.3 Faculty Empowerment Strategies**

**6.3.1** The institution has effective welfare measures and Performance Appraisal System for teaching and non-teaching staff

#### **Response:**

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

#### **Response:**

The Institution considers the welfare of the employees and appraise their valuable contribution in all aspects. The following are the welfare measures favoured to the teaching and non-teaching staff members:

- 1. Casual leave 12 days per academic year
- 2. On duty leave for attending FDPs, workshops, conferences, external examination duties and university examination paper valuation
- 3. Medical insurance
- 4. Canteen facility with food varieties
- 5.24-hour internet WiFi facility
- 6.100 % Fees waivering for children of staff at this institution
- 7. Medical leave
- 8. Maternity leave
- 9. Incentives for respective staff achievements
- 10. Transportation facility to all the teaching and non-teaching staff
- 11. Accommodation facility in Hostel for the staff members based on their request.
- 12. Technical and skill-based training programmes.
- 13.80 faculty members have received an amount of Rs 3,84,000 to present papers in national and international conference and attending workshop/training programmes.
- 14. Sweet boxes have been distributed for Diwali,Pongal and Christmas festivals. Calenders and Diaries are given for all staff on the last working day of the year.
- 15. Workload concessions for faculty having research projects and consultancy projects
- 16. The non-teaching staff are trained periodically to upgrade their technical skills.
- 17..Gift for the newly married staff.

#### Teaching Staff:

- 1. FDPs are organized periodically to enhance their proficiency and performance.
- 2. Faculties are motivated to do certification courses like NPTEL, Coursera courses, etc
- 3. Faculties are asked to present papers in International conferences, publish articles in reputed journals, do funded projects, develop products, apply for patent, etc.
- 4. Faculties with PG degrees are asked to pursue PhD.
- 5. Well equipped library with foreign and Indian author books, journals, magazines.

6.Performance based faculty awards

#### Faculty Performance Appraisal and Development System (FPADS)

Faculty's performance is appraised yearly once including the odd semester of current academic year (CAY) and the even semester of CAY–1 year. A structured framework is followed in appraising the performance of the faculty members.

The performance appraisal system is detailed as follows:

#### 1.Faculty's self-assessment

- As per the FPADS policy statement, each faculty will self-assess their academic performance in the following aspects: (75 marks):
  - Student's results in Internal and University exams
  - Student's feedback
  - Faculty contribution towards institutional development
  - Faculty's co-curricular activities like organizing/attending FDPs, workshops, conferences, training programmes
  - Certification courses undertaken
  - Acted as External Resource persons
- Research contribution of the faculty is assessed in the following aspects (25 marks):
  - Publications in reputed journals, books, book chapters
    - Doing funded projects
    - Undergoing consultancy works
    - Patent publications
    - Supervising PhD scholars
    - Pursuing PhD
- If the performance of the faculty meeets the taget He / She is recommended for awards/rewarsds.Teaching faculty who have scored less than 75 % in the faculty Performance Appraisal are counselled by Head of the department and principal for their improvement in performance in the next academic year. They will be given suggestion for their improvement.

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

Response: 27.38

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

| 2021-22        | 2020-21             | 2019-20 | 2018-19                          | 2017-18 |  |
|----------------|---------------------|---------|----------------------------------|---------|--|
| 48             | 53                  | 35      | 43                               | 40      |  |
|                |                     |         |                                  |         |  |
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6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

Response: 42.25

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 45      | 38      | 26      | 46      | 49      |

#### 6.3.3.2 Number of non-teaching staff year wise during the last five years

| 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 |
|---------|---------|---------|---------|---------|
| 43      | 42      | 32      | 22      | 22      |

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#### 6.4 Financial Management and Resource Mobilization

6.4.1 Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

#### **Response:**

#### **Mobilization of Funds**

Rohini College of Engineering & Technology is a self-financed private institution. Tuition fee is the main source of income of the institution. Along with tuition fee, research grants from various Government and Non Government agencies and consultancy projects are the additional resources used for the mobilization of funds.

#### **Optimal utilization of resources**

The yearly budget is prepared according to the needs & requirements of the departments taking into consideration of annual intake of students, laboratory & infrastructure developments. Students, faculty & staff requirements and promotions and latest technologies etc., Formal budget estimates will be prepared by each department and will be reviewed in HODs meeting with the Principal. After deliberations formal budget made altered in departments and forwarded to Principal for preparing final budget at college level. The final budget is sent to Management for approval and sanction. The Management is approving almost 100% which was proposed by the institute. Funds are allocated by the Management of the College. Department Heads are intimated of the extent of funds allocated against their budget proposals. Major works like construction, up-gradation of existing infrastructure, procurement and maintenance of common utilities, procurement of furniture etc. are controlled directly by the Pro Chairman. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc. are initiated from the respective departments and the funds are released on a case by case basis from the accounts office of the college on approval by the Management. After final approval of budget the purchasing process is initiated by purchase committee, accordingly the quotations called and purchase orders are placed after final negotiations. All transactions have transparency through bills and vouchers. The bill payments are passed after verification of items. Respective faculty member ensures that whether suitable equipment/machinery with correct specification is purchased. The entire process of the procurement of the material is monitored by the purchase committee and principal. Effective purchase system helps to identify best supplier for both consumables and non consumables at an optimum cost. During the last five years, the budget was utilized to meet expenses such as staff salary, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel etc. Almost 95% of the allocated budget provided by the management has effectively been utilized by the institution.

#### **Financial audits**

#### Internal Audit :

All vouchers are audited by an internal financial committee on half yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers. If any discrepancy is found, the same is brought to the notice of the principal. The same process is being followed for the last five years.

#### **External Audit :**

The accounts of the college are audited by chartered accountant regularly as per the government rules. The auditor ensures that all payments are duly authorized after the audit, the report is sent to the management

for review. Any queries, in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits.

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#### 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. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

#### **Response:**

The Internal Quality Assurance Cell (IQAC) of our Institute has been functioning from 2017 onwards and the main purpose of this Cell is to assure internal quality in all the activities of the institute in terms of academics and administration, thriving for continual improvement. IQAC implement quality benchmark in to every academic activity, mainly, teaching learning process and ensure Outcome Based Education (OBE) for progressive education.

The IQAC is continuously ensuring various quality assurance steps at all levels of the institution functioning as mentioned below.

- 1. Teaching Learning process Outcome Based Education (OBE)
- 2. Development of quality benchmarks/parameters in drawing the quality policies for

Teaching-Learning, Research, Curriculum planning and implementation.

- 1. Internal academic and administrative audits
- 2.Structured feedback mechanism where Feedback are collected from students for Teacher Evaluation
- 3. Provision for collecting feedback on quality-related institutional processes from Internal and external stakeholders
- 4. Conducting Guest Lectures, seminars/workshops, FDPs on quality related themes and promotion of quality circles, encouraging R&D and Consultancy for innovations.

Academic Audit:

Internal Academic Audit is initiated by IQAC to evaluate the functions of various departments in the Institution. IQAC has developed an audit format to assess the academic process with more weightage to **teaching learning process**, extra and co curricular activities, extension activities, Budget formulation and utilisation by heads of departments.

IQAC records the observations and gives recommendations to improve the shortcomings after the thorough analysis of the report submitted by auditors. IQAC also suggest the measures as denoted below and ensure that the improvements are made especially in the specified areas of teaching learning process.

- Faculties incorporate paedogical initiatives for effective teaching of the Outcome Based Education.
- Remedial classes/special classes for slow learners and failure students
- Incorporating additional features like one credit courses by industry experts
- NPTEL Videos/Video lecture and open e-learning resources developed by faculties to facilitate the students to learn the subjects off the class room.

The audit findings from the ISO audit are also taken into consideration after the internal audit and all the concerned HODs are requested to take appropriate corrective or preventive measures.

#### Feedback Mechanism:

IQAC has a structured feedback mechanism on the following aspects such as

- Student, Parent, Teacher and Alumni Feedback on curriculum
- Student Feedback for Faculty Evaluation to ensure the proper teaching-learning and evaluation process.

Feedback about the course handling faculty is obtained through online mode and Questionnaires like knowledge level of the faculty, Use of Teaching aids and Innovative Methods, Effective communication/deliverance of the subject content, fairness in Assessment, Provides assistance and counselling on the subject evaluation etc., are to be answered by students. The average weightage of each question is calculated and the final Teaching Effectiveness Index for each faculty is obtained. Faculties with less than 75% are asked to give explanation and HOD/Principal suggests corrective action. Also, the feedback received from the stakeholders are carefully analysed and suitable actions are initiated at Department and Institute level.

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#### 6.5.2 Quality assurance initiatives of the institution include:

- **1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
- 2. Collaborative quality initiatives with other institution(s)/ membership of international networks
- **3.**Participation in NIRF
- 4. any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc

**Response:** A. All of the above

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#### **Criterion 7 - Institutional Values and Best Practices**

#### 7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

**Response:** 

#### Curricular ,Co-Curricular Activities for Gender Equity & Sensitization

Effective measures are in place in the Institution to promote gender equity.

Yoga for Women is given special focus.

·Fine Arts Programs attract woman students more

Opportunities for women as administrators, such as Managing Directors and HoDs

Girl students encouraged to take part in educational tours, NSS camps, NCC, etc., in good number

**Facilities for Women** 

Hostels:

Well established exclusive hostels for girl students exist in the campus. Behaviour of students is monitored under set of well-defined rule under the guidance of wardens.

Grievances of hostel students are addressed by conducting meetings witht wardens and floor incharges at regular intervals. It is mandatory that women's hostel entry is restricted

**Medical Facilities:** 

Health centre with a qualified doctor and nursing staff is available in the campus to provide medical care to the girls' students.

Gymnasium facility:

A separate gym facility for girls is made available in the campus. Considering the health of girls, they are motivated to make use of gym for progressing the same.

Women's Cell :

Women's Cell is functioning to address women's recreational needs and their thirst for social service.

Safety and Security:

#### Surveillance system:

24/7 surveillance with CCTV cameras installed at important points. Entry of unwanted element is monitored through these cameras at main gate.

#### Kavalan App :

All the girl students are instructed to download the Kavalan – SOS app, a part of the Tamil Nadu State Police Master Control Room initiative, which the people can use to seek police assistance instantly in emergency situations.

#### Security personnel:

RCET has strong team of 24 security personnel a deployed all around the campus to create a secure environment in the campus. A record of visitors to the campus is maintained by security personnel to ensure the unauthorized persons.

Anti-ragging squads involving the teaching staff monitor the students in the hostels.

#### **Gender-specific Counselling Programmes**

#### Counselling:

Our institution has a system of mentoring in the each department for inculcating social, moral and ethical values. An exclusive student counsellor is appointed to solve the issues faced by the students .

Mentor-Mentee system addresses stress, personal problems, homesickness and veer of academic worries ·

A special women grievance cell (Internal Complaint Committee) in place to deal with women related problems

By way of promoting an equitable and inclusive society, special programmes are organized on days like **International Women's Day, World Aids Day, World Disability Day,** etc.

Commemorative days like World Cancer Day, Tuberculosis Day, World Health Day, International Yoga Day, International Day against Drug Abuse and Illicit Trafficking, Fitness Pledge and World Aids day are celebrated to inculcate health consciousness in every student and staff.

As a part of nation building initiative, the Voter's Day is celebrated and a public awareness programme is conducted to ensure 100 % voting.

To imbibe cultural connect and values various festivals are celebrated on the campus. "Samathuva Pongal" is celebrated on the eve of Magara Sankranti.

Students and Staff together celebrate Dussera, Holi, Onam and Christmas in the campus.

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# 7.1.2 The Institution has facilities and initiatives for 1. Alternate sources of energy and energy conservation measures 2. Management of the various types of degradable and nondegradable waste 3. Water conservation 4. Green campus initiatives 5. Disabled-friendly, barrier free environment Response: A. 4 or All of the above File Description Document Upload supporting document View Document

## 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

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

**Response:** A. All of the above

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7.1.4 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic diversity and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

#### **Response:**

Every effort is taken by our college to sustain the spirit of "University with Diversity" on the part of all its stakeholders.

#### **Curricular Activities for Harmony**

Curricular and Co-curricular and Extra-curricular activities are given relevant degree of importance to facilitate students of diverse backgrounds come together, share, care and mingle. The activities include:

Department and Institute level annual programmes like cultural festivals, literary meets, sports events, etc.

Opportunity for socio-cultural interaction during South Zone and All India Sports Meets held in the University Events conducted by the NSS, the NCC and the YRC create opportunities for students across faculty to mingle together and embrace each other transcending caste, religion, region, and language.

Every year NGOs from nearby rural places and self help groups are encouraged to put up their stalls in the college premises during festival times.

The college conducts free medical camps for the benefit of the people living in the nearby villages.

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

The Institution is committed to inculcate values, rights, duties and responsibilities of citizens in the staff and the students. Whenever there was a calamity, the college volunteered itself to donate financial and human resources to mitigate the sufferings of the victims. The staff of the college offered their one-day salary towards Relief Funds when different parts of the country were hit by cyclones or floods. The staff and student volunteers were also encouraged to take part in relief activities with government machineries.

The student volunteers of the Institution take part in rallies to create awareness among the public about the importance of exercising their voting rights. Pledge is taken by the staff and students students on Voters Awareness Day.

The Independence Day and the Republic Day are celebrated by the college. Students are given platforms to stage cultural programmes.

The following are some of the important days observed:

Anti Terrorism Day Pledge

Anti Corruption day

Anti Tobacco day

Kargil Vijay Diwas

Untouchability Oath on the death anniversary of Gandhi National Safety Day

In the wake of Covid-19, when the Government appealed to the nation to download and install Aarogya Setu Mobile App as precautionary measure, the college immediately responded positively.

The Institution conducts a lot of awareness and welfare programmes in the villages around Anjugrammam (organized by the NSS and the YRC units, UBA) and serve the rural community. These programmes not only provide them with an opportunity to acquaint themselves with the public but also to acquire a sense of social responsibility and their indebtedness to the society. Another important agenda of NSS is their tree plantation campaign. Thus the duties and responsibilities of the students towards the society are injected into the young minds.

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#### 7.2 Best Practices

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

**Response:** 

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

**BEST PRACTICE – I** 

#### **1. Title of the Practice:**

#### DIGITAL TRANFORMATION OF TEACHING AND LEARNING

Learning is the key to knowledge and continuous learning is the constant objective of our institution. Our college supports our students in acquiring and updating knowledge and developing skills in par with industrial needs.

#### 2.Objectives

- "Learn anywhere any time" is the primary objective of RCET
- To facilitate the process of continuous learning through video lectures.
- To enhances the learning process of students through digital learning.

#### 3. The Context:

One of the most important benefits of using digital learning is that materials are always available to students-24 hours a day, 7 days a week. This gives student's complete flexibility over when and where they study, enabling them to take control over the best times to study for themselves. RCET decided to reach the students to their home for teaching. Smart Interactive boards are also used for teaching.

#### 4. The practices

- 2223 video lecture's were prepared by the faculties and it is uploaded in the institutional web site.
- Courses syllabus has been split into separate units as needed and video lectures have been prepared.
- Video Lectures have been prepared for value added courses /Certificate courses.

- Those students who weren't able to attend value added courses can view them when possible.
- Apart from course related videos, faculties have prepared videos in aptitude, soft and reasoning skill development.
- With the aid of Smart Interactive Boards educational games/Activities are conducted. Students get easily engaged in the learning process.

#### 5. Evidence of Success

- Teacher's successfully used flipped class room technology as video's were available.
- Improvement in results.
- Students are captivated when taught using smart Interactive Boards.
- We have achieved 100% Admission Enrollment ratio successively for more than five years in undergraduate courses and more than 90% admission in post graduate courses.

#### 6. Problems encountered and Resources required

• Monitoring of students is not feasible when taught by video lecture's.

#### **BEST PRACTICE – II**

## **1.** Title of the Practice: Technical Association of ROHINI College of Engineering and Technology (TARCET)

TARCET sets out a technical platform for the betterment of the institution and Society. It aims to technically strengthen the students by incorporating their skills in the various fields of Engineering & Technology, so as to cope up with the highly competitive environment.

#### 2. Objectives

- TARCET helps students to attend National and International Level Seminars and Conferences.
- TARCET inspires students to take small everyday actions that can add up to a big difference for their technical skill development by developing technical products.
- Through TARCET faculty members train the students of RCET to attend various inter college & intra college technical events.
- Motivate faculty and students to obtain Patents.
- Encourage the students and faculty to carry out funded projects.

#### 3.The Context

The prime objective of the New Education Policy is to "make India a knowledge superpower by equipping its students with the necessary skills and knowledge". The TARCET aims competitions that are organized by other colleges, in which the students are performing exceptionally well. TARCET provides proper

guidance in patent filing and applying for funded projects. Proper trainings are arranged at regular intervals to the teaching faculty and students, to

keep them updated with new skills and knowledge.

#### 4. The practices

- The students are trained for presenting **technical papers & projects**. The students are trained from First year to final year as per the requirement.
- Students are encouraged to attend **technical as well as non-technical events**.
- Students are encouraged to participate in **national & international conferences**
- Students & faculty members are motivated to **publish SCI/ Scopus/ Peer Reviewed journals**
- Students are involved in activities like **group discussion** through which they can share their views in public forum with facts and figures. This improves speaking and listening capacity
- TARCET provides an in-depth understanding of **new product development** practices –including innovation process, idea generation, concept development and optimization.
- TARCET creates an awareness about **IPR** for faculties and students of the Institution.
- TARCET guides the students in undertaking **funded projects**.

#### 5. Evidence of Success

- Many students from various departments have participated & won many prizes and received cash awards in the technical & non-technical events and conferences conducted by various reputed institutions.
- Through TARCET faculty members & students have published their work in peer reviewed journals.
- Students & faculty members are involved in various funded projects including TNSTC.
- Students & faculty members are involved in innovative product development.
- Faculty members filed many patents respective with their discipline.

#### 6. Problems encountered and Resources required

- Difficulty in maintaining proper balance between academic activities & co-curricular activities so that their performance will not be affected in academics.
- Time constraint is a major limitation in implementing training sessions.
- Convincing the students to attend such sessions & participating events outside native is really a challenging task.

| File Description                                      | Document      |
|---|---------------|
| Best practices as hosted on the Institutional website | View Document |
| Any other relevant information                        | View Document |

#### 7.3 Institutional Distinctiveness

**7.3.1** Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

**Response:** 

**Response:** 

## SOCIAL RESPONSIBILITY TOWARDS COMMUNITY DEVELOPMENT AND NATION BUILDING

Rohini college of Engineering and Technology (RCET) was started in the year 2012 by Shri.K.Neela Marthandan, a great Industrialist and philanthropist and now managing by his son Dr.N.NeelaVishnu. The main feature of the college comprises world class infrastructure with experienced and talented faculties, excellent pass percentage, good placement records and society-oriented products/projects developed by the students.

RCET provides quality education with minimum fess structure. RCET undertakes all steps to ensure that scholarship sanctioned by Central and state government are enjoyed by the students. In addition to this RCET provides empowerment to students by providing scholarship for economically backward and meritorious students. Tuition fee waiver schemes has been provided to economically backward students. It helps in empowering their academic and career goals by removing the financial barrier. Rohini Merit Scholarship has been given to students who have scored more than 80% in Higher Secondary Examination.

RCET has also been keen is committed in rendering services for the development of the society. Numerous social welfare programs have been undertaken by the institution. RCET has now grown into an educational foundation promoting the values, professionalism, social sensitivity and dynamic entrepreneurship. Numerous Carrier guidance and skill development programs have been conducted at various schools which serves as an eye opener for the students. More than 1000 students have benefited by this programs. Computer training certificate programmes have also been conducted for neighborhood school students and rural youth by our faculties to empower them in IT field. RCET has also conducted many training sessions in basic engineering practices as an effort to curb employability in rural youths.

By collaborating with ISRO "SPACE EXPO" was being conducted to foster scientific mindset among the younger generation. Science Exhibition was being conducted in association with Kanyakumari District Administration which acted as a platform for the students to foster their scientific knowledge and bring the best invention from their brains.

RCET has adopted five village panchayat namely Agastheeswaram, Thovalai, Mylaudy,Kanyakumari, and Marungoor .. The majority of the population of these districts depends on agriculture and aquaculture

(Fishing) for their livelihoods. The College has played a significant role in improving the overall socioeconomic condition of the region through its educational service, The institution addressed this issue that poses a particular challenge to the backbone occupations of the region, namely Farming and Fishing. Kitchen waste based Biogas plant was installed at "valar meetpu poonga" of the Mylaudy Panchayath. RCET organized "Waste to wealth" programme and training was given to produce NPK rich bio Manure in Marungoor village in association with UBA. Around 50 farmers were benefitted by this program. We have conducted medical camp and eye screening camp at Agastheeswaram village. We also conducted training program to the unemployed youth how to repair electric home appliances. Around 75 youth participated and benefitted. In marungoor village we have demonstrated trouble shooting of computer's and it's applications.44 women had participated. In Kanyakumari we have developed and demonstrated solar powered fish drying machine. 51 fishermen attended and benefitted. Yoga practice session was conducted at Agatheeswam.

RECT has conducted ecofriendly health progarmmes. Students involved in community development activities in the villages, visit to social welfare center, cleaning drives and distributing free meals to the needy people. The spirit of mutual work, discipline, social responsibility towards community and development and nation building is inculated through NSS, NCC.

| File Description                             | Document      |
|--|---------------|
| Appropriate web in the Institutional website | View Document |
| Any other relevant information               | View Document |

### 5. CONCLUSION

#### **Additional Information :**

**Rohini college of Engineering and Technology (RCET)** persistently fosters a deferential and unbiased campus culture, where students are fortified to involve in various activities to explore different paths for knowledge and individualism.

- An ISO 9001:2015 Certified institution
- Received "Outstanding Leadership Award" and 'Best Transformation Institution'
- Institutional Scholarship for students securing best marks in the HSC examination every year
- SPECTRA Technical I Fest is conducted every year to celebrate the innovation and creativity of the students.
- Sponsored projects worth 31.75 lakhs from Government Agencies
- The institute has a Good Governance Document
- TCS iON test centre for conduction of GATE, NEET (PG), JEE, IBCS, CUCET and other online Examinations
- The institute has a local chapter for NPTEL
- Active Professional Chapters and Students Clubs across all departments
- College owns mass transport system to transit almost 90% of our staff and students
- Student from different states like Kerala, Manipur opt our institute for UG programs witnessing the fundamental principles of National Education Policy(NEP)i. e respect for diversity
- Startup TN -RCET circle Launch pad received from Tirunelveli District collector.

The institute had distinguished Guests and eminent personalities for the various programs hosted like Convocation, college day,Conferences and Science Expos.

*Sreedhara Panicker Somanath, Director of Vikram Sarabhai Space Centre* – "I compliment Rohini college of Engineering and Technology for joining hands with ISRO and AeSI in organising the conference, which is commendable and inspiration to young minds".

*Kailasavadivoo Sivan, Former Chairman ISRO,-* "I Congratulate almost 1350 graduates for all their future endeavours and I also appreciate the Management for serving the students from rural background".

*Dr. C. Sylendra Babu, Director General of Police* – "It is extraordinary and appreciable that Rohini College of engineering and Technology able to accomplish good infrastructure in a short span of 10 Years".

*Dr.A Kaliyamurthy,Former Superintendent of Police* – "I am really happy to see such a highly disciplined group of students ever in Rohini College of engineering and Technology"

*Dr.Balagurusamy,Former Vice Chancelloor Anna University-* "I am happy to note that Rohini College of engineering and Technology is the best Engineering college in Southern district"

#### **Concluding Remarks :**

- Rohini college of Engineering and Technology (RCET) was started in the year 2012 by Shri.K.Neela Marthandan, a great Industrialist and philanthropist.
- Outcome Based Education (OBE) implemented since 2017, facilitate more emphasis on the development of cognitive skills and learning outcomes.
- Faculties are given freedom to design their own pedagogical approaches for teaching within the approved framework, one of the salient feature of National Education Policy(NEP).
- The Institute facilitates the placement training activities with the help of industry experts and corporate trainers to prepare the students industry-ready, apart from providing placement training right from First year in the regular schedule for the Distinctive Syllabus framed.
- Institutional Magazine Rohini Beats covers all events, activities and achievements
- All the departments have set up Product Development Centre to inculcate research practices in the student community.
- One of the programmes of RCET is B.Tech Agriculture. A farm has been developed by applying the principles of precision farming to a variety of crops to come out with standards, specifications and package of practices with the support of experts from ViveKananda Kendra.The polyhouse farming is also being practiced.The whole campus has landscaping with green grass, ornamental and medicinal plants, and shady trees making the campus very green and beautiful
- There has been constant and continual progress during the last five years. A detailed analysis of the criteria are given in the Self Study Report of the Institution are uploaded in the NAAC website. RCET has aligned itself with the National Education Policy in providing multidisciplinary education to its students for a lifelong learning and a successful career.