



# **SELF STUDY REPORT**

**FOR**

**2<sup>nd</sup> CYCLE OF ACCREDITATION**

**RAJARAJESWARI COLLEGE OF ENGINEERING**

NO 14, RAMOHALLI CROSS, KUMBALGODU, MYSORE ROAD, BENGALURU  
560074

[www.rrce.org](http://www.rrce.org)

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**(Draft)**

# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

RajaRajeswari College of Engineering (RRCE) was established by Moogambigai Charitable and Education Trust (MCET), Bengaluru in the year 2006. Moogambigai Charitable and Educational Trust (Regd.) was founded by the Chairman Dr. A. C. Shanmugam, B.A. LLB, FIMSA, FRCPS (Glasgow, UK) former M.P, and MLA, in order to provide quality professional education at an affordable cost to deserving students irrespective of their caste creed or religion. RajaRajeswari College of Engineering visualizes the motto of our Chairman “The students should be job providers, not job seekers”. The trust established 7 Institutions of excellence at Bengaluru and RajaRajeswari College of Engineering is one among them. The Trust is managing RajaRajeswari Medical College & Hospital, ACS College of Engineering, RajaRajeswari College of Nursing, RajaRajeswari Dental College and Hospital, RajaRajeswari College of Physiotherapy, and RajaRajeswari Institute of Allied Health Science.

RajaRajeswari College of Engineering, a Self-financing institution is approved by All India Council for Technical Education (AICTE), New Delhi, and is affiliated to Visvesvaraya Technological University (VTU), Belagavi and the Government of Karnataka. RajaRajeswari College of Engineering is accredited by the National Board of Accreditation (NBA) for the Undergraduate programmes of Electronics & Communication Engineering (ECE), Electrical & Electronics Engineering (EEE), Computer Science & Engineering (CSE) & Mechanical Engineering (ME). RajaRajeswari College of Engineering is accredited by National Assessment and Accreditation Council (NAAC) with an ‘A Grade’ & also secured International Accreditation from HLAET International Texas. RajaRajeswari College of Engineering is ranked 32rd in All India level and 8th rank in South India by silicon India for the year 2021. The institution offers UG courses in Civil Engineering, ISE, AI&ML and Robotics & Automation along with PG courses MBA, MCA & M. Tech. The institution also has 9 research centers approved by Visvesvaraya Technological University and currently 53 research scholars pursuing their Ph.D’s in this research centres. Within a short span, RRCE has set appreciable progress with the state-of-art institutions and is considered as one of the most rapid-developing Engineering Colleges in the state of Karnataka.

The students train on the career perspective problem solving ability and adaptability skills for the contemporary domain expertise for the holistic development of the student.

### **Vision**

To provide an open opportunity to young generation for evolving their core competencies helping them to build their career as Global professionals to be an Autonomous Institution by achieving excellence in the field of higher education.

### **Mission**

To consistently strive for Academic Excellence to become a leading Institution in the field of Engineering, Management and Research to produce competent and ethically sound manpower for the benefit of Industry,

Society, Nation and the Global Environment.

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

### Institutional Strength

- RRCE is accredited by National Assessment and Accreditation Council (NAAC) 'A' Grade.
- VTU accorded permanent affiliation status for four Undergraduate programmes B.E. – Mechanical Engineering, Computer Science and Engineering, Electrical & Electronics Engineering and Electronics & Communication Engineering.
- Four Undergraduate programmes B.E. - Mechanical Engineering, Computer Science and Engineering, Electrical & Electronics Engineering and Electronics & Communication Engineering are accredited by the National Board of Accreditation (NBA) (2 cycles consequently).
- Visvesvaraya Technological University has recognized our institution as Research Centre in the Department of Civil Engineering, Computer Science and Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering, Mechanical Engineering, Master of Business Administration, Physics, Chemistry and Mathematics.
- RRCE has signed MoU with Indian Society for Education Research and Technology (ISERT) which bridges the gap between the academic curriculum of the University and current industry practices. ISERT provides a unique digital capacity building platform to connect RRCE students with industry mentors for up-skilling them based on current industrial trends and technologies by organizing webinars, hands on sessions, Internships and projects certify them which add value to their e-profile. Industries look into the e-profile database of RRCE students in the ISERT digital platform and conduct interviews and recruit RRCE students in their Human Resource team based on the skillset requirements.
- The institution is in a pretty, central, and well-placed Bangalore - Mysore highway. The location has great accessibility via both road and metro lines. Students and staff benefit from a college bus transport run by the institution from various parts of the city.
- The institution boasts dedicated and well-qualified faculty and staff members who are very knowledgeable.
- Five Centres of Excellence, namely Intel FICE Lab, IoT, Altair Hyper Works, TOYOTA Lab and WSN lab.
- Grant-in-Aid from All India Council for Technical Education for MODROB scheme to set up Center for Research on:
  - Automated Machining and Robotics and IOT.
- Institution Innovation Council (RRIIC) and RajaRajeswari Business Incubator (RRBI) are established by MoE.
- A well-equipped cafeteria serves students and faculty members.
- The institution's has active placement cell, which is giving continuous training to all the students to fetch placements in various companies.

### Institutional Weakness

- The scope for curriculum enrichments and enlargements are difficult to achieve as statutory authorities like the All India Council for Technical Education (AICTE) and Visvesvaraya Technological University (VTU) govern the progress.
- Limited access to research grants being a self-financed institution.

- Delimit chance to attract the students being an affiliated institution with the rising number of private universities.

### **Institutional Opportunity**

- Proposal under progress to seek autonomous status for the institution to impart innovative and flexible curriculum to cope up with the fast changing technology developments.
- Harnessing technology the Alumni and the Industry by associating with partners.
- Improving the ranking of the institution at the National level / International level.
- Initiation of establishing the Centre of excellence in association with Industry in all departments.
- To do quality Research & Development (R&D) work, Peer reviewed publications, funded projects, product developments, patents, and start-ups.

### **Institutional Challenge**

- With the rapid advancement in technology, the institution would adopt the latest technology infrastructure.
- Inspire students to progress a deeper intellect of thinking and nurture in them a sense of integrity and social concern.
- To facilitates faculty & support staff to update their knowledge & skills to match the global industrial and technological developments.
- Setup an effective forum for connecting with the Alumni with a provision for their professional development and mentoring of current students.
- Encourage research aptitude amongst students and cultivate a thought process inclined for innovation.
- Improve research productivity of the faculty members.
- Exploit the market for consultancy opportunities with the industry and research organizations for revenue generation.
- Leverage from the Collaborative initiatives with Centers of Excellence.

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

The Institution is affiliated to Visvesvaraya Technological University (VTU), Belagavi, Karnataka and follows the curriculum designed by the University. The senior faculty members of the institution participated in the curriculum design by attending curriculum revision workshops/ meetings and attending the Board of Studies meetings to contribute their inputs in designing the curriculum aspects of various engineering programmes offered by the University. The institution makes consistent efforts to supplement the University curriculum by administering certificate courses through NPTEL, workshops, seminars, field study, and collaborations / MoU's with industry to bridge the gap between curriculum, and encouraging the faculty and students to participate in various activities organized by the technical bodies like IEEE, CSI, IETE, ASM, ICI IEI, and ISTE to enrich and gain the cutting edge technologies in their specializations. The institution stimulates the faculty to impart the curriculum through innovative teaching methods, power points presentations, simulations, videos, assignments, tutorial discussions, face-to-face interactions with industry experts, Guest lectures, workshops, seminars, training programs for students by inviting resources persons from internal and external

experts, field study and e-Learning apart from the traditional method of teaching.

Choice Based Credit System (CBCS) has been implemented in all the programs, which enable flexibility to opt the subjects to the students to achieve the academic expertise, excellent curricular and co-curricular opportunities, employability, and entrepreneurial skills through teaching-learning methods. Open elective course are available for students of all programmes, which enables the students to learn the multi-disciplinary courses in their study and its advantages for the students to enhance the career opportunity. The Postgraduate programs are designed with advanced core and elective courses along with an emphasis on laboratory and research work. The implementation and monitoring processes for the curriculum have been devised and documented.

The Departmental faculty emphasis student-centric methods to provide experiential and participative learning experience through projects, internships, laboratory experiments to get specializes and placement. The institute frequently performs a formal assessment of the learning curriculum and teaching methods. The results of feedback will be used to help find ways to improve further.

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

The important parameter in Outcome Based Education (OBE) is Teaching-Learning Process. The institution faculty are well qualified, competent, and enact in achieving excellence in teaching and learning. The institution follows centralized admissions of the Government of Karnataka, which is merit-based and through management too. The institution adheres to the rules and regulations of the student's admissions as per AICTE, VTU and the Government of Karnataka.

The institute imparts technical education to the student, which plays an important role in human resource development of our country by creating trained, skilled manpower to improve the industrial productivity and improving the quality of life. The institution drives proficiency assessments and provides support for slow learners by conducting bridge classes, remedial classes, guiding the student for self-study. Advanced learners are encouraged to participate in various co-curricular activities and secure ranks in the University examinations. The student's performances are evaluated through the seminar, project presentation, viva voce in the laboratory during the end semester University exams. In addition, the students have submitted projects sponsored by various state government funding agencies. The student-faculty ratio is maintained to facilitate student-centric learning environment. The class rooms, seminar halls and auditorium are equipped with modern devices like LCD projectors and other ICT tools to make the teaching learning process more interactive, effective and innovative for delivering the content by the faculty. Institute practices student-centered learning methods such as peer learning and participatory learning with traditional teaching. Faculty evaluation of syllabus completion is been monitored regularly.

The academic understanding and performance of each student are assessed through the continuous process by internal tests at the institutional level and external university examinations. Course outcomes (CO) - Programme outcome (PO) attainment is calculated on each semester basis. Internal test question papers include Bloom's taxonomy to flag CO levels. Learning is assessed on three different domains, such as cognitive, psychomotor, and affective domains. A student feedback system for faculty members leads to improvement in the continuous learning process.

To enhance the knowledge of the course, students are encouraged to participate in the classes via experiential learning, inclusive leadership, and problem-solving methods.

## Research, Innovations and Extension

The Research centres of the institution affiliated by the Visvesvaraya Technological University (VTU) engage faculty, learning resources towards supporting students, preparing, training and encouraging them to participate in R&D activities. The management of the institution encourages the faculty to submit research proposals and conduct research for which a Dean (R&D) has been appointed to facilitate the research and extension activities efficiently and plays a vital component of academic activity. Nine departments of the institution have been approved as research centers by the VTU and currently 53 research scholars pursuing their Ph.D's. The institution obtained various grants from VGST, AICTE- FDP, MODROB etc. to enhance research and innovations.

The core activities include organizing various types of activities, such as FDPs, workshops, conferences, inviting eminent scientists and professors to the campus to speak and interact with students and faculty, conferences, fellowship programmes.

RRCE encourages the students to participate and submit the project proposals to various funding agencies such as KSCST, VTU, which supports and promotes the students to do innovative projects. So far, this programme has utilized the tremendous talent and potential of the students and the rich experience of engineering faculty for tackling the real-life problems of people. The faculty of the institution receives the research grants from VGST regularly.

The RRCE possesses an active NSS unit & established a RRCE NCC Naval Unit from 13th August 2021 with approved strength of 20 cadets. RRCE provided the base for conducting Annual Training Camp 2021 (ATC) which included drill, firing, weapon training, sports, cultural, rigging and seamanship, boat work, anchor work, semaphore, the camp was for 10 days, parade training, etc. The institution aims to organize activities like blood donation camps, International Yoga Day, Women's Day etc. Staff and students are voluntarily participating in the blood donation camp, Swatch Bharath and other charity projects/events. The Departments encourage students to develop their leadership skills by having clubs and professional societies wherein the students are participating to showcase put on events that get the students to show their leadership ability.

## Infrastructure and Learning Resources

RRCE campus is spread across 5 acres of lush green campus, excellent atmosphere and environment for the delivery of quality education. The institution adheres to the norms stipulated in the Approval Hand Book of All India Council for Technical Education as on the prevailing date. The Institute has modern infrastructure, learning resources including ICT-enabled classrooms with adequate and well-equipped, laboratory space, conference rooms, seminar halls, lecture halls, and workshops. The institution has provided necessary infrastructural facilities to the physically disabled students to cater their needs.

In the laboratories and workshops, state-of-the-art equipment and machinery, hardware, and softwares are available. More than 935 computers have LAN and Internet connections. The institution has substantial infrastructure for sports and other extracurricular activities. All administrative offices of the Institution are computerized, and the offices have LAN and the entire campus is equipped with Wi-Fi connectivity. RRCE maintains an adequate student computer ratio with over 150 MBPS bandwidth internet connection.

The central and departmental library has an adequate number of books of all disciplines, national and

international journals, manuscripts, special reports, collection of rare books and a large number of e-journals and e-books. Learning Resources like e-Journals, e-books, Shodhganga, databases like Scopus, Web of science are available to faculty and students to access and download reputable academic articles and journals. The central library of the institution has a seating capacity of over 388 students in the library's reading hall and reprographic facilities. The institution updates the facilities periodically in accordance with the growth and change facilities (computers, software, electronic equipment, machines etc.).

The institution encourages the student to participate in sports and games to improve their overall development. The institution has a sports field to facilitate various games and sports, as well as a gym for the students to exercise.

The institution campuses are taken appropriate measures to keep people safe, secure, and clean. Gender-segregated hostel facilities are provided.

The budget for infrastructure, library and other learning resources is earmarked annually based on the recommendations of respective committees constituted for the purpose.

### **Student Support and Progression**

Our Institution has signed MoU with Indian Society for Education Research and Technology (ISERT), which bridges the gap between the academic and current industry practices. ISERT provides a unique digital platform to connect RRCE students with industry mentors for up-skilling them based on current industrial trends by organizing various programmes and certify them, which add value to their e-profile. Industries look into the student's e-profile in the digital platform, conduct interviews, and recruit RRCE students.

The institution has a well-structured student support system for coordination with the various scholarship agencies that provide scholarships to the socio-economically weak students. The management offers fee concessions to the socially weaker section and meritorious students to enable them to pursue the education at our institution. The institution organizes special academic / remedial sessions for the weak students, industrial training to the students for understanding the current trends in the industry, and career counseling by eminent personalities from academics and industry. The institute organizes annual sports events every year to bring out the sportsman spirit amongst students. Students are encouraged to participate in the inter-collegiate cultural meet organized by the University.

The institution provides personality development workshops, guest lectures, pre-placement training, etc., to the students regarding future career options. During this pandemic period also, our institution conducted more number of webinars to keep the students intact with their academic work as well as career opportunities.

The institution collaborates with industries for mutual association and employment opportunities to the students. The institution adopts transparent and institutional committees are framed to address the student grievances. An effective mentoring system is in practice to build a one-to-one relationship & confidence among students for personal, academic, and overall growth of students.

Students participate in a wide variety of sports, games and cultural activities, including athletics, art etc. The Placement & Training cell gives a valuable opportunity and guidance for the students to integrate relevant, practical work with academic study.

The Institute's alumni association frequently host events to support and contribute to the various technical conferences and symposia. The Alumni are invited frequently to interact with students to understand the trends in the industries / corporates.

### **Governance, Leadership and Management**

The MCET Management has a very high level of commitment for the institution's vision and mission. The Management always takes initiative to invite eminent resource persons to make the teaching-learning processes more effective and efficient. The Management and the Head of the institution strongly believe in the delegation of work and responsibilities, therefore, various committees are formed where the Incharge of the respective committee in turn designs, delegates and communicates their major responsibilities to its team members. On task completion, the in-charge reports to the Head of the institution.

The Principal convenes regular meetings with the HoDs and ensures that adequate information is communicated to employees & at the same time informed to the Management about the progress.

The Principal, Deans, HODs can be approached by the students and staff for issues that involve immediate attention and given top priority to redress it. Grievance redressal cells are duly formed for students and parents. A well-established online feedback mechanism is in place. Regular academic audit (both internal and external) are conducted at the end of each semester.

The institution is governed in an e-governance model through an ERP, which provides a smooth flow of information between the administration, accounts, examination, staff, and students to enhance the speed and quality of internal functioning. The institution adheres to the procedure and policy guidelines as envisaged in AICTE for recruiting the regular faculty. The Service manual of the institution summarizes the human resources policies and practices which the Institution's Governing Council approves. The Institution shall provide the medical concession in our sister concern like medical and dental hospitals for the benefit and welfare of the staff and students. The institution shall organize various sponsored and management sponsored FDP's, seminars, workshops, etc. to provide the development of faculty, staff, and students. The staff is permitted on duty leaves for attending and participating in orientation, refresher courses, conferences, seminars, workshops, etc. Additionally, the institution has an IQAC cell that creates and reviews quality initiatives. The students get involved with each other, for the annual festival called Kalasourabha, which encourages students to take on leadership roles.

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

The institution has taken effective measures to create a safe environment for students and faculty members. The institution maintains and encourages gender equity in the faculty are required to be at least 33% female, but over half of faculty are women, so the regulations have been exceeded. Women are honored by days like Mother's Day, which shows our reverence for their individuality. To keep the working environment is much more harmony the institution has various committees such as sexual harassment committee, discipline committee, anti-ragging committee etc. The institution has well defined strategy development plan for the efficient functioning to attain the vision.

The other best practices adopted are a well-functioning mentoring system. This institutional practice is to build one-to-one relationship with student for personal, academic and overall growth of student. Mentor in



connection with mentee helps to increase knowledge and build skills in student for future goals and milestones.

The college has lots of lush greenery and flowering plants that add to the serene atmosphere and help to provide fresh air for students. A plastic-free zone (PFZ) known as Swatch RRCE (RajaRajeswari College of Engineering) has been introduced. Color-coded trash has been implemented to categorize wet and dry waste. The country is suffering a major water crisis. RRCE has a variety of initiatives dedicated to preserving and saving water. In the organization, rainwater harvesting is in place. Rainwater harvesting has saved money on water and water saved from it is used in the garden. Other college efforts, including encouraging students to not travel to and from campus on their own, are carried out to benefit the environment. To encourage students and teachers to utilize bikes, carpooling, and bike pooling, the institution has issued a series of brochures. This would help pollution in general. There is an effort underway to make paperless necessary in the workplace. In order to reach students and faculty with vital communications, the College relies on SMS messaging. In order to instill national and moral values in students, they are being trained in ethics, morality, and human value.

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	RAJARAJESWARI COLLEGE OF ENGINEERING
Address	No 14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru
City	BANGALORE
State	Karnataka
Pin	560074
Website	<a href="http://www.rrce.org">www.rrce.org</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Dr.t. Chandrashekar	080-28437124	9900028023	080-28437373	principal@rrce.org
IQAC / CIQA coordinator	Dr. Karthikeyan M	080-28437375	9790005223	080-28437376	mkarthikeyan1968@gmail.com

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

**Establishment Details**

Date of establishment of the college

22-08-2006

**University to which the college is affiliated/ or which governs the college (if it is a constituent college)**

**State****University name****Document**

Karnataka

Visvesvaraya Technological University

[View Document](#)**Details of UGC recognition****Under Section****Date****View Document**

2f of UGC

13-12-2017

[View Document](#)

12B of UGC

**Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)****Statutory Regulatory Authority****Recognition/Approval details Institution/Department programme****Day,Month and year(dd-mm-yyyy)****Validity in months****Remarks**

AICTE

[View Document](#)

02-07-2021

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Extension of Approval Annually

**Details of autonomy**

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

No

**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 in Acres	Built up Area in sq.mts.
Main campus area	No 14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru	Urban	5.06	30942

## 2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Computer Science And Engineering	48	PUC PCMB PCMC	English	180	155
UG	BE,Electronics And Communication Engineering	48	PUC PCMB PCMC	English	120	57
UG	BE,Mechanical Engineering	48	PUC PCMB PCMC	English	60	3
UG	BE,Electrical And Electronics Engineering	48	PUC PCMB PCMC	English	60	11
UG	BE,Civil Engineering	48	PUC PCMB PCMC	English	120	22
UG	BE,Information Science And Engineering	48	PUC PCMB PCMC	English	60	46
UG	BE,Robotics And Automation	48	PUC PCMB PCMC	English	60	0
UG	BE,Artificial Intelligence And Machine Learning	48	PUC PCMB PCMC	English	60	34
PG	MBA,Mba	24	BBM B COM BSC BA	English	60	25
PG	MCA,Mca Pg	24	BSC BCA BCOM CS	English	60	60
PG	Mtech,Mtech Computer	24	BE CSE ISE	English	9	0

	Science And Engineering					
Doctoral (Ph.D)	PhD or DPhil,Phd Computer Science And Engineering	48	MTECH CSE ISE	English	19	5
Doctoral (Ph.D)	PhD or DPhil,Phd Electronics And Commu nication Engineering	48	MTECH ECE	English	27	1
Doctoral (Ph.D)	PhD or DPhil,Phd Mechanical Engineering	48	MTECH ME CHANICAL	English	25	2
Doctoral (Ph.D)	PhD or DPhil,Phd Electrical And Electronics Engineering	48	MTECH EEE	English	6	0
Doctoral (Ph.D)	PhD or DPhil,Phd Civil Engineering	48	MTECH CIVIL	English	6	1
Doctoral (Ph.D)	PhD or DPhil,Phd Mba	48	MBA	English	8	0
Doctoral (Ph.D)	PhD or DPhil,Phd Physics	48	MSC Physics	English	4	0
Doctoral (Ph.D)	PhD or DPhil,Phd Mathematics	48	MSC MATHS	English	19	1
Doctoral (Ph.D)	PhD or DPhil,Phd Chemistry	48	MSC Chemistry	English	10	0

#### Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	20				31				141			
Recruited	19	1	0	20	22	9	0	31	75	66	0	141
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				50
Recruited	26	24	0	50
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				68
Recruited	9	59	0	68
Yet to Recruit				0

### Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD	0	0	0	0	0	0	0	0	0	0
Ph.D.	19	1	0	19	9	0	0	0	0	48
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	3	0	0	75	66	0	144



Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD	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

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD	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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1091	118	0	0	1209
	Female	887	24	0	0	911
	Others	0	0	0	0	0
PG	Male	70	2	0	0	72
	Female	89	2	0	0	91
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	4	0	0	0	4
	Female	6	0	0	0	6
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	24	21	21	38
	Female	12	22	4	16
	Others	0	0	0	0
ST	Male	4	3	3	10
	Female	3	6	2	2
	Others	0	0	0	0
OBC	Male	63	73	90	70
	Female	50	60	57	68
	Others	0	0	0	0
General	Male	220	232	402	405
	Female	156	155	167	168
	Others	0	0	0	0
Others	Male	27	26	25	22
	Female	16	14	21	19
	Others	0	0	0	0
Total		575	612	792	818

### Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	<p>RajaRajeswari College of Engineering, a Self-financing College, affiliated with Visvesvaraya Technological University (VTU) is proud to distinguish as an academic teaching institution and delivers a quality interdisciplinary &amp; multidisciplinary engineering education in accordance with the curriculum framework by the VTU. Through this, the institution will imbibe VTU curriculum integration of essential subjects, skills and capacities, conceptual understanding, and emphasize integrative learning, critical thinking, creative problem solving, life skills to the students. VTU has introduced many changes in the curriculum structure, teaching-learning process, assessment procedures to</p>
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	<p>stay relevant and minimize the gap between Institution – Industry. VTU to fulfill the Multidisciplinary Aspiration of NEP 2020, along with Open Electives and Professional Electives, few courses on Arts, Law, Political Science, Geography, Music, Yoga, NSS, Physical Education, Sports, Finance, Banking, and Kannada literature are included as Ability Enhancement Courses (AEC). The Management of the institution in accordance with the AICTE, VTU, and Government of Karnataka embraces the transformation in a continuous way and hence adopts the transformation to respond to new challenges to ensure better outcomes. The institution is well equipped of integrating the study of various academic disciplines suited to their life-long interests. The faculty in the institution has the ability and enhances their knowledge to teach inter and multi-disciplinary subjects to the students. The institution has adequate facilities for the students to prepare for graduate and professional study, for careers in new and emerging fields, and also high competency levels and confidence. The institution will focus on multi-disciplinary ‘cross-learning’ for finding out the connection between different subjects.</p>
2. Academic bank of credits (ABC):	<p>The institution is proposing to drive for the autonomous status where the institution can register with the Academic bank of credits. The Institution is already in the process of encouraging the students to take up SWAYAM / MOOCs offered by premier institutions of the country to enhance their technical skills. The Institution will adopt these relevant online courses to appropriate programmes to enhance the student’s skill competence and prepare for the eligibility to have the benefit of Academic Bank of credits in accordance with the VTU.</p>
3. Skill development:	<p>In view of the fast-changing technological developments, the students, faculty, and staff of the institution need reskilling. The institution believes that the skills like creative/critical thinking, problem-solving ability etc. are going to be the challenges of future years. Newly emerging this year are skills in self-management such as active learning, resilience, stress tolerance management, and flexibility. The institution tries to reskill/upskill the individuals in unprecedented numbers, deploy precision safety nets, and to create bespoke maps that orient the students</p>

	<p>towards the jobs of tomorrow where they will be able to thrive. The institution has numerous functional MOU's with various companies, professional bodies, and organizations to develop the skills to fill the gaps between the industry and academia. The institution promotes the student and the faculty to learn a new skill set in an increasingly accessible through digital technologies.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>The institution encourages the students and faculty to learn the online courses offered by premier institutions of the country to enhance their skills. The institution shall adopt the NEP 2020, which envisions an educational system fashioned on the lines of India's profuse linguistic, cultural, and artistic heritage. The promotion of Indian arts and culture is seen as very important and it could be effectively imparted through integrating Indian culture into the main curriculum, which would not only develop a strong sense of identity and aesthetic outlook but also enhance creative and cognitive skills among the students. As the institution adheres to the framework of the VTU curriculum, the Indian Knowledge system is integrated with the curriculum as a mandatory credit course such as Samskrutika Kannada / Balake Kannada (3rd /4th Semester), Constitution of India, Professional Ethics (4th / 3rd semester), Universal Human Values-II and A credit courses on NCC (5th and 6th semesters as elective courses).</p>
<p>5. Focus on Outcome based education (OBE):</p>	<p>VTU Regulations governing the UG and PG Degrees are under the Outcome-Based Education and Choice Based Credit System (CBCS). The institution strictly follows the guidelines and regulations of the VTU in the curriculum. The institution adheres to the National Board of Accreditation norms to prepare the outcome-based education in PEO's, PSO's and course outcomes. The institution aims to follow the outcomes-based education as to: 1. Help formulate graduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes that are expected to be demonstrated by the holder of a qualification; 2. Enable prospective students, parents, employers and others to understand the nature and level of learning outcomes (knowledge, skills, attitudes and values) or attributes a graduate of a programme should be capable of demonstrating on successful completion of the</p>

	<p>programme of study; 3. Maintain national standards and international comparability of learning outcomes and academic standards to ensure global competitiveness, and to facilitate student/graduate mobility; and 4. Provide higher education institutions with an important point of reference for designing teaching-learning strategies, assessing student learning levels, and periodic review of programmes and academic standards.</p>
6. Distance education/online education:	<p>The Institution in strive to start the online education programme and to accomplish the eligibility criteria of University Grant Commission (Open and Distance Learning ) Regulations, 2017 and University grants commission ( Online Courses or Programmes) Regulations 2018. The institution in strive to start the online education programme and to accomplish the eligibility criteria of University Grants Commission (Open and Distance Learning) Regulations, 2017 and University Grants Commission (Online Courses or Programmes) Regulations, 2018. The institution proposed plans for online education in the near future shall penetrate in the following form: 1. To offer skill-oriented programmes 2. To offer an online academic programme as approved by the UGC/Distance Education Council 3. Education programme customized or generic programmes in emerging knowledge's to enhance the skills/knowledge 4. The Learning and Development Centres of the corporates offer general/specific technology-driven online programs for the students as a part of reskilling strategies. 5. To adopt the online courses of world-class universities as a credit course to the students to understand the new knowledge in emerging areas. 6. Employability skills offered to the students to make them ready for employment.</p>

## Extended Profile

### 1 Program

#### 1.1

Number of courses offered by the Institution across all programs during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
430	476	468	492	484
File Description		Document		
Institutional data prescribed format		<a href="#">View Document</a>		

#### 1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
10	10	13	14	14

### 2 Students

#### 2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
2283	2352	2420	2447	2225
File Description		Document		
Institutional data in prescribed format		<a href="#">View Document</a>		

#### 2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
178	197	223	236	223

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 2.3

### Number of outgoing / final year students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
625	571	447	452	367
File Description	Document			
Institutional data in prescribed format	<a href="#">View Document</a>			

## 3 Teachers

### 3.1

#### Number of full time teachers year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
192	179	179	188	166
File Description	Document			
Institutional data in prescribed format	<a href="#">View Document</a>			

### 3.2

#### Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
192	179	179	188	166
File Description	Document			
Institutional data in prescribed format	<a href="#">View Document</a>			

## 4 Institution

### 4.1

#### Total number of classrooms and seminar halls



**Response: 62**

## 4.2

**Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)**

2020-21	2019-20	2018-19	2017-18	2016-17
667	1150	950	952	1135

## 4.3

**Number of Computers**

**Response: 935**

## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

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

##### Response:

RajaRajeswari College of Engineering is affiliated to Visvesvaraya Technological University (VTU). The University will specify the regulations, curriculum, syllabus and also communicate to the institution by sending the action plan for every academic semester through the “Calendar of Events (COE)”. The Institution will take effective measures to implement, execute, and deliver the academics to the students. The Principal with due discussions with the Head of Departments (HOD’s) will prepare the college “COE” for all programmes of the particular semester through the Academic Calendar. The academic calendar consists of the class commencement date, last instruction date, dates for conduction of the internal assessments, workshops, seminars, industrial visits, cultural, sports, Class committee meetings, dept review meetings, mentor meetings etc., and any other planned events. The faculty members of the respective departments prepare academic plans such as Time tables, Lesson plans, student databases, laboratory manuals, course files, etc. for the specific semester of the academic year. Faculties are encouraged to plan to impart the curriculum following OBE (Outcome Based Education) through innovative teaching methods such as blackboard teaching, presentations, assignments, expert lectures, discussions, workshops, seminars, quizzes, industrial visits apart from regular lecture sessions and the same is taken for prior from their HOD and Principal. In addition to this each course is expected to achieve the course outcomes ( COs) and map with the programme outcomes (POs) as specified by the accreditation agencies. Allocation of the subjects to the faculty is carried out by considering the faculty subject specialization, experience, and willingness. The progress of syllabus coverage is monitored periodically at various levels. Regular student mentoring is carried out by the faculties and grievances if any, suitable remedial measures are taken as and when necessary. Identification of below-average students and motivating them towards excellence in their academic performance by taking remedial classes. The institution conducts an academic audit of attendance registers, internal exams, question papers, and evaluation processes. Periodical feedback is obtained from the students on aspects of the teaching-learning process. The parent-teacher meetings are held to review the student's progress and discussion on the performance of the student. Course files are prepared in detail by faculty which includes: vision, the mission of the institution, calendar of events, student list, individual timetable to perform predefined academic activities, syllabus copy with textbooks and reference books, lesson plan, attendance registers, course outcomes, lecture notes, question papers of internal tests with scheme and solutions, assignments, previous year question papers, copies of PPTs slides if any. Industrial visits are arranged for the students to make them familiar with the industry process and current technological developments.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

**1.1.2 The institution adheres to the academic calendar including for the conduct of CIE****Response:**

RajaRajeswari College of Engineering is affiliated to VTU, and thus follows the examination pattern of the University. Institute initially prepares the annual academic calendar before the commencement of the academic year and then it is circulated to all departments. The Academic calendar includes the working days for the institution, holidays, internal assessments dates, class committee meeting dates, sports day, cultural day, last instruction day of the institution. The Department's academic calendar consists of the details of the schedule of workshops, seminars, technical talks, industrial visits, etc, and submits to the Principal for approval. The institution had taken the following special initiatives for effective curriculum delivery and beyond the same.

- **Academic calendar:** Well-planned academic calendar with necessary instructions is prepared and given to all the departments before the commencement of the semester of every academic year with all norms, assessment schemes, and the same is displayed in all the notice boards for the student's information.
- **Class and Timetable:** Each department's timetable coordinator prepares the timetable as per the norms of the university to the required credit in consultation with the HOD. The timetable is released and displayed well in advance of the starting of the semester of every academic year.
- **Course files and lesson plan:** HOD ensures that a detailed lesson plan, course files are prepared by the faculty for the subject allotted to them well in advance. The attendance registers and course files are maintained for each subject by the faculty members and the Principal, HOD regularly inspects them to ensure effective course delivery to the students
- **Continuous Internal Assessment:** Continuous internal assessments are conducted once in 30 working days to monitor the progress of the students in academics continuously. Three internal assessment examinations are conducted for each semester of the academic year. Two sets of internal assessment question papers are prepared, carried out by the concerned course handling faculty members by preparing the scheme of evaluation. This complete process of internal performance evaluation is used by faculties to identify slow and advanced learners in their respective subjects. Special attention to the slow learners is provided by conducting extra coaching classes for their subject. The advanced learners are engaged in career development activities and provide input to the competitive examinations. Mentoring sessions were found to be very useful to overcome personal issues, academic, non-academic problems.

**Academic monitoring:** The institution ensures that class notes, question banks, lab manuals, model question papers are available for all the courses. In addition to the regular subject classes, the college organizes special lectures, workshops, seminars by inviting experts from various fields to share their knowledge and experiences with the students. The institution also organizes and conducts personality development programs for students such as symposiums, conferences, project exhibitions and helps the students to get an internship, implant training, industry-sponsored projects. Tutorial classes, Bridge courses are conducted for the required subject. The academic progress of the students and grievances if any, are addressed and remedial measures are taken whenever necessary.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

**1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years**

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
4. Assessment /evaluation process of the affiliating University

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

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

## 1.2 Academic Flexibility

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

**Response:** 100

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

**Response:** 10

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

**1.2.2 Number of Add on /Certificate programs offered during the last five years****Response:** 92**1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.**

2020-21	2019-20	2018-19	2017-18	2016-17
26	27	16	13	10

File Description	Document
List of Add on /Certificate programs	<a href="#">View Document</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

**1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years****Response:** 55.6**1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
1314	1434	1132	1637	1019

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**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:**

University has introduced a compulsory subject in " constitution of India and Professional Ethics for III / iv Semester students".

The institution established various committees such as the Internal Complaints Committee (ICC), Redressal Grievance Committee, SC/ST/OBC committee, Anti-ragging committee, and Discipline Committee to provide gender equality ethics, moral/human values to the students.

Various programmes are organized in the areas of gender equality, sustainability, Universal human values (UHV) ethics, and other related topics. Faculties involve the students in a variety of activities including expert lectures, National Service Schemes, and the Youth Red Cross program. Environmental Science is a mandatory subject for all students enrolled in the Bachelor of Engineering programme. Environmental issues are discussed in depth in the classroom as part of a regular course. There are chapters on topics such as the scope and nature of environmental science, natural resources, the eco-system, biodiversity, pollution, and social and population issues included in the above-mentioned subject matter. Unless and until students pass this course, their final grades are not released. The contemporary issue of environmental consciousness has been comprehensively handled by the institution, and sustainable development is given a great deal of attention in the curriculum. The students are must be aware of and adhere to human values as well as professional ethics in their respective fields of study. Various Departments of the institution organize talks on Human Values, with a particular emphasis on Gender Equality, Women's empowerment, and Skill development, for the benefit of the students. The N.S.S cell organizes a special camp for them. Students are also involved in value-added programmes to educate them on their obligations as well as the professional ethics of their field.

The institution celebrates various commemorative days such as republic day, independence day and women's day, teachers day, engineers day, international yoga day, etc. These celebrations raise the moral, ethical, and social values of the students.

The grievance redressal cell of the institution takes care of counseling to the students, helps gender equity, Stress management, Social Challenges among the students, and also deals with related issues of safety and security of female staff and students. Closed Circuit Television (CCTV) is installed in all the locations of the institution to monitor the student's activities and ensure their safety.

We have proud to state that, there is not even a single incident of ragging or complaints from students regarding any kind of harassment.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

**Response: 72.12**

**1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
365	374	337	332	279

File Description	Document
Programme / Curriculum/ Syllabus of the courses	<a href="#">View Document</a>
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	<a href="#">View Document</a>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<a href="#">View Document</a>

**1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)**

**Response: 89.49**

**1.3.3.1 Number of students undertaking project work/field work / internships**

**Response: 2043**

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 1.4 Feedback System

**1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni**

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

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

#### 1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1.Feedback collected, analysed and action taken and feedback available on website
- 2.Feedback collected, analysed and action has been taken
- 3.Feedback collected and analysed
- 4.Feedback collected
5. Feedback not collected

**Response:** A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	<a href="#">View Document</a>
URL for feedback report	<a href="#">View Document</a>



## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1 Average Enrolment percentage (Average of last five years)

**Response:** 67.57

##### 2.1.1.1 Number of students admitted year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
413	575	612	792	818

##### 2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
789	876	990	1050	990

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy ) during the last five years ( exclusive of supernumerary seats)

**Response:** 81.34

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

2020-21	2019-20	2018-19	2017-18	2016-17
139	156	185	177	204

File Description	Document
Average percentage of seats filled against seats reserved	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 2.2 Catering to Student Diversity

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

#### Response:

The institution adopts and implements a well-designed counseling / mentoring system to evaluate and assess the learning capabilities of students. The learning levels of the students are studied and analyzed through the induction/orientation program conducted by the institution during the fresher's day. The institution analysis the learning skills of the students from the data of academic performance in PUC / XII exams, entrance examinations marks. Their learning and acquiring skills are further evaluated in their performance in Internal Assessment Tests, end semester examinations. The students are monitored during their academic journey in the institute special efforts are taken to enhance the performance of slow learners and students with good academic skills are mentored to achieve higher goals. Students are continuously encouraged, guided to achieve challenging goals.

The institution follows the specific attributes to assess the learning levels of the students

**Bridge and remedial classes:** The students who secured below 50 % marks in the continuous internal assessment (CIA) examinations are considered slow learners and schedule, conduct remedial classes, tutorials, tests, regular mentoring to improve their academic performance. In addition, special attention in coaching for bridge courses like mathematics is given to the diploma students who join through lateral entry in the second-year undergraduate program.

**Classes for Arrear Students:** The faculty identifies the Arrear students after the results obtained from University based on performance. The mentors motivate the students to perform better. The concerned faculty members enhance the arrear students' academic performance by providing added classes.

**Activities for Advance learners:** The advanced learners are provided with additional references of journals, advanced study materials and encouraged to make presentations, participate in international/national conferences/seminars/workshops/seminars/ intercollegiate competitions. Advanced learners are fortified to enroll in MOOC Courses – Swayam, course era, etc. Encourage to pursue internships in reputed industry/ institutions. The faculty members initiate to depute the students to participate in research initiatives. This encourages out-of-the-box thinking while also providing training in the planning and execution of experiments and fieldwork, as well as in the analysis of findings and the publication of results. The students are given exposure in getting funds from various organizations like Vision Group on Science and Technology (VGST) / Karnataka State Council for Science and Technology (KSCST) projects and guiding to obtain Patent. The institution gives leadership tasks to the students in departmental and social activities to develop their organizational skills, ability to drive in their decision making with mind and matrices, and encourage participation in intra or inter-competitions. Special guidance to set high aims for their future and are motivated to prepare for higher education and various competitive examinations, to complete SWAYAM courses.

**Activities for slow learners:** Slow learners are found based on their performances in continuous internal assessment(CIA) examinations, assignments/tutorials, and the end semester examinations conducted by the university. Remedial classes, mock tests, practical tutorial sessions, one-to-one counseling through mentor

meetings, personal attention in teaching, providing theory question bank, and solving previous year university question papers are adopted to improve their academic performances.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Past link for additional Information	<a href="#">View Document</a>

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

**Response:** 12:1

File Description	Document
Any additional information	<a href="#">View Document</a>

## 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

**Response:**

The institution adopts various ways to enhance the classroom learning experience to the student by way of providing blended traditional teaching along with ICT-enabled classes.

Experimental learning, participative learning, and problem-solving methodologies are embraced to support the students to nurture their practical intelligence and skill competence.

**Experiential Learning:** The institute arranges industrial visits which enable the students to enhance their knowledge of practical aspects of their studies. The institution facilitates the students to take up Internships in industries on emerging trends to gain practical experience. Students develop skills through hands-on training by industrial experts, seminars, technical talks, guest lectures, workshops by industry experts / renowned academicians. Seminars and expert talks are conducted to support the students in bridging the gap between academics and industry. Students are taught to present a seminar on a specific topic to demonstrate their expertise in the presentation abilities. Conferences and other activities are conducted by the departments to help students for augmenting their learning skills, leadership skills and improve their subject knowledge. These efforts would improve the challenge of the student's critical thinking, analytical thinking, and design capabilities. The students are also trained on virtual labs and modern simulation tools. The industry visits/site visits/ survey camps, guest lectures are conducted regularly to improve their learning skills. Students are encouraged to do mini projects & competitions are conducted to augment students' conceptual/experiential learning.

**Participative learning:** Students participate in various events in co-curricular and extracurricular activities to improve their technical skills, managerial skills, sharing of knowledge by group discussions through

participative learning. Project-based learning is adopted for the self-study components from their lower semester onwards. Students are motivated to participate in various associations, professional society activities organized by the departments. Industry-Institute-Interaction programme which enables the students to participate, share their technical knowledge, analytical skills, and problem-solving skills. Collaborative efforts with the industry personnel for enhancing the learning levels of the graduates. Conduction of annual technical symposium, an exhibition of projects of UG/PG students which provides the students to presentation skills. Students are encouraged to take MOOCs (Massive Open Online Courses) offered by leading institutions of the country which include online lectures, demonstrations, and interaction through web sessions. Participative learning through laboratory classes, workshops are conducted in a group under the guidance and supervision of the faculty members. Various extracurricular activities like NSS, NCC, Youth Red Cross, Swatchh Bharath, health awareness camps, commemorative day events, sports are organized to facilitate the student to participate and involve.

**Problem-solving methodology:** The department conducts tutorial classes for the students to engage them in problem-solving methodology. Technical quizzes, assignments at the end of each module of the courses make the students acquire and develop critical thinking, learn problem-solving strategies. Apart from these, the following methodologies are adopted

1. Case Study Analysis and Discussion.
2. Product Design and development.
3. Mini projects
4. End semester project works
5. Debates
6. Group discussions
7. Technical presentations

All academic activities are designed to raise the students' knowledge, interpersonal and technical skills and build confidence in them.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Link for additional information	<a href="#">View Document</a>

### 2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

#### Response:

The traditional chalk and talk method of teaching-learning are conducted regularly. However, the institution included innovation in a teaching-learning process to make it more attractive & interesting for the students. The institution includes the ICT tools for carrying out the illustrations, demonstration-based ways of learning, special lectures, field study, case-studies presentations, project reviews, experimental methods, flipped classroom sessions, etc. Faculty members are using various ICT tools and techniques in the Teaching/Learning methodologies to deliver the contents/knowledge, which has facilitated the students to grasp the concepts quickly and increase their active participation during the class. Faculty members are

attending various faculty development programs & training program at collaborated industries for domain knowledge and for new trends in education technology/ pedagogy, which make their teaching more innovative. The faculties at our institution use the following ICT Tools:

1. Microsoft Teams for sharing subject notes, assignments, handling online classes
2. Open courseware assignment
3. Microsoft Teams for conduction of MCQ Test.
4. PPT presentation
5. Video prepared by Faculty members
6. ICT-based teaching Learning (Moodle, etc.)
7. Google classroom for sharing notes
8. VTU E-shikshana program
9. Google classroom for conduction of test
10. Google classroom for sharing videos
11. Google classroom for sharing question bank
12. Digital social learning platforms (Whatsapp, Blogs, etc.)

ICT tools allow faculties to have wider choices of resources, facilitate the teaching-learning processes such as planning, executing, and evaluating students' academic activities, as well as other tasks. Technologies can be used to participate in collaborative learning events, co-planning, and other activities which help students feel close to peers. Multimedia projectors have been installed in almost all classrooms and the Wi-Fi network has been activated in the classrooms. The progress of the students is monitored pertaining to their tutorial classes, internal assessments, assignments, and other aspects of the students' education facilitated by ICT tools. Students are taught about the concepts with PowerPoint presentations that include animations, videos, and visualizations of the subject contents.

ICT facilitated Teaching-Learning Process is also carried out in regular laboratory practical sessions, access to the digital library, online courses like MOOCs, SWAYAM, etc., online journals, online tests. Utilization of LCD projectors for seminars, workshops, conferences, presenting educational videos, and ease of use of non-print lecture material for students of different courses.

Lesson contents are delivered by using ICT tools in the classroom provides the student with a clearer understanding and strengthening of the subject concepts and problem-solving methods. ICT tools that are used in the institution are supplementing traditional teaching-learning methods to all the faculty members of the institution. The institute is offered various ICT tools to the faculty members and guided them to implement innovative methods for enriching the learning experience. The institution has utilized high-speed internet access and computer resources in the departments and the library to enhance the learning skills of the faculties and students. The faculty are trained for the efficient use of tools through the initiative taken by the institute.

The presentations skills, communication skills, placement, and training facility are enriched with ICT tools to strengthen the students to attain more proficiency in listening, speaking, reading, and writing skills.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<a href="#">View Document</a>

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

**Response:** 19:1

#### 2.3.3.1 Number of mentors

Response: 121

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	<a href="#">View Document</a>
mentor/mentee ratio	<a href="#">View Document</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	<a href="#">View Document</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 2.4.2 Average percentage of full time teachers with 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:** 20.14

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

2020-21	2019-20	2018-19	2017-18	2016-17
48	47	37	28	23

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 5.39

##### 2.4.3.1 Total experience of full-time teachers

Response: 1034

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

**Response:**

The institution is affiliated with Visvesvaraya Technological University (VTU) and conforms to the norms stipulated in the Continuous Internal Assessment examinations (CIE) evaluation procedure of VTU as on the prevailing date. The norms and regulations governing the evaluation process are conveyed to the students through copies of the syllabus that are delivered to them at the beginning of the first year of their degree course in which they are enrolled. The calendar of events including the Internal Assessment test schedule is prepared by the faculties, HoDs & approved by the Principal in advance, and communicated to the students at the commencement of the semester.

- 1.Students are informed about the internal assessment process by their faculty and through the first-year orientation programme.
- 2.Students and faculty will be notified of the changes if any in the evaluation procedure by VTU.
- 3.In ahead of the internal review, the students will be provided with an outline of the portions

coverage, question paper pattern relevant to their regulations. Questions are asked based on course content and approved by department heads, schemes and solutions are prepared by faculty before the assessment and the same is used for evaluation.

4. Evaluation of internal assessment blue books is based on scheme and solution prepared by the faculty and are given to students at the end of an assessment to verify their marks.

**Internal assessment for the theoretical subjects is evaluated by:**

1. Three Internal Assessments
2. Assignments, Quiz and Case studies as per VTU regulations.

**Internal assessment for the practical subjects is evaluated by:**

1. Every experimental execution is evaluated, Model Practical exams

**Internal assessment for the Project, seminars, and internship is evaluated by:**

1. Student's presentations and its report, models.

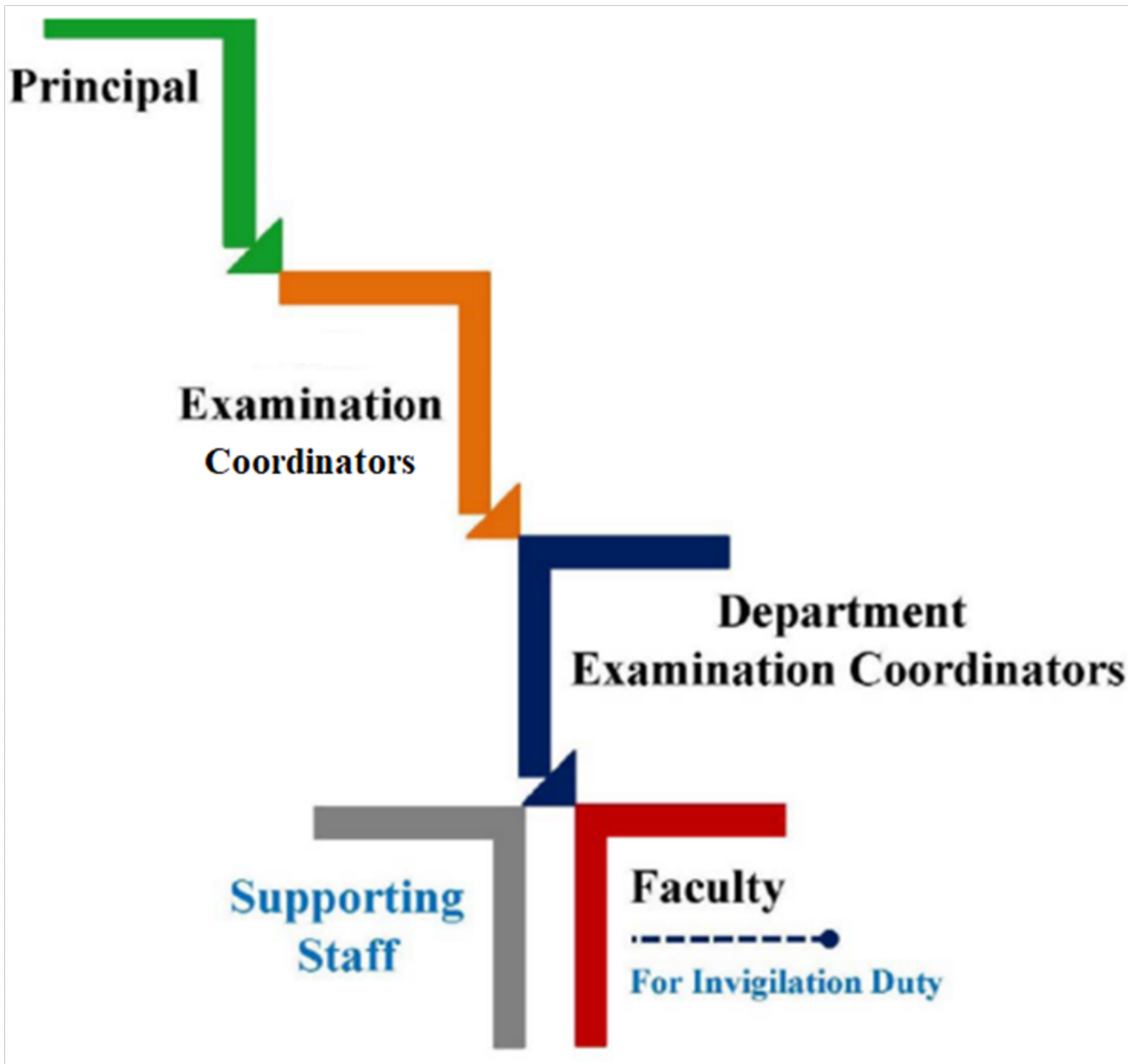
The institution publishes the Rules and Regulations for all Programmes as per university norms for the evaluation of Continuous Internal Assessment examinations. In addition to academic rules and regulations, the regulations governing examination, evaluation, malpractice etc., are in place.

**CIE Evaluation:** The faculty plans the evaluation pattern along with the appropriate assessment tools and is made known to all the students at the beginning of the semester with rubrics and assessment frameworks. The concerned subject faculty will set two question papers and subsequently get verified and approved by the HOD. Among the 2 sets of question papers, one question paper is selected to conduct the internal assessment. The examination and seating arrangements will be organized in a centralized mode. After the examination, the answer scripts are evaluated by the faculty, as per the scheme and solution, and marks will be announced & also displayed in the college ERP, for the students to check online. For any clarifications, the student can approach the concerned faculty and recheck the answer scripts.

**SEE Evaluation:** University will assign the question paper setting to the concerned faculties for the semester End University exams. The Board of Examiners [BOE] of the University scrutinizes the question papers and finalizes the same. The SEE answer scripts will be evaluated in the digitalization by the VTU. The faculty assigned by the VTU evaluates the answer scripts as per the scheme and solutions.

**Practical Exams:** University will appoint external and internal examiners to conduct the practical exams as per the schedule given by the respective departments.





Structure of the Examination Section for Internal Assessment

Test

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for additional information	<a href="#">View Document</a>

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

Response:

The institution follows strictly the guidelines and rules issued by the affiliating university while conducting internals and semester-end examinations. The following mechanisms for redressing the grievances of the students pertaining to evaluation at the institution and University level:

#### **Institution Level Grievance Redressal:**

##### **Departmental Level:**

1. At the department level, to ensure transparency in conducting the internal assessments a centralized examination committee, comprising of a senior faculty as convener and other teachings, non-teaching staff as members, and invigilators are assigned.
2. The faculty members will evaluate the blue books and randomly verified by the HOD to ensure the standard of the evaluation process to maintain transparency in evaluating.
3. If students have any doubts, clarification about the evaluation, they need to meet the concerned subject faculty and get clarified their doubts.
4. If any grievance is raised by a student, then it is reported to the Head of the Department, and it will be solved after discussion with concerned faculty.
5. The concerned faculty discusses the evaluation scheme and model answers with the students and helps them to solve their queries.
6. If the grievance is not addressable at the department level then the matter is forwarded to the Principal for further action.
7. The internal assessment review meeting will be conducted by the HOD of the respective departments. This enhances the transparency and rapport between faculty members and students.

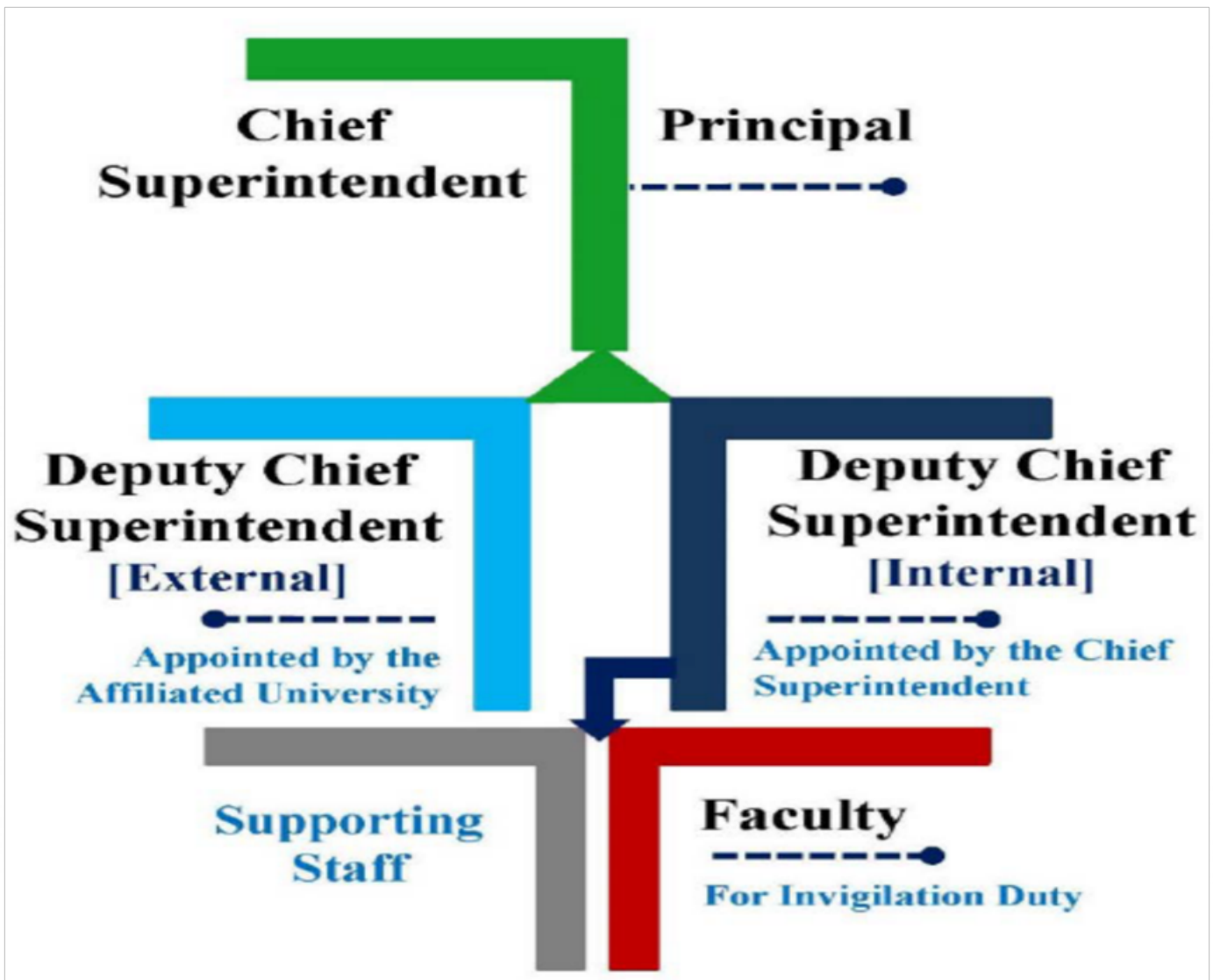
##### **Institution level:**

1. The Institution appoints a senior faculty as Internal Deputy Superintendent and the University appoints external deputy chief superintendent for smooth conduction of external examination of the University.
2. Any grievances relating to university question paper like out of syllabus, repeated questions, the improper split up of marks, missing data, the wrong question during semester exams are addressed to the principal, after making an analysis of university question papers by the course handling faculties with Head of the Department, in turn, the same is forwarded to the university immediately for suitable actions.
3. After resolving the grievances by the University it is intimated immediately to the concerned departments through the principal and communicated to the students through class coordinators and subject handling faculties.

##### **University level:**

1. The queries related to results, corrections in mark sheets, other certificates issued by the university are handled at the VTU examination section after forwarding such queries through the Principal.
2. If a student has, any grievances related to the evaluation of university answer scripts are intimated to the course handling faculty and head of the department if necessary.
3. The revaluation is applied for answer scripts, during which the re-evaluated marks are obtained during the announcement of revaluation results of the same semester.

4. In view of any discrepancy in the evaluation and the result, the students can apply for a photocopy of their answer script, and they could choose for re-valuation/re-totaling as per the VTU notification.
5. The VTU will facilitate “disclosure of answer scripts” to the students who have applied for the photocopy of their answer scripts. The answer scripts will be sent to through the student registered mail id.



Structure of the Examination Section for Semester End

Examination

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for additional information	<a href="#">View Document</a>

## 2.6 Student Performance and Learning Outcomes

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

**Response:**

Programme Outcomes (POs) are defined for every course of the respective departments in accordance with the National Board of Accreditation (NBA), New Delhi, and are the statements that describe the competencies gained by the student throughout the course. The Programme Specific Outcomes (PSO's) are well defined in aligned with the vision and mission of the institution and in accordance with the department graduate attributes. The Course Outcomes (COs) for each subject are well defined in the syllabus of the affiliated university or it will be defined by the respective faculty members in consultation with the HOD or Senior faculty members who have handled/handling the same subjects through brainstorming sessions. Every CO is aligned to one or more POs, and is measured at the end of the course, through various assessments, designed specifically to effectively measure the CO and contribute to the PO that it is mapped to.

The number of COs for a course is not fixed and may have about four or five CO's. Few courses may have as few as three COs, while courses like project work may have as high as six CO's. While defining the COs, faculty will ensure that they are not an abridged version of the course content and use Bloom's taxonomy for defining every CO, its attempt to specifically address one or more POs through the course content and its assessments. However, the strength of the mapping is dependent on the course experts, and this component necessitates the need to have the CO-PO mapping together with its strength.

The POs, PEOs, and PSOs are published in the institutional website and presented in all the prime locations such as HOD cabins, corridors, classrooms, laboratories, departmental notice boards, etc, and the same is communicated to students, faculty members, and staff. CO's of the respective course are indicated in internal assessment question papers.

**Syllabus:** All courses of the curriculum have well-defined COs in the affiliated university syllabus. The hard copy of the syllabus is made available to every student.

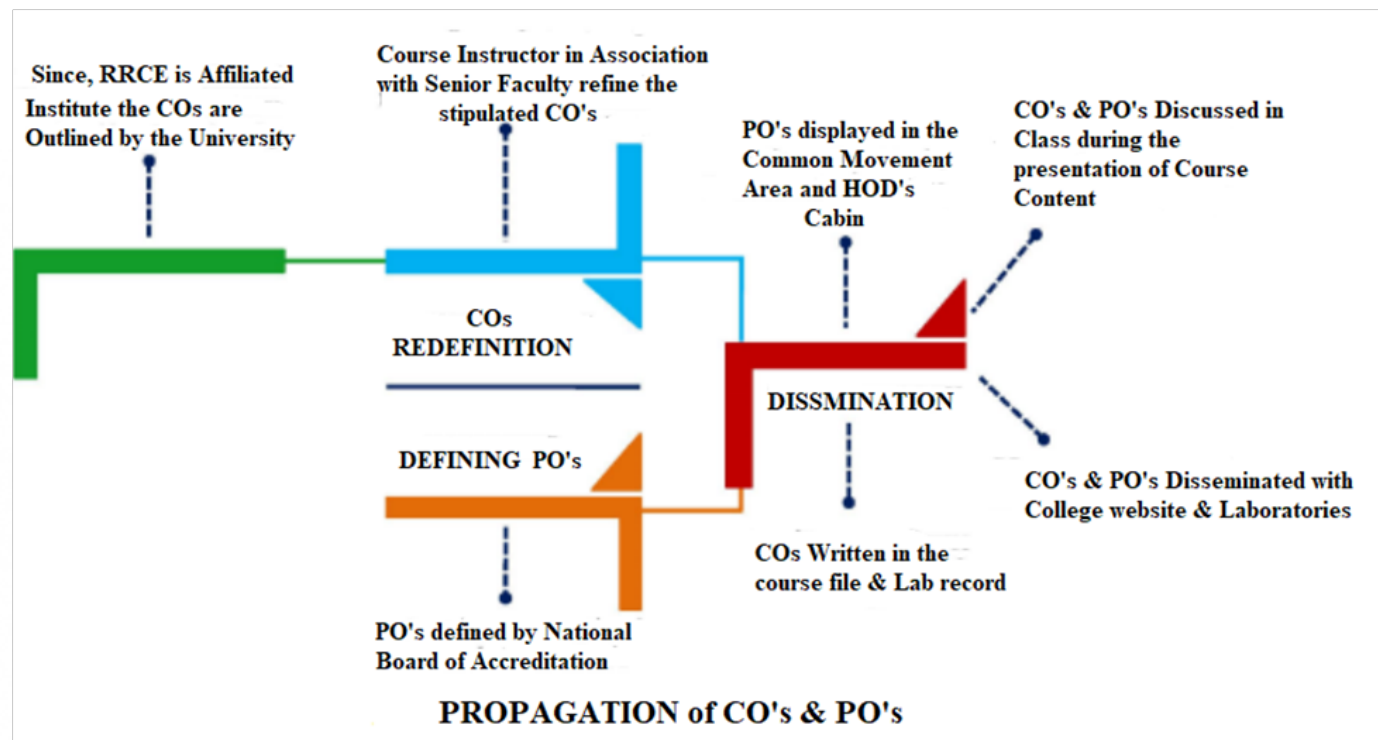
**Website:** The syllabus of all programs offered by the institution is uploaded on the institutional website which includes the COs of various courses of the curriculum.

**Course handout:** Vision-Mission, PO's, PEOs, & PSOs of the various programmes offered by the institution along with COs of the courses of the curriculum are included in the course handouts of every program.

**Library:** Central library facility of the institution keeps all the PEOs, PSOs, POs, and COs of all programmes for easy access to students and faculty members through the syllabus books of various programs.

**Lab Manual:** All POs, PEOs, PSOs, and COs of specific lab courses are displayed in Laboratories, websites and lab manuals for the benefit of the students and the faculties at the beginning of every semester.

**Course Files:** Course files are prepared by the faculty members for every semester consisting of POs, PEOs, PSOs, COs and lesson plan, notes, PPTs, handouts, previous year university question papers, internal assessment question papers, assignment questions etc.



File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Past link for Additional information	<a href="#">View Document</a>

### 2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

**Response:**

**COs attainment:**

The following procedure is adopted to measure the attainment of COs with respect to POs and PSOs:

**Step 1:** The course outcomes (COs) are made available in the syllabus prescribed by the University. Course experts may also describe COs depending on their expertise. The weightage for each CO depending upon its relevance to the subject of the course are prepared and attainment is carried out by considering Continuous Internal Evaluation (CIE) assessment marks, assignment marks, and course exit survey (Direct assessment, weightage given up to 80 % ) and Semester End Examination (SEE) marks (Indirect assessment, weightage given upto 20 % ) by a proper evaluating technique.

**Step 2:** An average of three Continuous Internal Evaluation (CIE) marks along with evaluated marks for assignments are considered for direct assessment of COs.

**Step 3:** Course Exit Surveys (CES) are developed by the faculty in accordance with the COs. The course exit surveys are taken at the end of each course before the commencement of the Semester End Examination (SEE) of the university by allocating five points rate scale. It is also considered a direct assessment tool.

**Step 4:** The attained COs are then mapped with POs which have been given weightage depending upon the respective COs. Weightage for the mapping of COs with POs is given in the rating scale of 3= Good, 2= Average, and 1= Poor.

**Step 5:** The attained COs are also mapped with PSOs which have been given weightage depending upon the respective COs. ( Weightage is given in the rating scale of 3= Good, 2= Average, and 1= Poor). The graphs are plotted with respect to CO and PO, CO and PSO.

**Step 6:** The assessment and attainment process framed with COs which are in turn mapped with the POs and PSOs are used for the Assignments, and Laboratory works.

**Step 7:** Qualitative analysis is carried out on the attainment of the COs for a course by the course expert after the COs are computed with POs/PSOs. The observations, action taken / to be taken, and recommendations are reported by the course expert as part of the CO/PO/PSO analysis. By this analysis, the expert would analyze and help to bridge the gap and if required to incorporate content beyond the syllabus. This analysis includes finding the weak areas towards the attainment of POs/PSOs and a detailed plan of action of various events which help in the further attainment of the POs/PSOs.

**Step 8:** If the attained values of the assessment of COs with respect to POs and PSOs are below satisfactory level 3 then the course subject teacher/expert has to reframe the teaching process by including ICT tools, tutorial / special classes that will enhance the attainment. If the COs are attained with satisfactory level 3 then the teaching methods used by the subject teachers are meeting the requirements of the attainment for the specific course. The final attainment of the individual course will be evaluated by the HoDs.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for Additional information	<a href="#">View Document</a>

### 2.6.3 Average pass percentage of Students during last five years

**Response:** 94.86

#### 2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
605	551	413	424	348

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

2020-21	2019-20	2018-19	2017-18	2016-17
625	571	447	452	367

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste link for the annual report	<a href="#">View Document</a>

## 2.7 Student Satisfaction Survey

### 2.7.1 Online student satisfaction survey regarding teaching learning process

#### Response:

File Description	Document
Upload database of all currently enrolled students (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>

## 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, Chairs in the institution during the last five years (INR in Lakhs)**

**Response:** 55.75

**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)**

2020-21	2019-20	2018-19	2017-18	2016-17
30.3	7.575	14.01	1.66	2.205

File Description	Document
List of endowments / projects with details of grants	<a href="#">View Document</a>
e-copies of the grant award letters for sponsored research projects / endowments	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)**

**Response:** 13.54

**3.1.2.1 Number of teachers recognized as research guides**

**Response:** 26

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years**

**Response:** 49.18

**3.1.3.1 Number of departments having Research projects funded by government and non-government agencies during the last five years**



2020-21	2019-20	2018-19	2017-18	2016-17
7	7	6	5	5

### 3.1.3.2 Number of departments offering academic programmes

2020-21	2019-20	2018-19	2017-18	2016-17
10	10	13	14	14

File Description	Document
Supporting document from Funding Agency	<a href="#">View Document</a>
List of research projects and funding details	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Paste link to funding agency website	<a href="#">View Document</a>

## 3.2 Innovation Ecosystem

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

#### Response:

The Institution has created an ecosystem for innovations and has established the RajaRajeswari Institution Innovation Council (RRIIC-IC201912297) under the guidance of the All India Council for Technical Education (AICTE) and it is approved by the Ministry of Education (MoE), Government of India. The objective of the RRIIC is to motivate, guide, support, and train the young budding engineering graduates and their ideas to transform into prototype models. RajaRajeswari Institution Innovation Council (RRIIC) is a unique initiative innovation cell to elevate young professionals by exposing them to new ideas and processes resulting in innovative, entrepreneurial activities and a startup ecosystem in the institution. Through this council, initiatives are taken to transform the skill sets, knowledge to the faculty members and students by conducting various events related to intellectual property, entrepreneurship programmes, start-up workshops, competitions etc.,

The various functions of RRIIC

- To organize various talent acquisition events
- To organize workshops / interaction with entrepreneurs / seminars.
- To conduct various innovation and entrepreneurship-related lectures.
- Success stories of entrepreneurs.

- To encourage the students to participate in project competitions.

The institution has initiated an incubation center under the name RajaRajeswari Business Incubator (RRBI) through which various programmes have been conducted to help the students for startups. The institution provides workspaces, mentorship, training, a guide to attract investment, and management support to the interested stakeholders for the successful establishment of startups.

Further, RajaRajeswari College of Engineering has a well-established and active Research and Development Centre, with members drawn from different departments. The Centre encourages students and faculty members to make a common beneficial and practical situation with standards of industry-institution collaborations. Research Events such as organizing International and National Conferences, Workshops, Faculty Development Programs, Guest Lectures, Seminars for faculty members and students to interact on research and innovation.

An Entrepreneurship Development Cell and Incubation Centre was established for the benefit of faculty members and students. RRCE signed MOU with Pongu Ventures to envision creation and promote innovation in the institution through countless modes leading to an innovation promotion eco-system in the campus. The purpose is to develop their innovative skills and the Centre organizes training programs, seminars, and interactive sessions with successful entrepreneurs, innovative ideas competition to promote specialized knowledge in the fields of Information Technology. The Entrepreneurship Development Cell and Incubation Centre conducted presentations, competitions, and student activity programs, wherein students present their Ideas and Start-Up Ideas which have the potential to be converted into viable ventures. Our faculty members have published patents related to the research carried out in various departments. The Institution has well-equipped laboratories to provide to the needs of students and encourage them towards research and developmental activities. The Research and Development Centre carry out review meeting to ensure that faculty members submit research proposals to various government organizations (like AICTE, DST, and VGST), and other funding agencies for getting sponsored projects. The institution provides opportunities for the students and faculty to enhance the research exposure through field visits, industrial training, internships, projects, industry lecture series, seminars, MoUs.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### **3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years**

**Response:** 97

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

2020-21	2019-20	2018-19	2017-18	2016-17
27	18	20	16	16

File Description	Document
Report of the event	<a href="#">View Document</a>
List of workshops/seminars during last 5 years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.3 Research Publications and Awards

#### 3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 1.64

##### 3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

Response: 46

##### 3.3.1.2 Number of teachers recognized as guides during the last five years

Response: 28

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
URL to the research page on HEI website	<a href="#">View Document</a>

#### 3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 2.57

##### 3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
155	89	96	44	80

File Description	Document
List of research papers by title, author, department, name and year of publication	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.3.3 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:** 1.48

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

2020-21	2019-20	2018-19	2017-18	2016-17
29	91	42	62	44

File Description	Document
List books and chapters edited volumes/ books published	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 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:**

The institution is taking various initiatives towards extension and outreach activities for the neighborhood community and motivates the student's social participation to understand the social issues with ethical values, legal and social remedies for various concerns. A mission statement for inculcating these ethical standards through outreach programs is practiced. The institution has NSS, YRC and NCC units in the campus to serve the nearby localities. NSS Unit is to build the youth with the positive mind and spirit to serve society and work for the social upliftment of our nation as a movement. Through the NSS programme the students learn the importance of self cleanliness, pollution effects, water/energy conservation, protection of natural resources, interaction with the public. RajaRajeswari College of Engineering conducts regular activities with the students to participate in the institution and nearby community which helps students to get an awareness of the real-life experience of the workplace and holistic development. Some of the activities of our NSS unit have been done for community development such as Plantation of trees, Swachh Bharat, International Yoga Day, Leadership & Soft Skills Training, Blood Donation Camps, Motivational Program, Food Safety Awareness Program, Stress

Management – Meditation Program – Human Engineering, Eye Checkup Camp, students COVID vaccination drives etc.,

The institution motivates the faculty members and students to participate in need-based, participatory initiatives with local communities, like health, sanitation, education, women's empowerment, etc. The institution promotes and provides enough opportunities to spread societal awareness and serve their surroundings for students. The institution transfers not only technical education but also the human aspects to serve society. The students voluntarily come forward and participate in initiatives that benefit society. Participation in the activities helps the students to develop much-needed societal skills. The faculty members support the students to track the involvement of the student in different social activities. To develop and impart societal activities to the nearby community, the institution leads the plans and arranges several extension and outreach programs. The activity of NSS, YRC & NCC cells are quite energetic in such activities. Through this, every student is counseled to become a part of NSS and to develop lifelong skills such as communication, management, leadership, analytical and perceptual, etc.

The institution also carries out Social affirmative schemes for the development of underprivileged communities. During the orientation program of newly admitted students, the coordinators of NSS and various societies gave information to the students on the advantages and scope of the extension activities. These activities are communicated to the students through circulars regularly. The NSS Unit of our Institution has been conducting many awareness programs in and outside the institution. To inculcate social awareness in our NSS students, they have been deputed as volunteers for various activities organized by the departments, college, government, and non-government agencies.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### 3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

**Response:** 33

#### 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
05	10	09	06	03

File Description	Document
Number of awards for extension activities in last 5 year	<a href="#">View Document</a>
e-copy of the award letters	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 78

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

2020-21	2019-20	2018-19	2017-18	2016-17
32	16	13	12	05

File Description	Document
Reports of the event organized	<a href="#">View Document</a>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 85.14

#### 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
3573	1202	1870	2049	1270

File Description	Document
Report of the event	<a href="#">View Document</a>
Average percentage of students participating in extension activities with Govt or NGO etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.5 Collaboration

#### 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

**Response:** 449

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

2020-21	2019-20	2018-19	2017-18	2016-17
192	104	112	27	14

File Description	Document
e-copies of related Document	<a href="#">View Document</a>
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

**Response:** 91

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

2020-21	2019-20	2018-19	2017-18	2016-17
26	20	14	17	14



File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	<a href="#">View Document</a>
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>



## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

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

**Response:**

RajaRajeswari College of Engineering is established with an objective to become a centre of excellence in technical education to cater to the needs of engineering aspirants. The institution has adequate infrastructure facilities to facilitate effective teaching-learning processes, extra and co-curricular activities to fulfill the requirements and norms framed by the All India Council for Technical Education (AICTE), Visvesvaraya Technological University (VTU), and the Government of Karnataka. The institution is located on Bengaluru-Mysore Highway and the campus has sufficient space devoted to offering technological courses and research activities.

The RajaRajeswari College of Engineering campus has been designed as a complete, self-contained centre of excellence with modern classrooms, state-of-the-art labs, workshops, library, hostels, sports facilities, Wi-Fi enabled campus with high-speed internet connectivity, and advanced computing facilities. It consists of an auditorium, conference halls, and seminar halls for each department to conduct conferences, seminars, guest lectures, workshops, and other events.

To deliver and impart the technical education, to carry out the administrative activities the following adequate infrastructure and physical facilities are available in the institution

- 53 number of classrooms halls with an adequate number of desks, lights, fans, good ventilation, a podium, and a green board with ICT facilities like LCD projectors.
- 9 seminar halls with ICT facilities like LCD projectors, Wi-Fi, and audio systems.
- 935 numbers of computer systems are available in laboratories with the latest configurations comprising servers, desktops with an adequate number of printers, and scanners.
- All the computer systems are connected through campus LAN.
- 100 Mbps internet, wi-fi enabled campus.
- The Central library with NewGenLib -Library Management System (NGL) with RFID Technology supported.
- Digital library consists 24 numbers of computer systems with VTU consortium to refer the online books, journals, and E- materials.
- Separate administrative offices with reprographic facilities, document rooms, individual cabins to cater to the needs of the faculty and students.
- Separate cabins are provided to the HODs with a computing facility for administrative the department, student mentoring, counseling, and guidance.
- Individual desktop computer with internet facilities is made available to all the faculty.
- A separate ICT enabled board room to conduct the pre-placement discussions.
- TCS iON zone facilitates the online competitive examinations conducted by the government and non-government agencies.
- Adequate laboratories with hardware and software, equipments, machines, and tools to deliver and enhance the teaching-learning process.
- The institution has established Center of Excellence in ALTAIR Hyperworks, TOYOTA Centre of

Excellence, Internet of Things (IoT) in the technical field of design, automobile, computer science, information technology, etc, to enhance the technical knowledge of the students and to bridge the gap between industry and academics.

- The institution provides accommodation to the students in the boys and girls hostel with 24x7 security, energy backups with mess facilities with purified drinking water.
- ERP software of the institution is used for the effective implementation of automation of academic and administrative activities.
- Disabled friendly washrooms, wheelchairs, ramps, and lifts are provided.

The Institution's management is primarily concerned with the development and improvement of its infrastructure with regular maintenance of existing buildings.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

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

##### **Response:**

The Department of Physical Education, RajaRajeswari College of Engineering has the unique responsibility to provide the necessary infrastructure to help the students to get the training in sports and encourage students to play games. The institution also puts forth sports and games to the students and extends the fullest support to co-curricular and extracurricular activities. The sports and games activities are provided to make the students physically fit and mentally strong to face the contests of the real world.

The department has an infrastructure for all the indoor and outdoor games. The institution sports field covers an area of three acres located near the hostel premises. The playground facility is inclusive of a cricket practice court, basketball court, volleyball court, football, hockey practice courts, etc.

The indoor hall has the provision for playing table tennis, chess, carrom and to perform yoga. A well-furnished gym is established inside the campus. The physical education classes are conducted for all students as a part of the “Personality and Character Development” program.

The institution encourages, motivates, and allows the students to participate in various competitions at university, state, inter and intra colligate sports and games. Students who have participated in various sports and games are sponsored by the management by the way of providing expenses incurred during the participation. The student's achievements in sports and games are honored, felicitated during the sports, annual day celebration of the institution.

Our student teams have participated in many tournaments inside and outside Bangalore and have won many prizes. Also, conducting International yoga day, NSS events, NCC, and different club activities. A well-laid-out playfield annexed to the institution Campus provides a facility for various games. The institution every year conducts chairman trophies, inter colligates sports, games & cultural.

Apart from sports and games, the institution provides an excellent platform for conducting cultural activities like singing, dancing, musical composing, quizzes, etc. Our students have participated in the university-level cultural competition and won prizes. Also, management provides the platform for the student to exhibit their talents during the cultural events organized and celebrated by the institution during the annual day, founder's day celebrations of every year.

Apart from the regular sports and games & cultural events, the institution organizes a series of events to conduct and celebrate the Kannada Rajyotsava, to commemorate the Karnataka Formation Day or Karnataka Day, which is celebrated on 1 November of every year.

The faculty members are also participating in various intercollegiate sports, games & cultural activities conducted on the eve of the founder's day celebrations every year.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### **4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)**

**Response:** 100

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

Response: 62

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 20.37

##### 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
223.5	126.3	120.18	185.16	286.74

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	<a href="#">View Document</a>
Upload audited utilization statements	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

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

Response:

**NewGenLib Library Management System (LMS) with RFID Technology of library automation is implemented in the central library of the institution.**

**The details of the LMS are as follows:**

**NewGenLib Ver.3.0.4**

**Integrated Library Management System (with RFID Technology)**

**Subscription ID: “NGL171”**

**Library Management System (LMS)** allows for the tracking of books, journals, magazines, and other materials available, orders placed, bills paid, patrons (Staff and Students) who have borrowed the books from the library, and document searches on a variety of categories of books such as authors, titles, year of publications, publishers, and many. **Library Management System (LMS)** consists of a relational database, software to interact with the database.

The LMS segregates software functions into distinct programs known as modules such as the **Technical processing module** - which consists of primary, search, import of cataloging.

**Circulation module**- contains check out (issues), check-in (return), reservations, renewal or loan, binding management, overdue management, RFID, report of lost items, a record of reference materials, request for check out, each of them is integrated with a unified interface.

**Acquisitions module** – consists of search, process requests, process approval of supplies, firm orders, receive orders, gifts, accession received, process payment (invoice received), invoice payment details, claims for unsupplied items, process quotations.

**Serial management** – consists of processing new subscriptions, ordering subscriptions, receiving invoices, registering serial issues.

**Online Public Access Catalog/Public User Interface (OPAC)**- consists of reviewing user ratings, approving user comments, user catalog records, opening OPAC, new arrivals.

**NewGenLib Ver.3.0.4**- The software functional modules are completely web-based. Uses Java Web Start™ Technology. Compatibility – Complies with international metadata and interoperability standards: MARC-21, MARC-XML, z39.50, SRU/W, OAI-PMH. It uses open-source components, scalable, manageable, and efficient. It is OS independent – Windows and Linux flavors available, Z39.50 Client for federated searching, Internationalized application (11 8N), Unicode 4.0 complaint, easily extensible to support other languages, Data entry, storage, retrieval in any (Unicode 3.0) language, RFID integration: Book Tags, Gate Antennas, Work Station, Handheld Reader, Self-KIOSK.

**Library Details:**

RajaRajeswari College of Engineering Central library and Information has a variety of collections of books, National and International journals, and periodicals as per the AICTE and Visvesvaraya Technological University. The library is located in the main building of the institution with reading rooms, seminar rooms, discussion rooms, a digital library room, a periodical section, which has a total floor area of 1560 sq. mt. and includes all of the most up-to-date amenities and services. It is designed to meet the needs of all specialties at the undergraduate and postgraduate levels, as well as research and developmental activities. It has a collection of approximately 34000 volumes, 67 national and international printed journals, back volumes of journals, e-Resources (VTU Consortium), Rare book collections, and many other resources. It has a seating capacity of 368 students and faculty members, as well as good ventilation, lighting, and furniture.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for Additional Information	<a href="#">View Document</a>

#### 4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases
- 6.Remote access to e-resources

**Response:** A. Any 4 or more of the above

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership, Remote access to library resources, Web interface etc (Data Template)	<a href="#">View Document</a>

#### 4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

**Response:** 5.95

##### 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
2.64	5.89	7.56	6.92	6.73

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e-journals during the last five years (Data Template)	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**4.2.4 Percentage per day usage of library by teachers and students ( foot falls and login data for online access) during the latest completed academic year****Response:** 14.67**4.2.4.1 Number of teachers and students using library per day over last one year****Response:** 363

File Description	Document
Details of library usage by teachers and students	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**4.3 IT Infrastructure****4.3.1 Institution frequently updates its IT facilities including Wi-Fi****Response:**

RajaRajeswari College of Engineering implements the information technology facility to the staff and students to enhance the teaching-learning and research activities and deliver facilities to students to utilize the information technology resources in the institution and attain a higher level of learning for their career. The Institution updates the IT infrastructure facilities regularly to facilitate, teaching-learning process and also meet the requirements, norms prescribed by AICTE and VTU. The institution is equipped with high configuration computer systems, that are available to the students and staff members for academic, administrative, and research activities.

The institution has a language laboratory to enable the students to improve their communication and writing skills. Language laboratory software comprises the interactive instructor, student module, lesson composer, and integrated study materials.

The institution currently possesses 100 Mbps of internet bandwidth and the entire campus is linked through Local Area Network(LAN) and upgraded according to the latest configurations and trends. The institute has a massive network of 935 computers with 100 Mbps fiber-optic internet connectivity along with a standby 10 Mbps backup link and a Wi-Fi facility with public and private connectivity. A centralized firewall and three-layer switching LAN is available for the entire campus. D Link (MEGABIT and GIGABIT Switch) 28-port switch is present on each floor of the institute which is connected to the Main D Link 28-port switch. All the laboratories on each floor contain 24 port 10/100 D Link switches. All floors and computer laboratories are connected in Star topology and 100 Mbps bandwidth is shared in LAN. Uninterrupted power supply (UPS) is available in all departmental laboratories computers and administrative systems.

The entire college and hostel are having a Wi-Fi facility working at 100 Mbps speed can be able to access the internet on their devices such as laptops, mobiles for 24x7 to the students and staff for enhanced teaching-learning processes.



To facilitate the Academic, Account, Administrative information the institution has Enterprise Resource Planning (ERP) software and it is utilized to compile and enhance the academic and administrative processes of the institution to maintain, analyze and interpret the data. IP-based CCTV cameras throughout the campus and hostels maintain a safe and secure environment for the staff and students as well as ensure discipline.

A digital library facility is provided for the students and faculty. 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.

The institution has an adequate server available to conduct the Visvesvaraya Technological University examinations, online examinations, webinars, online conferences, and workshops.

During this COVID pandemic, the institution widely used IT tools to deliver academic activities to the students without any lapses. The institution used Microsoft Teams to deliver the course content by way of creating each staff and student with an individual login id and password. Through which the staff members uploaded all the course contents, assignments and conducted online internal assessment tests.

File Description	Document
Upload any additional information	<a href="#">View Document</a>

#### 4.3.2 Student - Computer ratio (Data for the latest completed academic year)

**Response:** 2:1

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Student – computer ratio	<a href="#">View Document</a>

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

**Response:** A. 750 MBPS

File Description	Document
Upload any additional Information	<a href="#">View Document</a>
Details of available bandwidth of internet connection in the Institution	<a href="#">View Document</a>

### 4.4 Maintenance of Campus Infrastructure

**4.4.1 Average 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:** 55.15

**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)**

2020-21	2019-20	2018-19	2017-18	2016-17
359	82.7	704	719	739

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>

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

**Response:**

RajaRajeswari College of Engineering has well-structured maintenance systems to maintain all the physical, academic, and support facilities.

**PHYSICAL FACILITIES**

The management of our institution allocates funds regularly to maintain the equipment, instruments, machines, and properties. The Institution has taken steps for effective maintenance of the instruments, infrastructure system active for regular functioning.

**Laboratories Maintenance Facilities:** The departmental laboratories are regularly monitored for maintenance/service to enhance the working of all the equipment by the concerned lab In-charges. HODs verify and collect the request for maintenance from the lab in charges if any. After HODs verification it is forwarded to the Principal. The Principal verifies the details accordingly the budget is recommended and the same is forwarded to the management for approval. With the requirement of request, the maintenance is carried out by the lab instructors or faculty incharges and the work completion statement and invoices entry are maintained in the maintenance register of the laboratory. Annual stock verification of each laboratory is carried out at the end of the academic year for maintaining and upkeeping the laboratories in good working condition.

**Computer Laboratories Maintenance facilities:**

The computer system complaints are raised by the faculty members with the system admin and the

problem is analyzed and rectified by the system admin. Annual stock verification of each laboratory is carried out at the end of the academic year for maintaining and keeping the laboratories in good working condition. Regular maintenance of all the departments like cleaning of the lab spaces, hardware checking, software updates printers, Wi-Fi, and LAN connection is frequently checked, monitored, updated, and maintained and entered in the maintenance register by the system admin.

#### **Academic facilities:**

Classrooms are well equipped with projectors to deliver the course content. Seminar halls of all departments are connected with Audio-Visual projection with rolling screens. The classrooms are furnished with a dual desk with an attached bench. Wi-Fi Connection is provided in the entire campus to access. Class Rooms, Tutorial Rooms, Laboratories, Seminar Halls are regularly maintained.

#### **Library Maintenance facilities:**

The institution library of the institution consists of well-stocked books, journals, digital library. The stock register of library books is maintained and stock verification is carried out annually. The Librarian has evaluated the requirement books, journals annually and the request is submitted to the Principal.

#### **Support facilities**

The institution adopted the policy to maintain the support facilities regularly. A separate maintenance department takes care of the entire campus on a regular basis. The maintenance department of the institution takes care of maintaining electrical work, plumbing work, other physical facilities like Lifts, furniture, RO plant, Diesel Generator, UPS, ACs, Transport facility, restrooms, and also monitors the campus cleanliness and gardening.

#### **Sports facilities**

The physical education department of the institution maintains the sports equipment, gym, indoor and outdoor sports facilities by regularly cleaning and maintaining by the Physical director with supporting staff.

#### **Transport Facility**

The institution provides transportation facilities for both students and staff members. Buses and other vehicles are well maintained by the transport officer of the institution / Administrative officer.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 50.77

##### 5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
954	1336	1320	1152	1193

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	<a href="#">View Document</a>
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	<a href="#">View Document</a>

#### 5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 1.09

##### 5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
56	50	10	7	4

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	<a href="#">View Document</a>

### 5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

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

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Link to Institutional website	<a href="#">View Document</a>

### 5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

**Response:** 43.96

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

2020-21	2019-20	2018-19	2017-18	2016-17
1435	1196	899	1405	256

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 5.1.5 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 any additional information	<a href="#">View Document</a>
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View Document</a>
Details of student grievances including sexual harassment and ragging cases	<a href="#">View Document</a>

## 5.2 Student Progression

### 5.2.1 Average percentage of placement of outgoing students during the last five years

**Response:** 59.15

#### 5.2.1.1 Number of outgoing students placed year - wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
306	287	264	311	252

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Self attested list of students placed	<a href="#">View Document</a>
Details of student placement during the last five years (Data Template)	<a href="#">View Document</a>

### 5.2.2 Average percentage of students progressing to higher education during the last five years

**Response:** 17.92

**5.2.2.1 Number of outgoing student progression to higher education during last five years**

Response: 112

File Description	Document
Upload supporting data for student/alumni	<a href="#">View Document</a>
Details of student progression to higher education (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)**

Response: 25

**5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
4	3	0	0	0

**5.2.3.2 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**

2020-21	2019-20	2018-19	2017-18	2016-17
16	3	0	0	0

File Description	Document
Upload supporting data for the same	<a href="#">View Document</a>
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 5.3 Student Participation and Activities

**5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.**

**Response:** 13

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	9	3	0	1

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	<a href="#">View Document</a>
e-copies of award letters and certificates	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:**

The institution has a practice of identifying class representatives for each class and nominating them to the student council during the commencement of the semester. The members of this council are used for different administrative bodies. The council is responsible for the conduct of many events, activities on the campus including curricular, co-curricular, and extracurricular activities. The activities of the council would be supported by the participation of all the faculty members. The required funding for the conduct of such events is met by the management of the institution.

- 1. Students Council:** The institution adheres to the norms laid by the competent authority for the Constitution of the Student Council committee and this council is established every year for performing prescribed duties.
- 2. Disciplinary committee:** Respond to allegations of misbehaviors or academic misconduct, educate the student about the impact of their behaviors, honest conduct, and rights of others, investigate and respond to complaints.



3. **Placement Committee:** The students are engaged through the institution placement officer in arranging campus interviews, and conducting various placement-related programs which gain the hands-on experience of teamwork and organizing the events practically during the tenure in the campus. Arranging the soft skill development programs for fellow students.
4. **Professional / NSS committee:** The students voluntarily participate and help in organizing the blood donation camps through RED Cross society, celebrating swachhata divas, and organizing various awareness programs nearby villages/places. And also conducting professional sponsored programmes to give a personality encouragement with the aid of selfless social work with student personality.
5. **NCC:** NCC unit has been initiated from the academic year 2021-22. Students have actively participated in NCC activities.
6. **Sexual Harassment Elimination committee:** Addressing the issue of sexual harassment of women in the college premises (Prevention, Prohibition, and Redressal).
7. **Anti-Ragging Committee:** This committee ensures no ragging incidents in the institution and spreads awareness among students against any ragging activities through displaying pamphlets of anti-ragging, observation anti-ragging in the campus including hostel.
8. **Sports committee:** Conducting sports events, Facilitating student participation in sports and games in other institutions at university/state/inter-state level/ national level.
9. **Alumni Association:** Induction of current passed out students into the Alumni association. The alumni addressed the students through technical talks, webinars, career guidance programs, etc.
10. **Grievances Redressal committee:** Listening and resolving student grievances addressing student facilities online or offline.
11. **Student Welfare committee:** Listening and resolving student grievances, addressing student facilities.
12. **Cultural committee:** Conducting cultural events, facilitating student participation in other institutions at state/inter-state level.
13. **Newsletter Committee:** Every year each department will prepare a newsletter that includes the departmental programs conducted during the academic year. Which includes the technical seminars, FDP's attended/ conducted by the faculties, toppers details, patents, publications, students achievements, sports, cultural events.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### 5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

**Response:** 46

#### 5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years



2020-21	2019-20	2018-19	2017-18	2016-17
38	31	46	76	39

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Report of the event	<a href="#">View Document</a>
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	<a href="#">View Document</a>

## 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:

RRCE Alumni Association has registered under the Alumni Association Karnataka Society's Registration Act, 1960 with the registration ID JNR-S92-2013-14 dated 8th July 2013 at Bengaluru.

#### RRCE Alumni Association contributes significantly integrated with the objectives as follows :

- To encourage and nurture the interaction between Alumni and institute benefited mutually to both.
- To guide the students of the institute for professional development, higher education, and being good citizens.
- To Organize and support recruitment activities for the student of the institute.
- To motivate the students of the institute and alumni members of the association for research development work in various fields of Engineering.
- To mentor students of the institute on various professional careers available and support them through various activities such as a workshop, expert advice, seminar, industrial visits, etc.
- To support and assist with training programs in entrepreneurship development with resources available with the association.
- To encourage and support students of the institute in sports, cultural and extracurricular activities.
- To Publish a newsletter from the alumni association.

- To boost the industry-institute interaction to bridge the gap between industry and education offered by the institute and enhance students' employability.

RajaRajeswari College of Engineering Alumni Association has a professional structure, which helps the alumni to get associated with each other. This alumni association acts as a platform for all the alumni members by establishing their inner talents as well as by extending helping hands with each other. Thus, it paves the way to establish, enrich and enhance the skills of every alumni member throughout their lifetime. This provides a variety of benefits and services that help alumni maintain connections to their educational institution and fellow graduates. The purpose of an association is to foster a spirit of loyalty and to promote the general welfare of our organization.

The Alumni Engagement builds connections with RRCE alumni, community members, and employers to help students develop academic and professional skills in preparation for life after the institution. Experiential learning and real-world experiences are provided through a variety of programs for all RRCE students.

Our alumni are actively participating in institutional activities like alumni career engagement programs, technical seminars, and webinars, sharing their successful career experiences, interacting with the students in all areas, and guiding them to improve their life. RRCE alumni have the opportunity to share their expertise and experience and help to connect current RRCE students to successful internships, jobs, and experiential learning opportunities.

Every year, the RajaRajeswari College of Engineering alumni association conducts alumni meet. The alumni feedback contributes to filling up the gap between subject and practical knowledge, understanding between the students and faculty. The institutional facilities are regularly updated or developed to meet the needs and desires of the students based on the suggestions and recommendations given in alumni meet.

Alumni of the institution bring students up-to-date information about various career opportunities and corporate requirements. It is the goal of our institution to set up an effective forum for connecting with the Alumni for a more proactive role for nurturing the current students.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 5.4.2 Alumni contribution during the last five years (INR in lakhs)

**Response:** A. ? 5 Lakhs

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Link for any additional information	<a href="#">View Document</a>

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

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

##### Response:

##### Vision

To provide an open opportunity to the young generation for evolving their core competencies helping them to build their career as Global professionals to be an Autonomous Institution by achieving excellence in the field of higher education

##### Mission

To consistently strive for Academic Excellence to become a leading Institution in the field of Engineering, Management, and Research to produce competent and ethically sound manpower for the benefit of Industry, Society, Nation, and the Global Environment.

##### Description:

The institute has adopted best practices in Governance & Leadership, by way of having clear Vision & Mission statements where it is committed to impart quality education in order to empower youth and women and aims to deliver engineering education through the effective teaching-learning process and update their knowledge & skills to match the global industrial and technological development through defined objectives. In line with the vision and the mission, the Institution has blended with well-qualified faculty members to enhance the learning of the students and enrich the students with character, building innovative leadership, making them employable and successful in their lives by inculcating life employability, entrepreneurship skills and provide ethical values, ensuring that our institution creates employers, not employees. A variety of projects are undertaken to address and resolve social problems related to health, education, environmental protection, water conservation, etc. Various stakeholders such as parents, students, Alumni, Industries, etc were involved in the process of formulation of vision and mission.

The institution provides Quality Technical Education in Undergraduate, Post Graduate, and Doctoral fields as per the university syllabus and beyond in strict compliance with AICTE requirements and Industrial needs through industry-institute interaction.

The Management and Principal ensure that the institution moves ahead in accordance with the planning to achieve the highest benchmark. The Governing council conducts meetings twice a year in order to have effective implementation of the policies to monitor the value addition in the academic processes. The governing council approves the strategic plan, vision and mission, and budget based on the strategic plan framed by IQAC cell headed by the principal of the institution.

The Principal conducts meetings with the Head of the department weekly and the Head of the Departments conducts the meeting weekly to review the progress of the activities in accordance with the academic calendar. The academic calendar consists of all the curricular, co-curricular, and extra-curricular activities, which are in line with the Vision and Mission of the institution. IQAC monitors the functioning of all the committees relevant to the teaching-learning process, student enrichment, and overall development of the institution to identify areas of improvement and suggest the necessary action plan. The Management, IQAC, Principal, and various committee coordinators are the important leader who frames and implement the policies plan, develop activities and ensure timely execution, this reflects effective governance, which is in tune with the Vision and Mission of the institution.

An effective and participative decision-making process is adopted to achieve the vision, mission, and goals of the institution and also in building effective organizational culture.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

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

#### **Response:**

The institution practices an efficient decentralized administration that has complete transparency in all the processes. In accordance with its belief in collective leadership and democratic traditions, the institution practices decentralization and participatory management. This approach may be seen especially in the considerable delegation of authority to all the Heads of the departments within the institution, which is a manifestation of this practice and in detail is deliberated below:

#### **Internal Quality Assurance Cell (IQAC)**

The Internal Quality Assurance Cell (IQAC) is headed by the Principal and faculty as committee members as per the composition and guidelines as given by the NAAC. The IQAC is a centralized institution-level committee & an authority for overseeing, regulating, adjusting, and putting into effect the numerous academic actions and procedures. Its objective is to ensure that academic work is carried out in a consistent and trustworthy manner throughout the institute.

#### **Academic functioning:**

The institution instills a culture of collaborative responsibility among its teaching members and the departments that make up the institution as a whole. Operational autonomy has been given at various levels

to execute and implement the new strategies. Under the supervision and guidance of the Principal, Heads of Departments are empowered, and the departments are granted academic autonomy, which is a concrete step towards the establishment of an effective decentralized governance system. The freedom to make the required judgments in running the academic activities, online classes, and conducting various webinar activities is granted to each department and several activities were planned and executed for the development of students and faculty members even during this pandemic situation.

### **Administrative functioning:**

The Principal, in collaboration with the institutional authorities, is in charge of the distribution and supervision of administrative responsibilities in the office. Despite the fact that budget creation is an administrative responsibility, individual budgets are prepared at the departmental level, and the overall budget is prepared based on the inputs received from those departments. Every department has complete authority to use the funds assigned to it for a variety of tasks.

The various duties, responsibilities, and activities are required for the smooth operation of the institution are decentralized into different committees, each of which has headed by the senior Professors and members such as faculty members, student coordinators, parent representatives, industrial representatives, etc, and each of these committees is monitored by the Institutional Quality Assurance Committee (IQAC) at both the Institutional and Departmental levels.

The Principal of the institution conducts weekly meetings with the Heads of the Departments to analyze, implement the strategic policies, review the academic activities performed, to fulfill the needs of the students, to improve the quality of the technical education and execution. At the end of the academic year, the Governing body will attest, review, and verify the outcome of the success.

The management and the institution regularly obtained feedback, opinion, and valuable suggestions from the Principal, faculty members, and staff members and included the decision for institutional development. The participative role of the management will provide encouragement to all.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## **6.2 Strategy Development and Deployment**

### **6.2.1 The institutional Strategic / Perspective plan is effectively deployed**

#### **Response:**

The institute IQAC prepares a strategic perspective plan as a Short and long-term goal through IQAC chaired by the principal and involves all the stakeholders from the institution. The Institutional Strategic Plans for the long and short terms goals are formed in the following categories:

**1. Reimaging Campuses**

- Physical infrastructure
- Digital Infrastructure (Teaching & Learning)
- Library & information centre
- Quality assurance systems

**2. Indigenous Commitment**

- Research, Development & Innovation
- Financial Planning & Management

**3. Inspiring People**

- A high performing institution
- Building leadership and capability
- Health and safe workplace

**4. Life Ready Graduates**

- Placement, Internships & Career
- Graduate attributes
- Student-centered wellbeing

**5. Engagement Priorities**

- Industry- Institute relationships
- Community Service and Extension
- Alumni engagement and interaction
- Permanent affiliation and accreditation of all programs
- Establishing centre of excellence
- Autonomy of the Institution

**6. Strategy Implementation and Monitoring**

The strategic development plan is placed for approval by Governing Body and the next step is its implementation. The Strategy implementation is monitored through the IQAC of being implemented and the progress shall be measured from time to time.

**Prospective and Strategic Plan of the institution after the 1 Cycle of NAAC includes:**

1. All Branches Permanent Affiliation and Accreditation of the institute
2. PG Course and Research centers for all Branches
3. Foreign collaborations
4. Autonomy of the Institution
5. To have a center of excellence in all the departments to enrich the knowledge of students and the research scholars.
6. To orient faculty towards research

- 7.To start new UG programs in the department like Artificial Intelligence and Machine learning, Robotics and Automation to bridge the gap between industry and academic institutions.
- 8.To attain 100% Placements.
- 9.To attain 2nd cycle NAAC accreditation with A+

The chairman of the IQAC will submit the strategic perspective plan to Governing Council and after receiving the approval take all the necessary actions required to implement the plan.

**The following are the activities implemented successfully in accordance with the strategic perspective plan.**

#### **New UG Programmes started in Institute**

The Under Graduate Programme in Artificial Intelligence and Machine learning, Robotics, and Automation are introduced during the academic year 2020-21 and 2021-22 with an intake of 60 students.

**PG Course and Research centers for all Branches:** The institution applied for Research Centre for Civil and EEE department and VTU approved the research centre for the academic year 2020-21.

The institution would like to highlight that the strategic plans are implemented in **establishing centre of excellence.**

#### **Deployment**

The plans enunciated by the management and principal are communicated to the faculty, students, staff, and other stakeholders through meetings, emails, and other forms of communication. IQAC has framed various coordinators to review the program from time to time and their implementations as per the plan.

<b>File Description</b>	<b>Document</b>
strategic Plan and deployment documents on the website	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

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

##### **Response:**

The Institute has well defined organizational structure and organogram for effective functioning which represents an organizational chart consisting of Governing Body, Academic and Administrative setup, and various bodies. The Governing Body is the topmost decision-making body consisting of members of the Management, member secretary, distinguished members from the field of education, and nominated faculty



members. The representatives of the Management are the members of the Governing Body of the institute who play the most significant role in designing, implementing, and planning policies. The Management and principal ensure that the institution moves ahead with all the planning to become one of the renowned institutions. The Leadership strives to empower society by providing dynamic education through major policy decision which reflects the effective and efficient functioning of the institutional bodies as follows:

- 1.To get permanent affiliation for all branches from the affiliated Visvesvaraya Technological University.
- 2.To get accreditation from the National Board of Accreditation of all branches.
- 3.To establish a Center of Excellence for each branch of study.
- 4.To get Autonomy for the Institute.
- 5.Research centers and Post Graduate courses for all the branches.
- 6.To collaborative with the foreign university.
- 7.Apply for more research schemes to fetch funding.
- 8.Infrastructural development measures.

These decision policies and planning are reviewed by the Governing Body in accordance with the statutory regulatory authorities and the stakeholders.

Action plans are prepared to have effective implementation of policies and to monitor the value addition in the academic process under the guidance of the Principal and Heads of the Department. There are various committees in the institute, the head of the committee plan and deploy to ensure quality improvement, development activities and ensure timely execution. IQAC monitors the functioning of all the committees relevant to teaching-learning, student enrichment, and overall development of the institute to identify areas of improvement and suggest required actions.

The Management has given powers to the Principal to execute the strategic perspective plan, and functions related to the academic, nonacademic, and quality improvement of the institute. The senior professors from various departments are part of this council.

The Principal and Chairman of the IQAC submit proposals related to the strategic perspective plan, academic, and other functions to the Governing Council and after ratification deploys the same. The institute has academic departments headed by the departmental heads, admission section, establishment section, exam and evaluation section, accounts section guided by the principal.

Service rules, recruitment policies, procedures for the institution, the roles and responsibilities of all faculty members and the supporting staff are made known through the service manual of the institution.

The Institution follows the transparency in the process of recruitment involves inviting applications from aspirants for the required position through paper advertisement, receiving resumes from aspirants are reviewed in accordance with the regulations of AICTE & VTU, suitable candidates are called for interview, and based on the recommendation of the selection committee framed with subject experts and nominee of the University, and the final decision will be taken by the management.



File Description	Document
Upload any additional information	<a href="#">View Document</a>
Link to Organogram of the Institution webpage	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### 6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

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

File Description	Document
Screen shots of user interfaces	<a href="#">View Document</a>
ERP (Enterprise Resource Planning) Document	<a href="#">View Document</a>
Details of implementation of e-governance in areas of operation, Administration etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 6.3 Faculty Empowerment Strategies

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

**Response:**

The Management of the organization provides various facilities for the benefit of teaching and non-teaching staff to take care of the welfare of the human resources of the institution. The teaching and non-teaching staff, along with the support staff play a vital role in the functioning of the organization.

The well-being of our employees is an utmost significance in our institution. Consequently, the welfare measures for teaching and non-teaching staff are listed in the following order of priority:

1. The teaching and non-teaching staff are provided with the Employees Provident fund. The non-teaching staff are provided with an ESI facility.
2. The Management is committed to provide free health medical facilities for both teaching and non-teaching staff at Rajarajeswari Medical College and Hospital (RRMCH) and RajaRajeswari Dental College and Hospital (RRDCH).
3. The teaching and non-teaching staff can avail of casual leave and permission. During the semester-end vacation will be given to both teaching and non-teaching staff members.
4. The teaching and the non-teaching staff are provided with the transport facility at a subsidized rate.

5. Group insurance that covers all employees of the institution.
6. Gratuity benefits to the staff are provided.
7. Medical Leave and Maternity Leave for eligible employees.
8. The gym facilities are available to members of the staff.
9. The participation of a large number of faculty members in national and international conferences has been supported by the institution.

Internet access and free Wi-Fi are also provided on campus for faculty and staff members.

1. Faculty members are given an individual cabin to create a pleasant environment for their preparation & teaching.
2. Faculty development programmes (FDP) are organized and conducted regularly to all faculty members.
3. Skill development courses are offered for non-teaching personnel to improve their abilities in the workplace.
4. Attendance and leave are automatically tracked via a biometric system.
5. Registration fees have been provided to encourage young faculty members to pursue a research career and to publish their findings in peer-reviewed journals.
6. Elevator facilities are provided in the institution.
7. All the employees of the institutions are treated on par when it comes to receiving benefits from the institution.
8. The Women Empowerment Cell was founded to provide opportunities for female members to thrive and build momentum.
9. Faculty doing research will be provided on duty to carry out their Ph.D. works.
10. Reprographic services are provided.
11. All the faculty members are provided with festival gifts during the New year.
12. Free hostel accommodations to the faculty members.
13. Bank and ATM facilities are created inside the campus.
14. In a nutshell, the Management and the Institution strive hard to keep our staff safe, happy and positive workplace atmosphere.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

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

**Response:** 20.07

#### **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**

2020-21	2019-20	2018-19	2017-18	2016-17
14	53	32	37	43

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	<a href="#">View Document</a>

### 6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

**Response:** 21.4

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

2020-21	2019-20	2018-19	2017-18	2016-17
15	21	29	21	21

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	<a href="#">View Document</a>
Reports of Academic Staff College or similar centers	<a href="#">View Document</a>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	<a href="#">View Document</a>

### 6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).

**Response:** 100

#### 6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation /

**Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
192	179	179	188	166

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<a href="#">View Document</a>
IQAC report summary	<a href="#">View Document</a>
Details of teachers attending professional development programmes during the last five years	<a href="#">View Document</a>

**6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff****Response:**

The Institute has a well-defined Performance Based Appraisal System (PBA) for Teaching staff and an Evaluation system for Non-Teaching Staff where their performance is evaluated annually.

**1. Performance-Based Appraisal System for Teaching Staff:**

The Institute strictly follows all the essential recruitment and promotional policies as stipulated by Visvesvaraya Technological University (VTU), the All India Council for Technical Education (AICTE), and the Government of Karnataka.

Performance-Based Appraisal system of teaching staff is based on the following parameters

Teaching, Learning, and Evaluation Related Activities:-

1. Lectures, seminars, tutorials, and practicals were conducted.
2. Project guided.
3. Additional knowledge and resources provided.
4. Examination Related.
5. Academic progress Record.
6. Student feedback.
7. Result analysis.
8. Co-curricular, Extension, and professional-related activities.
9. Professional development-related activities organized or attended such as seminars and workshops, Organization of FDPs, Seminars, and Workshops
10. Research, Publication in high impact journals, refereed journals, and academic contributions.
11. Publication - papers in conference proceedings/ workshops/ seminars/symposium etc. Papers in

journals , books, articles / chapters / published in books.  
12. Research funds obtained and guidance.

Each faculty member completes the self-appraisal procedure every year in the prescribed format. The appraisal is done on the following metrics: Teaching-learning process – evaluation, Faculty feedback from students, awards/rewards obtained by the faculty, and staff contribution towards extracurricular and co-curricular activities not restricted only to their department. The research contribution of staff in terms of research projects, publications, and guidance provided to students for involvement in research. After reviewing the details filled by the employee, the Head of the Department has put his/her remarks and forwards the same to the Principal who will then discuss the strength and weakness with the staff and finally forwards his recommendation to the Management.

#### **Non-Teaching Staff:**

The appraisal for non-teaching staff is carried out by their technical qualifications and ability, knowledge level of understanding, systematic and regular working abilities, punctuality in work, relations with staff, HOD, colleagues, and students. The respective department teaching staff is then forwarded to the HOD. After the reviews of HOD, it is then discussed by the Principal and Management for further proceedings.

Also, the Management and Principal felicitate the staff members who have to give 100% result in their subjects every academic year. The institute felicitates the teaching and non-teaching staff who have served the organization for 10 continuous years. For special achievements of teaching and Non-teaching staff, they are felicitated during the annual day or any occasional functions of the institution.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## **6.4 Financial Management and Resource Mobilization**

### **6.4.1 Institution conducts internal and external financial audits regularly**

#### **Response:**

Financial forecasting is carried out yearly by the Principal and the Administrative Officer considering the budget proposals submitted by the respective Head of the Departments, Wardens, and other departments in accordance with the previous year's details of income & expenditure and the balance sheet.

The budget proposal is prepared and placed before the Governing council for suggestion and approval. Financial happenings are carried out by the accounts department under the guidance of the Principal. The entire process is monitored regularly by the Financial Officer of the institution. The Financial Officer has suggested and revised the formats of relevance, based on the feedback received from the students and

faculty, in consultation with the Principal. Budget allocation is done every academic year for each department under the corresponding heads. Approved budget and its utilization are followed regularly through internal and external financial audits.

To ensure financial compliance. The institutional accounts are regularly audited. The observation of the auditors if any is immediately corrected/rectified.

**Internal Audit:** The internal audit is an ongoing continuous process. Qualified Internal Auditors from the institution have been permanently appointed and a team of staff under them does a thorough quarterly basis check and verification of all payments, receipts & journals vouchers of the transactions cash books, ledger account review that is carried out in each financial year on an accrual basis system.

**External Audit:** The external auditor appointed by the institution performs an audit of the financial statements of the institution. The financial records are audited by qualified chartered accountants after the end of each fiscal year is certified income & expenditures, balance sheets, and prepared notes to accounts are certified.

Statutory financial audit of Institution is conducted in two sessions, first in October/ November/ December for the period of six months starting from 1st April to September and second in May/ June for the period from October to March. Finalization of account is completed in June and the audited statement is prepared in July. The audited statement is duly signed by Chairman and Chartered Accountant. All accounting systems are accrual basis computerized and maintained on Tally.

The Institution also publishes audited financial statements on the institution's website as information for the public.

**Finance Committee:** The Board of Management in its meeting held on 22.03.2021 constituted a Finance Committee as an Advisory Body to advise the BOG on all matters connected with the finances of the college. The BOG reviews/ratifies the proceedings. Budgetary provisions for the departments are made based on the requirements/inputs provided by the HOD.

The departments propose their budgetary requirement for the particular year. In the capacity of the Member-Secretary of the Board of Governors, the Principal puts-forth proposals on finance-related matters and seeks approval and ensures its implementation effectively. The annual budget for the institution is prepared at the beginning of the financial year, considering potential income and expenditures (recurring and non-recurring) involved for the year.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the



**last five years (not covered in Criterion III)****Response: 0**

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	<a href="#">View Document</a>
Annual statements of accounts	<a href="#">View Document</a>

**6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources****Response:**

The institution has a defined procedure for the mobilization of funds and the optimal utilization of resources. It ensures the efficient, optimal utilization of funds for academic, administrative, infrastructure development, research and development activities.

The funds are generated by the way of fees through the admissions of students made through Government and Management seats. Beginning of every Academic year a Budget is prepared to carry out the various activities to enhance the teaching-learning processes every year. The process of budgeting involves- Preparation of the departmental budget – Preparation of the institutional budget.

The Departmental Budget is prepared by the Budget Committee of each department by taking into account the various requirements of the entire department reflecting both recurring and non-recurring expenditure for a given financial year. The Principal will consolidate all the departmental budgets received and accordingly prepare the institutional budget for submission of approval by the Management.

The majority of the revenues required by the institution are generated internally through fees collected. The Directorate of Technical Education (DTE), Government of Karnataka /AICTE fixes the fees to be collected from students.

The sources of income are:

1. Tuition fees collected from students.
2. Hostel fees / Mess fees collection.

### 3. Transport Fees.

#### Utilization of Resources

The tuition fee is the Institute's primary source of revenue. Tuition fees are used for college development such as buildings, infrastructure facilities, maintenance, etc, and are followed by staff wages which include teaching, non-teaching, administrative and supporting staff.

The academic, infrastructure facilities like classrooms, seminar halls, laboratory equipment/software/hardware, IT facilities, etc are frequently updated to enrich the knowledge of the students.

The library infrastructure development, books, journals are purchased every year adhering to the norms of the Visvesvaraya Technological University, AICTE.

International, national conferences, faculty & skill development programmes, workshops, seminars, guest lectures, invited talks, industrial visits, student technical symposiums are conducted to impart technical knowledge to the staff and students. All these activities are financially supported by the Management.

Extracurricular activities such as sports and games have been arranged for the students to improve their physical skills apart from academics. Students participating in various sports & games at the national, state, university, and college level are sponsored with supporting materials and financial assistance by the Management.

The Management also sponsors and encourages the students in participating in various cultural activities at the national, state, university, and college levels. The Management encourages and motivates the faculty to generate revenue from research and consultancy projects.

Any financial grant received from the agencies like AICTE, VTU, DST, etc is supported by the Management if there are any additional financial requirements to set up the lab, equipment, and other computing facilities.

The institution has a governing council, a planning, purchasing committee, a library, and other groups that assist with the preparation, division, allocation, and use of finances. Tally software is used to keep track of the finances, and all of the transactions may be monitored by authorities. The aforesaid mentioned above information are properly audited at regular intervals.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## 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****Response:**

The IQAC was established in 2015 at our institution to achieve its purposes and attain its objectives at the institutional and program level through the core functions of teaching and learning, scholarship and creative activity, and support for student learning and success. The prime task of the IQAC in RRCE demonstrates that the objectives of the IQAC are performed effectively by evaluating valid and reliable evidence of learning and by supporting the success of every student.

**OBJECTIVES OF IQAC**

- To develop a quality system for conscious, consistent, and catalytic programmed action to improve the academic and administrative performance of the Institution.
- To promote the institution measures for functioning towards quality enhancement through internationalization of quality culture and institutionalization of best practices.

**ROLES AND RESPONSIBILITIES****ROLES**

- Evaluate the attainment of the vision and mission of the various departments and processes necessary changes for continuous improvement.
- Monitors the attainment of the Vision and Mission of the Institute.

**RESPONSIBILITIES:**

- Development and application of quality benchmarks/parameters for the various academic and administrative activities of the Institute.
- Facilitating the creation of a learner-centric environment conducive to quality education.
- Arrangement for feedback responses from students, parents, and other stakeholders on quality-related institutional processes.
- Documentation of the various programs/activities of the Institute leading to quality improvement.
- Acting as a nodal agency of the Institute for coordinating quality-related activities, including the adoption and dissemination of good practices.
- The agenda, minutes, and Action Taken Reports are documented with official signatures and maintained print/electronic formats.
- Preparation of the Annual Quality Assurance Report (AQAR) based on the quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA) in the prescribed format.
- IQAC gathers department academic plans at the start of the academic year and analyses their effective implementation throughout the year.

**Best Practice 1:**

IQAC Contribute, Monitor, and evaluate the Teaching & Learning processes IQAC has helped the teaching community to interpret the Course objectives and Course Outcomes that were introduced for each course by the affiliating University. The head of the department and the class teachers will conduct class meetings

periodically for the improvement of the teaching-learning process by deliberating test performance, attendance issues, syllabus coverage, identification of needs for co-curricular activities.

IQAC was also involved in the monitoring of course files, course/lesson plans, modes of delivery, websites referred, number of periods engaged, and teaching aids required for topics planned. Assignment questions and module-wise question banks were provided and subject-wise feedback was collected and analyzed periodically. Pedagogical skills were incorporated in the teaching and learning processes.

The IQAC has taken an initiative to counsel the students related to academic and non-academic issues through the mentoring system. All the faculties in the organization are assigned with mentees to monitor the progress of the students, will collect feedback related to the understanding of the subjects, their progress in internal assessment, and semester-end examination. Faculty will give their suggestion to students to overcome any difficulties they are facing.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

**6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities ( For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )**

**Response:**

As a process of continuous and consistent improvement in the overall performance of the institution, IQAC has actively channelized all its efforts to promote academic excellence by analyzing the Internal Assessment (IA) and the end-semester University examinations constantly. IQAC has formed an Internal Academic Audit Committee to check academic-related files across all the departments. The Academic Audit Committee Members review the record of attendance, internal assessment process, lesson plan execution, lab conduction, proctor system, remedial classes, and other teaching-learning processes twice in a semester.

The Institution established an Internal Quality Assurance Cell (IQAC) as a post-accreditation quality sustenance measure adhering to the structural guidance of NAAC.

In the last five years, new programs have been added. In 2017, One Undergraduate (UG) Telecommunication Engineering with the intake of 60. During the academic year 2020-2021 One UG Program on Artificial Intelligence and Machine Learning with an intake of 60, and in the academic year 2021-2022 One UG Program on Robotics and Automation with an intake of 60 & B.Sc. Honors with an

intake of 60 were introduced. The intake of the Undergraduate and Postgraduate programme was enhanced from 789 to 849 during this academic year 2021-2022. Four UG Programmes are accredited by NBA.

The academic performances of the passed out students (20-21) have been improved with 96.8% (avg.) results due to the implementation of the quality initiatives. The Department of EEE and Civil Engineering were recognized as Research Centre by the University (VTU). The campus facilities were continuously augmented and strengthened. A good number of Innovative Teaching-Learning were introduced. The Outcomes in terms of Research and its publications have increased considerably. The Institution fostered Linkages with many reputed industries to facilitate Industrial exposure to students and subsequently help in the placement of graduates. Four students have started their own companies and become Entrepreneurs, since 2016. The number of Ph.D. faculty enhanced from 30 (2012) to 45 (Present). The Institution received many Distinctions in recognition of its contribution in the field of Technical Education, RajaRajeswari Institution Innovation Council (RRIIC) of our institution secured a 4-star rating from the Ministry of Education's Innovation Cell (MIC) for the year 2020-2021. RRIIC is one among, "Top 259 out of 2680 institutions" across India and one among 41 institutions in the South West (Karnatak & Kerala) Region. This award was given for the best performance in organizing activities for promoting innovation, entrepreneurship, IPRs, and start-ups on the campus. The RajaRajeswari College of Engineering is recognized in the band "PERFORMER" in the ATAL ranking of an institution on Innovation Achievement (ARIIA) or Flagship programme of Ministry of Education, Govt. of India.

Centers of Excellence /Incubation Centers/Innovative Labs are established. E-Governance Cell, primarily responsible for computerization of all academic, financial, and administrative activities related to the College, was established in March 2014. A Full-fledged Language Laboratory for the use of all the Departments was established. The Students are provided intensive courses in communication skills in English and basic proficiency in the local language as well. Many initiatives were introduced to promote Research culture. Many of the faculty and staff have been bestowed with awards both at the State and National levels in recognition of their contribution in various fields. To commemorate 16 years of its journey in promoting engineering education, RRCE conducted seven international conferences.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### 6.5.3 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)**
- 3.Participation in NIRF**
- 4.any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

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

File Description	Document
Upload e-copies of the accreditations and certifications	<a href="#">View Document</a>
Upload details of Quality assurance initiatives of the institution	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste web link of Annual reports of Institution	<a href="#">View Document</a>

NAAC

## 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 during the last five years.

##### Response:

The institution has a great responsibility regarding gender equality of all gender's equal rights, benefits, responsibilities, and opportunities. The institution through various activities shows that gender equity plays a vital role in equal opportunities for males and females in terms of economic, social, cultural, and political developments.

In this regard, our institute has provided various facilities like CCTV surveillance for safety and security, women's hostel facility inside the campus, Sports facility for women's, providing women's the higher administrative, academic positions in the institute, various committees and clubs of the institution which organizes events and enrichment programs to help them to achieve their goals in their career.

RRCE provides various facilities common to both genders, by including both men and women in all the college-level committees namely, the Anti-ragging committee, Social Grievances committee, disciplinary committee, etc to represent and to give their valuable suggestions in stopping the crimes which disturb the individuality of the students.

RRCE is providing equal opportunities to men and women to exhibit their talents in curricular, co-curricular, and extracurricular activities, RRCE is taking suitable care in associating faculty members in case of students going out to represent the institution.

RRCE is educating students regarding the punishments for disturbing the individual's freedom by posting the warning boards in all the common places, and by collecting affidavits from every student, the common areas are kept under CCTV surveillance, security is provided at all the entrances to prevent outsiders entry.

Hostel facility is provided both for girls and boys in the campus. Security is provided in the hostel 24X7 and student movement is monitored strictly. Wardens will be there in the hostel 24X7. Sports facilities for women are provided on the campus. A separate slot is allotted for girls to use the gym. There is a separate Discipline Committee in the institution to take care of the safety and security of the students. To educate the students about sexual harassment and its punishments the signboards are placed on every floor of the institute. An exclusive A common room facilities for girls and boys are provided. Daycare center facilities to take care of workers' children are made in the campus. In the institution, women are provided with equal administrative and academic positions. Various committees and clubs of the institution organize events and enrichment programs for girls which help them to achieve their goals in their careers. All faculty and girls' students participate actively in all the activities.

**The below link contains the Measures initiated by the Institution for the promotion of gender equity during the last five years including the Action plan**

**[https://www.rrce.org/rrce/wp-content/uploads/2016/12/DVV\\_7.1.1-Support2.pdf](https://www.rrce.org/rrce/wp-content/uploads/2016/12/DVV_7.1.1-Support2.pdf)**

File Description	Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	<a href="#">View Document</a>
Link for annual gender sensitization action plan	<a href="#">View Document</a>

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

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

**Response:** A. 4 or All of the above

File Description	Document
Geotagged Photographs	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

### 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

**Response:**

RajaRajeswari College of Engineering (RRCE) has practiced waste management practices such as segregation, recycling, and composting. Creating awareness among students, staff, and faculty members to control waste generation during events and daily routine activities has been practiced. The college has

housekeeping staff, gardeners, and sweepers who help in the segregation of waste and proper disposal.

- **Solid waste management**

Dustbins have been installed throughout the campus for waste segregation. Waste like plastic, metals, glass, cardboard, newspaper, and stationery are systematically collected, segregated by housekeeping staff, and sold to authorized vendors for its recycling. Biodegradable kitchen waste from mess and cafeteria, horticultural waste such as dried leaves, twigs, and plant clippings are collected from all around the campus and disposed of properly. Waste food from the mess and cafeteria are taken away by housekeeping staff and sent to the centralized biogas plant at our sister concern of RajaRajeswari Medical College and Hospital, located 2 km away from the institution through a vehicle.

- **Liquid waste management**

Sustainable liquid waste treatment is adopted in the campus through the centralized sewage treatment plant located at our sister concern of RajaRajeswari Dental College and Hospital which is located beside our institution. It helps to minimize the chemical and biological load of domestic sewage and is good for gardening purposes. Uniform distribution of water and best practice is adopted through water conservation.

- **Biomedical waste management**

There is no biomedical waste from our institution. If any waste arises it is safely disposed to reduce the adverse effects on human, animal health, and aesthetics.

- **E-Waste management**

The obsolete computers and other wastes generated from the electronic equipment are auctioned to authorized e-waste dealers and the hazardous materials in those types of equipment are removed and disposed off as per norms. The old computers are also exchanged with a new computer. The electronic waste components such as computer system components, CPU and ICs are used in practical demonstration to our students. Some of the reusable electronic components like resistors, capacitors, inductors, diode, transistors, thermistors, etc. are removed from the gadgets and used by students in making projects.

- **Waste recycling system**

Paper waste is sold out for its recycling in the paper industry. Cement concrete cubes as a waste of Concrete Lab are used as pavers in the campus. Vermicomposting is used to recycle solid waste, peels of vegetable and food waste. Liquid Waste after proper treatment used in garden plants. Kitchen waste is used for centralized Bio Gas plants to generate Methane gas.

- **Hazardous chemicals and radioactive waste management**

Generally, no hazardous waste is generated in the campus from any Department. The Condemned batteries are disposed off through outside agencies. All precautions are taken to store a few concentrated acids/chemicals in a safe and separate room.

File Description	Document
Any other relevant information	<a href="#">View Document</a>
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	<a href="#">View Document</a>
Link for Geotagged photographs of the facilities	<a href="#">View Document</a>

**7.1.4 Water conservation facilities available in the Institution:**

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

**Response:** A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

**7.1.5 Green campus initiatives include:**

1. Restricted entry of automobiles
2. Use of Bicycles/ Battery powered vehicles
3. Pedestrian Friendly pathways
4. Ban on use of Plastic
5. Landscaping with trees and plants

**Response:** A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	<a href="#">View Document</a>
Geotagged photos / videos of the facilities	<a href="#">View Document</a>
Any other relevant documents	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

**7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any**



**awards received for such green campus initiatives:**

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

**Response:** A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View Document</a>
Certification by the auditing agency	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

#### **7.1.7 The Institution has disabled-friendly, barrier free environment**

- 1.Built environment with ramps/lifts for easy access to classrooms.
- 2.Divyangjan friendly washrooms
- 3.Signage including tactile path, lights, display boards and signposts
- 4.Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- 5.Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

**Response:** A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	<a href="#">View Document</a>
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>
Details of the Software procured for providing the assistance	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

#### **7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).**

**Response:**

Numerous efforts and activities have been made by the institution to provide an inclusive environment, i.e., tolerance and harmony toward cultural, regional, linguistic, community socioeconomic, and other diversity. The institution hopes to cultivate tolerance and harmony between students, faculty, and other stakeholders by hosting a variety of events and festivals.

Our country with a large population has an infinite number of physical characteristics and cultural patterns in India people practice all of the world's main faiths. During the college's festival, we conduct a traditional clothing competition of various states and fashion show to reflect our Indian culture. In this event, students were various outfits representing various states, faiths, and civilizations. Students learn about our country's cultures and contribute to the development of tolerance and peace toward cultural, regional, linguistic, communal, social, and other differences. This also contributes to the creation of an inclusive atmosphere in the college and society.

During Covid 19 pandemic, the administration takes measures while reopening institutions after assuring immunization of teaching and supporting staff. In this regard, our institution organized a special COVID 19 vaccination camp at the college campus to vaccinate all teaching, non-teaching staff, students, and other personnel.

Blood donation camp is annually organized at RajaRajeswari College of Engineering in association with Rotary Club and RajaRajeswari Medical College and Hospital where students, faculty and staff contributed voluntarily by donating blood for the noble cause of serving society and proudly adorn the badge of a blood donor. This fosters good connections among persons of various ethnic, cultural, and community origins. In the institute, there is Grievance Redressal Cell, which deals with the glitches with respect to anyone's race or cultural background.

College and cultural festivals facilitate students to work for a fixed goal in unison and this eventually develops a sense of responsibility in them. It elevates confidence and also teaches them how to work in a team and in various challenging situations. In outstation fests, students get a chance to explore the campus and city more after the event, eventually getting exposed to a different culture. This helps them understand different cultures and explore their sensitivities and finer nuances. Every year a cultural festival is arranged in college premises to express their talent and to learn about different cultures amongst the people.

Every year, RRCE organizes a Student Induction Program with the goal of assisting new students in adjusting to and feeling comfortable in their new atmosphere, instilling in them the philosophy and culture of the institution, assisting them in building bonds with other students and faculty members and exposing them to a sense of larger purpose and self-exploration.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

**7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).**

**Response:**

The institution trains students and employees about their constitutional commitments regarding values, rights, duties, and responsibilities and they are continuously working to develop them as better citizens of the country through different curricular and extra-curricular activities. Visvesvaraya Technological University also implemented a subject on Indian Constitution and Society across all engineering disciplines in order to raise awareness and sensitize students and workers to their constitutional obligations. As part of the process of developing democratic principles. The institute hoists the flag during national festivals and welcomes eminent people to encourage students and employees by teaching them about the traits of independent warriors and emphasizing citizens' duties and responsibilities. The institution supports student involvement in sports and games, and NSS/ NCC at the national level in order to develop national bonds and relationships. Many activities are undertaken by the institution, orientation programmes, training programmes, seminars, and workshops, in order to educate future leaders to inherit human values while meeting constitutional duties. Some of the themes covered in Elocution/ Debates activities include ethical values, rights, obligations, and responsibilities of citizens.

The Sadbhavana day is observed to encourage national integration, peace, affection, and communal harmony among the Indian people of all religions. 'Sadbhavana' in the English language means goodwill. Celebrated on August 20th every year, Sadbhavana Diwas commemorates the memory of our late erstwhile Prime Minister, Rajiv Gandhi. Being the youngest Prime Minister, Rajiv Gandhi's thought process was modern and different from others.

India had to fight really hard to drive the British out of the country. So, India had a government at the time of Independence, but it did not have a constitution. Republic Day was first celebrated when India's constitution came into existence. To teach this history to students RRCE celebrates all such national important days.

International yoga day is celebrated every year in the college campus and the main objective behind this observation is to make this ancient practice popular among the present generation of people who are unaware of its benefits. Adopting this practice is believed to provide significant relief from physical ailments and mental tension which plagues our day-to-day life.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

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

- 1.The Code of Conduct is displayed on the website**
- 2. There is a committee to monitor adherence to the Code of Conduct**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

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

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	<a href="#">View Document</a>
Code of ethics policy document	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

**7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).**

**Response:**

**Institution celebrates/organizes national and international commemorative days** with enthusiasm. Every year the institute organizes national festivals and birth/death anniversaries of the great Indian personality's viz., social reformers, and freedom fighters. These National festivals are celebrated to make the students aware and get motivated to contribute to the nation. The Institution also conducts multiple extension activities and services like tree plantation, blood donation camps, etc.

The institution celebrates International Yoga day during every year. As per the directions from the Ministry of Education and AICTE, International Yoga Day was celebrated on 21st June 2021. The yoga day celebration was held in the RRCE, Bangalore. A large number of students and faculty participated in Yoga day. The main objective is to provide awareness and salient health benefits of Yogic Practices such as pranayama, yoga asanas, and give hands-on yoga exercises to make their immune system strong and fight against corona and other diseases.

Institution celebrates National Mathematics day and conducted “Maths Quiz 2020” on the occasion of National Mathematics Day Celebrations on 22nd December 2020 (Tuesday) by RajaRajeswari Institution Innovation Council (RRIIC-MoE approved ICIC201912297). Students got the mathematical knowledge based on this quiz competition. Students will get confidence about the interview aptitude questions. Students were appreciated by giving merit certificates to the winners.

World Intellectual Property Day has been celebrated in the institution on 26th April 2021. Dr. Abhay Jere, Chief Innovation Officer, MoE Innovation Cell, and Dr. Mohit Gambhir, Innovation Director, MoE Innovation Cell was the resource person who discussed on the topic of “Why IP is Important in Academia?”. The objectives of the event were to give exposure to the students and faculty members on Intellectual Property Rights (IPRs) and how to file IPRs and how to commercialize the patents into products.

RajaRajeswari Institution Innovation Council & Women Entrepreneurship Cell of RajaRajeswari College of Engineering, Bangalore is jointly organizing International Women’s Day on 8th March. National level women empowerment and leadership talk on “Women Entrepreneurship & Empowerment” was carried out.

**Objectives of the event are:**

1. Sensitization on Women Empowerment.
2. Discussion on Women Entrepreneurship Opportunities
3. Women Leadership & balancing EQ and IQ at Workplace
4. Discussion on Economic Up-liftment by Women Startup creation
5. Challenges faced by Women Entrepreneurs.

On every 15th August, RajaRajeswari College of Engineering celebrates Independence Day. To Commemorate 75th Independence Day in the campus, Dr. T. Chandrashekar, Principal hoisted the national flag and recited the National anthem along with Management, HOD’s, staff and students of the institution. The dignitaries, staff, and the students showed their reverence to the Father of the Nation Mahatma Gandhi by offering flowers. The Oath taking ceremony of NCC cadets and NSS volunteers was followed by the presentation on the report on the importance of Independence Day.

The institution also celebrates Teachers day on 5th September, Engineers day on 15th September to impart the contributions made to the nation by eminent professionals & personalities.

File Description	Document
Link for Geotagged photographs of some of the events	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>
Link for Annual report of the celebrations and commemorative events for the last five years	<a href="#">View Document</a>

## 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:**

#### Practice-I

##### 1. Title of the Practice: Integrated Teaching

An integrated approach in teaching allows the student to explore, gather, process, refine and present information about topics they want to learn without the constraints imposed by traditional subject barriers. The institution is much concerned with the integration in the field of professional education and professional training of the student. The institution is in the coordination of different teaching activities to make sure the harmonious functioning of the educational process for a more effective teaching and learning process.

##### 2. Objectives of the Practice

An integrated approach in teaching allows students to engage in purposeful & relevant learning. It encourages students to see the interconnectedness and interrelationships between the curriculum areas. Rather than focusing on learning in isolated curriculum areas, an integrated program is based on skill development around a particular theme that is relevant to the student in the class. This practice helps students to explore multiple perspectives of concepts that they study in their curriculum. It helps the students to develop a bridge between the subjects they study. Helps to understand multi-disciplinary subjects and concepts and to carry out inter-disciplinary projects. It helps the student to find a methodological approach for the problem and to find different possibilities of the solution to the problem.

##### 3. The Context

The model of integrated teaching is the inquiry approach. Inquiry approaches allow for students to construct meaning using their prior knowledge on a Subject and new knowledge gained during the learning process.

Integrated learning incorporates multiple subjects, which are usually taught separately, in an Interdisciplinary method of teaching. The goal is to help students remain engaged and draw from multiple sets of skills, experiences, and sources to aid and accelerate the learning process. Through this practice, our

expectations were met by the constant engagement of faculty members and students in online discussions through webinars, seminars, technical talks, and guest lectures. In this practice, clear and measurable objectives were set and activities are carried out to match the objectives. Inline interactive sessions were conducted to emphasize active learning. Students were given assignments and evaluated in front of students to clarify on how assessments were applied and specific measures available in the evaluation process. Frequent specific feedback were taken from students for improvisation.

#### **4. The Practices**

The following practices are adopted at our institution to implement integrated teaching.

- 1.Seminars
- 2.Technical Videos
- 3.Tutorials
- 4.Hands-on Workshops related to Curriculum
- 5.Industrial Visit
- 6.Projects
- 7.Conferences
- 8.Project Exhibition and Poster presentation

Innovative teaching facilities like Smart Class-Rooms, LCD projectors, Seminar hall, Internet and Wi-Fi facilities enable the teachers to teach uniquely and innovatively and make the students inculcate in the proper learning process. Interactive techniques like quizzes, group discussions, projects, internships, industrial visits, and applications of ICT resources enrich the teaching-learning experience and engage students in higher-order thinking and investigation.

Institute facilitates and inspires student learning and creativity by developing Centre of Excellence in the department level and the area of thrust. Also, facilitate digital-age learning experiences by creating smart classrooms, seminar halls, audiovisual lecturing, and through virtual laboratories. Specific models were exposed to students to support student learning. Online teaching mode is promoted to engage students during pandemic situations. Constant placement training is conducted to students to support their professional growth and leadership skills.

#### **5. Evidence of Success**

Students stated that integrated teaching prepared them to learn at ease and helped them to understand the subject in a better way. Moreover, the methodology helped them to establish relationships among the subjects they had undergone. Through this practice, the average score obtained by the students in the end-semester examinations was increased. Although the difference in the scores was small, it was statistically significant.

The number of students responded well during their placement interviews to the questionnaires raised by the on-campus placement drives. Analysis of the feedback collected through the questionnaire showed that, for all items, the majority of the students had given positive answers. Although the analysis of data of passed out students to present students showed that there is an increase in deep learning, it also showed an increase in knowledge of the student in the area of preference.

#### **6. Problems Encountered and Resources Required**

The implementation of integrated teaching had challenges. There were initial problems in creating an integrating teaching process. One challenge was identifying faculty compatibility. Another major problem revolved around creating a system for sharing advanced teaching skills among other faculty in the department. There were also instances where departments faced problems scheduling classes in the room where the mode of teaching was supported. Basic resources required for teaching like teaching aids, software tools, audio, video systems are incorporated. The implementation of integrated teaching had challenges. The planning of integrated teaching across departments was time-consuming and involved negotiation with the faculty members. Moreover, a lot of time was invested in the development of the integrated model, as it required inputs from all the departments participating in the process.

## **Practice II.**

### **1. Title of the practice: Mentoring System**

A well-functioning on effective mentoring system is available in the institution to build a one-to-one relationship with students for the personal, academic, and overall growth of students. Mentoring helps to build confidence and a conducive environment for students to increase knowledge and build skills for future goals and milestones. Throughout their course, students develop an identity and involve in deep understanding of professional principles and the skills to apply their ideas. This practice is so much important that it cannot be left to students to find some informal methods to practice and should be imparted to students by a structured system. The overall goal of our student-mentoring program is to advance the professional development of our students during their program of study through regular group meetings with skilled, trained faculty mentors.

### **2. Objectives of the practice**

The Mentoring system assigns a faculty member to a group of students. The mentor meeting is scheduled every week/fortnight for the mentoring of the student. The mentor plays the role of a personal mentor for the student in all matters. For the institute, the mentor is the first point of reference for all matters concerning any specific student. The mentor guides the student at every step of their stay at the institute to be successful at whatever the student takes up. The mentor personally ensures that the student is aware of all the resources available to the student during their course of study at the institute. The mentor is available to counsel the student in any matter of concern apart from the curriculum also. Mentoring system is practiced to build meaningful mentoring relationships among mentee and mentor, to showcase personal reflection, and to encourage exploration of talents related to sports, academic, and extra-curricular to help the professional development of the student. This system has evolved from a model of 20 students- 1 faculty pairings that resulted in spending more time with students during mentoring. Through the practice students who share interests in the theme (e.g., human rights, health policy, arts, health sciences, environment protection, energy saving, waste management) are given provision to participate in student-led discussions on topics related to their interest by conducting Green day, NSS activities, outreach program. Structured exercises enable students to get to know about their social responsibilities and constitutional obligations.

### **3. The Context**

The Mentoring system is relatively new in general to a student entering the institute. The students do take some time to familiarize themselves and feel more comfortable with their mentors and most importantly develop confidence in them. The students meet their mentors to consult with them regarding the courses to



take and to guide them through the registration process. The students then meet their mentors before every internal assessment to update them on their progress in every course. The students also meet their mentors after the internal assessments to discuss their performance and about the scope for improvement next time and the steps to be taken to achieve the same. The students might also choose to meet their mentors more regularly for advice regarding matters which may be extra- or co-curricular or otherwise. In addition, the mentor might also choose to see any student with more regularity when their academic performance concerns the mentor.

#### **4. The Practice:**

A mentor is a personal mentor and counselor for a student during the duration of his stay at the Institute. A mentor represents a parent away from home for a student and is the first point of reference for the activities of a student during the complete course of study at the institute.

As soon as a student enters the institute, a faculty member is assigned to take over the role of a mentor for the student. The mentor not only guides the student in academic matters but also any matter of concern for the student. The student seeks the advice of the mentor at every step of their course of study beginning from the registration for courses at the start of every semester. The students meet their mentors regularly. However, depending on the need, mentor conducts more meetings with their students and their parents. The mentor educates the student about the various course requirements, such as the mandated minimum and maximum course load every semester, and how to choose electives.

The mentor helps the students to channel their interests and energies effectively during the complete course of study at the institute. The students meet their mentors for various reasons, some students would like extra help with the material in a course and are shy to approach a new instructor assigned to the course. Few might be facing problems adjusting to the new environment may be in the hostel or at other places around the institute; some others would like to know about their options of availing various resources at the institute. Students would like to know about their options for going through internships during the break or even the benefits of the same, few might want to do some minor project work or participate in various competitions in addition to their courses, some others might want to know their options after graduation and how to figure out where they would fit in better. At times the students might just need someone who can give them personal time and attention by listening to their struggles in transitioning to a higher education environment and finally in becoming a constructive member of society.

In the subsequent mentoring process, students led discussions on topics of interest in the group's discussion. It is carried out in front of other groups of students to motivate them to join the group to ensure continuity of the mentoring process. Mentors also guide students to participate in workshops, conferences, and webinars to learn about the interested topic and enhance their facilitation skills. Through mentoring, professional behaviors are imparted to students by constant meetings. Mentors are also facilitated by providing feedback and guidance to the students' ideas and passions and the challenges they encounter. The faculty mentors also keep descriptive proctor files for each student. The class teacher and mentoring coordinator will be assessing student understanding and it will be followed up at regular intervals.

#### **5. Evidence of success:**

The most important evidence of success for the mentoring system is from the testimonials of the End-users. The students and their parents have been very happy with the mentoring system. Generally, for the complete duration of the course of study of a student. The behavior of the students on the campus, in

general, has witnessed a tremendous improvement and the students are much happier and contented with their course of study at the institute after the implementation of the mentoring system. The pass percentage and the average academic performance of the students have also achieved greater heights with the mentoring system. Some students have presented themselves as quite a challenge for their mentors, but they figure out their priorities and start performing better after counseling sessions with their mentors. The students have been at most risk during their initial Stages in the course of study. The transition to higher education setup proves to be sudden for some students. The mentoring system has addressed the needs of the students and effectively nurtured many students during the duration of its implementation.

This mentoring program has increased the graduation rates of students. Mentoring is significantly correlated with a wide variety of positive student outcomes, such as student behaviors, attitudes, and placement rates.

## **6. Problems Encountered and Resources Required**

There were initial problems in creating mentoring process. One challenge was identifying mentors, then motivating, educating and training to do effective mentoring. Another major problem revolved around creating a system for interacting students with mentors in the department. There were also instances where faculty failed to understand the level of student understanding in the classrooms. Resources required that support mentoring like mutual contact, group discussions, meeting with parents, software tools, audio, video lecture systems are incorporated.

However, due to lack of an operational mentoring definition, a lack of theoretical guidance and poor research designs very difficult to draw positive correlations equate to casual effects. University has to carry out faculty development programmes to address these limitations by knowing through mentoring programs increase student success rates. In mentoring programs (1) psychosocial support; (2) career guidance, and (3) academic and program guidance is the need for more rigorous research designs in the studies of undergraduate mentoring programs. Lastly, the best practices identified need to be carefully worked through implementing best practices will help clarify expectations for mentor and mentee and ultimately improve the overall experience of mentoring.

However, RajaRajeswari College of Engineering has signed MoU with the Indian Society for Education Research and Technology (ISERT) which bridges the gap between the academic curriculum of the University and current industry practices. ISERT provides a unique digital capacity-building platform to connect RRCE students with industry mentors for up-skilling them based on current industrial trends and technologies by organizing webinars, hands-on sessions, Up-skill training programmes, Internships, and certify them which add value to their e-profile. Industries look into the e-profile database of RRCE students in the ISERT digital platform and conduct interviews and recruit RRCE students in their Human Resource team based on the skillset requirements. The above information will be available in the website: <http://isert.org.in>, [www.college.selectsmart.net](http://www.college.selectsmart.net).

File Description	Document
Link for Best practices in the Institutional web site	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

### 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:

##### Distinctive Area: RajaRajeswari Institution Innovation Council (RRIIC)

RajaRajeswari Institution Innovation Council (RRIIC) was established at RajaRajeswari College of Engineering, Bangalore in the year 2019 as per the guidelines of the Ministry of Education (MoE) Innovation Cell, formerly Ministry of Human Resource Development (MHRD), Govt. of India. AICTE MIC Approved: IC201912297.

##### Scope and Objective:

The objective of RRIIC is to create and cultivate a vibrant and self-sustainable Entrepreneurship, Innovation, and Startup ecosystem in RajaRajeswari College of Engineering by providing state of the art infrastructure facilities, mentoring support and seed funding which resulting in Innovation and Entrepreneurship driven employment and economic growth in the southern part of the country.

##### Major Focus of RRIIC:

1. Establish a vibrant Innovation and Entrepreneurship Eco-System in the campus by providing mentoring support to the faculty members and students.
2. Encourage, facilitate and support the development of at least 10 technology-based start-ups in RajaRajeswari College of Engineering.
3. Encourage and support students and faculty members for filing Intellectual Property Rights (IPRs) in National and International Patents Offices.
4. Provide Seed funding for Technology Commercialization and scalable market reach for the budding entrepreneurs and technopreneurs.
5. Adopt National Innovation and Startup Policy (NISP 2019) and formulate Higher Education Institute (HEI) level Innovation and Startup Policy (RRCEISP 2020) and promote Innovation and Entrepreneurship (I & E) related activities and establish I & E eco system at HEI level. Investment in entrepreneurial activities should be a part of the Institutional financial strategy. Minimum 1% fund of the total annual budget of the college should be allocated for funding and supporting innovation and entrepreneurial activities through the creation of a separate "Innovation Fund".
6. Extend the dedicated infrastructure support, mentoring support, and seed funding for developing innovative technology-based applications or products or services for high social impact sectors such as Sustainable development to avoid climate change, advancements in communication, renewable energy deployment, education, healthcare, agriculture, Sanitation, Food Processing, and

Clean energy.

### Organization of the Institution Innovation Council:

RajaRajeswari Institution Innovation Council has different entities:

1. **RajaRajeswari Business Incubator (RRBI):** RRBI is a registered Business Incubation Unit established as a non-profit special purpose vehicle under the Societies/Companies act of Govt. of Karnataka.
2. **Entrepreneurship Development Cell:** The objective of EDC is to support and align engineering and management students by organizing mentorship sessions on Design Thinking and Prototype Development by External Experts from Pongu Ventures Private Limited, Chennai. Student Innovators are provided with Maker's Space facility to design their Innovative Prototypes, consulting support for them to test their prototypes for Technological feasibility, Commercial viability. RRCE Institution Innovation Council members support the Student Entrepreneurs with Market Analysis Survey, Digital Marketing and arrange seed funding to develop innovative Prototypes.

Total number of Academic and Industry Partners: **42**

Total number of Entrepreneurship Partners: **7**

1. **IPR Cell:** IPR Cell is functional in RRCE with the implementation teams consisting of Student and Faculty Entrepreneurs and innovators with a minimum target outcome of 40 IPR filing and publications by faculty members per year, 10 IPR filing, and Publications by Student Teams per year. It also facilitates and offers seed funding for Technology adoption and commercialization by giving mentoring support to a minimum of 10 Student start-ups and five faculty start-ups per year by reimbursement of the registration fee, consultation support to start-up registration as per the Companies Act, providing 24/7 infrastructure facility and working space.
2. **IDEA Club & Prototype Centre:** An unique facility named Idea Development and Adoption Lab (IDEA Lab) with fabrication labs and Makers Space for Idea Development, Prototype Design, Evaluation, and Application of Technology for Solving Problems in the Industry, Academia and Society by adopting Technology. IDEA Club organizes the events such as Ideathon Competition, Prototype Exhibition, and Startupthon competitions aligned with National Innovation and Startup Policy 2019 adopted by the Ministry of Education to identify the potential prototype development teams for seed funding of up to Rs 1.00 Lakh to develop a Minimal Viable Product (MVP).
3. **Incubation Centre and Startup Club:** Startup club is provided with a pre-incubation & Incubation facility and extends support to startups by students, staff, and faculty for mutually acceptable time-frame and collaborate with nearest incubation facilities in other HEIs in the region in order to facilitate access to their students, staff, and faculty.

### Major Milestones:

1. Establishing EDC Cell in the campus with at least 500 students and 100 faculty members.
2. Creating a mentor network of at least 25 alumni and NGOs who are ready to contribute.
3. Develop a Co-working space of a minimum of 3000 Sq. Mtrs for incubation and maker's space.

4. File a minimum of at least 25 patents every year (2021) with the support of the IPR Cell.

### Key Performance Indicators (KPIs)

1. The number of students in Entrepreneurship Cell activities is at the minimum of 500
2. Number of students participating in National Level Innovation events: a minimum of 100 students and 25 Mentors ( minimum of 25 Teams of Size 4 students and 1 mentor )
3. Number of faculty as mentors for students projects: 90% of the total faculty members.
4. A number of faculty who take up courses in Innovation and Entrepreneurship: 50% of the total faculty members of the college.
5. Number of Campus companies / Startup: Minimum 10 per Academic year (minimum one startup from each department)

### RRIC Reward System:

1. The college will develop academic and non-academic incentives and reward mechanisms for all staff members and stakeholders who are actively contributing, involving, and supporting the entrepreneurship agenda and activities on the campus.
2. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, training, etc.
3. The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships, etc\
4. A performance matrix will be developed and to be followed for evaluation of annual performance.

File Description	Document
Link for appropriate web in the Institutional website	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

## 5. CONCLUSION

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### Additional Information :

RRCE has MOU with the International Society for Engineering, Research and Technology (ISERT) to fill the gap between the industry and academia. This MOU helps the students to attend the seminars, hands-on workshops, internships, projects, lecture series, certification programs etc. organized by the industries and provide the certificate to the students. The institution has total 42 numbers of Academic and Industry Partners.

RRCE Institution Innovation Council (RRIIC) supports the Student Entrepreneurs with Market Analysis Survey, Digital Marketing and arranges seed funding to develop innovative Prototypes. The institution has seven numbers of Entrepreneurship Partners.

RajaRajeswari Business Incubator (RRBI) is a registered Business Incubation Unit established as a non-profit special purpose vehicle under the Societies/Companies act of Govt. of Karnataka. It will provide incubation, innovation seed fund support to create an Innovation and Entrepreneurship Eco-System for the faculty and the student of the institution.

Centre of Excellence in the Internet of Things (IoT) facility of in the Department of Computer Science & Engineering well-stocked integrated with IDEA Lab, which will provide IoT based Technological solutions for rural healthcare and agriculture industry where research scholars of the institution are working on it.

Centre of Excellence in Wireless Sensor Network functioning in the department of Electronics and Communication Engineering, which provides solutions and improves the per capita income of the farmers in the state.

Centre of Excellence in Hyperworks & Toyota Automotive Laboratory established in the Mechanical Engineering department in collaboration with IDEA Lab to simulate the Automotive Vehicle design and evaluation.

Organizing Ideathon Competition, Prototype Exhibition, and Startupthon competitions aligned with National Innovation and Startup Policy 2019 adopted by Ministry of Education to identify the potential prototype development teams for seed funding of up to Rs 1.00 Lakh to develop a Minimal Viable Product (MVP).

Start-up Eco System established in the campus creates Internship opportunities for at least 25% of the students on the campus and creates Placement opportunities for 10% of the students in the Campus.

The webinars and related courses offered by different platforms such as NPTEL and SWAYAM have ensured a structured implementation of OBE among faculty and students

### Concluding Remarks :

RajaRajeswari College of Engineering (RRCE), during its existence of 15 years, is striving to achieve the objectives of promoting excellence in technical education. The major objective is to enhance the standards and delivery of the degrees. The institution promotes continuous professional development by imparting training programmes, organizing various activities and encouraging R&D activities.

The Institution adopts the policy guidelines as envisaged in AICTE, VTU, Government of Karnataka, NAAC, NBA and other accredited agencies as applicable from time to time. The Governance and Management of the institution embrace transformation as a continuous way of teaching-learning and hence adopt the transformation to respond to new challenges to ensure better learning outcomes.

NAAC and NBA award of accreditation of the institution has a focus in the practice of excellence and adopt the culture pertaining in industry and Society Oriented Research, Innovation, Interdisciplinary, Industry partnership by establishing Centres of Excellence in various domains, entrepreneurship development, Networking (Student, faculty & other specialist staff), Patents & IPR, student-centric, where the teacher will play the role of facilitator and Feedback cum corrective measures.

NAAC certification will be a measure to evaluate and assure the standard of education delivered at our institution. It is anticipated that the NAAC accreditation further improves and promotes institutional benchmarks.