



# RajaRajeswari College of Engineering

(Approved by AICTE, New Delhi, Govt. of Karnataka & Affiliated to Visvesvaraya Technological University, Belgaum)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Ref:- RRCE/NAAC-AQAR/2017-18/037-B

Date:- 25/09/2018

To,  
**Dr. Sujatha P. Shandbhag**  
Deputy Advisor,  
National Assessment and Accreditation Council  
Post Box No.1075,  
Nagarabhatta  
Bengaluru-560072.

Respected Madam,

Sub:- **Submission of Annual Quality Assurance Report (AQAR) of RajaRajeswari College of Engineering, Bengaluru, Karnataka for the year 2017-18- Reg.**

- Ref:-1. NAAC Accreditation letter no: NAAC/WH/Cert-ANA/EC (19<sup>th</sup> SC)/37.1/2017  
Dated: 27/01/2017 (Validity up to: 01/12/2021)  
2. Our Institution Track ID: KAC0GN23596


With reference to the above subject and reference cited, we submit herewith the Annual Quality Assurance Report (AQAR) of RajaRajeswari College of Engineering, Bengaluru, Karnataka in the prescribed format as desired by NAAC for the year 2017-18. Also, the same AQAR report has been uploaded into the institution portal through web link as:

[https://www.rrce.org/rrce/wp-content/uploads/2018/09/AQAR\\_2017-18.pdf](https://www.rrce.org/rrce/wp-content/uploads/2018/09/AQAR_2017-18.pdf)

This is submitted for your kind information and oblige.

Thanking you Madam,

Yours Faithfully

  
Principal  
(Dr. **RAJESHWARI**)  
**COLLEGE OF ENGINEERING**  
Ramohalli Cross, Bengaluru-74

#### Campus

#14, Ramohalli Cross, Kumbalgodu, Mysore Road  
Bengaluru - 560 074  
Ph : 080 - 28437124 / 28437375 Fax : 080 - 28437373  
E-mail : [info@rrce.org](mailto:info@rrce.org), [enquiry@rrce.org](mailto:enquiry@rrce.org)  
[www.rrce.org](http://www.rrce.org)

**NAAC Accreditation (Cycle 01)**  
**Vide letter no: NAAC/WH/Cert-ANA/EC (19<sup>th</sup> SC)/37.1/2017**  
**Dt: 27/01/2017**  
**Valid up to: 01/12/2021**

**Institution Track ID: KAC0GN23596**

**ANNUAL QUALITY ASSURANCE REPORT (AQAR)**

**Submitted to**



**NATIONAL ASSESSMENT AND ACCREDITATION  
COUNCIL**

**Bangalore – 560 072**

**By**

**RAJARAJESWARI COLLEGE OF  
ENGINEERING**

**Bangalore – 560 074**

**For the Academic year 2017 - 18  
(July 2017 - June 2018)**

## CONTENTS

Sl. No.	Details	Page No.
<b>Part - A</b>		
<b>1</b>	<b>Details of the Institution</b>	<b>4</b>
<b>2</b>	<b>IQAC Composition and Activities</b>	<b>6</b>
<b>Part - B</b>		
<b>3</b>	<b>Criterion – I: Curricular Aspects</b>	<b>9</b>
<b>4</b>	<b>Criterion – II: Teaching, Learning and Evaluation</b>	<b>13</b>
<b>5</b>	<b>Criterion – III: Research, Consultancy and Extension</b>	<b>17</b>
<b>6</b>	<b>Criterion – IV: Infrastructure and Learning Resources</b>	<b>29</b>
<b>7</b>	<b>Criterion – V: Student Support and Progression</b>	<b>34</b>
<b>8</b>	<b>Criterion – VI: Governance, Leadership and Management</b>	<b>39</b>
<b>9</b>	<b>Criterion – VII: Innovations and Best Practices</b>	<b>46</b>
<b>10</b>	<b>Abbreviations</b>	<b>63</b>

## **The Annual Quality Assurance Report (AQAR) of the IQAC** *(For Affiliated/Constituent Colleges)*

Institutions Accredited by NAAC need to submit an Annual self-reviewed progress report i.e. Annual Quality Assurance Report (AQAR) to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the IQAC at the beginning of the Academic year. *The AQAR period would be the Academic Year. (For example, July 1, 2017 to June 30, 2018)*

### **Part – A**

#### **Data of the Institution**

*(data may be captured from IIQA)*

##### **1. Name of the Institution**

- Name of the Head of the institution : Dr. R. Balakrishna
- Designation : Principal
- Does the institution function from own campus : Yes
- Phone no./Alternate phone no. : 080-28437124 / 7598
- Mobile no. : 9900028023
- Registered e-mail : [principal@rrce.org](mailto:principal@rrce.org)  
[office@rrce.org](mailto:office@rrce.org)
- Alternate e-mail : [iqacrrce@gmail.com](mailto:iqacrrce@gmail.com)
- Address : #14, Ramohalli Cross,  
Mysuru Road,  
Kumbalagodu,
- City/Town : Bengaluru
- State/UT : Karnataka
- Pin Code : 560074

**2. Institutional status:**

- Affiliated / Constituent : Yes (Affiliated)
- Type of Institution : Co-education/Men/Women
- Location : Rural/Semi-urban/Urban:
- Financial Status : Grants-in aid / UGC 2f and 12 (B) / Self financing✓ (Please specify)
- Name of the Affiliating University : Visvesvaraya Technological University Belagavi, Karnataka.
- Name of the IQAC Co-ordinator : Prof. Thanuj Kumar M.
- Phone no. : 080-28437124
- Alternate phone no. : 080-28437598
- Mobile : 9980633612
- IQAC e-mail address : [iqacrce@gmail.com](mailto:iqacrce@gmail.com)
- Alternate Email address : [thanuj369@gmail.com](mailto:thanuj369@gmail.com)

**3. Website address:**

Web-link of the AQAR: (Previous Academic Year):

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

<http://www.rrce.org/naac/AQAR 2016-17.pdf>

**4. Whether Academic Calendar prepared during the year?**

Yes/No....., if yes, whether it is uploaded in the Institutional website:

Web link:

<http://www.rrce.org/rrce/wpcontent/uploads/2018/01/Calenderofevents 2018 feb May.pdf>

5. Accreditation Details:

Cycle	Grade	CGPA	Year of Accreditation	Validity Period	
1 <sup>st</sup>	A	3.37	2016	02/12/2016	01/12/2021

6. Date of Establishment of IQAC : 01/08/2015

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year for promoting quality culture		
Item/Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
ISO Certification	09/08/2016 to 08/08/2019	All Departments
NBA	05/10/2016 to 30/06/2019	4 Departments (CSE, ECE, ME & EEE)
HLACT	01/12/2015 to 31/12/2023	All Departments
IQAC minutes of meeting	01/07/2017 to 30/06/2018	Maintained

**Note: Some Quality Assurance initiatives of the institution are:**  
**(Indicative list)**

- Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analysed and used for improvements
- Academic Administrative Audit (AAA) conducted and its follow up action
- Participation in NIRF
- ISO Certification
- NBA etc.
- Any other Quality Audit

8. Provide the list of funds by Central/ State Government-

UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
RRCE/Electronics And Communication Engg./Dr.Rangaiah L.	Seminar Grant	AICTE	2017	1,00,000/-
RRCE/ Information Science and Engineering / Dr.J.Amutharaj	Student Project Grant	Karnataka State Council for Science and Technology (KSCST), Govt. of Karnataka	2017 ( 6Months)	Rs. 4000/-
RRCE/ Information Science and Engineering / Dr.J.Amutharaj	Student Project Grant	Vishvesvaraya Technological University, Belgaum	2017 ( 6Months)	Rs. 5000/-
RRCE/ Information Science and Engineering / Mrs.Neha Singhal	Student Project Grant	Vishvesvaraya Technological University, Belgaum.	2017 ( 6Months)	Rs. 5000/-

9. Whether composition of IQAC as per latest NAAC guidelines: <sup>✓</sup>Yes/No

Latest notification of formation of IQAC is uploaded

10. No. of IQAC meetings held during the year:

There were 6 minutes of minutes of IQAC meeting and compliance to the decisions has been uploaded on the institutional website.

Web portal details:

<http://www.rrce.org/news/minute-of-meeting-of-iqac/>

11. Whether IQAC received funding from any of the funding agency to support its activities during the year?                      Yes                      No <sup>✓</sup>

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

- Yoga day,
- Cultural fest,
- Sports,
- Innovative day,
- Department Technical Fests,
- Blood donation camp,
- Tree plantation under NSS,
- Technical seminars at department level,
- International and National conferences were held, etc.

13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
1. To increase in research publications in reputed journals. 2. Planned to increase MOU's with industries and reputed institutions. 3. Increase placement activities in all the departments 4. Enhance Industry Institution Interactions	1. Research publications have improved 2. MOU's are under progress and action plan is reviewed. 3. Conducting pre-placement training to the students from 2 <sup>nd</sup> year onwards and allowing students to talk up in house coaching for IAS, IES, etc. 4. Industry Institution Interactions like industrial visits, technical talks, internships, etc are being conducted.

14. Whether the AQAR was placed before statutory body? Yes /No:

Name of the statutory body: Governing Council      Date of meeting(s): 7/11/2017

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?

Yes/No:

Date:

16. Whether institutional data submitted to AISHE: Yes/No: ✓

Year: 2017-18

Date of Submission: 14/02/2017

17. Does the Institution have Management Information System?

✓ Yes No

If yes, give a brief description and a list of modules currently operational.  
(Maximum 500 words)

www.1message.com is the management information system adopted by the institution to inform the activities, events, and also send details of the student's performance to their parents. Every student, faculties and staff are given user name and password to upload or download the files and check their database. Faculties take attendance online and upload the subject lesson plan, assignments, notes, presentations, IA marks, etc. Circulars are also sent online to individual students and staffs. Calendar of events, faculty achievements, activities, events, programs conducted are updated as and when it is conducted.



## **Part-B**

<b>CRITERION I – CURRICULAR ASPECTS</b>
<b>1.1 Curriculum Planning and Implementation</b>
<b>1.1.1 Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words</b>
<ul style="list-style-type: none"><li>➤ University will communicate with the institution by sending the action plan for the academic year through “calendar of events” of every semester to the affiliated colleges.</li><li>➤ Taking this in to account principal will instructs to prepare college “calendar of events” after discussions with heads of the departments.</li><li>➤ The semester plan consists of commencement date and last working date, dates for conduction of the internal assessments, workshops, seminars, industrial visits, cultural, sports, etc. and others planned events.</li><li>➤ The faculty members of various departments develop academic plans such as timetables, lesson plans, student database, laboratory manuals and course files, etc. for the academic year.</li><li>➤ Faculties are encouraged to plan in advance to impart the curriculum following OBE (Outcome Based Education) through innovative teaching methods such as presentations, assignments, expert technical lectures, discussions, workshops, seminars, quiz, industrial visits apart from regular lecture sessions and the same is taken for approval from their Head of Department and the Principal.</li><li>➤ Identification of below average students and motivating them towards excellence in their academic performance by taking remedial classes.</li><li>➤ Allocation of the subjects to the faculty is done taking into consideration, the faculty subject specialization, experience and their willingness.</li><li>➤ The progress of syllabus coverage is monitored periodically at various levels.</li><li>➤ Regular mentoring is carried out by the faculties and grievances if any, suitable remedial measures are taken as and when necessary.</li><li>➤ The institution conducts academic audit of attendance registers, internal exams, question papers and evaluation process.</li><li>➤ Periodical feedback is obtained from the students on aspects of teaching-learning process.</li><li>➤ The faculty is encouraged to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions and also by arranging workshops, seminars, and industrial visits apart from regular/traditional teaching methods.</li><li>➤ The academic review meetings are held twice in a semester to review the progress of syllabus coverage and the effectiveness of the instruction delivery.</li></ul>

- The parent-teacher meetings are held to review the progress of syllabus coverage and discussion on performance of the student.
- Course files are prepared in detail by faculty which includes:
  - Vision, mission of the institution
  - Vision, mission of the department
  - Student list
  - Students profile
  - Syllabus copy with text books and reference books
  - Calendar of events
  - Course Time table
  - Lesson plan
  - Staff Diary
  - Teacher's Diary
  - Attendance registers
  - Individual time table
  - Course Outcomes
  - Lecture notes
  - Question papers of Internal Tests with scheme and solution
  - Assignments
  - Copies of PPTs slides, if any
  - VTU question papers of previous years
  - Previous year result analysis

Industrial visits are arranged for the students to make them familiar with the industry process and current technological developments

#### 1.1.2 Certificate/ Diploma Courses introduced during the Academic year

Name of the Certificate Course	Name of the Diploma Courses	Date of introduction and duration	focus on employability/ entrepreneurship	Skill development
NIL	NIL	NIL	NIL	NIL

<b>1.2 Academic Flexibility</b>			
<b>1.2.1 New programmes/courses introduced during the Academic year</b>			
<b>Programme with Code</b>	<b>Date of Introduction</b>	<b>Course with Code</b>	<b>Date of Introduction</b>
<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>

<b>1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the Academic year.</b>					
<b>Name of Program adopting CBCS</b>	<b>UG</b>	<b>PG</b>	<b>Date of implementation of CBCS / Elective Course System</b>	<b>UG</b>	<b>PG</b>
	BE-Civil Engineering	M.Tech-Computer Science and Engineering		2015-16	2016-17
	BE-Computer Science and Engineering	M.Tech-Computer Network Engineering		2015-16	2016-17
	BE-Electrical & Electronics Engineering	M.Tech-Communications systems		2015-16	2016-17
	BE-Electronics & Communications Engineering	M.Tech-Digital Electronics and communication Engineering		2015-16	2016-17
	BE-Information Science and Engineering	M.Tech-Thermal Power Engineering		2015-16	2016-17
	BE-Mechanical Engineering	MBA-Master of Business Administration		2015-16	2016-17
		MCA- Master of Computer Applications		2015-16	2016-17

<b>1.2.3 Students enrolled in Certificate/ Diploma Courses introduced during the year</b>		
	<b>Certificate</b>	<b>Diploma Courses</b>
<b>No of Students</b>	<b>Nil</b>	<b>Nil</b>

<b>1.3 Curriculum Enrichment</b>		
<b>1.3.1 Value-added courses imparting transferable and life skills offered during the year</b>		
<b>Value added courses</b>	<b>Date of introduction</b>	<b>Number of students enrolled</b>
Training the Trainers Hyper works, Ansys	23/09/2017 to 30/10/2017	40

Skill Development Programs (SDP)	23/09/2017 & 26/09/2017 07/10/2017, 12/10/2017 & 26/10/2017	100
Five days' workshop on Total Station	09/04/2018 to 13/10/2018	50

<b>1.3.2 Field Projects / Internships under taken during the year</b>	
<b>Project/Programme Title</b>	<b>No. of students enrolled for Field Projects / Internships</b>
Prayojana Construction Management Training Institute	3
Non – Destructive testing Division	8
Bangalore Metro Rail Corporation Ltd.,(BMRCL)	5
RR Contractors & Constructions	8
Metcraft Engineering, Harohalli industrial area, Ramanagar	3

<b>1.4 Feedback System</b>				
<b>1.4.1 Whether structured feedback received from all the stakeholders.</b>				
<b>1) Students</b>	<b>2) Teachers</b>	<b>3) Employers</b>	<b>4) Alumni</b>	<b>5) Parents</b>
<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

<b>1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)</b>
<p>There is a formal mechanism to obtain feedback from students on a regular basis. The feedback is also obtained from the students and the remaining stakeholders and their views are considered to bring in the appropriate timely changes in the system. During the reformation of the curriculum university invites the representative from the college to put forward the view on behalf of all the stakeholders of the Institute. The senior faculty would participate from the institution and share the feelings of all the stakeholders, which would help in enriching the curriculum and to bring the new changes in the syllabus and the environment.</p> <p>Effective Feedback Encourages the Instructor, Improving Motivation and Stimulating Increased Effort</p> <p>Both the tone of feedback and the context in which it is given have both been shown to be important for determining effectiveness. It helps learners to maximize their potential at different stages of training, raise their awareness of strengths and areas for improvement, and identify actions to be taken to improve performance. The most effective leaders actively seek feedback to enhance their performance. Feedback can also be highly motivating and energizing. It has strong links to employee satisfaction and productivity. People like to feel involved and identified with their organization. Effective leaders have good listening and emotional awareness – they understand the impact that their behaviour has on others. When staff receives little feedback they tend to be self-critical or self-congratulatory as they are relying upon events rather than specific feedback to measure their performance and impact.</p>

CRITERION II -TEACHING-LEARNING AND EVALUATION						
2.1 Student Enrolment and Profile						
2.1. 1 Demand Ratio during the year						
Name of the Programme	Branch	Number of seats available	Number of applications received	Students Enrolled		
B.E.	M.E	180	160	134		
	ECE	180	250	151		
	CSE	180	300	171		
	ISE	60	100	40		
	EEE	60	40	29		
	CV	120	150	105		
2.2 Catering to Student Diversity						
2.2.1. Student - Full time teacher ratio (AY: 2017-2018)						
Year	Branch	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2017 - 2018	M.E	134	03	34	03	37
	ECE	151	1	30	6	36
	CSE	171	- Nil -	31	6	37
	ISE	40	- Nil -	12	- Nil-	12
	EEE	29	- Nil -	12	- Nil -	12
	CV	105	- Nil -	24	- Nil -	24
Basic science				21	-Nil-	21
TOTAL				164	15	179
2.3 Teaching - Learning Process						
2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)						
Branch	Number of teachers on roll	Number of teachers using ICT (LMS, e-Resources)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
ME	37	37	PPTs, Conducting Quiz, NPTEL videos, YouTube videos and Edu Blogs	2	0	EDUSAT, NPTEL
ECE	36	36		1	1	
CSE	37	37		1	1	
ISE	12	12		1	0	
EEE	12	12		1	0	
CV	24	24		1	0	
Basic Science	21	21		0	0	

**2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)****Yes. Student Mentoring System is adopted in the Institution.**

- This enables bridging gap between the Teachers and Students.
- This creates a better environment in the college, where students can approach teachers for both educational and personal guidance.
- It is happening in monthly twice (15 days once) and submitted report through class teacher of each semester to mentor coordinator.
- Motivate students to attend holistic activities like placement, internship and technical symposium in inter-intra College in Karnataka.
- Providing guidance/suggestions for the slow learners.

Program code	Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
ME	514	28	1:20
ECE	470	21	1:22
CSE	521	26	1:20
ISE	128	9	1:15
EEE	134	12	1:11
CV	378	18	1:21

**2.4 Teacher Profile and Quality****2.4.1 Number of full time teachers appointed during the year (2017-18)**

Program Name	Branch	No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with PhD
<b>B.E</b>	<b>ME</b>	37	37	3	3	8
	<b>ECE</b>	36	36	4	4	8
	<b>CSE</b>	37	37	12	12	9
	<b>ISE</b>	12	12	0	0	1
	<b>EEE</b>	12	12	0	0	2
	<b>CV</b>	24	24	4	4	4
<b>Basic Science</b>		21	21	3	3	8

**2.4.2 Honours and recognitions received by teachers**

(received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies

**2.5 Evaluation Process and Reforms****2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year**

Programme Name	Program Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester-end/ year- end examination
<b>B.E</b>	<b>ME</b>	<b>01/I</b>	25 .11.2017	
		<b>03/II</b>	25 .11.2017	21.02.2018
		<b>05/III</b>	25 .11.2017	23.02.2018
		<b>07/IV</b>	25 .11.2017	16.02.2018
	<b>ECE</b>	<b>01/I</b>	25 .11.2017	
		<b>03/II</b>	25 .11.2017	21.02.2018
		<b>05/III</b>	25 .11.2017	23.02.2018
		<b>07/IV</b>	25 .11.2017	16.02.2018
	<b>CSE</b>	<b>01/I</b>	25 .11.2017	
		<b>03/II</b>	25 .11.2017	21.02.2018
		<b>05/III</b>	25 .11.2017	23.02.2018
		<b>07/IV</b>	25 .11.2017	16.02.2018
	<b>ISE</b>	<b>01/I</b>	25 .11.2017	
		<b>03/II</b>	25 .11.2017	21.02.2018
		<b>05/III</b>	25 .11.2017	23.02.2018
		<b>07/IV</b>	25 .11.2017	16.02.2018
	<b>EEE</b>	<b>01/I</b>	25 .11.2017	
		<b>03/II</b>	25 .11.2017	21.02.2018
		<b>05/III</b>	25 .11.2017	23.02.2018
		<b>07/IV</b>	25 .11.2017	16.02.2018
	<b>CV</b>	<b>01/I</b>	25 .11.2017	
		<b>03/II</b>	25 .11.2017	21.02.2018
		<b>05/III</b>	25 .11.2017	23.02.2018
		<b>07/IV</b>	25 .11.2017	16.02.2018

**2.5.2 Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)**

- As per the University rules and regulations end-semester examinations and valuations are conducted
- To enhance the knowledge and skills of the students, the RajaRajeswari College of Engineering, Bangalore periodically
- It has included in the courses of study, skill oriented programs like evaluating assignments, quizzes, internship, investigative projects, applied aspects of the theory, fabricating and assembling of new equipments, industrial training and seminars, for Continuous Internal Assessment.
- To develop students technical skills through technical symposium.

**2.5.3 Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)**

- As per University calendar of events Academic Calendar of college/department is prepared in order to fulfill the overall student empowerment by including,

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Internal Assessment -1,2,3</li> <li>• Expert Talk from Industries</li> <li>• Industrial Visits</li> <li>• Short Term workshops</li> </ul> | <ul style="list-style-type: none"> <li>• Project Exhibitions.</li> <li>• Sports &amp; cultural activities</li> <li>• Parent –Teacher meeting.</li> <li>• Graduation day</li> </ul> |
|--|--|

## 2.6 Student Performance and Learning Outcomes

### 2.6.1 Program outcomes, program specific outcomes and course outcomes

for all programs offered by the institution are stated and displayed in website of the institution (to provide the web link)

<http://www.rrce.org>

<http://www.rrce.org/department/mechanical-engineering/>

<http://www.rrce.org/department/electronics-communication-engineering/>

<http://www.rrce.org/department/computer-science-engineering/>

<http://www.rrce.org/department/information-science-engineering/>

<http://www.rrce.org/department/electrical-electronics-engineering/>

<http://www.rrce.org/department/civil-engineering/>

### 2.6.2 Pass percentage of students

Program Code	Program name	Number of students appeared in the final year examination	Number of students passed in final semester/year examination	Pass Percentage
<b>B.E</b>	<b>ECE</b>	91	84	<b>92.3</b>
	<b>ME</b>	115	102	<b>88.7</b>
	<b>CSE</b>	82	77	<b>93.90</b>
	<b>ISE</b>	43	43	<b>100</b>
	<b>EEE</b>	45	38	<b>84.44</b>
	<b>CV</b>	63	60	<b>95.23</b>

### 2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as web link)

[www.rrce/campus.uno](http://www.rrce/campus.uno)



<b>CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION</b>				
<b>3.1 Resource Mobilization for Research</b>				
<b>3.1.1 Research funds sanctioned and received from various agencies, industry and other organisations</b>				
Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the Academic year
Major projects				
Minor Projects				
Interdisciplinary Projects				
Industry sponsored Projects				
Projects sponsored by the University/ College	<b>6months</b>	<b>VTU</b>	<b>10,000</b>	<b>10,000</b>
Students Research Projects (other than compulsory by the College)	<b>6months</b>	<b>KSCST</b>	<b>37,500</b>	<b>37,500</b>
International Projects				
Any other(Specify)	<b>Workshop</b>	<b>AICTE</b>	<b>1,0,0000</b>	<b>1,0,0000</b>
	<b>International Conference (ICTRCET18)</b>	<b>SERB-DST</b>	<b>1,00.000</b>	<b>1,00,000</b>
<b>Total</b>			<b>24,7500</b>	<b>2,47,500</b>

<b>3.2 Innovation Ecosystem</b>		
<b>3.2.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year</b>		
Title of Workshop/Seminar	Name of the Dept.	Date(s)
	<b>CSE</b>	
Workshop on Advanced Networking		30/08/2017 to 01/09/2017
Workshop on Android Applications		30/08/2017 to 01/09/2017
Workshop on IoT for MCA Students		31/08/2017
Seminar on Multimedia Communication – IISC Extension Lecture Program		27/09/2017
Seminar on Discrete Mathematics and its Applications		25/09/2017
Seminar on Machine Learning		12/03/2018
Workshop on ARM7 Processor		24/04/2018
CSI Technical events Samshoadhan 2018		7/03/2018
Technical Training on Usage of WISE3 Platform		31/10/2017
Technical Training - Hand on Training on Oracle Database		23/10/2017 to 24/10/2017
One day Technical Talk on CFD	<b>MECH</b>	04/05/2018
One day Technical Talk on Solid Works		20/03/2018
One day Technical Seminar on Heat Transfer		24/02/2018
One day Technical Talk Reverse Engineering		23/02/2018
Two Days FDP on Total Quality Management		30/01/2018 to 31/01/2018

One day FDP on Training the Trainers		23/09/2017
One day FDP on Recent advancement in Mechanical Engineering		02/09/2017
Seminar on Introduction About Analog Circuit Design	<b>EC</b>	19/08/2017
Seminar on Career Opportunities in VLSI, Data Sciences and VLSI		11/10/2017
Seminar on Programmable Logic Design(PLD)		23/09/2017
Seminar on Industry Expectation from Young Engineers		20/03/2018
Seminar on IOT Block chain and Micro services		24/03/2018
Seminar on The Semiconductor Industry Opportunities and Challenges		10/04/2018
IEEE Expert Talk on Wide Area Measurement Systems (WAMS)	<b>EEE</b>	28/10/17
FDP on Mobile Application Development & Python Programming	<b>ISE</b>	22/01/2018 to 28/01/2018
Workshop on Introduction to Robotics using arduino Microcontroller		5/04/2018 to 7/04/2018
Seminar on Opportunities on education in abroad		22/04/2018
Workshop on Crypt tools-Cryptographic Algorithms & security tools		07/05/2018
Two days FDP on Software Application laboratory	<b>Civil</b>	8/02/2018 to 9/02/2018
One day workshop on M S project		10/03/2018
Five days workshop on Total Station		9/04/2018 to 13/04/2018
Four Days workshop on Non destructive testing of structures		31/10/2017 to 3/11/2017
5 days workshop on total station		31/10/2017 to 4/11/2017
One day internal faculty development Programme in physics	<b>Physics</b>	24/01/2018
Expert Talk on Applications of Fourier series and Fourier Transforms	<b>Mathematics</b>	07/09/2017
Expert Talk on Counting Principles and its applications		25/09/2017
Expert Talk on Sampling Theory and its applications		24/2/2018
Seminar on national Science day	<b>Chemistry</b>	28/2/2018

### 3.2.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardees	Awarding Agency	Date of Award	Category
Development of Android based Mobile App for reducing the crime rate in India and Women Safety App name- "Third Eye"	Aman Ulla Dr Usha S	Institution	18/05/2018	Paper Presentation in International Conference
Transparency maintenance in crime using digital filing	GauravSingh Swetha P Apporva D P	Institution	18/05/2018	Paper Presentation in International Conference
Energy Efficient Solar Stove	Ramya S (1RR14EE033) Nayana R (1RR14EE026) Anusha T S (1RR14EE002) Y.B.Tejaswini (1RR14EE049)	Institution	09/05/2018	Best Project by Innovation Club
Smart city Green corridor for time critical applications using wireless IoT	NyimaDakpa (1RR14EC062) Syed Ruman S A (1RR14EC090) Sathvik S M Jain (1RREC078) Goverdhan G (1RR13EC018)	Institution	09/05/2018	Best Innovative project
Personal Data Security using scrambling algorithm	AkashMannari (4 <sup>th</sup> yr B.E)	Institution	12/10/2017	1 <sup>st</sup> Prize in MINI PROJECT
IoT for Smart Cities	P.Hanuveenakirutiga (3 <sup>rd</sup> yr B.E)	SRM University, Chennai	6/10/2017 & 7/10/2017	Awarded (Rs 1500) and Certified
Traffic Simulator Implementation on IoT	Aman Ulla (2 <sup>nd</sup> yr B.E)	Institution	22/11/2017	1 <sup>st</sup> Prize and Certified
Automation approach on smart buildings and adaptive controls using IOT	CHAITHRA V S 1RR14CS013 NEHA PATIL 1RR14CS045 AKASH RAMESH MANNARI 1RR14CS003	Institution	25/05/2018	1st Prize
	Aakash Singh Gaurav Singh Hariom mishra	Innervate future project exhibition 2018 Institution	09/05/2018	Best Project by Innovation Club

<b>3.2.3 No. of Incubation centre created, start-ups incubated on campus during the year</b>		
Incubation Centre	Name	Sponsored by
<b>Data Science</b>	<b>Centre for Test and Data Science</b>	<b>MANAGEMENT</b>
Name of the Start-up	Nature of Start-up	Date of commencement
<b>Data Science</b>	<b>Projects, internships, sponsored research &amp; training</b>	<b>NIL</b>

<b>3.3 Research Publications and Awards</b>		
<b>3.3.1 Incentive to the teachers who receive recognition/awards</b>		
State	National	International

<b>3.3.2 Ph. Ds awarded during the year (applicable for PG College, Research Center)</b>		
Name of the Department	No. of Ph. Ds Awarded	Name of the Department
<b>CSE</b>	<b>3</b>	<b>CSE</b>

<b>3.3.3 Research Publications in the Journals notified on UGC website during the year</b>			
	Department	No. of Publication	Average Impact Factor, if any
<b>National</b>	<b>CIVIL</b>	<b>1</b>	
	<b>Chemistry</b>	<b>2</b>	
<b>International</b>	<b>CSE</b>	<b>4</b>	<b>2</b>
	<b>MECH</b>	<b>4</b>	<b>6.02</b>
	<b>EC</b>	<b>17</b>	<b>2</b>
	<b>IS</b>	<b>10</b>	<b>5.338</b>
	<b>CIVIL</b>	<b>1</b>	<b>5.327</b>
	<b>Physics</b>	<b>5</b>	
	<b>Mathematics</b>	<b>1</b>	<b>4.09</b>
	<b>Chemistry</b>	<b>2</b>	<b>2.916</b>

<b>3.3.4 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year</b>	
Department	No. of publication
<b>CSE</b>	<b>50</b>
<b>MECH</b>	<b>2</b>
<b>EC</b>	<b>17</b>
<b>IS</b>	<b>10</b>
<b>CIVIL</b>	<b>2</b>
<b>Physics</b>	<b>2</b>
<b>Mathematics</b>	<b>1</b>
<b>Chemistry</b>	<b>2</b>

### 3.3.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index

Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
Research pathway towards MAC protocol in enhancing network performance in WSN	<b>Anitha K S Usha</b>	International Journal of advanced computer science & Applications (IJACSA)	2017	DOI 10.14569/IJACSA.2017.080706	RRCE	-
Effect of Thermal Aging and Chemical Treatment on Tensile Properties of Coir Fiber	<b>Jobish Johns</b>	<i>Journal of Natural Fibers</i>	2018	10.1080/15440478.2017.1321513	RRCE	-
Influence of Chemical treatment on thermal decomposition and crystallite size of Coir Fiber	<b>Jobish Johns</b>	<i>International Journal of Thermophysics</i>	2018	DOI: 10.1007/s10765-017-2324-5	RRCE	-
Mechanical and Thermal Properties of Carbon Black Reinforced Natural Rubber/Polyvinyl Alcohol Fully-Interpenetrating Polymer Networks	<b>Jobish Johns</b>	<i>Journal of Vinyl Additives and Technology</i>	2018	doi.org/10.1002/vnl.21560	RRCE	1
Effect of Processing Parameters on the Vulcanization	<b>Jobish Johns</b>	<i>Plastics, Rubber and Composites: Macromolecular</i>	2017	doi/abs/10.1080/14658011.2017.1323610	RRCE	-

of Natural Rubber Using Glutaraldehyde.		<i>Engineering</i>				
RESTful web services composition & performance evaluation with different databases	<b>Sakthivel U.</b> <b>Singhal N.</b> <b>Raj P.</b>	<i>ICEECCOT 2017</i>	2018	Scopus	RRCE	-
Evaluation of energy consumption using receiver-centric MAC protocol in wireless sensor networks	<b>Ananda Kumar K.S.,</b> <b>Balakrishna, R</b>	International Journal of Electrical and Computer Engineering	2018	Scopus	RRCE	
Comparative analysis of delay and throughput using IEEE 802.11 and receiver centric-MAC protocol in wireless sensor networks	<b>Ananda Kumar K.S.,</b> <b>Balakrishna, R</b>	2017 Innovations in Power and Advanced Computing Technologies, i-PACT 2017	2018	Scopus	RRCE	
Development of cluster routing protocol in homogeneous networks for randomly deployed MSN in WSNs	<b>Kamal Raj, T.,</b> <b>Ananthan, T.V.,</b> <b>Balakrishna, R.</b>	International Journal of Applied Engineering Research	2017	Scopus	RRCE	

**3.3.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)**

<b>Title of the paper</b>	<b>Name of the author</b>	<b>Title of the journal</b>	<b>Year of publication</b>	<b>h-index</b>	<b>Number of citations excluding self citations</b>	<b>Institutional affiliation as mentioned in the</b>
RESTful web services composition & performance evaluation with different databases	S.Usha	International Conference on Electrical, Electronics, Communication Computer Technologies and Optimization Techniques	2018	1	1	Professor
CFCLP-a novel Clustering Framework based on Combinatorial approach and Linear Programming in Wireless Sensor Network	S.Usha	Proceedings of the 2017 2nd International Conference on Computing and Communications Technologies, ICCCT 2017	2017	1	1	Professor
Curing of Natural Rubber/Polyvinyl Alcohol Blends Using Glutaraldehyde	Dr. Jobish Johns	<i>Materials Today: Proceedings</i>	2018	nil	nil	R&D Center, Department of Physics, Rajarajeswari College of Engineering, Bangalore, India
Mechanical and Thermal Properties of Carbon Black Reinforced Natural Rubber/Polyvinyl Alcohol Fully-Interpenetrating Polymer Networks	Dr. Jobish Johns	<i>Journal of Vinyl Additives and Technology</i>	2018	nil	01	Department of Physics, Rajarajeswari College of Engineering, Bangalore, India

Influence of Chemical treatment on thermal decomposition and crystallite size of Coir Fiber	Dr. Jobish Johns	<i>International Journal of Thermophysics</i>	2018	nil	nil	Department of Physics, Rajarajeswari College of Engineering, Bangalore, India
Effect of Thermal Aging and Chemical Treatment on Tensile Properties of Coir Fiber	Dr. Jobish Johns	<i>Journal of Natural Fibers</i>	2018	nil	nil	Department of Physics, Rajarajeswari College of Engineering, Bangalore, India
Effect of Processing Parameters on the Vulcanization of Natural Rubber Using Glutaraldehyde	Dr. Jobish Johns	<i>Plastics, Rubber and Composites: Macromolecular Engineering</i>	2017	nil	nil	Department of Physics, Rajarajeswari College of Engineering, Bangalore, India
Influence of Grafting Content on the Properties of Cured Natural Rubber Grafted with PMMAs using Glutaraldehyde as a Crosslinking Agent	Dr. Jobish Johns	<i>Advances in Polymer Technology</i>	2017	nil	nil	Department of Physics, Rajarajeswari College of Engineering, Bangalore, India
Thermogravimetric and Swelling Studies on Natural Rubber based super elastomers	Dr. Jobish Johns	<i>International Journal of Innovative Research in Engineering &amp; Management</i>	2017	nil	nil	Department of Physics, Rajarajeswari College of Engineering, Bangalore, India



<b>3.3.7 Faculty participation in Seminars/Conferences and Symposia during the year :</b>				
<b>No. of Faculty</b>	<b>International level</b>	<b>National level</b>	<b>State level</b>	<b>Local level</b>
Attended Seminars/ Workshops	30	18	2	1
Presented papers	11	20		
Resource Persons	5	4	1	

<b>3.4 Extension Activities</b>			
<b>3.4.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year</b>			
<b>Title of the Activities</b>	<b>Organizing unit/ agency/ collaborating agency</b>	<b>Number of teachers coordinated such activities</b>	<b>Number of students participated in such activities</b>
Educational Outreach program	CSE, RRCE	10	50
Educational Outreach Program 2018	ECE, RRCE	2	30
Blood Donation Camp	RRCE(NSS) Lions Club of Bangalore South along with the Red Cross blood bank, RRMCH Blood Bank, Narayana Hrudayalaya Blood Bank, BGS Global Hospitals Blood Bank, Sushrutha Blood Bank	10	650

<b>3.4.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year</b>			
<b>Name of the Activity</b>	<b>Award/recognition</b>	<b>Awarding bodies</b>	<b>No. of Students benefited</b>
20 <sup>th</sup> Foundation day By VTU	Felicitation – Formar Academic Senate member & Special officer	Visvesvaraya Technological University	

**3.4.3 Students participating in extension activities with Government Organizations, Non-Government Organizations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year**

Name of the scheme	Organizing unit/ agency/ collaborating agency	Name of the activity	Number of teachers coordinated such activities	Number of students participated in such activities
NSS	RRCE(NSS) Lions Club of Bangalore South along with the Red Cross blood bank, RRMCH Blood Bank, Narayana Hrudayalaya Blood Bank, BGS Global Hospitals Blood Bank, Sushrutha Blood Bank	Blood Donation Camp	10	650
National Service Scheme	National Integration Camp 2018.	National Integration Camp	2	50

**3.5 Collaborations**

**3.5.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year**

Nature of Activity	Participant	Source of financial support	Duration

**3.5.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year**

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From-To)	participant
Internship		Bharath Heavy Electricals Limited, Bangalore	5/5/17 to 19/5/17	Kavya M Bharadwaj, Vijayalakshmi Patil, Vishal Venkatesh
Internship	Industrial Training on overall process of thermal power plant	Rayalaseema Thermal Power Project, Kadapa	18/1/17 to 28/1/17	Yeddula Brahma Tejaswini
Internship	Training on Power Grid	Kolar HVDC SubStation	2/2/17 to 18/2/17	Ramya S

Project work	Data Noise Reduction and Analysis for domain based lead generation -An Algorithmic Approach	Centre for Test and Data Science	1/2/218 to 25/6/2018	Meghana R Salagundi Aastha Mishra Gaurav Kumar
Project work	Automation approach on Smart Buildings and Adaptive Controls using IoT Tools	Centre for Test and Data Science	1/2/218 to 25/6/2018	Chaithra V S Neha Patil Akash Ramesh Mannari
Project work	performance monitoring and Improvement in High Volume Web Portals	Centre for Test and Data Science	1/2/218 to 25/6/2018	Jayashree A Nandini C R Kumudha P
Project work	A tool based study on audit trials and CSV compliances in Pharma Enterprises	Centre for Test and Data Science	1/2/218 To 25/6/2018	Lakshmi Devi S Kavana C M Harshitha B R
Project work	Data Modelling for Retail Analytics - A systematic approach towards Location and Market Penetration	Centre for Test and Data Science	1/2/218 to 25/6/2018	Nandakumar T Krithika D Anirudh M
Project work	An Implementation of algorithm for helping e-commerce to improve margins using the concepts and practices of Data Science	Centre for Test and Data Science	1/2/218 to 25/6/2018	Divyashree J Ashith Sashidhar
Project work	Analytics and Development in mean stack based applications	Centre for Test and Data Science	1/2/218 to 25/6/2018	Lokesh Lalithashree S
Project work	An Implementation of Cloud Infrastructure for enterprise application	Centre for Test and Data Science	1/2/218 to 25/6/2018	S Geethanjali Ranjitha V Swathi Shankar
Project work	A Continuous Regression Testing in Enterprise Applications and Systems	Centre for Test and Data Science	1/2/218 to 25/6/2018	Sahana T G Shwetha T Deepa R
Project work	An Implemetaion of DevOps Workflow Automation	Centre for Test and Data Science	1/2/218 to 25/6/2018	Varshitha R Sujay M Syed Nabeeq
Project work	Predictive algorithm development for quality analytics in application life cycle management	Centre for Test and Data Science	1/2/218 to 25/6/2018	Thejashree H Pooja V Latha S
Project work	Using Data Science concepts and Practices to understand and classify the startup funding ecosystem in India	Centre for Test and Data Science	1/2/218 to 25/6/2018	Shiva Basava P Sumukha K N Adiga Vishawanath S
Project work	Threat Modeling for Commercial Websites-A tool based Approach using OWASP standards	Centre for Test and Data Science	1/2/218 to 25/6/2018	Rashmi N Sushmitha M Prathap R

<b>3.5.3 MoUs signed with institutions of national, international importance, other universities, industries,</b>			
<b>Organization</b>	<b>Date of MoU signed</b>	<b>Purpose and Activities</b>	<b>Number of students / teachers participated under MoUs</b>
RRCE	3/11/2017	Research Activities	<b>20</b>
Prolific Pvt. Ltd., Bangalore	12/03/18	To bridge the gap between industry academy	<b>35</b>
ICT Academy	2018	Research Activities	
AICTE	2017	Internships	
Medini	9/5/2018	Training	
UMES(University of Maryland Estran Shore, MD, USA)	6/2/2018	Academic Interaction	
Egale Edutech	11/11/2017	Pre placement training and project Guidance	
AAKSPRO	3/11/2017	Research Activities conducting Conference	

**CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES****4.1 Physical Facilities****4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year**

Rajarajeswari College of Engineering										
Summary of Budgets for the 2017-18, 2016-17, 2015-16, 2014-15 Rs. in Lakhs										
Sl. No.	Items	2018-19	201/-18		2016-17		2015-16		2014-15	
		Proposed budgeted	Proposed budgeted	Actual expenses	Proposed budgeted	Actual expenses	Proposed budgeted	Actual expenses	Proposed budgeted	Actual expenses
1	Laboratory Equipments +Comp. acce	18.00	91.50	33.22	60.65	31.81	31.60	1.77	57.99	51.43
2	Software	6.00	6.0	8.48	12.50	12.04	35.50	32.75	33.64	12.64
3	R&D	21.19	23.00	0.78	34.25	14.50	26.00	-	35.00	8.86
4	Laboratory Consumables	9.50	7.70	483.00	10.60	7.73	11.60	6.80	14.45	7.45
5	Maintenance & Spares	6.31	8.55	432	11.25	2.72	10.5	1.90	10.50	2.31
6	Training & Travel	6.05	1.90	0.69	6.30	1.33	7.10	1.69	8.60	3.73
7	Miscellaneous expenses for academic activities	16.85	14.80	1.64	16.10	2.76	20.75	5.01	34.60	8.31
8	Library	7.40	7.00	8.55	9.50	1.73	6.45	0.53	17.01	8.37
9	Infrastructural Buildup	400.4	400.00	*	350.0	365.00	100.0	151.00	100.00	200.00
10	Teaching and Non-Teaching Staff Salary	1156.00	1056.00	917	825.00	795.00	1420.00	771.00	1000.00	705.0
	Total	1647.7	1616.45	1885.36	1336.15	1234.62	1669.5	972.45	1311.79	1008.1

\*Information yet to be received from FC Office

<b>4.1.2 Details of augmentation in infrastructure facilities during the year</b>		
<b>Facilities</b>	<b>Existing</b>	<b>Newly added (Academic year 2017-18)</b>
<b>Campus area</b>	<b>5.2 acres of land</b>	<b>---</b>
<b>Class rooms</b>	<b>55</b>	<b>6</b>
<b>Laboratories</b>	<b>49</b>	<b>9</b>
<b>Seminar halls</b>	<b>8</b>	<b>1</b>
<b>Tutorial</b>	<b>5</b>	<b>--</b>
<b>R&amp;D</b>	<b>09</b>	<b>--</b>
<b>Staff Room</b>	<b>14</b>	<b>2</b>
<b>HOD Cabin</b>	<b>11</b>	<b>--</b>
<b>Classrooms with LCD facilities</b>	<b>3</b>	<b>0</b>
<b>Auditorium</b>	<b>1</b>	<b>--</b>
<b>Classrooms with Wi-Fi/LAN</b>	<b>2</b>	<b>0</b>
<b>Seminar halls with ICT Facilities</b>	<b>4</b>	<b>0</b>
<b>Video centre</b>	<b>1</b>	<b>0</b>
<b>No. of important equipment's (≥1-0 lakhs) during the current year</b>	<b>166</b>	<b>25</b>
<b>Value of the equipment purchased during the year (Rs. In lakhs)</b>	<b>353.85152</b>	<b>36.30630</b>
<b>others</b>	<b>----</b>	<b>AC system 12</b>

<b>4.2 Library as a Learning Resource</b>			
<b>4.2.1 Library is automated {Integrated Library Management System -ILMS}</b>			
<b>Name of the ILMS software</b>	<b>Nature of automation (fully or partially)</b>	<b>Version</b>	<b>Year of automation</b>

<b>4.2.1 Library Services:</b>						
	<b>Existing</b>		<b>Newly added</b>		<b>Total</b>	
	<b>No.</b>	<b>Value</b>	<b>No.</b>	<b>Value</b>	<b>No.</b>	<b>Value</b>
Text Books	24153	28837189	1505	509293	25571	29346482
Reference Books	5735	560380	254	42530	5989	602910
e-Books	--	--	--	--	--	--
Journals	103	210128	103	210121	103	210121
e-Journals	7	--	--	--	7	--
Digital Database	7	--	--	--	7	--
CD & Video	--	--	--	--	--	--
Library automation	Yes	--	Yes	--	Yes	--
Weeding (Hard & Soft)	-	--	-	--	-	--
Others (specify)	----	--	--	--	--	--

<b>4.3 IT Infrastructure</b>									
<b>4.3.1 Technology Up gradation (overall)</b>									
	<b>Total Computers</b>	<b>Computer Labs</b>	<b>Internet</b>	<b>Browsing Centres</b>	<b>Computer Centres</b>	<b>Office</b>	<b>Departments</b>	<b>Available band width (MGbps)</b>	<b>Others</b>
Existing	824	25	100 Mbps	01	01	01	09	100Mbps	-
Added	30	1	-	-	-	-	-	-	-
Total	854	26	100 Mbps	01	01	01	09	100Mbps	-

<b>4.3.2 Bandwidth available of internet connection in the Institution (Leased line)</b>
<b>100Mbps</b>

<b>4.3.3 Facility for e-content</b>	
Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
ERP software	<a href="http://www.rrce.org/campus.uno">www.rrce.org/campus.uno</a>

<b>4.3.4 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives &amp; institutional (Learning Management System (LMS), etc.</b>			
<b>Name of the teacher</b>	<b>Name of the module</b>	<b>Platform on which module is developed</b>	<b>Date of launching e – content</b>

<b>4.4 Maintenance of Campus Infrastructure</b>			
<b>4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year (Academic Year 2017-18)</b>			
<b>Assigned budget on academic facilities (Rs in lakhs)</b>	<b>Expenditure incurred on maintenance of academic facilities (Rs in lakhs)</b>	<b>Assigned budget on physical facilities (Rs in lakhs)</b>	<b>Expenditure incurred on maintenance of physical facilities (Rs in lakhs)</b>
<b>1616.45</b>		<b>400</b>	

**4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)**

**Physical facility**

In the policy making of the institution for enhancement of infrastructure to excel in the teaching & learning, the following stake-holder members are considered.

- Faculty
- Current Students
- Exit Students
- Parents
- Technical Staff
- Alumni
- Industry/Employers
- Management including Academic Advisory Board
- Hostel Facility – Accommodation available

**Sports, outdoor and indoor games, gymnasium,**

The institution has a huge sports ground. There are well equipped gym and sports kits. Students are encouraged to participate in various zonal and inter-zonal tournaments. Students are provided with various sports kits and equipment's. They participate in inter collegiate and inter University matches. Institute sport has following facilities:

- Cricket ground
- Long jump facility
- Volleyball track
- Football ground
- Basket ball court
- Athletics etc.,

To manage all sport activities, a well qualified physical education Instructor is appointed. The institute has a well equipped gym facility.

**The infrastructure facilities meet the requirements of students with physical disabilities**

- Lift facilities are provided for physically disabled students
- Provide the rest room for physically disabled students
- Preferential service is provided to physically disabled students
- Wheel chairs are provided to physically disabled students
- Wooden slants are fixed in front of toilets for physically disabled students
- Sitting chairs are provided for physically disabled students in all corridors.

Computer facility including access to internet in hostel.

Computer facility is provided with internet facility hostel is within campus hence they are access internet in the college main building. College internet centre is open after college hour for hostel students.

Computer and internet facility available in the campus on & off, for both students and faculty usage of labs, digital library and internet centre.

Internet and Wi-Fi facility

Internet facility is provided, WIFI with 32mbps speed,



Library facility in the hostels

College Library facility is opened for hostel students after working hours along with regular students.

### **Maintenance of Campus Facilities**

The yearly budget is prepared according to the needs & requirements of the departments taking into consideration of annual intake of students, laboratory & infrastructure developments. Students, faculty & staff requirements and promotions and latest technologies etc,

Formal budget estimates will be prepared by each department and will be reviewed in HODs meeting with the Principal.

<b>CRITERION V - STUDENT SUPPORT AND PROGRESSION</b>			
<b>5.1 Student Support</b>			
<b>5.1.1 Scholarships and Financial Support</b>			
	<b>Name /Title of the scheme</b>	<b>Number of students</b>	<b>Amount in Rupees</b>
Financial support from institution			
Financial support from other sources			
a) National	OBC + SC + ST + Minority	1657	3,08,07,575/-
b) International			

<b>5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,</b>			
<b>Name of the capability enhancement scheme</b>	<b>Date of implementation</b>	<b>Number of students enrolled</b>	<b>Agencies involved</b>
Mentoring		2400	Individual Faculty & 1message.com
Personal Counselling- Parent teachers meet	Every Week	All students	Class teachers
Soft skill development			Faculty members
Language lab	2013	All first year students	

<b>5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year</b>				
<b>Name of the scheme</b>	<b>Number of benefited students by Guidance for Competitive examination</b>	<b>Number of benefited students by Career Counselling activities</b>	<b>Number of students who have passed in the competitive exam</b>	<b>Number of students placed</b>
2018	IAS Academy	All final year students	-	-

<b>5.1.4 Institutional mechanism for transparency, timely Redressal of student grievances, Prevention of sexual harassment and ragging cases during the year</b>		
<b>Total grievances received</b>	<b>No. of grievances redressed</b>	<b>Average number of days for grievance Redressal</b>
16	16	16

5.2 Student Progression					
5.2.1 Details of campus placement during the year					
On campus			Off Campus		
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Name of Organizations Visited	Number of Students Participated	Number of Students Placed
12	200	116	2	10	01
Name of the organization visited: Capgemini, Mphasis, Westline, Elint Labz, Qspiders, Future Generali, TCI Technologies, Future Generali, Hebbale Labs, Quintelcom, Vinformax, Alpha9 marine Services.					

5.2.2 Student progression to higher education in percentage during the year							
Year	Number of students enrolling into higher education	Program graduated from	Department graduated from		Name of institution joined		Name of Programme admitted to
2016 - 2017	25	Rajarajeswari College of Engineering -BE	ME	3	Prashanth Reddy	UK	MS-ME
					Ramesh Bhat	BIMTEC H-DELHI	PGDM
					Mahesh	USA-Colarado	MS-ME
			EEE	4	Divya M.S	UVCE	Power electronics
					Spoorthi B	Dr .A.I.T	Power electronics
					Pooja Nayak N	B.I.T	VLSI DESIGN AND EMBEDDED SYSTEM
					Manu.V	B.I.T	VLSI DESIGN AND EMBEDDED SYSTEM
			ISE	4	Arpitha.K	Dr. A.I.T	M.Tech (CSE)
					Sahana.M	Dr. A.I.T	M.Tech (CSE)
					Megha.S	Dr. A.I.T	M.Tech (CSE)
					Navyashree	RVCE	M.Tech (IT)
			ECE	10	Maithri u k shetty	BMS	VLSI & Embedded systems
					Ishwarya.S	Dayanand a sagar	Comp. Network Engg
					M.Bimbithas warnagowri	Dayanand a sagar	Power electronics
					Vinay kumar.G	BIT	VLSI & Embedded systems
					Sahana.p	SJBIT	VLSI & Embedded systems
					Syed ameer	VTU	VLSI & Embedded

					hussain		systems
					Anu shree.m.k	BIT	VLSI & Embedded systems
					Chaitra K	Manipal University	VLSI & Embedded systems
					Komala M L	Manipal University	
					Chandana S	Queensland University of Technology, Australia	MS
			CSE	5	Ankita	MTech-UVCE	Software Engg
					Dhanalakhmi	MTech	
					Akshatha	MTech	
					Aishwarya		MS
					Vishal		MS

**5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)**

Items	No. of Students selected/ qualifying			Registration number/roll number for the exam
NET	-			-
SET	-			-
SLET	-			-
GATE	ISE- 1	Meghana C	CS18S31211243	
	ECE-1	Maithri U K Shetty	EC17S31216084	
GMAT	-			-
CAT	-			-
GRE	ISE- 1	Archana C	1RR13IS003	
	CSE-2	Aishwarya		
		Vishal		
	ME-1	Prashanth Reddy		
	ECE-1	Chandana S		
	-			-
TOFEL	-			-
Civil Services	-			-
State Government Services	EEE- 01 (IBPS)			2000609674
Any Other	-			-

<b>5.2.4 Sports and cultural activities / competitions organised at the institution level during the year</b>		
<b>Activity</b>	<b>Level</b>	<b>Participants</b>
College Sports	College Sports	All students
VTU Sports- Volley Ball	South Zone University Level	All south zone students
Cultural-VTU	University Level	20 students
Culturals- College	College Culturals	All students

<b>5.3 Student Participation and Activities</b>						
<b>5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)</b>						
<b>Year</b>	<b>Name of the award/ medal</b>	<b>National/ International</b>	<b>Sports</b>	<b>Cultural</b>	<b>Student ID number</b>	<b>Name of the student</b>
<b>2017-18</b>		<b>1</b>	<b>Soft Ball</b>	<b>-</b>	<b>-</b>	<b>Yashas (ECE)</b>

<b>5.3.2 Activity of Student Council &amp; representation of students on academic &amp; administrative bodies/committees of the institution (maximum 500 words)</b>
<p>1. A 5th Voluntary Blood Donation Camp was organized at the RajaRajeswari College of Engineering, through National Service Scheme Unit Headed by Mr. K S Ananda Kumar, NSS Programme Officer on 21-09-2017 wherein Lions Club of Bangalore South along with the Red Cross blood bank.</p> <p>2. Sensitization Program: “Higher Education from Top 100 Universities Abroad”</p> <p>3. Student Enrichment Programme: “Placement Orientation And Preparation – Fundamentals of Programming”</p> <p>4. National Service Scheme: Students Participated in National Integration Camp 2018.</p>

<b>5.3 Alumni Engagement</b>
<b>5.3.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words):</b>
<p>Yes, Society Number: JNR-S92-2013-14</p> <p>The association is registered with office of the Karnataka Societies registration act, 1960. Dated: 8-07-2013 at Bangalore, Karnataka.</p>

<b>5.3.2 No. of <del>registered</del> enrolled Alumni:</b>
This year (2016-17) 510 students have enrolled for Alumni Association.

**5.3.3 Alumni contribution during the year (in Rupees):**

$$510 \times \text{Rs.}1000 = \text{Rs.}5,10,000/-$$

**5.3.4 Meetings/activities organized by Alumni Association:**

Alumni Association of the college is formed. Every year 26<sup>th</sup> of January will be celebrated as Alumni Association day, i.e., “SAMANVAYA”. All the office bearers of the Alumni Association will be calling the entire student Alumni’s for the function.

**CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT****6.1 Institutional Vision and Leadership****6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)**

- ✓ Internal Assessment for students will be conducted at department level.
- ✓ Faculty Development program will be conducted at department level.
- ✓ Workshop / Conferences activities will be conducted at department level.

**Participative Management**

To oversee the effectiveness of individual faculty regular academic review meetings are conducted at the end of internal assessment and rectify any omission on the part of the individual faculty to come to the right path.

**6.1.2 Does the institution have a Management Information System (MIS)?**

Yes/No/Partial:

YES – (1message.com)

**6.2 Strategy Development and Deployment****6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):**

<b>Curriculum Development</b>	The institution is affiliated to Visvesvaraya Technical University. The curriculum will be framed by the University.
<b>Teaching and Learning</b>	<p>We are using LCD, ICT tools to enhance the quality of teaching and learning.</p> <p><b>1. Semester Pre-commencement Preparations</b></p> <ul style="list-style-type: none"><li>• Departmental Academic Calendar</li><li>• Lecture plans</li><li>• Course learning Objectives and Course Outcomes</li><li>• Topic learning Objectives and Outcomes</li><li>• Lecture notes</li><li>• Updating the library with appropriate books as suggested by the faculty</li><li>• Modifying the laboratories to cater for the needs of revised syllabus and new technology.</li></ul> <p><b>2. Monitoring the teaching process through</b></p> <ul style="list-style-type: none"><li>• Online feedback from students (Mid semester and end semester)</li><li>• Audit of completed syllabus(Monthly)</li><li>• Result analysis at the end of semester examination.</li></ul> <p><b>3. Addressing issues of individual student</b></p> <ul style="list-style-type: none"><li>• Additional classes for slow learners</li><li>• Personal guidance to students approaching with difficulties</li></ul>

	<ul style="list-style-type: none"> <li>• Mentoring of students to motivate</li> <li>• Addressing the student personal issues is also done by various committees like SHE committee and Anti ranging committee</li> </ul> <p><b>4. Addressing issues related to course</b></p> <ul style="list-style-type: none"> <li>• Extra lectures are allocated in the time table for courses of difficult nature.</li> <li>• Teaching methodology workshops are conducted</li> <li>• Lectures are conducted on prerequisite topics</li> <li>• Expert lectures are conducted on topics related to the course, but, outside the syllabus</li> <li>• NPTEL videos support for learning the basic and latest subjects with good knowledge</li> <li>• Assignments are given to students to get additional knowledge supporting to curriculum</li> </ul> <p><b>5. Addressing issues of faculty</b></p> <ul style="list-style-type: none"> <li>• Course assignment as per Competency.</li> <li>• Mentoring and guidance to faculty for a course handled by him/her by senior/competent faculty</li> <li>• FDP's are conducted for faculties in departments</li> </ul>
<b>Examination and Evaluation</b>	The institution will follow the rules and regulations framed by the University to conduct examination and Evaluation.
<b>Research and Development</b>	<ul style="list-style-type: none"> <li>✓ New research scholars have registered in various departments of the institution and they are carrying out the research work. The registered research scholars have published technical papers related to their research work in various national and international conferences.</li> <li>✓ The institute provides seed money for research activities.</li> </ul>
<b>Library, ICT and Physical Infrastructure/Instrumentation</b>	<ul style="list-style-type: none"> <li>• The volume of new journal, conference and curriculum related books are added to library.</li> <li>• The college boosts a well-stocked and digitalized central library with college and department-wise division to ensure easy, quick and efficient access to desired data.</li> <li>• Wi-Fi campus.</li> <li>• OPAC Software is provided for personal assistance to each and every user while accessing the library books</li> <li>• Every department has individual air-conditioned seminar hall with LCD projector, system with internet connection.</li> <li>• RFID cum Bar-coded Identity card to all the users.</li> <li>• E-library and E-journals resources</li> </ul>
<b>Human Resource Management</b>	<p>1message.com web portal is used for following activities.</p> <ul style="list-style-type: none"> <li>• Online leave management portal was introduced.</li> <li>• Online Feedback (student and Faculty)</li> <li>• Online Faculty self-appraisal system was introduced.</li> </ul>
<b>Industry Interaction/Collaboration</b>	Number of MOU's for CAY - 04
<b>Admission of Students</b>	<b>2017-18 Admission details</b>



Sl. No.	Department	First Year	Lateral Entry
1.	CSE	171	4
2.	ME	134	51
3.	ECE	151	12
4.	EEE	29	10
5.	CIVIL	105	56
6.	ISE	40	0
7.	TCE	12	0
<b>Total</b>		642	133

### 6.2.2 : Implementation of e-governance in areas of operations:

<b>Planning and Development</b>	ARP software Package is used.
<b>Administration</b>	ARP software Package is used.
<b>Finance and Accounts</b>	Tally software package is used.
<b>Student Admission and Support</b>	1message.com website is used for this purpose.
<b>Examination</b>	<ul style="list-style-type: none"> <li>Online QPDS system</li> <li>University has introduced CBCS system.</li> <li>The valuation is conducted under the surveillance of CCTV cameras at recognized valuation centres.</li> <li>Barcode system for coding and decoding of answer scripts</li> </ul>

### 6.3 Faculty Empowerment Strategies

#### 6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of teacher Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2017	Prof. Usha S	ICCCT -2017	-	Rs. 1000/-
2017	Prof. Jyothi	ICCCT -2017	-	Rs. 3000/-

#### 6.3.2 Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non- teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
2018	CSI Technical events	--	07-03-2018	50	--

**6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year.**

Title of the professional development program	Number of teachers who attended	Date and Duration (from – to)
Recent Advancements in Mechanical Engineering	20	02/09/2017
Training the Trainers –Hyper works, Ansys	20	23/09/2017
Total Quality Management	20	31/01/2018
Introduction to Robotics using Arduino Microcontroller	2	05/04/2018 to 07/04/2018
FILE STRUCTURES CONCEPTS	1	15/02/2018 to 16/02/2018
Advances in Communication Networks Using Network Simulator-NS3	23	11/12/2017 to 16/12/2017
IOT using Raspberry Pi	3	19/04/2018 to 21/04/2018
Network Engineering	8	01/08/2017 to 03/08/2017
Mobile Application Development and Python Programming	20	22/01/2018 to 28/01/2018
ARM7 Processor	15	24/04/2018
Usage of WISE3 Platform	15	31/10/2017
Hand on Training on Oracle Database	15	23/10/2017, 24/10/2017
Advanced Networking	15	30/08/2017 to 01/09/2017
Android Applications	15	30/08/2017 to 01/09/2017
Analog Circuit Design Using Cadence Tool	20	24/08/2017
Programming with ARM Cortex-M3 Microcontroller”	20	12/03/2018

<b>6.3.4 Faculty and Staff recruitment (no. for permanent/fulltime recruitment):</b>			
Teaching		Non – Teaching	
Permanent	Fulltime	Permanent	Fulltime/temporary
31	31	NIL	NIL

<b>6.3.5 Welfare schemes for</b>	
Teaching	ICICI LOMBARD GENERAL INSURANCE (GROUP INSURANCE)
Non teaching	ESI, ICICI LOMBARD GENERAL INSURANCE (GROUP INSURANCE)
Students	ICICI LOMBARD GENERAL INSURANCE (GROUP INSURANCE)

<b>6.4 Financial Management and Resource Mobilization</b>
<b>6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)</b>
Internal and external financial audits are conducted regularly in the institute.

<b>6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)</b>		
Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
<b>NIL</b>	<b>NIL</b>	<b>NIL</b>

<b>6.4.3 Total corpus fund generated</b>
For the <b>CAY 2017-2018</b>
Corpus fund generated: NIL

<b>6.5 Internal Quality Assurance System</b>				
<b>6.5.1 Whether Academic and Administrative Audit (AAA) has been done?</b>				
Audit Type	External		Internal	
Academic	Yes	VTU Local Enquiry Committee & ISO	Yes	IQAC
Administrative	Yes	ISO	Yes	IQAC

<b>6.5.2 Activities and support from the Parent – Teacher Association (at least three)</b>
Each department in the institution conducts <b>parent teachers</b> meeting thrice in a semester to obtain the feedback of their Ward's to improve the quality of education.
<b>Mentor meeting</b> is conducted for the students by the individual faculty to ensure the improvement in academics and co-curricular activities. The purpose of this meeting is to conduct the SWOT (Strength, Weakness, Threats and Opportunities) analysis of students.

**6.5.3 Development programmes for support staff (at least three)**

- Soft skill training program
- Workshop on Mathematics Basics

**6.5.4 Post Accreditation initiative(s) (mention at least three)**

- Seed money is provided by the management to faculty for carrying out research activities.
- Symposiums are conducted.
- National and Inter-national conferences are organized by the institute.

**6.5.5**

- a. Submission of Data for AISHE portal : (Yes /No) **YES**
- b. Participation in NIRF : (Yes /No) **YES**
- c. ISO Certification : (Yes /No) **YES**
- d. NBA or any other quality audit : (Yes /No) **YES**

**6.5.6 Number of Quality Initiatives undertaken during the year**

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to-----)	Number of participants
2018	Alumni meeting	26-01-2018	26/01/2018	40
2017	FDP on Recent Advancements in Mechanical Engineering	02/09/2017	02/09/2017	15
2017	FDP on Training the Trainers – Hyper works, Ansys	23/09/2017	23/09/2017	15
2018	FDP on Total Quality Management	31/01/2018	31/01/2018	15
2018	Technical Seminar Heat transfer	24/02/2018	24/02/2018	15
2018	Computational Fluid Dynamics	04/05/2018	04/05/2018	15
2018	FDP on Mobile Application Development and Python Programming	22-01-2018	22/01/2018 to 28/01/2018	20
2017	FDP on Network Engineering	01-08-2017	01-08-2017 to 03-08-2017	8
2018	International Conference on Recent Trends in Computational Engineering & Technologies (ICRTCET'18)	17.5.2018 & 18.5.2018	17/5/2018 & 18/5/2018	50
2018	Educational Out Reach Program 2018	10-03-2018	10-03-2018	50

2018	CSI Technical events	07-03-2018	07-03-2018	50
2018	Awareness on Higher Education (GATE, GRE, IAS...)	21-02-2018	21/02/2018 to 22/02/2018	30
2017	Technical Training on, Usage of WISE3 Platform	31-10-2017	31/10/2017	30
2017	Hand on Training on Oracle Database	23-10-2017	23/10/2017 to 24/10/2017	30
2017	Technical Aptitude Training Program	11-10-2017	11/10/2017	50
2017	National Symposium Trigger 2K17	22-09-2017	22/09/2017	50
2017	Workshop on Advanced Networking, Android Applications	30-08-2017	30/08/2017 to 01/09/2017	50
2017	The Road to Achieve a rewarding career in I.T Industry	30-08-2017	30/08/2017	50
2017	FDP on Advanced Networking	01-08-2017	01/08/2017 to 03/08/2017	
2017	AICTE Sponsored One Week Hands On workshop On “Advances In Communication Networks Using NS-3	11-12-2017	11/12/2017 to 16/12/2017	50
2017	“Learn Electronics and Do Your Own Projects”	18-08-2017	18/08/2017, 19/08/2017, 21/08/2017	50
2017	“Python Programming”	30-08-2017	30/08/2017 to 01/09/2017	50
2017	“Introduction About Analog Circuit Design “	19-08-2017	19/08/2017	50
2017	“Carrier Opportunities in VLSI, Data Sciences and VLSI”	11-10-2017	11/10/2017	50
2017	Skill development program on “Analog Circuit Design Using Cadence Tool	24-08-2017	24/08/2017	50
2017	Skill development program on “Product Design Using Board Level Approach “	23-09-2017	26/09/2017 , 01/09/2017	50
2018	“Programming with ARM Cortex-M3 Microcontroller”	16-03-2018	16/03/2018	50

**CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES****7.1 - Institutional Values and Social Responsibilities****7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)**

Gender equity programmes were organized by SHE and WE committee of the Institution

Title of the Programme	Period	Participants	
		Male	Female
Women Empowerment program for class D staff	02-02-2017	-	80
Women's day celebration	08-03-2017	20	200
Women Empowerment program for Supporting Staff	20-07 2017	-	78
Women Empowerment program for faculty and students	03-10-2017	-	600
Talk on awareness rules and act on sexual harassment Elimination	12-04-2017	-	200
Women's day celebration by forming Karnataka Map	08-03-2018	25	997

**7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives****i) Environmental Consciousness and Sustainability:**

Green day celebrated on 24/4/2018 on the occasion of green day celebration, plantation was done in the college premises and felicitated the gardeners of the college for Maintaining the better Environment inside the college

**ii) Sustainability/Alternate Energy initiatives:**

Biofuel generation: About 500 kg of food waste will be generated from the hostel and canteen that has been used for generation of fuel , biofuel plant is under construction

Solar power: Plan is under progress.

<b>7.1.3 Differently abled friendliness</b>		
Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	YES	2
Provision for lift	YES	2
Rest Rooms	YES	-
Braille	NO	-
Software/facilities	NO	-
Rest Rooms	YES	-
Scribes for examination	NO	-
Special skill development for differently abled students	NO	-
Any other similar facility	Wheel chairs are provided for the Physically disabled people	

<b>7.1.4 Inclusion and Situatedness</b>						
Enlist most important initiatives taken to address locational advantages and disadvantages during the year						
Year	Number of Initiatives to address locational advantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2017-2018	Increased number of buses for transportation	01	09-09-2017	Education outreach Program	Lack of computer skill	Students -09 Staff -05

<b>7.1.5 Human Values and Professional Ethics code of conduct for various stake holders</b>		
Title	Date of publication	Follow up
RRCE handbook	August 2017	Every year handbook will be distributed to the parents and

Anahata-2018	August 2018	students on orientation day of the academic year, which includes syllabus for that academic year, facilities provided in the institution and role of each committee of the college. Role of anti-ragging committee, safety of the students will be highlighted. Magazine will be published at the end of the academic year which includes institution development, achievements student activities, curriculum and Co-Curriculum of that academic year
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7.1.6 Activities conducted for promotion of universal Values and Ethics			
Sl. No.	Activity	Duration	Number of Participants
1	Voluntary Blood Donation Camp	21-09-2017	650
2	RRCE NSS Coordinators participated in National Integration Camp-2018 at University Campus, Belagavi	17-03-2018 to 23-04-2018	25
3	RRCE NSS Volunteer's participated in National and state level NSS pre Republic day camp 2017-2018 at university of Agricultural Sciences, GKVK Bengaluru	-	30

7.1.7 Initiatives taken by the institution to make the campus Eco-friendly
<ul style="list-style-type: none"> <li>• <b>Energy conservation</b></li> <li>• The buildings are fitted with glass windows for max utilization of natural light.</li> <li>• Lights and fans are switched off when not required.</li> <li>• Air-conditioners are used only at essential places.</li> <li>• Energy efficient compact fluorescent tubes and ceiling fans of higher star ratings are used in most of the places to ensure energy conservation.</li> <li>• Staggering of classes has been done to reduce peak load.</li> <li>• Energy saving awareness program has been initiating among the staff and students.</li> <li>• The UPS Batteries were maintained in good condition which reduces charging current of Batteries.</li> </ul>



- The college has gradually moved on from normal light bulbs (least required wattage) to tube lights, slim lights, CFLs, LEDs and the college also replaced most of the CFT
- Monitor from LCD monitors thus conserving energy to the extent required.
  
- **Use of renewable energy**
  - It is planning to use the renewable energy in the campus.
  - The institute has installed Solar (PV) panels and Solar Water heating system and these are used as forms of renewable energy
  
- **Water harvesting**
  - It is planning to harvest rainwater in the campus. However, Waste water recycled and used for garden.
  - There is enough extent of plantation to reduce evaporative loss and soil erosion.
  
- **Check dam construction**
  - The importance of check dam construction and use guest lecture is conducted to create awareness.
  
- **Efforts for Carbon neutrality**
  - The College has been nurturing a large number of plants and trees which can absorb carbon dioxide. The Institute restricted the usage of plastic bags in the campus.
  - Routine inspection of college vehicles and generator set and other equipment ensures
  - Lowest possible emission and pollution free environment thereby neutralizing the carbon effect. Other than this the green lawns and plantation is also helpful in fixation of carbon content present in environment and helps in making pollution free environment.
  - Provision of convenient and easy to use Scan to Email facility to each department to keep Documents in electronic format.
  - Working towards making office and committee work paperless, wherever possible.
  - Usage of plastics is strictly discouraged.
  - Waste segregation is done at source; with separate bins for dry and wet wastes.
  - Papers are sent for recycling.
  - Efforts are on to upgrade college buses to BS IV norms as per National Pollution Control Board.
  - Two Diesel generators are situated in the college campus of Capacity 125KVA and 180KVA capacity which are approved by Karnataka State Pollution Control Board.

- Emission Norms and provide with Silencers/Mufflers to reduce noise pollution.

#### ➤ **Plantation**

- Every year in 1<sup>st</sup> week of July/Aug during Vana-Mahotsav, students of RajaRajeswari College of Engineering participate with enthusiasm in plantation drive.
- This drive is to remind the young citizens the importance of environment and ecology for sustainable development.
- Different plants are nurtured with care. The College drives into the space for trees, Garden and open spaces to protect the campus in GREEN.

#### ➤ **Hazardous waste management**

Generally, no hazardous waste is generated in the campus from any Department. The condemned batteries are disposed through outside agencies. All precautions are taken to store few concentrated acids/chemicals in a safe and separate room. The liquid waste from the chemical laboratories are isolated and neutralized they are then released in common effluent stream and gets diluted (solution of pollution is dilution).

#### ➤ **E-waste management**

The obsolete computers and other wastes generated from the electronic equipment's are auctioned to authorized e-waste dealers and the hazardous materials in that equipment's are removed and disposed as per norms. The old computers are also exchanged with new computer.

## **7.2 Best Practices**

### **Title of the practice: Integrated Teaching**

#### **What is integrated teaching?**

“An integrated approach allows learners to explore, gather, process, refine and present information about topics they want to investigate without the constraints imposed by traditional subject barriers”. An integrated approach allows students to engage in purposeful, relevant learning.

Integrated learning 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.

Integral to the model of integrated learning is the inquiry approach. Students are active learners who

research, interpret, communicate, and process learning to both others and themselves. 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.

### **Integrated Teaching Includes**

- a. Quiz
- b. Peer Learning: Many institutions of learning now promote instructional methods Involving ‘active’ learning that present opportunities for students to formulate their own questions, discuss issues, explain their viewpoints, and engage in cooperative learning by Working in teams on problems and projects. ‘Peer learning’ is a form of cooperative learning that enhances the value of student-student interaction and results in various Advantageous learning outcomes. To realise the benefits of peer learning, teachers must provide ‘intellectual scaffolding’. Thus, teachers’ prime students by selecting discussion topics that all students are likely to have some relevant knowledge of; they also raise questions/issues that prompt students towards more sophisticated levels of thinking. In addition, collaborative processes are devised to get all group members to participate meaningfully
- c. Seminars
- d. Technical Videos
- e. Tutorials
- f. Hands on Workshops Related to Curriculum
- g. Industrial Visit
- h. Projects
- i. Conferences
- j. Project Exhibition and Poster presentation.

### **II. Title of the practice: Soft and Technical Skill Development**

- a. Personality Development Programs.
- b. Pre-enrolment guidance.
- c. Induction program is conducted for students to enables them to settle quality in to the college community.
- d. Innovation and Entrepreneurship Development Centre(IEDC) is established in college to develop the innovation based entrepreneurship culture among the faculty and students

**Goal:**

To provide industry and R&D oriented training, and other skill sets to students to make them globally competitive and employable in multinational industries or to pursue the higher studies in engineering.

**The Context:**

The employability is one of the biggest challenges for engineering education and institutions for graduating students. The primary reason for this is the lack of skill sets as per the need of industry; it may be due to complete disconnecting between industry and academic institutions. The curriculum was also not designed as per the need of industry. So there is an eminent need to provide the skill sets (both technical as well as non-technical skills) so that the students can meet the challenge.

**The Practice:**

The college has taken corrective measure to meet the need for improving employability of students through setting up a separate Entrepreneurship Development Programme Cell as well initiated various skill oriented programs in the campus, so that students can easily be placed or can opt of higher studies. Some of the efforts made in this direction are briefly described here.

**Industry Oriented Training Programs:**

The department has started many industry oriented training programs conducted by competent authorized organizations. These programs are conducted weekends or in vacations and train the students to be suitable for industry requirement.

**Personality Development Program (PDP):**

Communication and other soft skills are required for all round development of students. They play major role in improving the employability of students. College started the PDP classes for the students with regular course by trained PDP trainers for 3rd and 4th year students.

**Aptitude & Graduate Aptitude Test in Engineering Classes:**

College also started Aptitude classes in all the departments which help students to get placed in Public Sector Units (PSU) easily and also go for higher studies.

**Evidence of Success:**

The initiatives and measures taken by the college help students to upgrade their technical and non-technical skills improving the employability of students/ promote to pursue the higher studies. The college placements have been steadily improving in terms of number of companies coming to campus,

number of students employed as well as quality of placements. Other than this the number of GATE qualified students has increased and they opt for higher studies/ go for PSU's jobs.

#### **Problem Encountered & Resources Required:**

The university curriculum is fixed for four years by the university and need to update regularly as per industry needs. Some of the students are not fulfilling the eligibility criteria of industry is required to develop the skill, so that they can overcome the deficiency and can get placed in other industry. Some of the students which are from Hindi medium and Kannada medium require rigorous PDP training to improve the soft skill.

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

#### **Objectives of the practice:**

The Mentoring system assigns a faculty member to every student. The faculty member is called the mentor for 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.

#### **The Context:**

The Mentoring system is relatively new in general to a student entering the institute. The students do take some time to familiarize 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 see their mentors after the internal assessments to discuss about 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.

#### **The Practice:**

A mentor is a personal mentor and counsellor for a student during the duration of 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 student 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 other 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.

**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 any one faculty member has been effective in monitoring the role of a mentor. The behaviour of the students on the campus in general has witnessed a tremendous improvement and the students are much happier and contended 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 counselling 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 set-up proves to be too 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.

**Problems encountered and resources required:**

Despite our best efforts in the effective implementation of the mentoring system, there are Still a small percentage of students who discontinue their course of study at the institute. The Percentage of drop-outs

did reduce greatly after implementing the system, but still present. Some students have required a great deal of time and effort from their mentors but have Shined after. However, the depression that a small percentage of students went through was too Critical for us to handle. We are planning to establish a Centre with professional counsellors.

### 7.3 Institutional Distinctiveness

The Vision of the Institute focuses on essentially aspects like global Standards, Value-based Education, Interdisciplinary Research, and Sustainable Development. The Institute has established its distinctive approach towards this comprehensive Vision Excellence in Academics and Exploration of Knowledge through Research Exponent for Development of a Rounded Personality with Global Vision and Social Responsibility. Participation of students in Co-Curricular Activities (CCA) and Extra Curricular Activities (ECA) like workshops, Technical talks, Hands on training Programs, Industrial Visits, social welfare programmes helps to enhance all rounded personality to strongly face the turbulent road of the future. Experiences and appreciations gained through these activities assist students during internships. Career guidance, Personal counselling, Training are well structured through a Mentoring Training and Placement. The Institute's determination to be transformed into a centre for major research is therefore a commitment to offer high quality teaching. In accordance with this the following activities were conducted in the institution.

#### Department of Information science and Engineering

Sl. No.	Event Name	Organized date	Recourse person
1	The Roadmap to achieve a Rewarding I.T Career On your OWN	05/09/2017	Mr.Kallur V. Vijayakumar, BMSIT, Bangalore
2	Technical Talk on VoIP (Voice over IP) & Unified Communication	23/09/2017	Mr.Guruprasad PS, British Telecom Pvt Ltd, Bangalore
3	Expert Lecture on Industry expectations from a Fresh Engineering Graduate	25/09/2017	Dr.N.Guruprasad, Professor, New Horizon College of Engineering, Bangalore – 560103
4	Industrial Visit to ISRO Satellite Centre	19/10/2017	Mr. Srinivas, Scientist at ISRO
5	Career Guidance Program on Higher Studies Abroad	24/10/2017	Mr.Ravi and Mr.Badvi, Edwise Overseas Education Consultants, Bengaluru.
6	Technical Talk on Computer Networking – Trends and Opportunities	04/11/2017	Prof.M.GomathyNayagam, Assistant Professor, CSE Department, Mount Zion College of Engineering & Technology. Pudukottai, Trichy,
7	Expert Lecture on “Discrete Mathematical Structure”	16/11/2017	Mr.Kallur V. Vijayakumar, BMSIT, Bangalore



8	Project exhibition	09/05/2018	Prof. Dr. Mark Lee, Professor, School of Computer Science, University of Birmingham, United Kingdom.
9	One day Workshop on Crypto Tool	06/05/2018	Prof.M.GomathyNayagam, Asst.Professor, Mount Zion College of Engg,Pudikottai,Trichy
10	Two Day Workshop on “Introduction to Robotics Using Arduino Microcontroller	05/04/2018 & 07/04/2018	Mr. SreenivasaSetty, Chief Technology Officer, SST Technologies, Bengaluru.
11	Technical talk on “Placement Orientation & preparation of fundamentals of programming”	10/03/2018 & 28/03/2018	Dr. Guruprasad.N,Professor ,New Horizon college of Engineering, Bangalore
12	Industrial visit to “ISRO Center”	06/03/2018	Mr Shrinivasa , Scientist ,ISRO
13	Expert talk on “ Advances in networking & cryptographic tool”	21/02/2018	Mr. Prasanna, Technical lead, Live Wire Team, Bengaluru. & Mr.Kiran, IT Engineer, Live Wire Team, Bengaluru.
14	Expert talk on “Cyber security and digital forensics”	07/02/2018	Prof. Gurdeep Singh Hura, Professor and Chair, University of Maryland Eastern Shore, Maryland, United States of America (U.S.A).

### Department of Electricals and Electronics Engineering

Sl. No.	Event Name	Organized date	Recourse person
1	Two days’ Workshop on DESIGN AND DEVELOPMENT OF EMBEDDED SYSTEM USING IOT”	04/04/2018 to 06/04/2018	Mr.PanishDudda.T Embedded Software Developer, Loginware Softec Pvt. Ltd, Hassan & Mr.Thejas P Achar Embedded Software Developer, Loginware Softec Pvt.Ltd,Hassan
2	Faculty Development Program Webinar on “Outcome Based Pedagogic Principles for Effective Teaching”(NPTEL)	19/10/2017 and 21/10/2017	Dr. S K Das Mandal- Asst professor, IIT Kharagpur Dr. Tamali Bhattacharyya- Project manager, IIT Kharagpur
3	3 days FDP on “Research and Development Techniques	23/01/2018 to 25/01/2018	Dr.A.Sri Ramachandra Murty and Prof. Vidya Shree.K, RRCE,Bangalore
4	Technical Talk on “IPR AWARENESS	07/10/2017	Mr. Himatej Reddy and Mr. Sathyajith D.R, Jackfruit Software and Systems Pvt Ltd
5	Technical Talk on Embeddeed system and Industrial automation	07/10/2017	Mr.Shivashankar and Ms.Ranjitha Prolific systems and Technologies pvt ltd



6	Expert Talk on “Wide Area Measurement Systems	28/10/2017	Mr. M.M. Babu Narayanan, SMIEEE, Chief Technical Advisor , Power Research & Development Consultants (P) Ltd., Bengaluru
7	IEEE Sponsored Expert Talk “INTERNET OF ENERGY AND STANDARDS	09/05/2018	Dr. Priya Ranjan Mishra, Principal Scientist, Philips Lighting Research India
8	Two Day Symposium	09/11/2017 & 10/11/2017	-
9	Industrial Visit	24/10/2017	220KV/66KV receiving station
10	Industrial visit to	03/05/2018	Shivanasamudra generating station
11	Skill Development Programs(SDP) Carrier Guidance on “JOB OPPORTUNITY IN PLC & IOT”	26/10/2017	Mr.Ramesh, Technofly Solutions & Mr. Anees Edgate Technology
12	Talk on “HIGHER EDUCATION OPPORTUNITY IN INDIA AND ABROAD”	08/05/2018	Mr. Raghavendra, Manager Academic Relation, ACE, Bangalore & Mr. Ravi, Manager Academic Relation EDWISE, Bangalore

Sl. No.	Event Name	Organized date	Recourse person
13	Social awareness talk on “Youth for Nation Building”	24/03/2018	Mr. Rajesh Padmar (lecture and HOD, Government Boys Pre-university College
14	Social awareness talk on “Youth for Parivarthan”	23/03/2018	Mr.Kaushik D Dahyal (Treasure of Youth for Parivarthan) and Niharija (Member of Youth for Parivarthan)

#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Activity	Title	Date	Number of Participants
Workshop	“Programming with ARM Cortex-M3 Microcontroller” By Mr. Madan Kumar, Technical Engineer, Microlabs Pvt. Ltd. Bangalore	12/03/2018	84
	Concepts of C and Key Aspect To Crack Interview Questions!! By Mr. Karthik M N , NIET, Bangalore 7 <sup>th</sup> semester Students of ECE	09/11/2017	100

	“Concepts of C and Key Aspect To Crack Interview Questions!!” By Mr. Karthik M N , NIET, Bangalore 5 <sup>th</sup> semester Students of ECE	25/10/2017 and 26 /10/2017	100
	“Python Programming” By Dr. Soven K dana, Professor Dept of ECE,RRCE, Bangalore	30/082017 to 01/09/2017	75
	“Learn Electronics and Do Your Own Projects” By Harish R Technical Head, Win-Global Tech,Bangalore, All faculties and Senior Students of ECE, RRCE	18/08/2017 to 21/085/2017	15
	AICTE Sponsored One Week Hands On Workshop On “Advances In Communication Networks Using NS-3” Chief Guest and Keynote speaker Dr. L Pratap Reddy Farmer Director (R&D), JNTU Hyderabad Working Chairman, SWECHA	11/12/2017 To 16/12/2017	53
<b>Expert Talk</b>	“Industrial Internship Program” By Mr. NithinAvasti APSIS-Solutions, Bangalore	16/05/2018	85
	“The Semiconductor Industry Opportunities and Challenges” By Mr. Arun John Mathias Manager.-Sandeepani. CoreELTechnologies(I) Pvt.Ltd. Bangalore.	10/04/2018	84
	“IOT Blockchain and Microservices” By Mrs. Suchetha G Murthy, Manager Development, Webcetera Software, Bangalore	24/03/2018	100
	“Industry Expectation from Young Engineers” By Mr. SreenivasaRamanujam K , Academic Relationship Manager – Karnataka, Tata Consultancy Services	20/03/2018	150
	“Programmable Logic Devices(PLD)” by Mr. Suhas, Esteemed Alumni 2010, Assistant Professor, Department of ECE Mechatronics, Govt Tool Room and Training Centre, Bangalore	9th and 23rd September	100
Out reach Program	Educational Outreach Program	28/03/2018	30

<b>Skill Development Programs (SDP)</b>	<p>“Product Design Using Board Level Approach “ By 1) Mr.Karunakar, Funded Director, SchemaZen Technologies Pvt. Ltd., Bengaluru</p> <p>2) Mr. Lakshmi Narasimha I.N, Business development Manager- Technical, SchemaZen Technologies Pvt. Ltd., Bengaluru</p>	<p>23/09/2017 to 26/09/2017</p> <p>07/10/2017 12/10/2017 26/10/2017</p>	100
	<p>“Demonstration and Hands on Session of Debugging and Testing Of Electronic Equipments” By Mr. Suhas, Alumni 2010, Assistant Professor, Department of ECE Mechatronics, Govt Tool Room and Training Centre, Bangalore</p>	28/10/2017	50
	<p>Projects for beginners from Concepts to Implementation using Open Hardware By G Prashanth Reddy Team leader, Intel India, Bangalore</p>	19/08/2017 28/10/2017	100
<b>Industrial Visit</b>	ISRO 4th semester Students	08/05/2018	100

### DEPARTMENT OF MECHANICAL ENGINEERING

Activity	Title	Date	Number of Participants
<b>Faculty Development Programme</b>	Training the Trainers Hyper works, Ansys	23/09/2017	40
	Total Quality Management	31/01/2018	40
<b>Industrial visit</b>	Britania industries limited	30/08/2017	60
<b>Technical Talk</b>	Industry Institute Interaction	23/02/2018	60
	Heat transfer	24/02/2018	60
	Solid Works	20/03/2018	60

### DEPARTMENT OF CIVIL ENGINEERING

Activity	Title	Date	Number of Participants
<b>Faculty Development Programme</b>	Software application laboratory	8/2/2018 & 9/2/2018	65
<b>Industrial visit</b>	RDC concrete	18 /04/ 2017	101
	Bangalore water supply and sewage board, T.K. Halli, Kanakpura	27/04/17 and 28/04/2017	108
	Vrushabhavathi Sewage Treatment plant	30/10/2017	99
	T.K Halli Water treatment plant	11/4/2018	100
<b>Technical Talk</b>	Project manegment and E Tabs software	3/03/2017	65
	Smart Dynamic Concrete	1/04/2017	99
	Bently Software for Civil Engineering	4/04/2017	103
	Digital Design and Proto typing-Market trends and Challenges	11/04/ 2017	100
	Bridging the gap between Industry and Civil Engineering Curriculum	25/09/2017	98
	Engineeria International Level Quiz Competition	7/10/ 2017	105
	Concepts of Water Proofing	11/10/2017	105
	Construction Management Training for Civil Engineering	23/10/2017	103
	Real Estate Project Proposal Clearance guidelines	28 /10/ 2017	110
	Construction planning Management	2/11/2017	105
	Design and development of airbus 350-900xwb	9/02/2018	100
	Ready – mix verses conventional concrete by rdc concrete	16/02/ 2018	98
<b>Technical Talk</b>	“M s project”	10/03/ 2018	85
	Opportunities on education in abroad	22/04/ 2018	103
<b>WORKSHOP</b>	“Five days’ workshop on Total Station”	09/04/2018-13/10/2018	

### Department of Computer science and Engineering

Activity	Title	Resource Person	Date
<b>Conference</b>	International Conference on Recent Trends in Computational Engineering & Technologies (ICRTCET’18)	Mr. Divyanshu Verma, Senior Manager , Intel R&D Bangalore Dr.Arokiaswami Alphones, NTU, Singapore Dr.Vijanth S Asirvadam, UTP, Malaysia	17/05/2018 to 18/05/2018

<b>Industrial visit</b>	DD Chandana (3rd Sem )	DD Chandana	11/10/2017
	ISRO ( 7th Sem)	ISRO	6/10/2017
	ISRO (4 <sup>th</sup> sem)	ISRO	28/03/2018
<b>Technical Talk</b>	Awareness on Higher Education (GATE, GRE, IAS...)	Mr. Sarvendu Sharma & Mr. Naveen from TIME Group	22/02/2018
	Awareness on Higher Education (GATE)	Mr. Vimallesh Director of GATE	21/02/2018
	Awareness on Higher Education (GMAT, GAT, GATE, TOFEL, IELTS)	TIME Institute	29/08/2017
<b>Technical Training</b>	The Road to Achieve a rewarding career in I.T Industry	Mr. Ravindra K, Founder & Developer, EkalavyaUniversys, Bangalore	30/08/2017
	Technical Aptitude Training Program	NIIT	11/10/2017
	Hand on Training on Oracle Database	Naveen J Oracle Certified Trainer Christ University	23/10/2017 to 24/10/2017
	Usage of WISE3 Platform	K M VinayakSwamy& Deepak Bhagath, Preva Systems, Bengaluru	31/10/2017
<b>Technical Seminar</b>	Multimedia Communication – IISC Extension Lecture Program	Prof. AnandiGiridharan, IISC, Bangalore	27/09/2017
	Discrete Mathematics and its Applications	Prof. Vijay Kumar BMSIT, Bangalore	25/09/2017
	Machine Learning	Mr Raghunandhan	12/03/2018
<b>Project Exhibition</b>	Mini Project Exhibition	Mr. Zaid Khan Epsilon Technologies. Ms. Vishanavi K Paytm, Bangalore.	12/10/ 2017
	Main Project Exhibition	Mr Shivsharnappa Sr. Buisiness Manager, HCL	25/05/2018
<b>Faculty Development Program</b>	Advanced Networking	Mr. Prasanna and Team memebers, Livewire Technologies	01/08/2017 to 03/08/2017
	Mobile application Development & Python Programming	Mr Sridhar,Sudocode Mr Ritesh,BHEL Dr Sheeba,RRCE Mr B NageshRao,Cyberplus	22/01/2018 to 28/01/2018
<b>Student Development Program</b>	JAVA/J2EE and Cloud Application	Mr. Ashok Kumar, IBM India	30/08/2017 to 01/09/2017
<b>Out Reach Program</b>	Educational Out Reach Program 2017	RRCE Faculties & Students	09/09/2017
	Educational Out Reach Program 2018	RRCE Faculties & Students	10/03/2018
<b>National Symposium</b>	Trigger 2K17	NIIT Vijayanagar	22/09/2017

<b>Guest Lecturer</b>	Emerging Trends in Web Application Development	Mr. Sarvendu Sharma & Mr. Naveen, TIME group, Bengaluru.	10/03/2018
<b>WORKSHOP</b>	Discrete Mathematics and its Applications	Mr Prasanna and Team members, Livewire Technologies	30/08/2017 to 01/09/2017
	Android Applications	Mr. Sridhar & Team, SuedoPvt. Ltd.	30/08/2017 to 01/09/2017
	IoT for MCA Students	Md. HafeezurRehaman Asst. Prof., Dept. CSE, RRCE	31/08/2017
	ARM7 Processor	Mr. SreenivasaSetty, Chief Technical Officer (CTO), SST Technologies, Bengaluru	24/04/2018

#### 8. Future Plans of action for next academic year (500 words)

- ✓ RRCE has applied for permanent affiliation in respect to NBA accredited courses of CASE, ECE, ME and EEE.
- ✓ As per request of the affiliation university (VTU), RRCE has applied for starting NCC unit from 2018-19.
- ✓ Industrial visit action plan is on to visit nearby industries and to entre with MoU's for getting exchange of facilities.
- ✓ Centre for Test and Data Science will be training the students for pre placement and placement and also coming up with other activities for pre and final year students.

Name \_\_\_\_\_

Name \_\_\_\_\_

\_\_\_\_\_  
Signature of the Coordinator, IQAC

\_\_\_\_\_  
Signature of the Chairperson, IQAC

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## **Annexure I**

### **Abbreviations:**

CAS	-	Career Advancement Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution

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