



Yearly Status Report - 2018-2019

Part A

Data of the Institution

1. Name of the Institution	SIR C. R. REDDY COLLEGE OF ENGINEERING
Name of the head of the Institution	Dr. G. Sambasiva Rao
Designation	Principal
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	08812230840
Mobile no.	9121214530
Registered Email	principal.sircrrengg@gmail.com
Alternate Email	principal@sircrrengg.ac.in
Address	VATLURU
City/Town	ELURU
State/UT	Andhra Pradesh
Pincode	534007
2. Institutional Status	

Affiliated / Constituent	Affiliated
Type of Institution	Co-education
Location	Rural
Financial Status	private
Name of the IQAC co-ordinator/Director	S Raghunath Sagar
Phone no/Alternate Phone no.	08812230840
Mobile no.	9194414470
Registered Email	iqac.sircrrcoe@gmail.com
Alternate Email	srsagar@outlook.com

3. Website Address

Web-link of the AQAR: (Previous Academic Year)	https://www.sircrrengg.ac.in/images/AQAR_CRR_2017-18.doc
4. Whether Academic Calendar prepared during the year	Yes
if yes, whether it is uploaded in the institutional website: Weblink :	https://www.sircrrengg.ac.in/index.php?option=com_content&view=article&id=25&Itemid=128

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
1	B	2.17	2017	19-Jul-2017	18-Jul-2022

6. Date of Establishment of IQAC	14-Jul-2016
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7. Internal Quality Assurance System

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
Academic Audit	18-Jul-2018	206

	2	
Participation in NIRF	19-Nov-2018 20	206
Skill Development Programmes	25-Jul-2018 365	829
Refresher Programme on Outcome Based Education.	23-Jul-2018 6	206
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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
Dr. T Venkateswara Rao	AQIS FDP	AICTE	2019 180	340000
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9. Whether composition of IQAC as per latest NAAC guidelines:

Yes

Upload latest notification of formation of IQAC

[View File](#)

10. Number of IQAC meetings held during the year :

4

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website

Yes

Upload the minutes of meeting and action taken report

[View File](#)

11. Whether IQAC received funding from any of the funding agency to support its activities during the year?

No

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

1. Academic Audit 2. Refresher Programme on Outcome Based Education 3. Establishment of Dassault Systemes Lab and ARC labs 4. Participation in NIRF

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

Plan of Action	Achivements/Outcomes
Academic Audit	An academic audit was carried out on 18th and 19th July, 2018 with internal audit done by teams formed for the purpose.
Participation in NIRF	NIRF data was submitted on 5th-december-2018
Induction and orientation program for junior faculty.	Junior faculty members were given induction and orientation training by in house senior faculty for one week from 16-07-2018 to 21-07-2018
Skill Development Programmes	Skill development programs were conducted throughout the year for students in Siemens, Dassault, AWS and ARC labs.
Refresher Programme on Outcome Based Education.	Refresher Programme for one week from 23-July-2018 to 28-July-2018 on Outcome Based Education was conducted for all faculty
Establishment of Dassault Systemes Lab	Dassault systemes lab is established with seventy high end computers.
Establishment of ARC Lab	ARC robotics lab was established in association with APSSDC and internship with Aachen university, germany provided.
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14. Whether AQAR was placed before statutory body ?	No
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	No
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2020
Date of Submission	10-Jan-2020
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripton and a list of modules currently operational (maximum 500 words)	Yes, the institute has a management information system, 'DBSERP', in place to provide mechanism for automated processing and management of the entire institution.

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

For effective implementation of curriculum, the involvement of immediate stakeholders i.e., students and faculty is to be monitored in an effective manner. Towards this the college has implemented the following:

- Academic calendar, semester-wise, is prepared at college level in line with the calendar provided by the university and to be followed by all departments for the entire academic year.
- Subject allocation is done by head of the department with due consideration to the choice, specialization, experience of the faculty and the requirements of the department, and communicated to them well in advance before commencement of semester.
- The college functions from 9 am to 5 pm on all week days and from 9 am to 12.40 pm on Saturdays. Accordingly, class time-tables are prepared with a maximum of 8 periods per day.
- Meetings are conducted by the HODs with staff members to design and implement various strategies for monitoring and effective implementation of the curriculum.
- All the departments follow a calendar containing activities that are undertaken in an academic year. This helps the departments in effective execution of their plans.
- All the staff members have to prepare course files with lesson plan, course objectives, course outcomes, mapping with programme outcomes, delivery methods and techniques, etc.
- Lab experiments and lab manuals are made ready before starting of each semester in all laboratories by updating as per the requirements.
- Faculty members are encouraged to teach using teaching tools and aids such as power point presentations, video lectures, quizzes, seminars etc. as per the demand of course outcomes.
- Reviews are conducted at regular intervals and the status of syllabus coverage and other academic issues are discussed.

x Slots are allotted to counseling, library, communication skills, personality development, expert lectures to balance the other activities with curriculum activities.

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
Revit architecture	--	27/08/2018	6	Employability	Yes
Auto cad	--	11/02/2019	6	Employability	Yes
3D Dassault Systems CATIA	--	20/06/2019	5	Employability	Yes

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
BTech	Nil	02/07/2018
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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.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	All	02/07/2018

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	1018	0

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Campus Recruitment Training	02/07/2018	135
Coding	25/07/2018	146
2 - Day Workshop on IoT its Applications by Brain O Vision Solutions India Pvt Ltd, Hyderabad,	19/09/2018	102
1 - Day Workshop on Cyber Security by Srinivas Pisupati, Vice President, Technogen Inc, Hyderabad,	22/09/2018	317
3 - Day Workshop on Google Andriod Developer by APSSDC (Andhra Pradesh State Skill Development Corporation)	09/10/2018	118
Workshop on Cloud Computing through AWS Educate Program in association with APSSDC (Andhra Pradesh State Skill Development Corporation)	19/10/2018	97
2 - Day International Conference on Computer Vision Machine Learning (ICCVML - 2018) was organized by the Departments of CSE IT	27/10/2018	102
5 - Day Faculty Development Programme on JAVA by Oracle Corporation in association with APITA (Andhra Pradesh Information Technology Academy)	21/01/2019	102
TECHFEST-2K19 , 12th National Level Technical Symposium	01/03/2019	317

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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BTech	Executing Pierce of sheet metal with the aided Robot Studio (5 Months International Project Exchange Program)	2
BTech	Study analysis on interaction with IRB7600 Industrial Robot with its digital twin (5 Months International Project Exchange Program)	2
BTech	Airport Authority of India(Gannavaram) (AN IMPLIMENTATION OF PORTABLE ILS LOCALIXER SIGNAL RECIVER USING SDR)	2
BTech	ECIL (IMPLEMENTATION OF TRAFIC LIGHT CONTROL BASED ON SENSOR DATA)	3
BTech	ECIL (DEISGN AND VERIFICATION OF 8 PORT ROUTER FOR NOC)	3
BTech	BSNL (OPTIMIZATION OF 2G/3G NETWORKS FOR IMPROVEMENT OF HAND OVER)	1
BTech	STEEL PLANT(OPC BASED SCADA SYSTEM IN VISAKHAPATNAM STEEL PLANT)	18
BTech	ECIL(SMART HOME SYSTEM ON FPGA)	2
BTech	STEEL PLANT(TESTING OF THIRISTOR IGBT IN BLAST FURNACE)	3
BTech	STEEL PLANT(PROVIDING ALTERNATE SOLUTION FOR SPA CARDING AT SMS)	4

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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution?
(maximum 500 words)

Feedback Obtained

The college obtains feedback from all the stakeholders i.e. students, alumni, employers, parents and experts from academia. Students The HOD and senior faculty periodically meet the student representatives to discuss academic issues. Any difficulties expressed by the students, if relevant are noted and communicated to the university either through the faculty who are members in the various BOS etc. or forwarded to the university when suggestions are invited during syllabus revision. Alumni Alumni meets are organized to obtain their views on curriculum and training and their suggestions are recommended for necessary modifications in the curriculum to the university and suggestions related to teaching-learning process are incorporated. Alumni visiting the college or its website give constructive suggestions to help the students achieve greater focus and improve themselves. Employers/ Industries The institute collects feedback from the recruiters on the performance of students of the institute both during the recruitment process and also after they are placed. This enables the institute understand expectations of the industry from the students and act accordingly. Evaluation of teachers performance is done in two ways in the college. Faculty The feedback from the students is collected twice in a semester-one shortly after the commencement of class work and the other after the completion of final internal exam. The first feedback helps to identify the strengths and weaknesses of the faculty so that they can overcome their short falls in the preceding classes. The second feedback is to know the level of attainment in overcoming their short falls. Appraisal is done by HOD for each faculty annually which is analysed critically to take necessary corrective actions like suggestions to improve in specific areas such as publishing papers, attending seminars/workshops, use of innovative teaching procedures, pursuing research, improving results in the subjects they are dealing etc.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BTech	All	840	638	638
Mtech	All	90	39	39
MBA	MBA	60	45	45
MCA	MCA	30	5	5

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2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018	638	89	173	33	206

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)

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
206	72	24	24	2	9

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

The institute strongly believes that student mentoring or counseling is the best method to help the students to overcome difficulties either in academics or in their behavior. Particularly at the adolescent age, the behavior of students is influenced by negative factors and counseling is the best way to put them in the right direction. This is carried out in the following ways. Academic Counseling The institute provides regular counseling to the students to address issues relating to their academic shortfalls and obstacles. The institute executes mentor scheme where a group of students are placed under the guidance of mentors. The role of faculty counselor/mentor is to monitor the academic progress of the students under his/her care and to take corrective measures for any aberration in their progress in academic pursuits. This also helps to check absenteeism. Personal counselling The student counselors play the role of personal counselor with whom a student can confide his/her personal problems. The faculty advisor strives to arrive at an optimal/amicable solution through counseling along with the HOD. The Principal also counsels the students and tries to mould them in right path. A Grievance Redressal Cell is also constituted to address the grievances of the students and to attend to their problems. Psycho-social counselling Problems relating to social factors affecting students performance viz. peer pressure, parental support, cultural and religious background, socioeconomic status, and interpersonal relationships are addressed through their mentors. Psychological counseling is done to handle crises in relationships, deal with stress and other pressures, resolve fears, panic and anxieties, cope with continuing family problems, work through difficult decisions, and overcome depression and sadness. Experts in psychology are invited to address students in the fresher's orientation class at the beginning of the academic year so that the new students joining the college can cope with the stress of engineering studies. Stress management programmes are also conducted for the benefit of the students.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
3570	206	1:17.3

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
2	2	0	2	0

2.4.2 – Honours and recognition 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
2018	Dr.P.H.S.TejoMurthy	Professor	Best Paper Award FECS
2018	K. Miranji	Assistant Professor	BHARAT SHIKSHA RATAN
2018	P.Srinivasulu	Assistant Professor	UGC NET

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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	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BTech	All	1year 1sem- JNTUK	15/11/2018	08/01/2019
BTech	All	1year 2sem- JNTUK	11/05/2019	07/07/2019
BTech	All	2year 1sem- JNTUK	08/11/2018	27/12/2018
BTech	All	2year 2sem- JNTUK	08/05/2019	20/06/2019
BTech	All	3year 1sem-AU	13/11/2018	27/03/2019
BTech	All	3year 2sem-AU	16/04/2019	07/08/2019
BTech	All	4year 1sem-AU	03/11/2018	19/02/2019
BTech	All	4year 2sem-AU	30/04/2019	07/06/2019
Mtech	All	1year 1sem- JNTUK	11/02/2019	03/05/2019
Mtech	All	1year 2sem- JNTUK	16/08/2019	02/11/2019

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

The college adheres to the norms of JNTU University which has a tradition of following good and time-proven methodologies for the evaluation of students. Student centric learning through assignments, projects, seminars and practical sessions is done as given below: The performance of a student in each semester is evaluated subject wise with a maximum of 100 marks for theory subject and 75 marks for practical subject. The project work is evaluated for 200 marks. For theory subjects the distribution is 30 marks for Internal Evaluation and 70 marks for the End Examinations. The weightage of Internal marks for 30 consists of Descriptive - 15, Assignment - 05 (Theory, Design, Analysis, Simulation, Algorithms, Drawing, etc. as the case may be and for Physics, Virtual Labs to be considered as Assignments) Objective -10 (Conducted at College level with 20 Multiple choice question with a weightage of ½ Mark each). Here, within the limited scope as an affiliated college, for assignment marks, the institute has brought in a method of evaluation by splitting the assignments into two parts - first assignment of general nature and the second one is an exam specific assignment for a total weightage of 10 Marks.

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

To ensure effective implementation of the evaluation reforms, the institution has set up separate examination sections at the department and college level which deal with the examination process. The college academic calendar is prepared by the examination section with the schedule of class work, assignments, internal assessment tests and end semester examinations for both theory and laboratory courses at the beginning of every academic year based on the university academic calendar.

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 weblink)

https://www.sircrrengg.ac.in/index.php?option=com_content&view=article&id=32&Itemid=135

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
UG	BTech	CSE	193	193	100
UG	BTech	ECE	214	212	99.06
UG	BTech	EEE	191	190	99.47
UG	BTech	IT	108	106	98.14
UG	BTech	MECH	129	129	100
UG	BTech	CIVIL	63	63	100
PG	Mtech	CST	4	2	50
PG	Mtech	CS	8	6	75
PG	Mtech	VLSI	5	5	100
PG	Mtech	PS&A	12	12	100

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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 weblink)

https://docs.google.com/forms/d/e/1FAIpQLSfMNxJ0icN61SLncwGGUa9PLgA_vXkVclXj_YQJlGULBICbIeg/viewform?usp=sf_link

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Total	0	Nil	0	0

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3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Effects of Wind on Structural and Facade Design and Simulation of Actual Atmospheric Boundary layer and Studies in the Wind	CIVIL	14/12/2018

Tunnels".		
Sustainable Solid Waste Management for Smart Cities	CIVIL	09/02/2019
Seminar on Intellectual Property Rights	CSE	25/08/2018
Recent trends inspace technology navigational aids for aviation	ECE	30/11/2018
SCILAB Programming by APSSDC	ECE	28/01/2019
Energy Conservation Necessity Tips in Power Sector	EEE	14/12/2018
Over view of transmission network in a power system	EEE	17/09/2018
Energy conservation and its necessity tips in power system	EEE	14/12/2018
2 - Day Workshop on IoT its Applications by Brain O Vision Solutions India Pvt Ltd, Hyderabad	IT	19/09/2018
1 - Day Workshop on Cyber Security by Srinivas Pisupati, Vice President, Technogen Inc, Hyderabad	IT	22/09/2018
3 - Day Workshop on Google Andriod Developer by APSSDC (Andhra Pradesh State Skill Development Corporation)	IT	09/10/2018
Workshop on Cloud Computing through AWS Educate Program in association with APSSDC (Andhra Pradesh State Skill Development Corporation)	IT	19/12/2018
5 - Day Faculty Development Programme on JAVA by Oracle Corporation in association with APITA (Andhra Pradesh Information Technology Academy).	IT	21/01/2018
Earthquake resistant design of structures	CIVIL	15/09/2018

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

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
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Smart India Hackathon 2019	M J S N Sai Ganesh, E V Kaushik, T B S S Rohit , G Mahesh, M Likhithaveni, P Renuka Devi	IIT Bombay	10/06/2019	SIH 2019 Hardware Edition
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3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start-up	Date of Commencement
Nil	Nil	Nil	Nil	Nil	02/07/2018

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3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	0	0

3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
ECE	2
MECHANICAL	1
MBA	1

3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	CSE	17	4.47
International	ECE	42	0.5
International	EEE	21	5.04
International	IT	15	2
International	MECHANICAL	24	3.5
International	CIVIL	2	7.01

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3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
CSE	42
ECE	47
EEE	1
IT	39
MECHANICAL	1
FED	2

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

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
A critical study and analysis of journal metric "CiteScore", cluster and regression analysis	Dr. A. Yesu Babu	International Journal of Engineering Technology	2018	2	Sir CRR College of Engineering	1
Edge Based Reliable Digital Watermarking Scheme for Authorized Ownership	Dr. M. Krishna	International Journal of Pure and Applied Mathematics	2018	6	Sir CRR College of Engineering	5
Independent and distributed access to encrypted cloud databases	Dr. M. Krishna	International Conference on Computational Intelligence in Information System	2018	6	Sir CRR College of Engineering	4
FPGA Implementation and verification of H.264 Encoder	Dr P H S Tejo Murthy	International journal of Engineering and technology	2018	0	Sir CRR College of Engineering	0
A new approach for velocity estimation of moving targets in SAR imaging	I. Hemalatha	journal of advanced research in dynamical and control systems	2018	0	Sir CRR College of Engineering	0
Autofocus in SAR imaging by using a specially designed polynomial with DW co	I. Hemalatha	International Journal of Pure and Applied Mathematics	2018	0	Sir CRR College of Engineering	0

efficient and phase gradient method						
An Efficient Methods For Segmentation Of Non-Ideal Iris Images Using Optimization Based Morphological Reconstructed FCM(MRFCM)	Dr R Satish	International journal of Engineering and technology	2018	0	Sir CRR College of Engineering	0
A Novel Segmentation Method For Noisy And Non-Circular Iris Images	Dr R Satish	IJCVR INDE RSCIENCE	2018	0	Sir CRR College of Engineering	0
An Efficient Method For Non-Ideal Iris Images Using Optimal Multi Level	Dr R Satish	JST	2018	0	Sir CRR College of Engineering	0
A New Approach For Recognition Of Non-Ideal Iris Images	Dr R Satish	JESTR	2018	0	Sir CRR College of Engineering	0
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3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
A critical study and analysis of journal	Dr. A. Yesu Babu	International Journal of Engineering	2018	2	1	Sir CRR College of Engineering

metric "CiteScore", cluster and regression analysis		g Technology				
Edge Based Reliable Digital Watermarking Scheme for Authorized Ownership	Dr. M. Krishna	International Journal of Pure and Applied Mathematics	2018	5	5	Sir CRR College of Engineering
Independent and distributed access to encrypted cloud databases	Dr. M. Krishna	International Conference on Computational Intelligence in Information System	2018	5	4	Sir CRR College of Engineering
A New Approach For Recognition Of Non-Ideal Iris Images	Dr R Satish	JESTR	2018	2	8	Sir CRR College of Engineering
FPGA Implementation and verification of H.264 Encoder	Dr P H S Tejo Murthy	International journal of Engineering and technology	2018	1	0	Sir CRR College of Engineering
An Efficient Methods For Segmentation Of Non-Ideal Iris Images Using Optimization Based Morphological Reconstructed FCM(MRFCM)	Dr R Satish	International journal of Engineering and technology	2018	1	0	Sir CRR College of Engineering
Implementation Of Bidirectional Blue-Fi Gateway In IOT Enviro	P. Hareesh	IJET	2018	1	0	Sir CRR College of Engineering

Design And Development Of Smart Energy Meter For Effective Use Of Electricity In Iot Applications	V Ranjith Kumar	IJET	2018	1	0	Sir CRR College of Engineering
A Technology Overview And Future Scope Of BIOMEMS In Tropical Disease Detection: Review	K Miranji	IJET	2018	1	0	Sir CRR College of Engineering

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3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	10	56	27	54
Presented papers	91	26	0	2
Resource persons	1	0	0	1

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3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Tree Plantation Programme	College NSS Unit	2	150
General Health Check-up Camp	College NSS Unit in collaboration with MEDALL diagnostic centre, Vijayawada	1	20
Blood Donation Camp (Police Co Memmoration Day)	College NSS Unit in collaboration with West Godavari District Police Department.	2	60
Blood Donation Camp	College NSS Unit in collaboration with	2	110

	Govt. Blood Bank, Eluru		
Health Check-up Camp	College NSS Unit in collaboration with CALLHEALTH service provider, Vijayawada	1	15
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Nil	Nil	Nil	0
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
Swachh Bharat	College NSS Unit	Swachh Bharat Abhiyaan	2	100
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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
Project Exchange Program	Ram Sai Meganadh	Self	150
Project Exchange Program	Kodali Jithendra Chowdary	Self	150
Project Exchange Program	Kolluri Vishnu Priya	Self	150
Project Exchange Program	Polavarapu Sasi bala	Self	150
Internship at Lammi Biological station Pajarventie 320, FIN-16900 Lammi, Finland	Ch.Raviteja	Self	150
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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	Duration To	Participant

Internship	Developing custom CAD tools using Onshape Cloud 3D CAD Software's FeatureScript Programming language	Everglades Technologies pvt ltd, 1-6-9 kommale cheruvu gattu, old town, Tanaku 534211, India Ph No: -08819-29777 7	25/02/2019	26/04/2019	Revathi Nagavalli Kamireddy
Internship	Artificial intelligence	Mobinius, bangalore	15/05/2019	30/05/2019	B.kishorebabu
Internship	Artificial Intelligence	Trigent Software Limited, Bangalore	01/05/2019	15/05/2019	Ch. Sneha Durga
Internship	Artificial intelligence	Virgosys, bangalore	15/05/2019	30/05/2019	CH.Alekhya
Internship	Artificial intelligence	Unimity solutions, chennai	01/05/2019	15/05/2019	I.bagyalakshmi
Internship	Artificial intelligence	Vmoksha, chennai	01/05/2019	15/05/2019	P.Poojyavi, G.Pavan Kumar
Internship	Computer Networking	Spyry Technologies, Bangalore	29/04/2019	18/05/2019	A. Mounika B.Chandra Kala Ch. Raga Malika Ch.Harika G.Pravallika Sai Lakshmi K.Kiranmaiee P.Sai Prasanna S. S.Suma Keerthi
Internship	Cyber Security	Cybervie, hyderabad	03/05/2019	04/06/2019	A.Subbaiah C.sai Kiran G.ravi varma G.dasaradh M.Ravi teja N.Srujana
Internship	Cyber Security	Cybervie, hyderabad	03/05/2019	04/06/2019	p.Surya Teja
Internship	Cyber security	Supraja Technologies, Visakhapatnam	10/05/2019	04/06/2019	B.Leela Rama Jyothi I. Jyothirmayi

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3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Thingtronics Innovations Pvt.Ltd.	20/11/2018	Advanced training in IoT to Students and Staff	60
Trident Techlabs Pvt.Ltd.	20/11/2018	Advanced training in VLSI to Students and Staff	60
APSSDC	29/03/2019	Skill Development Training	360
Brain O Vision Solution(India) Pvt. Ltd.	10/09/2018	Skill Development Training	360
STEINBEIS UNIVERSITY BERLIN, GERMANY	17/09/2018	1.Providing infra structure 2. Industry association, Research Institutes and Universities for Applied Research 3. Creation of Research activities between INDIA and GERMANY. 4. Implementing new learning methodologies for distance learning for managing	2
GJ infra company	09/08/2018	Project works, Site visits	200
APSSDC	29/03/2019	Skill Development Training	300
APPLYVOLT	18/12/2018	Advanced training in VLSI to Students and Staff	50
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CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
446	331

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Newly Added

								h (MBPS/ GBPS)	
Existing	1222	621	1222	70	170	19	192	195	150
Added	36	36	36	0	0	0	0	45	0
Total	1258	657	1258	70	170	19	192	240	150

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

240 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
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4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
428	327	18	4

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)

Maintenance of Infrastructure Maintenance of Buildings College has a campus engineer to implement the decisions taken by maintenance committee in connection with maintenance of infrastructure, electrical and plumbing requirements, painting and repairs if any in the campus. In addition, campus engineer attends to the complaints and suggestions from students and faculty. Civil works connected to construction and maintenance of buildings is taken up by the Construction committee. Maintenance of Campus The day-to-day cleaning of the campus is monitored by a Supervisor who is answerable to the administrative officer. Support is provided to him by assigning contingent staff for housekeeping, sanitation and gardening works in the campus daily. The maintenance supervisor prepares a schedule for regular maintenance of the campus. Maintenance of Facilities Maintenance of Library The infrastructure and facilities available in the library are looked after by the library staff supervised by the librarian. Library stock verification is carried out annually. Maintenance of Play Area The physical director is in-charge for the play areas. The cleanliness is maintained with the man power provided by the maintenance supervisor. Maintenance of Equipment Maintenance of labs and lab equipment Equipment in the labs is monitored by the lab technicians who supervise their functioning calibration regularly and report failures to the lab in charges. The lab in-charges are responsible for the physical safety, preventive and breakdown maintenance of all lab equipment. They also suggest the purchase of new equipment, scrapping of obsolete and old equipment in the lab stock and for the replacement/ repair of the damaged. Office Infrastructure All the equipment and the other office infrastructure are maintained under the supervision and guidance of maintenance coordinators/conveners in electrical, mechanical and communication equipment. The computers located all over the campus are maintained by a hardware engineer and his team and regular up gradation is carried out for proper functioning. Annual maintenance contracts are made with outside agencies for maintenance of equipment where calibration

and maintenance is required to be done by professionals and more qualified technicians.

https://www.sircrrengg.ac.in/images/Others/IQAC/Support_Facilities_Maintenance.pdf

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	0	0	0
Financial Support from Other Sources			
a) National	Scholarship	2402	89882000
b) International	0	0	0
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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.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Remedial Coaching	20/08/2018	531	C R R -Faculty
C Programming	27/04/2018	17	IT Faculty
Engineering Mechanics	06/05/2019	9	Mechanical Dept. Faculty
Engineering Drawing	09/05/2019	9	Mechanical Dept. Faculty
Bridge course	18/06/2019	607	Dept of ECE, Sir CRRCOE
Art of living	17/10/2018	120	Art of Living, Bangalore
Yoga for modern age	14/12/2018	120	ISKCON ELuru
Electronics workshop	14/02/2019	60	Physi Tech, Vijayawada
Stress management	08/03/2019	120	Swaroop Hospitals
International Yoga day	21/06/2018	600	Shri Venugopal Lunani
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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2018	Placement Counseling	125	516	0	425

2018	GATE	95	42	17	0
2018	GRE/IELTS	45	22	12	0
2018	CRT	0	120	0	60
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
6	6	10

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
Vee Technologies	296	50	TCS	504	40
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5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2018	15	B.Tech	CSE	University of BUFFALO, NEWYORK. University of WINDSOR, Canada. Fanshawe college, Canada. Conestoga college Canada.	MS
2018	3	B.Tech	ECE	VIT, IITM, SIR CRRCOE	M.TECH
2018	2	B.Tech	IT	University of East London (UEL), UK	MS
2018	1	B.Tech	IT	Charles Sturt University, Australia	MS
2018	1	B.Tech	IT	University of Hertfords hire, UK	MS

2018	1	B.Tech	IT	Wilmington University, New York, USA	MS
2018	1	B.Tech	IT	University of Queensland, Australia	MS
2018	1	B.Tech	IT	GEMS BSchool, Tirupathi	MBA
2018	2	B.Tech	MECHANICAL	IELTS	IELTS
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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	Number of students selected/ qualifying
GATE	17
GRE	11
TOFEL	7
Any Other	4
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5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Basket Ball	College Level Annual Games Sports	72
Volley Ball	College Level Annual Games Sports	144
Kabaddi	College Level Annual Games Sports	160
Kho-Kho	College Level Annual Games Sports	96
Hand Ball	College Level Annual Games Sports	80
Badminton (Singles Doubles)	College Level Annual Games Sports	64
Table Tennis (Singles Doubles)	College Level Annual Games Sports	64
Chess	College Level Annual Games Sports	45
Cricket	College Level Annual Games Sports	30
Throw Ball	College Level Annual Games Sports	80
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5.3 – Student Participation and Activities

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)

Year	Name of the award/medal	National/ International	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	GOLD MEDAL	National	1	0	315177112109	MIRZA.HASMATH BAIG
2019	NATYA RANJITHA	National	0	1	316177114003	A S VAISHNAVI
2018	GOLD MEDAL	National	1	0	316177120029	D.ROHITH BABU
2018	BRONZE MEDAL	National	1	0	17B81A0225	CH.P.C.V.S .RAGHAVA
2019	SILVER MEDAL	National	1	0	315177112109	MIRZA.HASMATH BAIG
2018	RUNNERS	National	2	0	17B81A0435 17B81A05EO 17B81A0238 17B81A05G4	G.V.BHANU PRAKASH S.SAILESH KUMAR J.BALAJI U.LOKESH
2019	RUNNERS	National	4	0	17B81A0299 17B81A02A0 17B81A0340 17B81A0402	S.KODANDA RAMBABU T. RAMAKRISHNA A K.GOKUL SAI A.RAGHAVENDRA
2018	BRONZE MEDAL	National	1	0	316177120108	Y.SRINIVASA RAO
2018	SILVER MEDAL	National	1	0	17B81A0225	CH.P.C.V.S .RAGHAVA
2018	SILVER MEDAL	National	1	0	17B81A0332	G.SOMESWARA RAO

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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

There is no student council at the college. However, student chapters of associations such as IEI, IETE, etc...in the departments organizes various programs such as Paper Presentation, Poster Presentation, Model Making/Circuit Designing/Project Designing, Debugging, Technical Quiz, Technical Talk, General Quiz, Aptitude Test, Group Discussion, Essay Writing, Sports, Games, Cultural events etc.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

The institution has an active Alumni Association established in the year 2011. Activities Some of the college alumni have been absorbed as faculty and they take great pride in networking and organizing alumni meets through the Alumni Association. Alumni-meets are regularly organized and are well attended by our

Alumni. Some of the activities are:

- The association organizes expert talks, seminars and also contributes towards placements.
- They conduct soft skill programmes for all the final year students.
- The Alumni works with the college to train students and get them acquainted with the requirements of the industry to be selected in the job market. Major contributions The alumni association paves way for the present students to have informal meets and interactions with the alumni which motivates and channels their focus in various areas of knowledge and skills through various soft skills programmes. Alumni have immensely contributed to the development of the college in the following ways:
- Provide guidance to the students for higher education and employment opportunities.
- Review changes and trends in the industry and giving inputs for design of curriculum.
- Provide feedback for evaluation of Program e Educational Objectives.
- Updating the current trends in the job market.
- Help the college in bringing more companies and industries for campus placements. Motivate the students to become entrepreneurs. Sharing and passing their experiences.

5.4.2 – No. of enrolled Alumni:

200

5.4.3 – Alumni contribution during the year (in Rupees) :

0

5.4.4 – Meetings/activities organized by Alumni Association :

29-12-2018 Alumni Meet

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)

The institution is managed by the management committee of Sir C R Reddy Educational Institutions that takes pride in managing some of the quality educational institutions that includes schools, colleges, management institutions, engineering and other professional institutions. The Institution believes in practicing participative management, decentralisation and delegation of authority. The top management inspires academia to achieve excellence at national level in the field of higher education. 1. In promoting decentralisation, the management plays the role of a facilitator with adequate financial and human resource support for the academic and administrative works. The principal contributes in the policy decisions of the management with respect to the institution. Principal being head of the institution communicates the decisions of the management in the head of the departments meeting, which is comprised of all the departmental heads who in turn communicate the same to faculty and take feedback. The management and principal encourage faculty and supporting staff to formulate system process and procedure for imparting quality education true to the spirit of the institute's vision mission and evolve strategies for academic growth of the institution. 2. The institution strongly believes in the active involvement of all the staff members of institution for effective management and promotes participative management. The principal with the heads of the departments discusses the needs, problems and suggestions to improve the educational quality and infrastructure to talk to the management for further action. The teaching and non teaching staff are represented in the institution committees to manage different institutional activities. Some of the available committees are as follows:

- Anti Ragging Committee
- Grievance Redressal Cell
- Disciplinary Committee
- Academic Cell
- Library Advisory Committee
- Women Protection Cell

• Entrepreneurship Development Cell • Class Work Review Committee • Internal Quality Assurance Cell • Examination Cell • Training and Placement Cell • Student Welfare Committee • College Magazine Committee • Canteen Committee. This empowers the department heads and individual faculty with flexibility in taking decisions on academic administration at department and institutional level. The management addresses various issues of the institute at regular intervals and periodically conducts review meetings and collects suggestions from faculty members to develop the road map for the future academic activities

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

Yes

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):

Strategy Type	Details
Curriculum Development	As the college is affiliated to JNTUK University, Kakinada, curriculum development is solely in the hands of the university. However the college uses several mechanisms to enrich the curriculum and prepare students to cope with the changing needs of the society as well as industry. These are summarized below. • Curriculum gaps are identified for each course and every care is exercised by the course coordinator to fill them by making the faculty deliver the content to students. The college has given flexibility for the faculty to take extra classes for each course. • The college organizes aptitude classes and communication skills lab by incorporating them in the time-tables of II and III years. This enables the students to prepare for campus interviews and also to enhance their employability and interpersonal skills. • Departments organize various training programmes for students to enrich their knowledge beyond curriculum to improve their employability. • Students are encouraged to take up mini projects and main projects related to the real time problems. If necessary, students are sent to industries or research organizations to collect the data, carry out analysis and suggest probable solutions.
Teaching and Learning	Based on the recommendations of academic audit, the following specific measures have been taken by the institute to improve teaching and learning process. As the institution is heading towards outcome based education, every effort is made to

transform the teaching-learning environment by choosing the following methods appropriate to specific courses:

- Tutorials and remedial classes in specified subjects.
- Learner centric interaction is implemented to make the students to be proactive and dynamic.
- Special lectures are arranged on specific topics by industry experts.
- Extended library and laboratory working hours beyond the institution timings.
- Faculty to be self motivated and responsible to take own initiatives for remedial classes beyond curriculum coverage etc.
- Stress on improvement in communication skills in English language through conduct of additional English input sessions during II III years.
- Aptitude classes for campus placements.
- Better understanding of fundamentals with the help of videos and PPT slides.
- Thrust on e-learning by the use of NPTEL material/ on line courses etc.
- Imbibing practical orientation through thrust on quality lab classes, industrial visits. The effectiveness of teaching-learning process is reviewed on regular basis.

Examination and Evaluation

The college has a central examination section to conduct university examinations and to liaise with university in examination related matters. It is headed by a senior faculty member as the in-charge of the section. The main functions of the examination in-charge are to collect confidential and non-confidential material from the university, keep in safe locker, prepare seating plans, conduct of examinations, safe dispatch of answer scripts to university, book malpractice cases, prepare consolidated internal marks statements and dispatch to university and maintain the record of examination results. Evaluation of teachers There are two ways of evaluation of all teachers. Feedback is collected from students for all teachers at the middle of each semester on a 0-100 scale. There exists a self evaluation of teachers in a prescribed format which is later verified by the team of senior professors. The feedback of teachers whose performance is not satisfactory is discussed in person and advice is given to them by HOD and senior faculty to improve their

<p>Research and Development</p>	<p>teaching as per the requirement.</p> <p>Research and Development: The institution encourages culture of research among teachers and students. There are number of research papers published by the faculty in national and international journals and conferences and research projects have also been completed. Faculty empowerment / encouragement Qualified and committed faculty is the strength of the college. Recognizing this very important and vital aspect, the college has adopted the following measures:</p> <ul style="list-style-type: none"> • Sponsoring for higher education. • Offering incentives for paper publications in journals/conferences. • Sponsoring faculty to attend workshops and faculty development programmes. • Organizing FDPs within college at an appropriate time in the academic year. • Encouraging faculty members with awards for both teaching and research. • Providing medical facility, special leaves, maternity leaves etc. Some of the initiatives for encouraging R D are: • Availability of adequate journals, digital library facility, reference books, internet and lab facilities. • Sponsorships are provided for researchers to visit universities in India for attending conferences / workshops/ QIP. • Motivation and guidance to apply for funded research projects. • Rewards for quality publications in peer reviewed journals. <p>Encouragement for higher studies.</p>
<p>Library, ICT and Physical Infrastructure / Instrumentation</p>	<ul style="list-style-type: none"> • The central library is the significant feature of the college and is fully automated with all modern facilities and uses software developed by the students of this college. The main features of the library software are bar code based circulation system, web-based public online catalogue, Provision for serials control and stock verification etc. • It has a total built up area of 4,454 square meters and was constructed at a cost of Rs 4.8 crore. The building has a ground and first floor. The ground floor consists of periodical section, browsing center, digital library, conference hall, discussion rooms, reprographic facilities, project reports and book bank for SC/ST Students. The first

floor accommodates issue section and reference section. It has a capacity to seat 336 people. • At present the college library has about 61,849 volumes with 17,089 titles and subscribes to numerous e-journals through DELNET, 121 volumes of hard copy journals 34 magazines. In the reference section, the library has over 4209 volumes and 3150 titles that support the activities of the research and development wing of the college. Digital library with 30 systems and a media server and a browsing center with 70 systems with internet facility are available in the library. ICT Modern methodologies and pedagogy of teaching-learning forms the core of teaching-learning process. To make the student attentive and engaged throughout the class is a challenge to every teacher. This is possible only through effective and interactive teaching so that a student easily understands the concepts and gains maximum information in the class room and some of the practices followed are given below. Well-equipped computer labs, LCD projectors and OHPs are available to the faculty for conducting seminars, workshops, computer aided training. LCD projectors are used wherever required in class rooms to facilitate better communication and ensure active student participation in teaching learning process. Students are assigned topics and are encouraged to make presentations to develop independent learning among students. Internet access to all faculty and students help them to access journals, e-learning material from other universities and make use of the same for knowledge enhancement. Using NPTEL, MIT and other e-learning resources for self-paced learning that supplements regular lectures. Students' feedback is taken online and analysis of students' feedback is generated using software. Attendance, internal assessment and university marks are software based.

Physical Infrastructure / Instrumentation The available infrastructure is utilized optimally in the following ways: ? The classrooms are utilized for the conduct of classes during working hours as well as for tutorial classes and remedial

classes. The central library is open up to 8:00pm. The laboratories are utilized for conducting practical classes. Each department is equipped with a separate HOD room and staff rooms with separate cabins for each faculty member. The seminar hall and auditorium are utilized for conducting guest lectures, conferences, technical symposiums, etc. Parking facility, RO filtered water facility with of freezers etc., are available in the campus. Separate hostels for both boys and girls are available. x Separate workshops, carpentry section, drawing halls are available. x Playgrounds are regularly used by students for playing football, volley ball, adminton, cricket, hockey etc.

Human Resource Management

Institution recognizes that faculty members are the strength and real asset of the institution. The institution takes appropriate welfare measures to retain faculty, encourages faculty to upgrade their skills and also attract quality faculty during recruitment. Employees are given utmost importance and their needs are recognized well:

- Recognizing quality work in teaching and administrative areas and suitably rewarding with promotions ensures faculty retention.
- Deputing faculty on leave for higher education for their career advancement as well as institutiona l growth.
- The institution frequently arranges in-house training programmes and also deposes faculty to other organizations for acquaintance with latest developments.
- Service rules are made transparent and faculty and staff are benefited from PF, Gratuity, ESI and other benefits like CL, EL, ML, adequate vacation, in-house dispensary etc. Canteen facility is available at subsidised rates.

Industry Interaction / Collaboration

The institute strongly pursues linkage with industry and professional bodies through various modes of interaction. Both UG and PG students are motivated to undertake their end semester project in the relevant industries of their domain to prepare them to meet the requirement in the industries. Industrial tours are arranged for exposure to industrial environment. Industrial training is mandatory during

summer before start of final year. To improve institute -industry relations and increase placements, there is a full-fledged training and placement cell working in the college. It is headed by a training and placement officer and a team of people to assist him. This department is in constant touch with IT companies and core engineering companies. These companies visit the college regularly and conduct campus interviews. The percentage of eligible and interested graduating students employed during 2018-19 is 82.36. The average number of companies that visit per year is 16.

Admission of Students

Of the students admitted into the first year B.Tech. Programme, 70 are admitted through centralized web counseling by Andhra Pradesh State Council for Higher Education (APSCHE) according to the norms and regulations prescribed by State Government through its Government Orders (GOs). Students from SC/ST/OBC/General are admitted as per the reservation quota allotted by the government. The remaining 30 of seats are filled under the management quota as per the guidelines and GOs given by Andhra Pradesh Government under the supervision of APSCHE.

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

E-governance area	Details
<p>Administration</p>	<p>The administration of the college uses e-governance system apart from traditional governance systems. Computer and mobile technologies like e-mail, WhatsApp and other modern technologies are employed on a day-to-day basis in communicating information to stakeholder. The college website displays relevant student information. The college has biometric attendance for teaching and non-teaching staff and the campus is equipped with CCTV Cameras at strategic places.</p>
<p>Finance and Accounts</p>	<p>The college uses Tally accounting software for e-governance for transparent functioning of Finance and Accounts department of the college. This helps to increase the efficiency of staff towards the accuracy in financial transactions. The college conducts regular audit of annual books of accounts. The administrative office keeps the all financial records</p>

	separately as per the events and transactions made for.
Student Admission and Support	The admission section, scholarship section and other student sections also use computers and all admissions are communicated with the state governments through the use of internet. College has counter for the students which provides them several services as such Admission form Filling, Examination form filling as well as Scholarship Form filling at one place. The College has provided the facility to the students for linking the contact number with aadhar card which was mandatory for the students as per the government rule.
Examination	The college has the separate examination cell with equipped ITC tools necessary for examination purpose. As per the requirement of Examination department all the necessary equipment is provided by the college such as computers with internet facility for online procedure of paper downloading and further activities for exam purpose. The examination department has a separate machine for printing the question papers downloaded from university portal.
Planning and Development	All departments and sections of the college are equipped with computers and everyday tasks are carried out using these. The entire campus is Wi-Fi connected and helps in networking the departments that are spread throughout the college. As the college uses computers extensively, licensed windows software has been procured. Computers are also upgraded as per need.

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 conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2018	T. Rama Krishna	IPEMAT	IPEMAT	2500
2018	S.V.Gopalakrishna	ICAMME	ICAMME	2500
2018	N.Poornachandra Rao	NBC 2016 and Indian standards : Innovations and	IGS	500

		case studies in Geo technical Engineering		
2018	A.S.Manikantha	NBC 2016 and Indian standards : Innovations and case studies in Geotechnical Engineering	IGS	500
2018	K.Srinivasa Rao	Sustainable Materials and Techniques in Concrete Structures	ICI	557
2018	Y.Sasidhar	Sustainable Materials and Techniques in Concrete Structures	ICI	557
2018	D.Ajay Kumar	VLSI FPGA signal processing @ Visakhapatnam	VLSI FPGA signal processing @ Visakhapatnam	700
2018	T S Nagamani	National seminar on empowerment of women -Recent trends and challenges	Sir CRRCOE	300
2018	G.Krishnaveni	National seminar on empowerment of women -Recent trends and challenges	Sir CRRCOE	300
2018	N.V.S.K.Vijayalakshmi	National seminar on empowerment of women -Recent trends and challenges	Sir CRRCOE	300
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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	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	5 DAY FDP	NIL	21/01/2019	25/01/2019	5	0

	programme on JAVA					
2018	3D Printing	NIL	10/12/2018	11/12/2018	25	0
2018	Applications of Non Destructive Methods in various Industries	NIL	10/10/2018	11/10/2018	20	0
2018	FDP on Research Methodologies	NIL	16/07/2018	21/07/2018	25	0
2018	FDP on Problem Solving using C	NIL	17/12/2018	21/12/2018	25	0
2018	Multi Media	Orientation Programme on Multimedia	27/08/2018	31/08/2018	0	18
2019	ICTACT 2019	NIL	26/04/2019	27/04/2019	40	0
2018	2-DAY Workshop on IoT and its Applications	NIL	19/09/2018	20/09/2019	19	0
2018	One DAY Workshop on Cyber Security	NIL	22/09/2018	22/09/2018	19	0
2018	Workshop on Cloud Computing through AWS Educate Program	NIL	19/12/2018	22/12/2018	19	0
View File						

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 programme	Number of teachers who attended	From Date	To date	Duration
Artificial Intelligence using m/c learning Deep learning	1	07/06/2019	11/06/2019	4

2-DAY Workshop on IoT and its Applications	19	19/09/2018	20/09/2018	2
5 DAY FDP programme on JAVA	5	21/01/2019	25/01/2019	5
Work Shop on Machine Vision and Imaging	1	25/06/2019	26/06/2019	2
FDP on Introduction to Research, NPTEL	4	01/08/2018	31/10/2018	92
FDP on Cloud Computing, NPTEL	1	01/08/2018	31/10/2018	92
Six Weeks Continuing Education Programme "Summer Faculty Research Fellow Programme-2018" Conducted by IIT DELHI	1	21/05/2018	29/06/2018	39
3D Experience design software conducted by APSSDC"	1	18/03/2019	19/03/2019	2
Digital Driven Design and Manufacturing on the 3dx platform (APSSDC)	1	02/07/2018	02/07/2018	1
Operation Maintenance Aspects of Thermal Power Plants	3	14/11/2019	16/11/2019	3
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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
2	2	2	2

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Regular employees of the institute are entitled for employee provident fund scheme and related	Regular employees of the institute are entitled for employee provident fund scheme and related	Health service-A dispensary with full time doctor Dr. S. Mohan Das and nurse with all

pension scheme. Gratuity scheme is provided in the institution as per rules. Group insurance benefit is offered to all the staff of the institution. Incentives, promotion and increments are given. Casual leave, earned leave, medical leave, special casual leave, maternity leave and other leaves are as per institutions rules. A dispensary with full time doctor Dr. S. Mohan Das and nurse with all facilities like beds, stretcher, wheel chair etc. to take care of health related problems of both students and faculty is available.

pension scheme. ESI scheme is implemented for eligible staff. Gratuity scheme is provided in the institution as per rules. Group insurance benefit is offered to all the staff of the institution. Incentives, promotion and increments are given. Casual leave, earned leave, medical leave, special casual leave, maternity leave and other leaves are as per institutions rules. A dispensary with full time doctor Dr. S. Mohan Das and nurse with all facilities like beds, stretcher, wheel chair etc. to take care of health related problems of both students and faculty is available.

facilities like beds, stretcher, wheel chair etc. to take care of health related problems of both students and faculty is available. Free comprehensive placement training. Subsidized canteen facility. Students managed hostels on cooperative without profit motive. College transportation at concessional rates is provided by the college. Free Wi-Fi facility to all the students in the campus as well as hostels. A separate scholarship section has been established to facilitate processing of applications and remittances of government scholarships. Stationary and reprography facility are available within the campus. Facility for indoor games and separate gymnasium for boys and girls are available. ATM facility is available.

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

The institution has both internal and external auditing system since its inception. The institution has qualified practicing chartered accountants as internal auditors who are auditing the accounts of the institution on a daily basis. Internal auditors check each and every transition for conformity for release of funds/ expenditure. Internal auditor prepares all financial statements required for external auditing. There were no objections raised by external auditor to date as the internal auditing is being carried out by qualified and experienced auditors and the process is highly stringent and transparent.

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

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
NIL	0	0
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6.4.3 – Total corpus fund generated

7141128

6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Committee constituting internal and external members	Yes	Committee constituting internal and external members
Administrative	Yes	Committee constituting internal and external members	Yes	Committee constituting internal and external members

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

1. A student monitoring system is in place to minimize irregularity in attendance, reduce backlog subjects and avoid dropouts. 2. Counselling, stress management, guidance in academic difficulties and career plans, and overall development is carried out by counsellors/mentors. 3. Parents also provide feedback and give suggestions in the process.

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

1. Conducts in-house training programmes on communication skills and MS Office for administrative and non-teaching staff. 2. Technical staff is sponsored to attend various training programmes related to their area. 3. Provides hands on training for non-teaching staff to improve their practical skills. 4. Training on new equipment and software in various labs.

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

1. Academic Audit 2. Participation in NIRF 3. Skill Development Programmes 4. Refresher Programme on Outcome Based Education.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	No
d) NBA or any other quality audit	No

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2018	Academic Audit	18/07/2018	18/07/2018	19/07/2018	206
2018	Participation in NIRF	12/11/2018	12/11/2018	05/12/2018	206
2018	Skill Development Programmes	25/07/2018	01/07/2018	30/06/2019	829
2018	Refresher Programme on	23/07/2018	23/07/2018	28/07/2018	206

Outcome Based Education.

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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)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Womens Day	08/03/2019	08/03/2019	320	0
Adolescent Health Problems in Girls	08/03/2019	08/03/2019	235	0
Empowerment of women	08/02/2019	08/02/2019	280	0

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

The college has 250 kWp installed capacity Solar Power to meet the requirements of the college. This renewable energy meets approximately 45 per cent of the college energy needs.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	1
Provision for lift	Yes	1320
Ramp/Rails	Yes	1
Braille Software/facilities	No	0
Rest Rooms	Yes	8
Scribes for examination	Yes	1
Special skill development for differently abled students	No	0

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2018	2	2	07/12/2018	2	Blood Donation camp	Blood Donation	170

2018	2	2	20/12/2018	2	Medall Health Check-up Camp	Medall Check-up	35
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7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
Handbook for students	01/07/2018	Handbook for students is published at the start of academic year and is updated as per need.
Code of conduct for staff	01/07/2018	Service rules, leave rules etc.. are published and disseminated as and when needed.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
International Yoga Day	21/06/2018	21/06/2018	600
Sushumna Kriya Yoga (Meditation)	29/09/2018	29/09/2018	200
Datta Kriya Yoga	26/02/2019	26/02/2019	575
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7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

<p>1. Energy Conservation Lab equipment are serviced periodically to reduce excessive consumption of power. Class room power consumption is monitored. 2. Use of renewable energy Solar power of 250 kWp has been setup to meet energy requirements of the college. Solar heaters are in use in the hostels. 3. Water harvesting The college has three bore wells to cater to the general needs of the institution. Soak pits were also constructed at appropriate places to raise the water table. 4. Efforts for Carbon neutrality The college management has taken certain measures to prevent emission of carbon dioxide in the campus. 5. E-waste management Some of the e-waste generated is used for the purpose of technical education by making use as hardware in laboratories for display and study. The remaining material is disposed of in an appropriate manner.</p>

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

<p>Best Practice -1 1. Title of the Practice: 'Inculcating the spirit of research among faculty for a progressive technological growth' 2. Objectives of the Practice • To improve quality in the teaching-learning process • To enhance quality in UG and PG projects • To publish papers in refereed International/ National journals and conferences • To undertake collaborative projects and consultancy for long term interaction with the academia and industry • To motivate faculty to pursue and obtain PhD 3. The Context Research is a never ending quest for knowledge, which may be used to promote progress for the society. Today's world is rapidly developing, giving way and scope for new research initiatives to have a better life. To keep up with the growing needs and demands has become most essential parameter. To meet such demands, continuous research and development of new products and projects has become the</p>

need of the hour. This motivated the college to strengthen RD activity that focuses on various independent domains and encourages multidisciplinary research. 4. The Practice Teaching and Research must go together. With this aim, research is promoted by the college in the following ways and means:

- Sponsoring faculty for seminars/conference/workshops/Orientation courses /refresher courses, STTPs, FDPs, etc., for improvement of teaching quality.
- Financial incentives for publications in International/National journals and conferences
- Modernization of laboratories with research facilities
- Exposure to international expertise by organizing invited lectures, work-shops, seminars and conferences, etc.
- Provision of research grant from the management for enthusiastic researchers.
- Encouraging faculty to pursue PhD from premiere institutes and universities by providing necessary support.
- Providing high end computing facilities, with internet, Wi-Fi, and other facilities.
- Supporting staff are also encouraged to upgrade their skills by being deputed to relevant authorized /recognized training centers in their respective trades/fields.

5. Evidence of Success Owing to the hard work done by the members of faculty, the following achievements have taken place in the organization

- No. of teachers availed the facility and obtained their Ph.D.: 04
- No. of teachers availed the facility and pursuing their research: 55
- No. of international publications by the faculty: 121

There is a considerable improvement in teaching learning process as the faculty is exposed to latest areas of their topic of research. Further they are able to help the faculty who are fresh to initiate research. Good number of teachers got admission into Ph.D. at various universities. Students' publications have increased and quality of student projects, both UG and PG, has been enhanced.

6. Problems Encountered and Resources Required

- Limited in-house research facilities for faculty pursuing PhD.
- Limited access to laboratories in premiere institutes.

Best Practice -2

1. Title of the Practice - Student Mentoring System
2. Goal To minimize irregularity in attendance, reduce backlog subjects and avoid dropouts through paying attention towards each student, proper counseling, stress management, guidance in academic difficulties and career plans, and overall development.
3. The Context Many students are from disadvantaged sections of the society and this results in irregular attendance and less concentration on studies due to personal issues. This results in poor attendance and backlog subjects which lead to increase in the number of dropouts. It is evident from the analysis of student entry characteristics that over 60 of the students fall under fee reimbursement category with 30 students joining through management quota and only 10 of the students pay college fee from parents' income. This indicates that 60 of students cannot afford to study the course unless government supports them through fee reimbursement. In addition, most of the students are from rural background, lacking required communication skills. Their inhibitions, poverty and brought up make them fear studies and force them to lag behind in their academics which result in poor attendance and number of backlog subjects. The highly competitive and complicated job market requires not only mastering the course content but also good communication skills and interpersonal skills. It has become imperative that a mentoring system is in place for the students to overcome stress, personal, domestic and academic difficulties.
4. The Process The practice creates an efficient mentoring system. Each teacher is assigned 20 students for mentoring. It is the responsibility of the faculty to observe and mentor the students in all aspects. Mentors meet the students at least once in a week to discuss various problems encountered by the students related to understanding the subjects, attendance, marks, and stress related to personal, domestic, academic, etc. The mentor collects and records all the necessary information about his/her wards. He looks after all aspects and issues of the students in the campus and guides the students to overcome difficulties. The mentor also involves parents or local guardians whenever necessary. This minimizes irregularities and makes the parents aware of the students' progress in the campus regarding attendance,

marks, etc. This leads to better discipline on campus, motivates students to actively participate in curricular and co-curricular activities and results in better performance of students. 5. Evidence of Success Evidence of success of the practice includes better results in the examinations, increased attendance, increased participation in co-curricular activities, better discipline on campus and a warm and respectful relationship between teachers and students. 2015-16 2016-17 2017-18 2018-19 Dropouts 33 28 26 5 Detentions 41 40 34 23 6. Problems encountered and resources required This practice requires dedicated faculty members who are able to carry out mentoring patiently in a friendly and non-coercive environment for the benefit of the students. To this extent, the college trains and motivates faculty members so that they can cope with the needs of the students. Faculty members find satisfaction in guiding the students in the right direction and thereby gain respect from them.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://www.sircrrengg.ac.in/images/Others/IOAC/Best_Practices_2018-19.pdf

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Distinctive Area Improving Employability of Students through Skill Development
 The college has taken measures to enhance entrepreneurship among the students by encouraging them to join technical entrepreneurship programme, an online management certification course being offered by the reputed business school ISB Hyderabad under skill India initiative. Technical symposiums and competitions are regularly conducted so as to make students present their innovative ideas. Young Researchers Club, Robotics Club, Revelations Club etc., are student centric clubs through which they can interact with experts from various fields to know the latest innovations, thereby enriching research attitude and personality development in them. As an affiliated institution, the college cannot offer any certificate/ diploma/ skill development courses on its own. However, the college is offering the following certificate courses in association with various governmental agencies: • Diploma in "Technology Entrepreneur Development" in association with Indian School of Business (ISB) Hyderabad and AP Government. • Certificate course in "Cyber Security" in association with NASSCOM- APSSDC. • Certificate course in "Data Analytics" in association with NASSCOM-APSSDC. • Certificate course in "Mobile App Development" in association with Andhra Pradesh Skill Development Center (APSSDC). Being a recognized skill development center for APSSDC-SIEMENS, the college is going to offer courses in: • Advanced Manufacturing Technology (CNC). • Advances Welding Technology (TIG, MIG, SAW etc.,). ICT. • Home Electronics. • Four-Wheeler Maintenance. Two-Wheeler Maintenance. • Advanced Welding Technology and several other courses.

Provide the weblink of the institution

https://www.sircrrengg.ac.in/images/Others/IOAC/Institutional_Distinctiveness.pdf

8.Future Plans of Actions for Next Academic Year

The institute has a comprehensive plan in place to meet the vision of the institute and its goals. These are highlighted below. The institution would like to organize the following programs • Obtain NBA Accreditation for UG programs of CE, CSE, ECE, EEE, ME IT. • Organizing more Campus Recruitment Training programs for engineering students to enhance their employability skills. • Focusing on FDP programs on latest trends in industry. • Establishment of Incubation Center. • Collaborating with foreign universities on student skilling internships and

faculty training and research. • Establishment of Hydraulic and Pneumatic skill development center. • Strengthening student Hackathon activities. Teaching and Learning • To append laboratories with some latest equipment matching with the needs of the industry and society. • Effective monitoring of the attainment of Course Outcomes, Program Outcomes and Program Educational Objectives. • Adapting innovative delivery methods. • Collaboration with industry and institutions of repute. • Improving the faculty student ratio. • To recruit senior faculty to strengthen human resources in the institution. Research • To increase research activity further in all departments. • To apply for more number of projects externally funded. • Encourage the faculty to apply Research Proposals for Research Grants from various funding agencies like DST/AICTE/UGC/DRDO/ISRO etc.,. • Motivate faculty to attend Seminars and Workshops, Conferences and publish papers in reputed journals. Organizing department wise Conferences/ Seminars on Contemporary topics. Infrastructure • Strengthening of networking and computing facilities and increasing bandwidth for Wi-Fi. • Uplifting the sports ground and facilities for sports and games. • Beautification of the college campus by planting, decorative and ornamental plants to create good ambience.