

## VISION

*To be among the Top 50 Engineering Institutes in India by 2020*

## MISSION

- *Design and implement flexible curriculum that equips graduates with professional and life skills*
- *Promote high quality collaborative research that strengthens the intellectual capital of the nation*
- *Forge industry and professional society alliances to accomplish technology transfer*
- *Prepare graduates with entrepreneurial skills to establish and expand future enterprises*

## *Revised Vision & Mission*

## VISION

*To be among the Top 20 Private Engineering Institutes in India by 2020.*

## MISSION

- *Design and implement curriculum that equips students with professional and life skills*
- *Recruit, develop and retain outstanding faculty to achieve academic excellence*
- *Promote and undertake quality research in thrust areas of science and technology*
- *Collaborate with industry and academia to meet the changing needs of society*
- *Foster innovation and cultivate the spirit of entrepreneurship among students*

# I N D E X

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## **Preface**

S R Engineering College was established in the year 2002 by Sri Rajeswara Educational Society, Warangal. The society came into existence in the year 1991 with registration under the Society Registration Act 1 of 1950 and was established by an Educationalist, Academician and Philanthropist, Sri. A.Varadha Reddy with the primary mission of serving the society through education. Warangal is an educational hub in the newly formed State of Telangana, catering to the needs of the people of both Telangana and Andhra Pradesh to meet the increasing demand for higher education.

Responding to the needs and aspirations of the youth for higher education, especially professional education in Engineering and Technology, the pioneers of the society started S R Engineering College with the permission from the Government of Andhra Pradesh, approval from the AICTE, New Delhi and affiliation from Jawaharlal Nehru Technological University, Hyderabad.

SR Educational Academy runs 93 institutions including Schools, Intermediate colleges, Degree Colleges and Engineering colleges in the region of Telangana & Andhra Pradesh states. Each of the institution under S R Educational Academy is governed by an Executive Body with Chairman of the society being the Chairman of all institutions with independent Secretaries monitoring day-to-day administration and reporting to the Chairman.

S R Engineering College is established in an area of 28.09 acres of land at 15 Km on the Warangal – Karimnagar SH7 highway. The college started with four B.Tech. Courses with total intake of 240 and progressively expanded by adding more UG and PG Programs and today it is one of the premier institutions of engineering offering five B.Tech. and seven M.Tech. Courses along with MBA Program. Besides, the college has recently started two integrated dual degree programs, a 5 ½ Years Master of Technology in Management (MTM) course and 5 Year Master of Applied Management (MAM) Program. The total number of students on rolls as on date is 3249.

A built up area of 33438.03 Sq.m. accommodates 67 laboratories and 11 computer centers besides amenities like Canteen, Seminar Halls, Open Air Theatre, Conference Hall, e-classrooms, Cricket Stadium, Sports Grounds & Hostels for Girls etc., to make life in the class rooms and outside comfortable. Continuous power supply of 82.5 & 125 KVA is provided with two modern Kirloskar generator sets. A fleet of 28 buses serves the staff and students in addition to the public transport. The aesthetically and architecturally designed structures, a well laid out campus dotted with roads, trees and a Temple merge into a stunning landscape that inspires the minds to *Learning at its best*.

S R Engineering College contributed greatly to the *mission* of S R Educational Academy and inculcated in the management a new sense of professionalism in their outlook and activities. The college periodically evaluates its own standards and stands out among the engineering colleges of the region. Three of the programs run by the college are accredited by National Board of Accreditation (NBA) in 2008. The institution applied for Re-accreditation, fresh accreditation for ME and is waiting for the team visit. The college continuously updates its quality policy of producing graduates with appropriate skills and potential for employment.

### **Executive Summary and SWOC Analysis**

Criteria-wise documentation has been made for NAAC accreditation. The seven criteria as per the NAAC format are presented explaining the core functions and activities of the Institute focusing on the issues which have a direct impact on teaching-learning, research, community development and the holistic development of the students. The criteria addressed are:

- Criterion I** - Curricular Aspects: The document includes details of Curriculum Planning and Implementation, Academic flexibility, Curriculum Enrichment and Feedback System
- Criterion II** - Teaching-Learning and Evaluation. This part of the document includes details of Student Enrolment and Profile, Catering to Student Diversity, Teaching-Learning Process, Teacher Quality, Evaluation Process and Reforms, Student Performance and Learning Outcomes
- Criterion III** - Research, Consultancy and Extension: This part of the document includes details of Promotion of Research, Resource Mobilization for Research, Research Facilities, Research Publications and Awards, Consultancy, Extension Activities and Institutional Social Responsibility, Collaborations.
- Criterion IV** - Infrastructure and Learning Resources: This part of the document includes details of Physical Facilities, Library as a Learning Resource, IT Infrastructure, and Maintenance of Campus Facilities.
- Criterion V** - Student Support and Progression: This part includes details of Student Mentoring and Support, Student Progression and Student Participation and Activities.
- Criterion VI** - Governance, Leadership and Management: This part includes details of Institutional Vision and Leadership, Strategy Development and Deployment, Faculty Empowerment Strategies, Financial Management and Resource Mobilization, Internal Quality Assurance System (IQAS)
- Criterion VII** - Innovations and Best Practices: Finally, this part of the document includes details of Environment Consciousness, Innovations and Best Practices

This institution has reconsidered the Vision and Mission statements, soon after the submission of the Self Study Report at NAAC, and replaced them with the new ones w.e.f the academic year 2013 – 2014 onwards.

### **SWOC Analysis**

#### ***Procedure adopted for SWOC***

The SWOC criteria are arrived at by involving and eliciting the opinion of a large section of individuals representing each group of stakeholders of our institute namely, members of management, administrative, teaching and non-teaching staff and fairly sizable number of students from UG and PG programs for a brain-storming session. After deliberating at length among this large gathering of individuals on the procedure to be adopted, it was decided that they form into 4 heterogeneous groups, each group comprising a mix of all stakeholders as above and asked to address the current status in terms of the following 3 broad dimensions to evolve coherent SWOC criteria under the direction of a team lead voluntarily chosen by the group to coordinate the activity:

- 1. The People** – The asset of all human resources behind the current pace of growth
- 2. The Processes** – All academic and non-academic functions evolved over time
- 3. The Tools and Techniques** – The current strategies adopted in leveraging technology  
Further, while assessing and measuring the role of the above 3 drivers of our institutional growth, the groups kept in mind the following 4 parameters:
  - 1. Knowledge and skills** - acquired by our students judged by their employability
  - 2. Resource deployment** – Extent of utilization of available resources like, infrastructural, human and financial resources
  - 3. Learning environment** – Extent to which the campus culture enhanced the learning process
  - 4. Role playing** – The concern and commitment of all stakeholders in discharging their respective responsibilities in building and broadening the intellectual assets of the region

This long exercise resulted in a comprehensive Data Collection Tool (a word template covering all SWOC perspectives) to support SWOC Analysis. The Data Collection Tool was then distributed to all stakeholders as identified above. All participants were asked to consider various elements involved in this study, and were encouraged to provide their objective feedback. A total of 597 (4 Members of Management, 165 Faculty Members, 440

Current Students, 25 Non-Teaching Staff and 15 Alumni and 18 others from a section of visitors, experts and parents ) from all stakeholder subgroups participated in this study and their observations have been catalogued, analyzed and final lists have been generated. The exercise was conducted in a transparent manner. The key findings of the SWOC analysis are discussed below.

The institute makes every effort to enhance strengths and minimize weaknesses at various levels and aspects through continuous and comprehensive efforts with long term strategies for development.

### **Strengths:**

- S R Engineering College is a house-hold name in the region.
- Visionary management.
- Three programs are accredited by NBA in the year 2008 (within six years of its inception) and is awaiting NBA visit for renewal. Also applied for fresh accreditation for Mechanical Engineering.
- Permanent affiliation from JNTU Hyderabad.
- Enriched academic ambience with technical, cultural and sports events in the campus at State and National levels.
- MoUs with CISCO, IBM, Microsoft, Idaho University, University of Missouri, Purdue University, University of Massachusetts, FACE etc.
- MoUs with NEN and TiE, Hyderabad.
- Sponsored projects from DST, AICTE and UGC.
- Large number of faculty publications.
- Entrepreneurial echo system.
- Contributing to Community Service through NSS and Engineering Projects In Community Services.
- Well coordinated institute – industry interaction.
- In – house FDPs for continuous improvement of teaching learning processes.
- Number of training programs are organized for added employability skills of graduates.
- Well equipped laboratories, with excellent infrastructure, Digital Library, AC Seminar Halls, Girls Hostel.
- Facilities for NSS, Sports and other extra-cultural activities.

- On-line E-learning software's like Blackboard, Moodle and NPTEL etc.
- Steady increase in number of campus placements.
- Increasing number of students opting for higher education in India and abroad.
- A women technology park is established to empower women in the neighbouring villages.

**Weaknesses:**

- Non-availability of major industries locally for industry institute interaction.
- Students hail mainly from rural background with lack of communication skills.
- Limited industrial consultancy work.
- Insufficient awareness among stakeholders about various activities and their importance.

**Opportunities:**

- NBA accreditation
- NAAC recognition
- Opportunity for corporate training, consultancy and placements.
- National level recognition for SREC, R&D centre.
- Increased networking with reputed institutions and industries at different levels for mutual benefit.
- Promoting start – up companies from SREC Incubation centre
- Deemed University status
- Customized and need based courses as per industry / society requirements.

**Challenges:**

- Uncertainties in industry manpower requirements and recession - 100% placements.
- Bridging the gap between course content and industry needs.
- Work strategically on key requirements of industry to increase revenue through consultancy.
- Changing behavioral attitudes of the students.
- No favourable industrial environment in the region.
- Connecting with nearby community.



**Profile of the Institution****1. Name and address of the College:**

**S R Engineering College**  
**Ananthasagar, Hasanparthy**  
**WARANGAL – 506371**  
**TELANGANA.**

**2. For communication:**

Designation	Name	Telephone	Mobile	Fax	Email
Principal	Dr. C. V. Guru Rao	0870-2818333	09849649069	0870-2818456	principal@srecwarangal.ac.in
Vice Principal	-	-	-	-	-
Steering Committee Co-ordinator	Dr. C. Narasimham	0870-2818333	09550769372	0870-2818456	hod_cse@srecwarangal.ac.in

**3. Status of the Institution**

- i. Affiliated : Yes, Affiliated to JNTU Hyderabad
- ii. Constituent : -
- iii. Any other (Specify) : -

**4. Type of institution:****a. By Gender**

i. For Men

☐

ii. For Women

☐

iii. Co-education

☒

b. By shift

i. Regular

☒

ii. Day

☐

iii. Evening

☐

5. **Is it a recognized minority** Yes ☐ **institution?**  
 No ☒

If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence.

6. **Source of funding**

Government

☐

Grant-in-aid

☐

Self-financing

☒

7. **Any other (Please specify)**

- a. Date of establishment of the college : 01 - 04 - 2002  
 b. University to which the college is affiliated/or which governs the college (if it is a constituent college) : Jawaharlal Nehru Technological University Hyderabad, Telengana.  
 c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2 (f) F.No:8-404/2008	01-11-12	---
ii. 12 (B) F.No 8-404/2008	01-11-12	---

(Certificate enclosed of recognition u/s 2 (f) and 12 (B) of the UGC Act as ANNEXURE)

- d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/clause	Day, Month and Year (dd-mm-yyyy)	Validity	Programme/ institution	Remarks
i. AICTE	10-06-2014	1 Year	<b>B.Tech:</b> 1. Computer Science & Engineering 2. Electronics and Communication Engineering 3. Electrical and Electronics Engineering 4. Mechanical Engineering 5. Civil Engineering  <b>Post Graduate (Management)</b> 1. Master of Business Administration 2. Masters of Applied Management 3. Masters of Technology Management <b>M.Tech:</b> 1. Computer Science and Engineering 2. Software Engineering 3. Embedded systems 4. Electronics Design Technology 5. Power Electronics 6. Power Engineering & Energy Systems 7. Advanced Manufacturing Systems	

(Enclosed the Certificate of AICTE approval as ANNEXURE)

**8. Does the Affiliating University Act provide for conferment of Autonomy (as recognized by the UGC) on its affiliated colleges?**

Yes ☒

No ☐

If yes, has the college applied for availing the Autonomy status?

Yes ☒

No ☐

**9. Has the College been recognized?**

a. By UGC as a 'College with Potential for Excellence' (CPE)?

Yes ☐

No ☒

If yes, date of recognition: ..... (dd/mm/yyyy)

b. For its contributions/performance by any other governmental agency?

Yes ☒

No ☐

If yes, Name of the agency: NBA

Sl. No.	Accredited Courses
1	Electronics and Communication Engineering
2	Computer Science and Engineering
3	Electrical and Electronics Engineering

Note: Applied for renewal awaiting for Expert Committee Visit.

NBA Approval Copy enclosed as ANNEXURE

**10. Location of the campus and area:**

Location *	Rural
Campus area in sq. mts or acres	28.09 Acres
Built up area in sq. mts.	333438.03 Sq.m

Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

**11. Does the College have the following facilities on the campus (Tick the available facility)? In case the College has an agreement with other agencies in using such facilities provide information on the facilities covered under the agreement.**

- Auditorium/seminar complex      ✓
- Sports facilities      ✓
  - \* play ground      ✓
  - \* swimming pool      X
  - \* gymnasium      ✓
- Hostel
  - \* Boys' hostels      ✓
  - \* Girls' hostels      ✓
- Residential facilities
  - \* for teaching staff      X
  - \* for non-teaching staff      X
- Cafeteria      ✓
- Health centre –
  - First aid facility      ✓
  - Inpatient facility      X
  - Outpatient facility      ✓
  - ambulance facility      ✓
  - emergency care facility      ✓
- Health centre staff –      ✓
  - Qualified doctor      Full time      Part-time
  - Qualified Nurse      Full time      Part-time
- Other facilities
  - Bank      X
  - ATM      ✓
  - post office      ✓
  - book shops      ✓

- Transport facilities
  - \* for students   ✓
  - \* for staff       ✓
- Power house                   ✓
- Waste management facility   ✓

**12. Details of programme offered by the institution: (Give data for current academic year)**

Sl. No.	Program me Level	Name of the Programme/ Course	Duration	Entry Qualifi cation	Medium of instructio n	Sanctioned/ approved Student intake	No. of student s admitte d
1	UG	B.Tech-CSE	4 Years	10+2	English	180	156
		B.Tech-ECE	4 Years	10+2	English	180	155
		B.Tech-EEE	4 Years	10+2	English	180	84
		B.Tech-MECH	4 Years	10+2	English	180	118
		B.Tech-CIVIL	4 Years	10+2	English	120	101
2	PG	MBA	2 Years	UG	English	60	20
		M.Tech-Computer Science and Engineering	2 Years	B.Tech	English	54	30
		M.Tech-Software Engineering	2 Years	B.Tech	English	24	08
		M.Tech-Embedded Systems	2 Years	B.Tech	English	54	26
		M.Tech-Power Electronics	2 Years	B.Tech	English	36	16
		M.Tech-Power Engineering & Energy Systems	2 Years	B.Tech	English	24	09
		M.Tech-Electronics Design Technology	2 Years	B.Tech	English	24	10
		M.Tech-Advanced Manufacturing Systems	2 Years	B.Tech	English	36	13
3	Integrate d Masters	Masters of Technology Management	5 ½ Years	10+2	English	60	45
		Masters of Applied Management	5 Years	10+2	English	60	28

**13. Does the institution offer self-financed Programme?**Yes ☒ No ☐If yes, how many? **14. Whether new programme have been introduced during the last five years?**Yes ☒ No ☐

If yes

Number	6
--------	---

**15. List the departments:** ( Do not list facilities like library, Physical Education as departments unless these are teaching departments and offer programme to students)

Department of Computer Science Engineering

Department of Electrical and Electronics Engineering

Department of Electronics and Communication Engineering

Department of Mechanical Engineering

Department of Civil Engineering

Department of Business Management

Particulars	Number	Number of Students
<u>Any Other (please specify)</u>		
<u>Engineering :</u>		
Under Graduate	05	2623
Post Graduate	07	461
Research centre(s)	00	
<u>Management:</u>		
Under Graduate	Nil	
Post Graduate	03	165
Research centre(s)	00	

**16. Number of Programme offered under** (Programme means a degree course like BA, MA, BSc, M Sc, and B.Com etc.)

- |                     |                                |
|---------------------|--------------------------------|
| a. annual system    | <input type="text"/>           |
| b. semester system  | <input type="text" value="√"/> |
| c. trimester system | <input type="text"/>           |

**17. Number of Programme with**

- |                                     |  |
|-------------------------------------|--|
| a. Choice Based Credit System       | <input type="text" value="Nil"/>                                     |
| b. Inter/multidisciplinary approach | <input type="text" value="Nil"/>                                     |
| c. Any other ( specify)             | <input type="text" value="University specified – credit based: 15"/> |

**18. Does the College have a department of Teacher Education offering NCTE recognized degree programme in Education?**

Yes ☐ No ☒

If yes,

a. How many years of standing does the department have? ..... years

b. NCTE recognition details (if applicable) Notification No.:  
 ..... Date: .....  
 (dd/mm/yyyy)

c. Is the department opting for assessment and accreditation separately?

Yes ☐ No ☐

**19. Does the College have a teaching department of Physical Education offering NCTE recognized degree programme in Physical Education?**

Yes ☐ No ☒

If yes,

a. How many years of standing does the department have? ..... years

b. NCTE recognition details (if applicable) Notification No.:  
 .....Date: .....  
 (dd/mm/yyyy)

c. Is the department opting for assessment and accreditation separately?

Yes ☐ No ☐



**20. Number of teaching and non-teaching positions in the College**

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University/State Government <i>Recruited</i> <i>Yet to recruit</i>	0	0	0	0	0	0	0	0	0	0
Sanctioned by the Management/Society or other authorized bodies <i>Recruited</i> <i>Yet to recruit</i>	16	1	33	2	135	53	30	2	33	6
	-	-	06	03	-	-	02	-	01	-

\*M-Male \*F-Female

**21. Qualifications of the teaching staff**

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	16	1	9	1	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	24	1	135	53	240
Temporary teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-

PG	-	-	-	-	-	-	-
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

## 22. Number of Visiting Faculty/ Guest Faculty engaged by the College.

24 – Guest Faculty

## 24. Students enrolled in the College during the last four academic years

### B Tech

SNo	Academic Year	Students Admitted			percentage
		Boys	Girls	Total	
1	2013-14	499	244	743/780	95.30
2	2012-13	508	215	723/780	92.70
3	2011-12	407	247	654/660	99.09
4	2010-11	312	195	507/510	99.04

SNo	Academic Year	MTech			MBA			MTM		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2013-14	65	107	172	13	6	19	24	12	36
2	2012-13	55	67	122	23	22	45	---	----	----

Students enrolled in the College during the current academic year, with the following details:

Students	UG		PG		Integrated Masters		M.Phil.		Ph.D.		Integrated Ph.D.		D.Litt./D.Sc.		Certificate		Diploma		PG Diploma	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
From the state where the College is located	340	183	65	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
From other states of India	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NRI students	159	61	13	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foreign students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	499	244	78	113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*M-Male F-Female

## 25. Dropout rate in UG and PG (average for the last two batches)

UG

< 3%

< 2%

## 26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) Including the salary component

Rs.48, 732

(b) Excluding the salary component

Rs.20, 223

- 27. Does the College registered as a study centre for offering distance education programme for any University?** Yes ☐ No ☒

If yes, provide the

a. Name of the University

b. Is it recognized by the Distance Education Council?

Yes ☐

No ☐

c. Indicate the number of programme offered.

- 28. Provide Teacher-student ratio for each of the programme/course offered**

SNo	Branch	Ratio
1	Electronics and Communication Engineering	1:15
2	Electrical & Electronics Engineering	1:15
3	Mechanical Engineering	1:15
4	Computer Science and Engineering	1:15
5	Civil Engineering	1:15
6	Business Mangement	1:15

- 29. Is the College applying for?**

Accreditation : Cycle 1 ☒ Cycle 2 ☐ Cycle 3 ☐ Cycle 4 ☐

Re-Assessment: ☐

- 30. Date of accreditation\*** (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1: ..... (dd/mm/yyyy) Accreditation outcome/results

Cycle 2: ..... (dd/mm/yyyy) Accreditation outcome/results

Cycle 3: ..... (dd/mm/yyyy) Accreditation outcome/results

\* Kindly enclose copy of accreditation certificate(s) and peer team report(s)

Cycle 1 refers to first accreditation; Cycle 2 and beyond refers to reaccreditation

Not Applicable

- 31. Number of working days during the last academic year.**

212

- 32. Number of teaching days during the last academic year**

180

**33. Date of establishment of Internal Quality Assurance Cell (IQAC)**

The Institution constituted IQAC on 04-04-2014

**34. Details regarding submission of Annual Quality Assurance Reports (AQARs) :  
Not Applicable**

- (i) AQAR for year ..... on .....(dd/mm/yyyy)
- (ii) AQAR for year ..... on ..... (dd/mm/yyyy)
- (iii) AQAR for year ..... on ..... (dd/mm/yyyy)
- (iv) AQAR for year ..... on..... ..(dd/mm/yyyy)

**35. Any other relevant data, the College would like to include.(Not exceeding one page)**

- B.Tech programs in EEE / ECE / CSE were accredited by National Board of Accreditation, New Delhi for three years with effect from 19-07-2008. The institution applied for Re-accreditation, fresh accreditation for ME and is waiting for the team visit.
- Permanent affiliation for three years with effect from 25-06-2013 JNTU Hyderabad.
- The institution is recognized under 2(f) & 12(B) Acts of UGC, New Delhi.
- The college has MOUs with several Industries, Organizations and Foreign Universities.
- Jawahar Knowledge Centre (JKC) of Telangana State Government with Star Status.
- 30 Mbps leased line and 20 Mbps NME internet connectivity. Wi-Fi enabled campus covering an area of more than half a kilometer radius.
- Two Generators Power backup with 82.5 and 125 KVA Capacity
- Grants sanctioned by AICTE, Govt. of India, DST and UGC.
- Exclusive Amenities provided with Cafeteria, Gymnasium, Lounges and Indoor games for boys & girl students.
- Girl's hostel facility is provided within the campus, for Boys hostel we have an agreement which is running out of the campus.
- Guest rooms for stakeholders.
- IIPC (Industry Institution Partnership Cell)
- Centre for Entrepreneurship Development.
- Add on E-Learning Softwares
- Career Guidance Cell.
- Many charitable programs under SR Foundation.

## **CRITERIA I**

### **CURRICULAR ASPECTS**

## **1.1 Curriculum planning and Implementation**

### **1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stake holders.**

#### **Vision**

To be among the Top 20 Private Engineering Institutes in India by 2020.

#### **Mission**

- Design and implement curriculum that equips students with professional and life skills
- Recruit, develop and retain outstanding faculty to achieve academic excellence
- Promote and undertake quality research in thrust areas of science and technology
- Collaborate with industry and academia to meet the changing needs of society
- Foster innovation and cultivate the spirit of entrepreneurship among students

#### **Quality Policy:**

S R Engineering College (SREC) strives to establish a system of quality assurance by continuously assessing and upgrading the quality of teaching and learning practices by effective monitoring at different levels; institutional, departmental and individual levels to enrich student learning experience and employability. SREC continuously reforms and refines its internal quality assurance systems at institutional level, measure and enhance the course design, content and delivery at department level and help faculty to innovate and improve teaching strategies to achieve and enrich student learning by adopting technology – enabled strategies.

#### **Communication to Stakeholders:**

The Vision, Mission and Quality policy of the Institute are disseminated to all the stakeholders in the following ways:

- Display boards are placed at all prominent places in the college.
- Communicated to faculty, staff and students through circulars and notices.
- Communicated to all the stakeholders through SREC Bulletin.
- Communicated orally to fresher's and staff during the Orientation/Induction Program.

- Communicated to employers and industries during placement drives and during meetings held by Industry Institute Partnership Cell (IIPC).
- Placed in the college website: [www.srecwarangal.ac.in](http://www.srecwarangal.ac.in).

**1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific examples.**

The Heads of the departments and staff members come out with various strategies for effective implementation of the curriculum. These action plans are approved by the Board of Studies (BoS) and submitted to the Academic council for approval which is finally approved by the Governing Body.

All faculty members prepare course files, lesson plans for each subject. They also develop laboratory manuals for all labs. These are periodically audited and modified with new developments in the field of technology. All efforts are made to maintain the quality sustenance in curriculum delivery.

- **Course files are prepared in detail by faculty which includes:**
  - Syllabus copy with text books and reference books
  - Academic calendar
  - Course time table
  - Course Outcomes
  - Handouts and Lecture notes
  - Copies of OHP transparencies/PPT slides, if any
  - Question papers of Internal Examination Tests, additional Tests and assignments
  - University question papers of present and previous two years (Regular & Supplementary)
  - Content beyond syllabus
- **Lesson plans prepared by individual faculty that include:**
  - Course objectives and outcomes
  - Session plan
  - Text books and reference books
- Allocation of courses to faculty is done democratically.
- The progress of syllabus coverage is monitored periodically by the respective Heads.



- The Class attendance registers are maintained by concerned faculty which contains entries like internal marks, seminars handled etc., and are scrutinized by the HOD.
- 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.
- The college prepares its own academic calendar incorporating the various activities of the college and also individual departments. Frequent review meetings are conducted at the department level and also at the college level to assess whether the activities are being conducted as per the academic calendar.
- The class review meetings are held thrice in a semester to review the progress of syllabus coverage and the effectiveness of the instruction delivery.
- Periodical feedback is obtained from the students to enhance the teaching learning process.
- Evaluation procedures are prepared by the Examination Branch of the college keeping in view the almanac of the University.

**1.1.3 What type of support (Procedural and practical) does the teacher receive (from the university /institution) for effectively translating the curriculum and improving the teaching practices?**

The Institute contributes to the effective curriculum delivery and improves teaching practices in the following ways:

**Procedural Support:**

- The faculty is encouraged to attend National and International Conferences and Symposia to present their research findings and also get abreast of the latest trends in their respective areas.
- The Institution sponsors the faculty by reimbursing travel expenses, boarding and registration fee along with academic leave for attending the above programs.
- The college encourages faculty to attend Workshops/Seminars/Orientation/Refresher courses and SDP/FDPs organized by various professional bodies and the affiliating University in order to update their knowledge and also improve their teaching practices.

- Special incentives are given to faculty who produce excellent academic results.
- The faculty is encouraged by giving incentives for their publications in peer reviewed journals.
- Academic leave is sanctioned to faculty for pursuing higher education.
- The library and computer centers are kept open from 8:00 am to 8:00 pm to facilitate the faculty and students residing in hostels.
- The institution encourages faculty to pursue higher education through Quality Improvement Programme and take up research activity individually or in collaboration.
- The faculty is encouraged to apply for research projects under different funding agencies such as AICTE, DST, and UGC to enhance their professional competence and to increase promotional avenues. In this regard the college has established an R&D centre to cater to the needs of the faculty.

#### **Practical Support:**

- The departments are equipped with OHP, LCD and Internet facility to promote effective delivery of curriculum.
- The departments also conduct workshops / refresher courses on latest topics and encourage the faculty to participate in these workshops.
- The college organized teacher training programmes with NITTR, Wipro Mission 10X,
- Imparting training to faculty under Indo-US faculty leadership institute under IUCEE, Asisto B, Hyderabad.



- The institution also offers skill development programmes to Non –Teaching staff.

- Also interactive sessions between the faculty members of the individual departments and the experts drawn from industry and premier institutions like NITs, IITs and foreign Universities are arranged.
- The College arranges lectures and webinars on research methodologies by eminent academicians to promote research activities in the departments and also to enrich their delivery of curriculum incorporating research aspects of the subjects in collaboration with IUCEE.
- The College library procures text books suggested by the faculty and also subscribes to various journals and technical magazines to provide effective tools for the instruction delivery. Lectures of eminent professors on various subjects are procured and made available in the central and department libraries for the use of faculty and students.
- The advanced Labs like Embedded Systems and VLSI are setup in the college and latest equipment is procured in various labs of the departments to promote research among the faculty members and also to strengthen the curriculum delivery by way of conducting practical.

**1.1.4. Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the curriculum provided by the affiliating university or other statutory agency.**

The institution takes special interest for the professional development of its faculty to facilitate effective curriculum delivery. The efforts made by the institution and faculty in this regard are listed below:

- Design experiments to conduct in the laboratory related to the curriculum and beyond curriculum.
- The departments conduct workshops on latest technologies related to the curricular subjects in collaboration with the industry and academia.
- Industrial visits are arranged to provide practical exposure to the students in their respective domain.
- Detailed lesson plans and course material are prepared by the faculty.
- Modern teaching aids like LCD projectors, OHPs, NPTEL courses are provided to the faculty.

- Each department has an exclusive air conditioned seminar hall to organize conferences/workshops/seminars and guest lectures.
- Tutorial classes are allocated for required courses.
- Class review meetings are conducted thrice in a semester to ensure syllabus coverage as per the lesson plans. The academic progress of the students and grievances if any are addressed and suitable remedial measures are taken whenever necessary.
- Bridge courses are conducted wherever necessary to see that the students follow the curricular subjects without any difficulty. Common bridge courses are conducted for lateral entry students in courses like Mathematics and English Communication Skills.
- Students are also encouraged to give presentations on specific topics of the subjects which shall enhance their presentation skills.
- Remedial classes are conducted for slow learners in every course to bring them on par with the other students.

#### **1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and university in effective operation of the curriculum?**

##### **Industry:**

- The Institute has started Industry Institute Partnership Cell (IIPC) in order to bridge the gap between the industry and academia.
- The IIPC conducts meets at the institute where in the latest developments and needs of the industry are discussed.
- The experts from industry also give their inputs for effective implementation of the curriculum.
- Experts from industry are also members on BoS.
- The students are encouraged to do their mini projects during summer vacation in various industries to get a real time exposure.
- The students of various departments of the college are taken for industrial visits from time to time to keep them abreast of the latest developments in the industry.
- Experts from industry are invited to deliver guest lectures on topics in the curriculum and beyond the curriculum.
- The departments take the help of Alumni Association and Centre for Student Services and Placements (CSSP) to maintain professional relations with the representatives of

industry. The HR managers of various companies are invited to the college campus to interact with the students and faculty.

- The college is a member of various professional bodies such as ISTE, IETE, IE(I), IEEE, IUCEE, Robotics Club, SAE, CSI, Renewable Energy Club and organizes workshops/conferences in association with these bodies on latest curriculum which in turn helps in effective delivery of the curriculum.
- The institution has MoUs with number of industries and organizations.



#### Research Bodies:

- The faculty members of various departments have obtained research grant from various funding agencies like DST, AICTE and UGC.
- An Orientation programme is conducted for the faculty to create awareness about the research opportunities in their respective domains.
- Senior faculty of the institution are research supervisors for scholars of various Universities.
- The faculty members are encouraged to submit research proposals to various government research organizations/public and private sectors to receive research grants and promote research activities in the departments.
- Researchers and scholars from various fields are invited to the college to motivate the students to take up research projects.
- The college encourages interdisciplinary projects and community service projects.

**University:**

- The college conducts review meetings on the latest curriculum and passes on the suggestions/comments of the faculty to the University for necessary modifications during BoS meetings and Academic Council.
- Professors from affiliating university are invited to the college from time to time to give seminars and interact with the faculty.
- Inputs from all the stakeholders are communicated to the University through University representatives on the BoS, Academic Council and Governing Body.
- Collaboration with Wayne State University, USA
- Collaboration with Idaho State University, USA
- Collaboration with University of Central Missouri, USA
- Collaboration with University of Missouri, USA
- Collaboration with University of PURDUE, USA
- Collaboration with University of South Alabama, USA
- Collaboration with Saint Louis University, USA
- Collaboration with UMass, Lowell, USA
- Institut Supérieur D'Electronique De Paris (ISEP) , Catholic University of Paris, France
- Indo US Collaboration for Engineering Education (IUCEE)
- Student Platform for Engineering Education Development (SPEED)

**1.1.6. What are the contribution of the institution and/or its staff members to the development of curriculum by the university?(number of staff members/departments represented on the board of studies, student feedback teacher feedback, stakeholder feedback provided, specific suggestion etc.)**

- Dr V.Mahesh is a Member BoS for B.Tech Programme (Production Engineering) and M.Tech Programme (Production Engineering) of the affiliating University.
- Dr. Syed Musthak Ahmed was invited as a special invitee for BoS, of PG (EDT) program by the affiliating University JNTUH.
- Dr. C. Venkatesh was invited as a special invitee for BoS, of PG (PEES) by the affiliating University JNTUH.

The Feedback is obtained by direct interaction of the HOD with the stakeholders, viz., students, parents, faculty, recruiters, employers and alumni. These suggestions are discussed by the Academic Planning Committee necessary action is taken.

- Feedback is taken from the students in a systematic manner and analysis is done for follow-up action.
- Feedback is taken from parents at the time of parent teacher meetings.
- The departments conduct an exit survey from the students at the end of their course on the content and delivery of the curriculum.
- The feedback of alumni is taken during the alumni association meetings. Their feedback plays a vital role in planning the curriculum, add on courses and also the training programmes to be planned for the year students.
- The employer feedback is also taken on the performance of our graduates in the industry.

**1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process (Needs Assessment, design, development and planning) and the courses for which the curriculum has been developed.**

Other than the courses offered by the affiliating University, the institution has developed curriculum for courses like Engineering projects in Community Services (EPICS) and Professional Ethics and Values (PEV).

The curriculum for Master of Technology Management (MTM) program was designed and developed by the institute as the affiliated University is not offering any such course.

The objective of offering MTM course is to develop techno managers and entrepreneurial engineers to address societal problems.

**1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?**

The institution has formed communication channels with all the stakeholders to ensure that objectives of the curriculum are achieved in the course of implementation.

The achievements of stated objectives of the curriculum are ensured by:



- Taking feedback from students on course outcomes, faculty and content delivery.
- Taking exit feedback from outgoing students on the curriculum and its implementation.
- Parent's feedback is taken formally during Parents meet.
- Obtaining feedback from the employers on the ability of the graduates to perform the required tasks in the industry.
- Feedback is taken from the students in a systematic manner and analysis is done for follow-up action.
- Student performance is also assessed through result analysis.
- The internal assessment and evaluation methodology is decided keeping in mind the parameters to be measured.
- The feedback of external examiners at the time of external practical examinations is taken for further improving the evaluation system.
- Quality of placements by considering the number of students placed in reputed companies and remuneration packages offered.
- Students actively participate in various cultural, extra and co-curricular events in inter college and intra college competitions.



**1.2. Academic Flexibility****1.2.1. Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc. offered by the institution.**

Keeping in mind the growing needs at state, national and global level, the Institution offers the following certificate/skill development courses for value addition:

- Microsoft I-Spark Centre providing training and certification courses
- Infosys Campus Connect Programme
- IBM Center for Excellence: SREC has been recognized as one of the top 50 institutions in India in “The Great Mind Challenge (TGMC)”
- Cisco Networking Academy - CCNA
- MoU with ORACLE Corporation
- Personality Development Programmes
- Konfident (Training programme to enhance confidence levels of students) by Focus Academy on Career Advancement (FACE)
- Communicate (Train students for effective communication) by FACE
- Empower (Business communication) by FACE
- Campus Placement Cracker (Train students in aptitude and reasoning skills) by FACE
- Wizard IT (Training in domain skills) by FACE
- Hypermesh Training Programme
- Catia – V5

**1.2.2. Does the institution offer programmes that facilitate twinning / dual degree? If yes give details.**

Yes, the College is offering an integrated programme named MTM (Master of Technology Management) where the student has to take one additional management course per semester along with B.Tech courses from second year onwards. The student will obtain a B.Tech degree after completion of four years and after an additional one and a half year (including project), he/she will get an MTM degree.

The college is also offering a dual degree programme named MAM (Master of Applied Management) where the students will obtain a BAM (Bachelor of Applied Management) degree at the end of three academic years and MAM degree on completion of five years.

**1.2.3. Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability Range of Core /Elective options offered by the University and those opted by the college Choice Based Credit System and range of subject options Courses offered in modular form.**

#### **Academic Flexibility:**

The students have the choice of selecting their own elective courses from the list of courses offered in the curriculum. These courses are based on the latest technological trends and industrial needs. This contributes to the skill development, progression to higher studies and improves potential for employment.

#### **Skill Development:**

- Innovative/creative ideas of the students are transformed into technology projects through Microsoft Innovation Centre.
- Ideation fest is open for all students and good ideas are encouraged to submit as business plan.
- Weekly innovation challenges are conducted to improve creative skills and problem solving abilities

#### **Academic Mobility: NA**

**Progression to Higher Studies:** Taking the advantage of choosing electives in the specialized areas, the students can increase their scope for higher education in latest areas in their respective domains.

#### **Improved potential for employability:**

- To improve the potential for employability, the college is arranging systematic and continuous pre-placement training programmes by expert trainers from external training agencies like Success key, Hyderabad and Globarena Technologies, Hyderabad and FACE, Coimbatore.
- The institute arranges conduct of tests by external agencies like AMCAT, NASSCOM and Co cubes and provides a platform for placements in reputed companies through these tests.

**Core Options:**

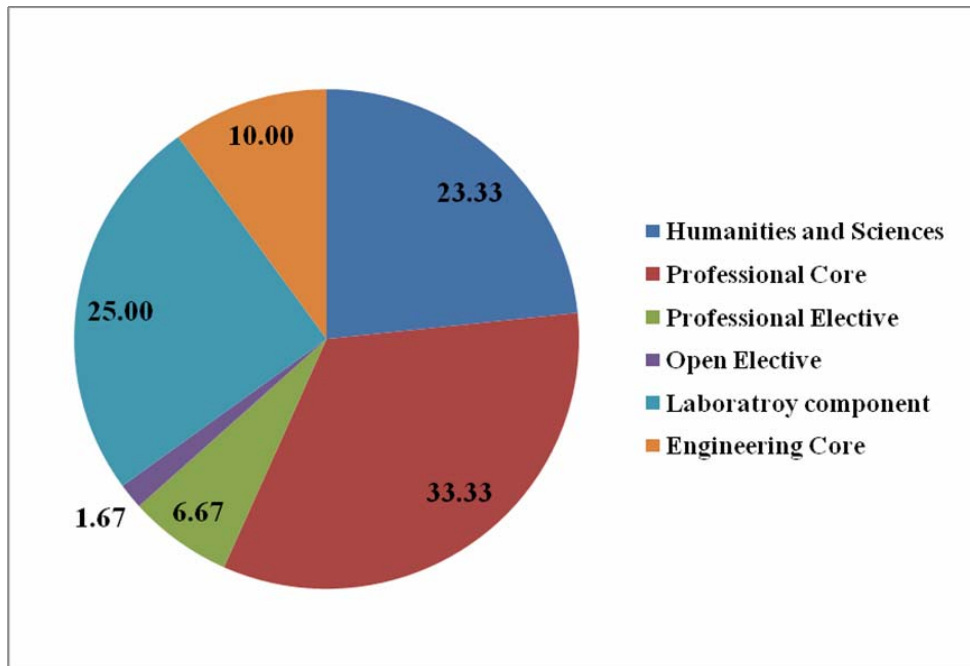
A student can specialize in one of the following fields:

**UG:** CE, EEE, ME, ECE and CSE

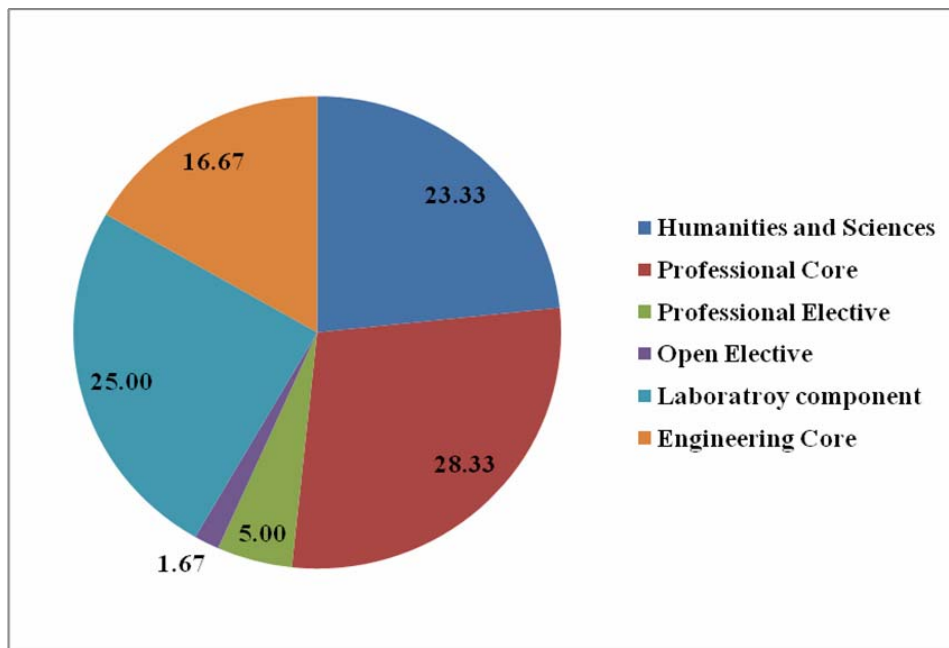
**PG:** PEES, PE, AMS, EDT, ES, CSE, SE

**Elective Options:****List of UG electives**

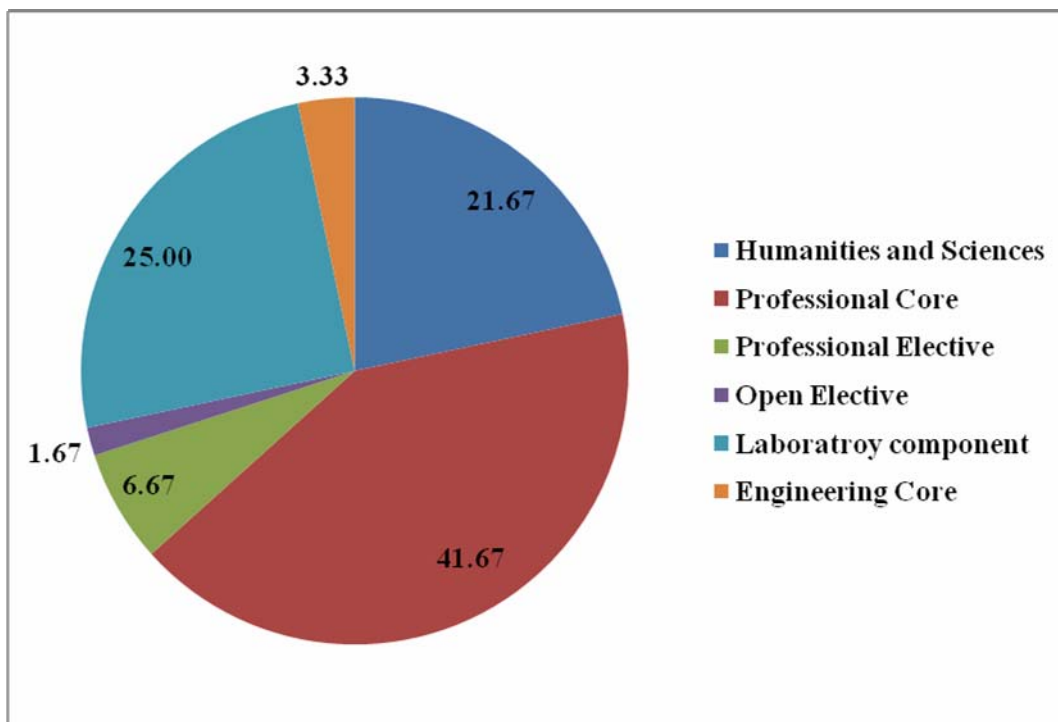
S. No.	Department	Year	Semester	No. of Electives	Total
1	B. Tech - CE	III	I	5	18
		IV	I	7	
			II	6	
2	B. Tech - EEE	III	I	5	14
		IV	I	3	
			II	6	
2	B. Tech - ME	III	I	5	17
		IV	I	6	
			II	6	
3	B. Tech - ECE	III	II	5	19
		IV	I	6	
			II	8	
4	B. Tech – CSE	III	II	5	21
		IV	I	8	
			II	8	



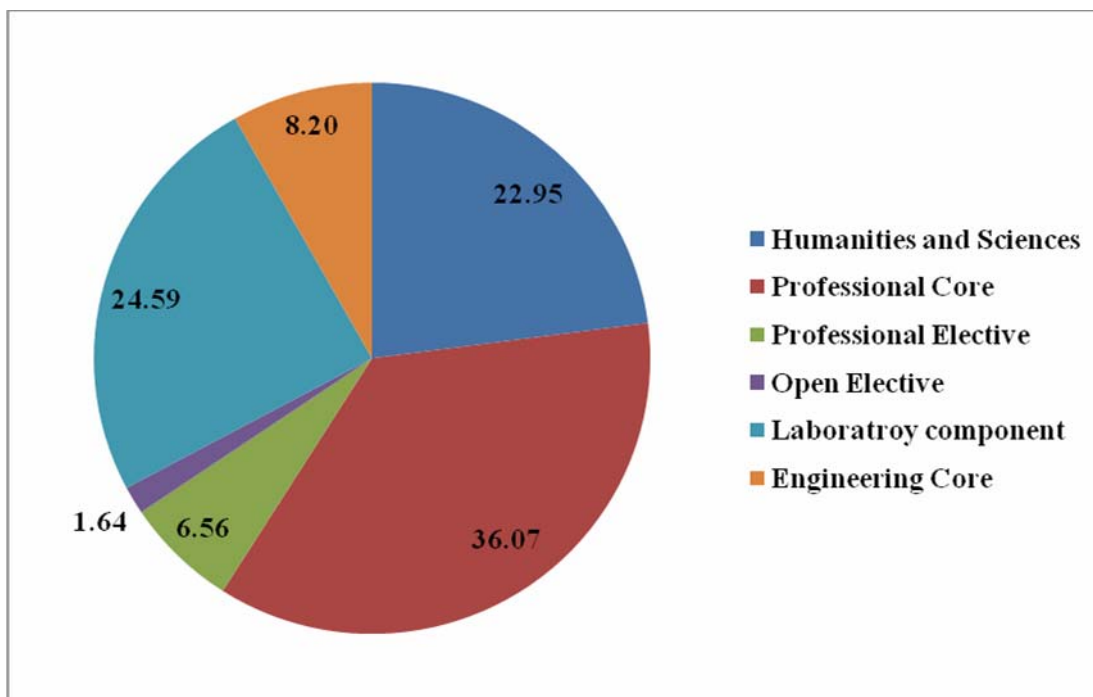
**Department of Electronics and Communication Engineering**



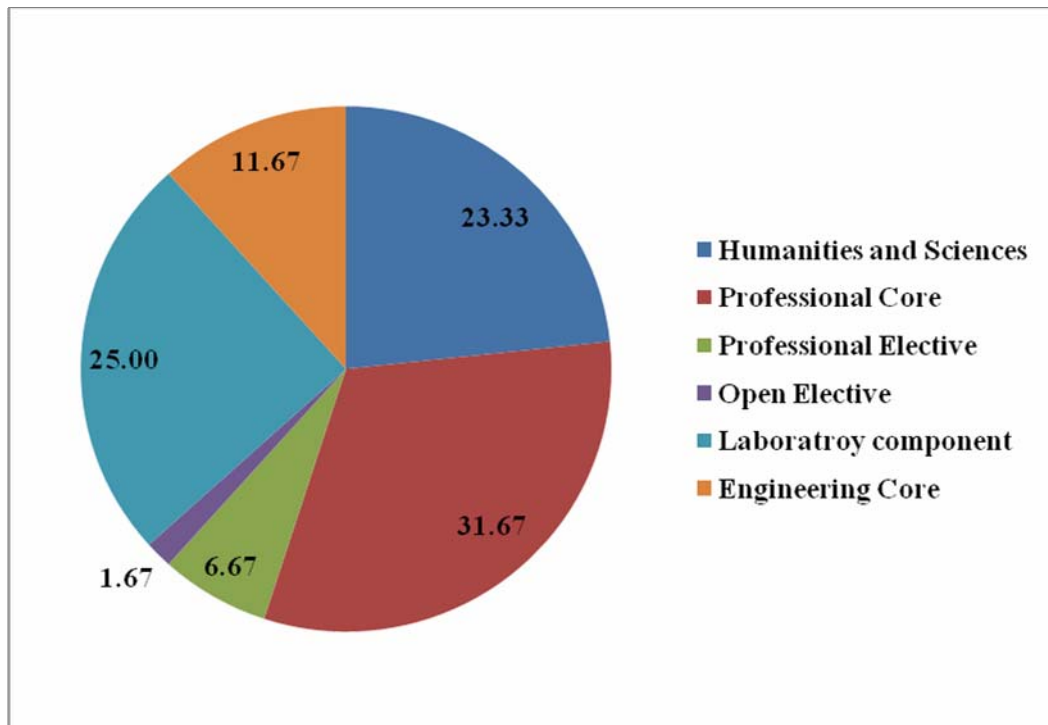
**Department of Electrical and Electronics Engineering**



Department of Mechanical Engineering



Department of Computer Science Engineering



**Department of Civil Engineering**

## List of PG electives

S. No.	Department & Specialization	Year	Semester	No. of Electives	Total
1	ECE – EDT	I	I	6	12
		I	II	6	
2	ECE – ES	I	I	6	12
		I	II	6	
3	CSE – CSE	I	I	6	12
		I	II	6	
4	CSE – SE	I	I	6	12
		I	II	6	
5	EEE – PEES	I	I	6	12
		I	II	6	
6	EEE – PE	I	I	6	12
		I	II	6	
7	ME – AMS	I	I	6	12
		I	II	6	

**Choice Based Credit System:** The courses are offered as per modules prepared by the Jawaharlal Nehru Technological University, Hyderabad.

**Courses offered in modular form:** Courses are provided unit wise and are arranged in the modular form at department level by academic committees comprising of HOD's, staff and Principal. The modules so arranged are also used for testing the students in the exams, (1<sup>st</sup> Internal, 2<sup>nd</sup> Internal and Assignments)

**Credit transfer and accumulation facility:**

No transfer of credit and accumulation facility exists.

**1.2.4. Does the institution offer self-financed programmes? If yes list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification salary etc.**

Yes, the college offers the following self financed programs recognized by AICTE and affiliated with JNTUH.

**1. Name of the Self Financed Programs:**

**(i) UG Programs:**

- B. Tech - Civil Engineering (CE)
- B. Tech - Electrical and Electronics Engineering (EEE)
- B. Tech - Mechanical Engineering (ME)
- B. Tech - Electronics and Communication Engineering (ECE)
- B. Tech - Computer Science Engineering (CSE)

**(ii) PG Programs:**

- Power Electronics – PE (Department of EEE)
- Power Engineering & Energy Systems – PEES (Department of EEE)
- Advanced Manufacturing Processes – AMS (Department of ME)
- Embedded Systems - ES (Department of ECE)
- Electronic Design Technology - EDT (Department of ECE)
- Computer Science Engineering - CSE (Department of CSE)
- Software Engineering – SE (Department of CSE)
- Master of Business Management – MBA (Dept. of Business Management)
- Master of Applied Management – MAM (Dept. of Business Management)
- Master of Technology Management – MTM (Dept. of Business Management)

The institution does not offer any programs that are not self financed.

**2. Admissions:**

Admissions are carried out as per the guidelines specified by APSICHE.

**• Admission process to B. Tech:**

70% of the seats are allotted by Convener, EAMCET based on the rank obtained and 30% of the seats are allotted under management or NRI category. In case of Diploma Holders 20% intake based on the Merit obtained in ECET, are admitted directly into 2<sup>nd</sup> year of B.Tech. under lateral entry scheme.



- **Admission process to M. Tech:**

Admission for M.Tech is done through common entrance examination like GATE/PGCET.

- **Admission process to MBA:**

Admission to the Masters degree in Computer Applications and Business Administration is governed by ICET entrance examination. Graduated candidates in Science and Commerce/Arts are eligible for admission into these courses.

### 3. Curriculum:

The institution is offering only self financed programs and the curriculum is approved by the affiliating University.

**4. Fee Structure:** As fixed by Admissions and Fee Regulatory Committee (AFRC) of Government of Andhra Pradesh.

**5. Teachers' Qualifications:** As per UGC/AICTE Norms.

**6. Salary:** As per UGC/AICTE VI pay scales specified from time to time. The present scale is as follows:

<b>Assistant Professor :</b>	Rs.15,600 - Rs.39,100+AGP:Rs.6,000/-
<b>Associate Professor :</b>	Rs. 37,400 - Rs.67,000+AGP:Rs.9,000/-
<b>Professor :</b>	Rs. 37,400 - Rs.67,000+AGP:Rs.10,000/-

#### 1.2.5. Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If yes provide details of such Programme and beneficiaries.

Yes, SREC offers skill oriented programmes that are relevant to regional and global employment markets. In view of this the institution conducts number of programs through Professional Chapters, Centre for Student Services and Placement (CSSP) and CED.

**CSSP** has been consistently striving to provide placement opportunities for UG / PG students in private / public /government sectors. CSSP is also providing information and advice regarding career advancement through Career Guidance Cell. Students are encouraged to enhance their skills to meet the requirements of present day industry. The major functions of this cell are:

- Organizing on / off campus drives
- Soft skills development programmes

- Quantitative, Logical and Analytical training
- Organize Invited talks by industry personnel.
- Campus recruitment training (Company specific training)
- Enhancing the programming skills of students.
- Career guidance through counseling
- Conducting personality development programmes
- Develop contacts with industries /companies
- Overseas collaborations
- Awareness programs for students to enroll for graduate programs
- Collaboration with Institute for **Electronic Governance-Jawahar Knowledge Center**, Hyderabad
- Conducting training programmes in collaboration with **Infosys Campus Connect**

**The major functions of CED are:**

- Weekly innovation challenge
- Business plan competition
- Tinker camps
- Ideation Fest
- International Conference on Next Generation Education for Entrepreneurial education
- Organizes Interaction with successful Entrepreneurs
- Organizes Entrepreneurship awareness camps

**Professional Chapters:**

- Plan and organize technical programs such as guest lectures /workshops / seminars / symposia / project expo for the students on a regular basis.
- Facilitate technical visits / practical training / project work / employment of student members in R&D laboratories, industries, academic institutions etc.
- Dissemination worldwide by publications, presentations and electronic media.
- Identify and promote latest trends in science and technology.
- Serve as a focal point on all aspects of professional development of the students.

**Certification Programs:**

A number of certification programs are organized at the department level (Pl refer list in sub sec: 1.2.1).



**1.2.6. Does the University provide for the flexibility of combining the conventional face to face and Distance Mode of Education for students to choose the courses/combination of their choice” If ‘yes’, how does the institution take advantage of such provision for the benefit of students?**

The institute being affiliated to Jawaharlal Nehru technological University, Hyderabad does not have the provision for flexibility of combining the conventional face to face and Distance Mode of Education.

**1.3. Curriculum Enrichment**

**1.3.1. Describe the efforts made by the institution to supplement the University’s Curriculum to ensure that the academic programmes and Institutions goals and objectives are integrated?**

The institute being affiliated to Jawaharlal Nehru Technological University, Hyderabad does not have the provision for flexibility of formulating its own curriculum. However, taking the advantage of partial academic autonomy given by the affiliating university, the institution updates the curriculum to reach out to the institutes goals and objectives. The academic planning committee meets regularly to identify the limitations in the syllabus and these deficiencies are supplemented by introducing special courses like Engineering Projects in Community Services (EPICS) and Professional Ethics and Values (PEV) and also brought few changes in selected courses to address the thrust areas.

In addition to this, to bridge the curriculum gaps the institution supplements to the curriculum in the following ways:

- Guest lectures, Seminars, Workshops, Training programmes and industrial visits are arranged to create awareness on the current demands of industry

- Soft skills training for all branches in I, II and III year
- Programming skills training in C-language, C++ etc.
- Aptitude, Reasoning and Logical skills Training
- Educational tours are organized to develop interpersonal relationships and to create awareness about the rich heritage and culture of our country.
- NSS is an additional facility which inculcates the social responsibilities and community orientation amongst the students.
- Various academic competitions are conducted for all round development of the students.
- Value added courses like DB2, Worklight, Rational Rose, Java, . NET courses, CCNA programme etc.
- Additional experiments were designed in labs beyond University prescribed experiments

### **Professional Development Programme (PDP)**

Modern HR selection processes are competency based, and SREC created programs to help students gain insight into much needed skills and expected attitudes. The class room work provides them with the necessary knowledge. Various special training programs have been undertaken throughout the 4 years for students to provide them with opportunities to learn and practice industry demanded skills. SREC is proud of record in achieving good results in this area to create whole professionals of its students by the time they graduate.

#### **At I-Year Level:**

All students are screened for their communication abilities and other soft skills. The institution invites experts from various fields to counsel the new students and mentor them wherever feasible in the Orientation Programme. These

- English language lab in I year
- Training to enhance confidence levels and communication skills
- Special classes for weaker students under finishing school

#### **At II-Year Level:**

Students are screened for their personality types and sensitized to understand various personality traits including their own. This enables our students to better appreciate that people are different and differences are not necessarily bad. However, they are trained in the following areas to work with people with different personality types so that every member of a team is productive and effective.

- Attitude and Assertiveness
- Personal grooming
- Interpersonal and Team player skills
- Mother Tongue Influence (MTI) reduction
- Paralinguistic communication
- Situational English
- Corporate and Business Etiquettes
- Expose on common errors made by Indians
- Effective presentation skills
- Improving Pronunciation, Voice Modulation

#### **At III-Year Level:**

All the students of III year attend classes on analytical and logical reasoning.

- Quantitative Aptitude
- Reasoning
- Logical Thinking

These continued training classes and efforts empower the students and prepare them to face job interviews with confidence.

#### **At IV-Year Level:**

SREC shifts focus to conduct mock interviews to prepare the students to face the On/Off campus job interviews. All the training and job seeking skills will come handy for students to face the placement drives. During the final year, additional practice tests and interview sessions are conducted to succeed in job interviews.

- Resume Preparation
- Interview handling skills with sufficient mock sessions
- Group Discussions
- Aptitude Tests

- Soft Skill Tests
- Test on Computer Knowledge
- HR Skills
- Training in Domain Skills

**1.3.2. What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?**

The college adheres to the syllabus designed by JNTUH but while delivering this syllabus content to the students, our faculty enrich it with their own expertise and experience so that the students also gain employable qualities that enable them get jobs in this highly competitive world.

The CSSP regularly interacts with the HR managers of companies and collects first hand information about the demands and expectations of the corporate sector regarding skill set of students. These demands of the companies are then communicated to the feedback committee which in turn formulates add on courses and extra classes which are then conducted to make up the deficiencies in the students to make them employable.

The institution enriches and organizes the curriculum by supplementing it with additional courses (Pl refer list in sub sec: 1.3.1) so that the students are benefited in the best possible manner.

To develop skills, brain storming sessions are held for faculty to design the tools in areas of technology and providing in-depth knowledge in respective disciplines. Special training and tailor made orientation programmes are conducted to enable the students to achieve the global standards. OHP and LCD Projectors have been used for effective instructional delivery.

The students are encouraged to take up mini projects and major projects related to the real time problems. If necessary students are sent to industries or research organizations to collect the data, do the analysis and suggest probable solutions. Mini and Major Projects, Seminar and Comprehensive Viva-Voce are made compulsory in the final semester of the programme so that the students would acquire skills to solve problems independently.

**1.3.3. Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?**

- Girls and boys participate in various co-curricular activities such as paper presentations, organization of events, group discussions, and technical quiz programmes etc. Both boys and girls are made members of various academic, co-curricular and extracurricular activities.
- Ethical Voting – An Awareness programme
- NSS conducts number of programmes on social awareness.
- Women Empowerment Cell is established to empower women and also sensitize gender issues.
- Environmental Studies and Professional Ethics and Values are delivered using ICT to create awareness on environmental issues and build up moral and ethical values among the student community.

**1.3.4. What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?**

**Moral and ethical values**

**Employable and life skills**

**Better career options**

**Community orientation**

**Moral and ethical values:**

- A separate course on “Professional Ethics & Values” is introduced in the curriculum which is dealt by senior teachers.
- Special lectures are arranged by renowned persons to instill moral and ethical values among students.
- Institute conducts the programs on stress management and life skills to ensure holistic development of students.
- The NSS Unit of the college involves the students in social service activities by arranging special camps in nearby villages and towns.



**Employable and life skills**

- Training programmes on Soft skills for students of I, II and III years.
- Training programmes on Quantitative Aptitude, Reasoning and Analytical skills for III year students of all branches.
- Personality development programs for II year students of all branches
- CISCO Certification through Cisco Networking Academy for ECE and CSE students.
- Microsoft Certification through Microsoft innovation Centre for CSE and ECE students.
- Java Certification through Oracle Corporation
- IBM Centre for Excellence
- Awareness programs on entrepreneurship through Tinker camps, Business plan competition, Weekly Innovative challenges.
- A state level technical event, Technotrendz is conducted every year.
- A three day cultural fest, Sparkrill is organized every year.
- Inter college games and sports are conducted at district level
- Literary and Cultural events are organized by the Student Activity Centre
- A renowned Southern India **S R T-20 cricket Tournament** is organized every year, to develop the relations among engineering college students in Southern India.
- Teachers day, Engineers day celebrations are grandly organized by staff and students to highlight the importance of teacher-student relationship and the role of engineers in nation building.

**Better career options**

- Training students in programming languages to make them employable into the IT sector.
- CSSP interacts continuously with employers and identifies the new areas of knowledge in demand and new career options available and trains the students to enhance employability.
- The institution arranges communication skills workshops, group discussions, essay writing competitions, debates etc., at regular intervals to enhance their soft skills.

- Students are also involved in organizing different events at the institute which helps them improve their team building, leadership and organizational skills.

### Community orientation

The institute promotes neighborhood - community networks by initiating the community development activities through its **National Service Scheme (NSS) Unit**. The NSS unit of the institute inculcates the spirit of service in the students mind by conducting various programmes like tree plantation, blood donation camps etc. The students of various departments form social service groups and take up service activities independently with the guidance of the faculty.

The recent major NSS activities are

- Program on personality development by lead India 2020 for school students of Upper Primary School, Ananthasagar.
- Program on computer education for school students of Upper Primary School, Ananthasagar.
- Awareness about Higher education to the students of UPS school, Jayagiri Village
- Awareness of environment and Prohibition of Plastic, Polythene covers at UPS, Jayagiri Village.
- Conducted an Elocution contest and Cultural activities at UPS Jayagiri Village.
- Donated School stationery to students of UPS Jayagiri Village.
- Tree plantation held at adopted village, Ananthasagar
- NSS camp on Swach Bharath.
- Social assistance to Blind School children on many occasions
- Donated School Bags, Benches to students of Ananthasagar Village.
- Organized Blood donation camps at SREC in collaboration with Red Cross Society and Lions Club, Warangal
- Awareness programme on Nutrition and Healthy diet, Fitness (Yoga)
- Organized Health Checkup – Medical Camp by a Pediatrician Dr. P.Surender Reddy for the children of Ananthasagar village.
- Awareness programme and a Magic show on Superstitions by State Scientific Student Federation President.
- Awareness programme on HIV-AIDS
- Took out a Rally on Prohibition of Liquor

- Ethical Voting – An Awareness programme
- Election contest on Role of a Student in Building Healthy Society
- Clean & Green Programme
- Training on English by NSS Volunteers to UPS School children During NSS Special camp
- SR Engineering college NSS UNIT Offered MID Day Meals to UPS School children

**1.3.5. Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?**

The institution has various channels to collect and document responses on curriculum from the stakeholders. Feedback is taken from the students every semester through feedback forms. The head of the department frequently interacts with the students and takes their feedback orally. Special formats are designed to take feedback from alumni and parents during alumni meets and parent-teacher meets. Feedback from the employers is also taken to assess the capability of our students to carry out the works in the industry. The views of the students on training programme arranged by the departments and training and placement cell are taken and accordingly improvements are made in this programme wherever necessary. The faculty also collects exit level feedback from the graduates regarding learning processes at the end of academic session every year.

The inputs from all the stakeholders are obtained and used to further improvise the overall competency of the students.

**1.3.6. How does the institution monitor and evaluate the quality of its enrichment programmes?**

The enrichment programmes conducted by the institution are evaluated on the basis of student's results, placements, their performance in competitive examinations and also the feedback taken from all its stakeholders.

- Feedback is taken on all quality enrichment programmes at the end and suitable modifications are effected wherever necessary.
- The impact of quality enrichment programme is assessed by analyzing the examination results and placements.

- Feedback from stakeholders like parents, industries, University experts also used for evaluation.
- Internal Quality Assurance Cell is established in the institution to evaluate the quality of enrichment programme besides curriculum.
- The college has been consistently improving the quality of teaching by arranging pedagogical related workshops

Thus the college uses education as a tool to address the all round development of the student in various academic programs it offers.

#### **1.4. Feedback System**

##### **1.4.1. What are the contributions of the institution in the design and development of the curriculum prepared by the University?**

The Institution is an affiliated college to the Jawaharlal Nehru Technological University, Hyderabad and hence there is no scope of framing its own curriculum. However, taking the advantage of partial academic autonomy given by the affiliating university, the institution updates the curriculum to reach out to the institutes goals and objectives. The college also forwards suggestions offered by its faculty to the University through the members of Board of studies. However, a systematic mechanism is devised in the institution to look after the feedback affairs and necessary communications are done to the University by the Principal.

Dr V.Mahesh is Member BoS for B.Tech Programme (Production Engineering) and M.Tech Programme of the affiliating University.

Dr. Syed Musthak Ahmed was invited as a special invitee on BoS of the affiliating University for M. Tech program on Embedded Systems.

Dr. C. Venkatesh was invited as a special invitee on BoS of the affiliating University for M. Tech program on PEES.

**1.4.2. Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes' how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programs?**

Yes, the institution has a well established system of collecting feedback from all its stakeholders.

- Feedback is obtained from the outgoing students on curriculum and worthy suggestions are communicated to the University for curriculum enrichment.
- The feedback is also used internally to fill the gaps in the curriculum by organizing workshops and invited talks.
- Alumni meets are organized to obtain their views on curriculum and training and recommend their suggestions to the University for necessary modifications in the curriculum.
- Feedback is also taken from parents during the parent teacher meets.
- Obtaining feedback from the employers on the ability of the graduates to perform the required tasks in the industry.
- The suggestions / comments of the faculty are communicated to the affiliating University through the members present in BoS, Academic Council and Governing Body.



**Academic Council Meeting**

**1.4.3. How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?**

The college introduced three Post Graduate programs. The details are given below:

S. No.	Year	UG/PG Course	Duration
1	2013-14	PG - MTM (Master of Technology Management)	(5 ½ years)
2	2013-14	PG - MAM (Master of Applied Management)	(5 years)
3	2013-14	PG M.Tech (Power Engineering and Energy Systems)	(2 years)
4	2013-14	PG M.Tech (Electronic Design Technology)	(2 years)
5	2012-13	PG M.Tech (Advanced Manufacturing Systems)	(2 years)

**Justification for introducing new M.Tech and Management Courses:**

Due to scarcity of qualified faculty in engineering colleges, AICTE has been taking steps to increase number of postgraduates recently. There has been a lot of demand for post graduate courses in different specializations of Mechanical Engineering, Electrical & Electronics Engineering and Electronics & Communication Engineering. Very few colleges in this State are offering M.Tech in specializations like EDT, PE&ES and AMS. Further, the Government policy of promoting Research and Development in the country enhanced the scope for PG education. In view of the above, it was intended to start new PG courses and also to increase the intake of existing PG courses.

The objective of offering MTM course is to develop techno managers and entrepreneurial engineers to address societal problems.

MAM course is introduced to prepare management graduates from UG level for extensive knowledge sharing and to fill entry level executive jobs in the corporate world.

## **CRITERIA II**

### **TEACHING-LEARNING AND EVALUATION**

## 2.1. Student Enrolment and Profile

### 2.1.1. How does the college ensure publicity and transparency in the admission process?

The college has a transparent admission process. The College follows the guidelines given by Andhra Pradesh State Council of Higher Education (APSCHE), Government of Andhra Pradesh in the admission process. Admission Notice is also notified through local and national level newspapers.

#### a. College Prospectus

The college ensures wide publicity to the admission process by printing college prospectus containing the campus profile, details of academic programmes designed to fulfill the needs of students in the contemporary scenario

#### b. Institutional Website

Institutional website has been developed and complete details are placed on the website to facilitate online access to the requisite information about the college.([www.srecwarangal.ac.in](http://www.srecwarangal.ac.in))

#### c. Advertisement in Regional / National Newspapers

Advertisement is given in leading local as well as national level newspapers.

#### d. Any other (specify)

Special programmes are conducted for intermediate/ diploma students by the college to generate awareness regarding the college admission process and curriculum

The **transparency** in the admission process is ensured through the following processes:

Sl.No.	Programme	Criteria	Process of Admission	
			Category A	Category B
1	Under Graduate (B.Tech)	As per the guide lines issued by APSCHE	70% of sanctioned Intake are admitted through state level common entrance test EAMCET	15% of the sanctioned Intake shall admit NRI Candidates who have passed the qualifying examination with not less than 50% marks in the prescribed subjects remaining 15% is filled on merit basis with candidate including from other states who have secured rank at JEE and score not less than 45% of the marks in the prescribed group



				subjects in the qualifying exams
2	Post Graduate (M.Tech)	As per the guide lines issued by APSCHE	70% of sanctioned Intake are admitted through National level entrance test GATE and remaining unfilled seats through state level common entrance test PGECET	15% of the sanctioned Intake shall admit NRI Candidates who have passed the qualifying examination with not less than 50% marks in the prescribed subjects and remaining 15% is filled on merit basis with candidate including from other states who score not less than 50% of the marks in the prescribed group subjects in the qualifying exams
3	Post Graduate (MBA)	As per the guide lines issued by APSCHE	70% of sanctioned Intake are admitted through state level common entrance test ICET	15% of the sanctioned Intake shall admit NRI Candidates who have passed the qualifying examination with not less than 50% marks in the prescribed subjects and remaining 15% is filled on merit basis with candidate including from other states who score not less than 50% of the marks in the prescribed group subjects in the qualifying exams

**2.1.2. Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.**

***Student admission:***

The admission is based on the common entrance examination conducted by Govt. of A.P. by the name, EAMCET (Engineering & Medical Common Entrance Test) / ECET (For admission into 2<sup>nd</sup> Year for diploma holders).

- Admission Process to B.Tech:**

70% of the seats are allotted by Convener, EAMCET based on the rank obtained and

30% of the seats are allotted under management or NRI category. In case of Diploma holders 20% intake based on the Merit obtained in ECET, are admitted directly into 2<sup>nd</sup> year of B.Tech. under lateral entry scheme.

- **Admission process to M. Tech:**

Admission for M.Tech is done through common entrance examination like GATE/PGCET.

- **Admission Process to MBA:**

Admission to the Masters degree in Computer Applications and Business Administration is governed by ICET entrance examination. Graduated candidates in Science and Commerce/Arts are eligible for admission into these courses.

**2.1.3. Give the minimum and maximum percentage of marks for admission at entry level for each of the programme offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**

- The college offers four years Under Graduate courses in various departments like (1) Electronics and Telecommunication Engineering, (2) Computer Science and Engineering (3) Electrical Engineering (4) Mechanical Engineering and (5) Civil Engineering.
- We follow the APSCHE guidelines and gazette notifications from time to time in admission process. At present the minimum percentage of eligibility for entrance test is 45% for general category students and 40% SC/ST students.
- The admission for PG & UG courses is done according to the conditions laid by the APSCHE (Andhra Pradesh State Council for Higher Education).
- The Selection of students for various departments is done through the counseling conducted by APSCHE (Andhra Pradesh State Council for Higher Education).
- SREC is the second most preferred college in the region of Warangal district after KITS, Warangal. The admitted students ranks generally follow after KITS, Warangal. There is however, some overlap of ranks between the two colleges, particularly from OBC, SC, ST students.

**2.1.4. Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?**

NO

**2.1.5. Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion**

- SC/ST
- OBC
- Women
- Different categories of persons with disabilities
- Economically weaker sections
- Outstanding achievers in sports and extracurricular activities

#### **SC/ST/OBC/Economically weaker sections**

The admission procedure for SC/ST/OBC/EWS students is as per the reservation policy of the State Government. Fee reimbursement, fee exemptions and book bank facilities are extended to these students as per the state government rules and policies .

#### **Women**

For women there is a separate reservation policy. 33% of the admitted students in convener quota are women.

#### **Different categories of persons with disabilities**

Differently abled students are given due consideration in the admission process, which is 3 % as per policy of the govt. of Andhra Pradesh.

#### **Outstanding achievers in sports and extracurricular activities**

Sports and NCC cadidates are given reservation as per state government policies.

**2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement.**

**EAMCET-2011 & EAMCET-2012 RANKS**

Branch	OC											
	Male						Female					
	2011			2012			2011			2012		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	19708	29877	7	26694	47905	9	14256	34414	8	26375	45877	4
ME	23097	27455	4	21297	50413	11	28068	41746	4	38712	49756	2
ECE	13649	19688	12	15124	25270	9	14198	27119	12	19439	28464	11
CSE	14599	35113	16	16887	48884	8	19299	36364	21	16907	55093	28
CE	27462	31680	3	27142	56751	10	31280	39940	2	41528	43552	7
	Total:		44	Total:		52	Total:		52	Total:		56
Branch	BC-B											
	Male						Female					
	2011			2012			2011			2012		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	25313	39486	14	28064	163698	23	30388	53824	8	51948	129187	12
ME	27177	32546	4	26414	74170	18	34003	36827	2	42629	125818	3
ECE	19504	30270	19	28873	47415	21	20754	31551	17	29211	47668	13
CSE	20139	51324	12	28294	131217	14	32480	52200	20	41876	138151	10
IT	77988	1E+05	4	0	155419	0	52601	105210	9	0	136701	1
CE	36043	55323	9	36542	138353	19	0	55371	1	54560	166992	6
	Total:		62	Total:		95	Total:		57	Total:		45

Branch	BC-D											
	Male						Female					
	2011			2012			2011			2012		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	24419	39532	7	29030	183799	18	28085	48730	8	61246	143760	6
ME	24280	40968	8	29894	85354	11	37715	79360	2	97152	153383	3
ECE	14147	31091	10	20548	61018	11	18630	91949	10	26672	61192	15
CSE	21498	51255	6	28041	120294	11	25090	50860	7	57104	175843	9
IT	53025	89819	3	0	0	1	56234	81124	3	0	0	0
CE	29266	53345	3	32968	89378	6	38164	49655	4	24853	85096	2
	Total:		37	Total:		58	Total:		34	Total:		35
Branch	BC-A											
	Male						Female					
	2011			2012			2011			2012		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	49141	65870	4	59238	175533	7	40774	51405	3	0	173649	4
ME	52415	59183	3	48861	193371	10	0	0	0	0	0	0
ECE	38663	48077	5	63299	191363	9	33568	48757	4	27860	116530	5
CSE	80294	1E+05	4	2E+05	200146	6	53270	118688	7	55486	182829	5
IT	0	2E+05	2	0	0	0	172368	180443	3	0	0	0
CE	48585	75094	4	75578	124671	4	0	82103	1	0	190633	1
	Total:		22	Total:		36	Total:		18	Total:		15
Branch	BC-E											
	Male						Female					
	2011			2012			2011			2012		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	49898	1E+05	2	82974	201233	5	106512	129375	2	0	121376	2
ME	32598	98311	3	69297	80741	3	0	0	0	0	0	0
ECE	24639	64236	4	1E+05	132231	4	50327	66928	3	122788	142672	2
CSE	0	0	0	2E+05	181524	3	70783	109645	5	79357	160186	2
IT	0	0	0	0	0	0	0	96886	1	0	0	0
CE	73870	78597	2	54522	106094	3	0	149844	1	37087	92178	1
	Total:		11	Total:		18	Total:		12	Total:		7

Branch	SC											
	Male						Female					
	2011			2012			2011			2012		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	66027	1E+05	8	70363	136446	15	68917	126391	7	97400	168561	10
ME	59225	1E+05	5	58747	150093	14	122111	133613	3	0	188519	1
ECE	56854	93090	12	78093	130709	10	55598	91794	9	50328	131398	8
CSE	93963	1E+05	7	1E+05	202021	15	78842	170309	12	78331	189985	8
CE	101011	1E+05	3	86176	125673	9	119217	176166	4	82620	179636	8
	Total:		38	Total:		63	Total:		39	Total:		37
Branch	ST											
	Male						Female					
	2011			2012			2011			2012		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	58578	72649	4	76875	100263	6	0	60431	1	54644	90075	3
ME	60042	74954	2	71806	98386	3	0	94498	1	111294	205213	4
ECE	61495	79046	3	1E+05	115985	4	46157	106981	5	95825	179044	4
CSE	91200	1E+05	6	1E+05	187382	6	111936	168817	2	0	197519	1
IT	146753	2E+05	2	0	181619	0	0	0	0	0	0	0
CE	58433	86124	2	60765	99672	4	81640	138467	2	61505	80662	3
	Total:		19	Total:		23	Total:		11	Total:		15

Branch	OC											
	Male						Female					
	2014			2013			2014			2013		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	46527	191238	15	45342	108300	16	54637	147535	10	25736	107475	14
ME	50396	189275	30	21983	51153	8	45613	45613	1	94193	112860	3
ECE	30902	56910	11	23822	41935	12	27669	58577	24	19893	42837	15
CSE	24348	75965	17	29583	81929	17	24912	84875	26	19046	108388	34
CE	23740	74004	11	31001	49691	6	33463	118617	8	26062	63958	6
	Total:		84	Total:		59	Total:		69	Total:		72

Branch	BC-D											
	Male						Female					
	2014			2013			2014			2013		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	62093	200535	12	32303	111482	18	82675	191062	13	56888	138116	6
ME	47773	197463	24	29412	83408	13	144114	144114	1	151666	151666	1
ECE	25584	93752	13	23442	71385	12	43835	132240	9	30206	80522	16
CSE	43233	99643	7	45075	101507	7	53363	100649	11	30377	110393	10
CE	46311	127551	11	32858	77934	10	40328	130415	6	56888	138116	6
	Total:		67	Total:		60	Total:		40	Total:		39
Branch	BC-B											
	Male						Female					
	2014			2013			2014			2013		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	46116	195031	9	28803	205258	27	72956	191045	4	62299	151918	11
ME	51083	199677	30	27119	96905	26	46398	46398	1	-	-	0
ECE	35958	192360	26	30796	78005	12	51995	123147	18	38439	84913	18
CSE	43507	146999	18	28780	201862	23	35121	198863	24	46575	195603	18
CE	32271	109948	15	42279	115208	14	108410	151473	2	65862	140478	5
	Total:		98	Total:		102	Total:		49	Total:		52
Branch	BC-A											
	Male						Female					
	2014			2013			2014			2013		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
EEE	74278	113715	2	57103	173576	6	-	-	0	57304	206205	2
ME	62473	143822	5	61781	140376	7	-	-	0	-	-	0
ECE	85521	199255	5	62704	151733	5	54394	146696	3	56337	123918	5
CSE	93824	181552	4	193245	193245	1	82558	168660	3	156105	176701	2
CE	97128	181090	5	100172	188712	5	153515	153515	1	44016	188608	5
	Total:		21	Total:		24	Total:		7	Total:		14

Branch	BC-E											
	Male						Female					
	2014			2013			2014			2013		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
	EEE	-	-	0	-	-	0	-	-	0	-	-
ME	59936	193713	3	84603	165733	5	-	-	0	-	-	0
ECE	-	-	0	78194	210778	4	-	-	0	-	-	0
CSE	89748	135185	2	199197	199197	1	136955	174179	2	130735	169465	2
CE	90455	106557	2	96549	110695	3	143478	143478	1	20521	20521	1
	Total:		7	Total:		13	Total:		3	Total:		3
Branch	SC											
	Male						Female					
	2014			2013			2014			2013		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
	EEE	154270	187735	4	82379	212913	6	83953	83953	1	143485	143485
ME	85366	199888	12	70573	160519	13	-	-	0	124459	124459	1
ECE	95477	201438	7	90397	215800	14	164922	200890	4	97192	197616	6
CSE	138980	199794	4	157786	217509	4	93913	196194	6	143286	184270	3
CE	86826	199307	11	87438	165750	11	97132	192793	4	121468	199600	5
	Total:		38	Total:		48	Total:		15	Total:		16
Branch	ST											
	Male						Female					
	2014			2013			2014			2013		
	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students	Min	Max	No. of Students
	EEE	82096	197279	5	71725	193688	12	-	-	0	117630	179514
ME	65077	200803	11	84084	105855	4	-	-	0	151247	182373	3
ECE	103222	193916	5	162151	202516	3	169778	169778	1	107198	183483	4
CSE	187949	187949	1	109270	213015	4	186198	186198	1	-	-	0
CE	89575	163364	5	66311	111432	6	142822	173017	2	125270	125270	1
	Total:		27	Total:		29	Total:		4	Total:		11



Programmes	Number of applications	Number of students admitted	Demand Ratio
PG 1.M.Tech (2013) 2. M.Tech (2012) 3. M.Tech (2011) 4. M.Tech (2010)	Under APSCHE	172 122	77% 70%
Integrated Masters 1. MAM	Under APSCHE	36	60%

Overall, there was considerable fluctuation in the admitted student ranks during 2013 and 2014. The probable reason is that the government started many engineering colleges in university campuses and some outside which entirely funded by the government. This has considerably impacted admission into private colleges, particularly in the year 2014.

**2.1.7. Was there an instance of the College discontinuing a programme during last four years? If yes, indicate the reasons.**

Yes

Two programmes named Information Technology (IT) and Master of Computer Applications were discontinued because as majority of students are preferring to join Computer Science and Engineering at UG Level and Software Engineering at PG level the Institution has withdrawn IT and MCA and increased the Intake of Computer Science Engineering at UG level and introduced Software Engineering at PG level.

**2.2. Catering to Student Diversity**

**2.2.1. How does the institution cater to the needs of differently - abled students and ensure adherence to government policies in this regard?**

The differently abled students are provided with special facilities to carry out their academic activities comfortably in their day to day life. The following measures have been taken to cater the needs of differently abled students as follows.

- The institution ensures that the classes of such students are held in the ground floors only.
- Ramp facilities and wheel chairs are available for the movement of physically challenged students.
- Supporting staff are provided to help them on the campus.

**2.2.2. Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.**

- The student is admitted to S R Engineering College on the basis of the rank obtained in EAMCET.
- Before the commencement of the teaching programme the students attend an Orientation Programme, in which they are informed about the traditions and objectives of the college.
- Orientation programmes are also organized at the departmental level. (to inform the students about the curriculum, examination pattern, general discipline and dress code)
- Parents of students are also invited to the inaugural session where they have an interaction with the orientation/induction team.
- The institution takes care of every aspect and needs of the students.
- Regular moral boosting sessions are arranged to make their moral high.
- The institution acts as a ladder in order to climb up their world of aspirations and ambitions to reach their goals and succeed in their lives.
- The institution takes care of the student not only to get suitable jobs after the course completion but also to become a socially and morally responsible in life.
- The college also takes care that every section or class contains equal mix of intelligent and average students.
- The slow learners are traced out by the faculty team and special care is taken by concerned faculty members by arranging special doubt clearing classes to cope up with their fellow students. These students are counselled by the senior faculty team and faculty experts in particular subjects.

**2.2.3 What are the strategies drawn and deployed by the institution to bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice? (Bridge/ Remedial/ Add-on/ Enrichment Courses, etc.)**

- The institution conducts doubt clearing and remedial classes, product development programmes and application oriented programmes for all groups of students to increase their skills and competence.

- Enrichment courses like personality development programmes / seminars/workshops / training programmes/technical festivals/ conferences/symposia are conducted to improve the student's mindset, creativity and motivate them to do some novel innovations.
- A faculty member is appointed as class coordinator to every section/class in order to identify the slow learners to help him/her with counseling and intensive coaching.
- Many courses are conducted by the college to provide better education environment for students so that they can improve their knowledge and enhance their abilities. Enrichment Courses like Soft Skills, Communication Skills, Aptitude skills, Tutorial classes, doubt clearing classes are already running in the college.
- The Institution conducts special 'Programming in C' laboratory practice classes beyond the college hours to bridge the knowledge gap of the weaker students.
- The institution is planning to provide Blackboard Software as an innovative learning process to students and teachers for effective Teacher - Learning Process.

#### **2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?**

- Under the banner of NSS activities, plantation drives, awareness against the use of polythene bags are undertaken regularly.
- Lectures/talks on save water, rain water harvesting etc., are organized.
- To sensitize women about their status, identity and role, the college has established a Women's Empowerment Cell.
- Seminars and workshops on problems relating to women like violence against women, dowry were organized to prepare them face the challenges.
- The institution provides co-education holding the tradition of teaching the holistic education with emphasis on the ethical and moral principles.
- Regular moral boosting sessions are arranged to make their moral high.
- Regular yoga and meditation classes are arranged for the students to maintain their health and fitness.
- The institute sensitizes its staff and students on issues such as gender inclusion, environment etc. by holding seminars on relevant topics like women empowerment.
- Women's day is celebrated by teachers and students every year. Experts are invited from their field of interest to share and deliver their experiences and knowledge.

**2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?**

- Advanced learners are identified through interactive classroom teaching and classroom discussions, their consistent performance in Examination and feedback from the faculty.
- Students are encouraged to present papers at National/International seminars and conferences.
- Advanced learners are encouraged for higher studies.
- Fast/Advanced learners are encouraged to take up internship in Industry/R&D Institutions. Such students are encouraged to participate in the on-going institutional/sponsored research projects.
- Leadership qualities of students are enhanced by making them organize and participate in the seminars/conferences/workshops and techno-cultural fests.
- High impactive communicative english courses, soft skill courses and aptitude courses are conducted for these students to increase employablity skills.

**2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)?**

The faculty coordinator for each section collects the data of academic performance and attendance of the students. The data is analyzed and the following remedial measures are taken:

- Student performance is continuously monitored by faculty and remedial classes are conducted whenever required. Counseling of students to overcome the identified learning / behavioral difficulties through continuous feedback is done.
- If a student doesn't attend classes regularly, the Head of the Department and the concerned faculty counsel the student and also communicate to the parents concerned in order to take corrective measures.
- Concept based and problem solving (assignments) approach is adopted to facilitate the students to acquire in depth fundamental knowledge in core subjects of the discipline.

## 2.3. Teaching-Learning Process.

### 2.3.1. How does the college plan and organize the teaching, learning and evaluation Schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

The planning and organizing of the teaching, learning and evaluation schedules for all courses in each discipline is done by a committee consisting of the Principal, Deans, Heads of Departments and Controllers of the Examinations.

#### Academic Calendar

The college prepares the academic calendar well in advance before the commencement of the session. The calendar outlines the session/semester schedule, examination schedule and schedule of holidays.

#### Courses to be taught

The lists of courses of the ensuing semester/ session are studied by the faculty of the department. Faculty is given the choice to select the courses based on their area of interest.

#### Course Allocation:

Based on the course preference list, the Head finalizes the course allocation for the faculty members. Faculty members prepare the lesson plans, schedule and assignment questions for their respective course.

#### Course Plan:

The course plan is made clear and understandable and reflects what the faculty is planning to deliver for the current semester. All the faculty members of the department prepare their lesson plan for their respective courses which includes:

- Course objectives and outcomes
- Lecture schedule/lesson plan
- Text books, Reference books and important URLs for the subject material.
- Assignment and important questions in each unit.

At the beginning of semester students are supplied with the above handouts.

### Time Table

The timetable committee comprising of faculty from each department prepare the master time table. In all programs, the guidelines of respective statutory bodies for the number of credit hours for each subject are followed.

### Evaluation Policy

The evaluation policy for each course is fixed well in advance and communicated to the students at the beginning of the year. Internal evaluation (for 30% marks) is done in the institution while 70% of the marks are evaluated in external examination

- Two internal examinations for theory subjects and one internal examination in case of practical are conducted in each semester
- Continuous evaluation procedure is followed for practical subjects.
- However, institution conducts end semester examinations in both theory and practical subjects.

### Attendance

A minimum of 75% attendance is required in each course for the student to get promoted to next semester/year.

#### 2.3.2. How does IQAC contribute to improve the teaching –learning process?

IQAC provides the development and application of quality benchmarks/parameters for the various academic and administrative activities of the institution. It also imparts knowledge through team work putting relentless efforts. It promotes the research and consultancy and also synergetic relationship with the industry and society to appoint well endowed faculty and to upgrade their knowledge. It also ensures timely, efficient and progressive performance of academic and administrative tasks.

Following are the members of the IQAC Cell:

- |   |   |              |
|---|---|--------------|
| 1. Dr. C.V. Guru Rao, Principal                         | – | Chairman     |
| 2. Sri. K.V.B.S.R.Subrahmanyam, Assoc.Prof./EEE         | – | Co-ordinator |
| 3. Mr. J. Jena, HR, TCS, Hyderabad                      | – | Member       |
| 4. Sri. K.Srinivasulu, Principal, KUCET, KU, Warangal.– |   | Member       |
| 5. Mr. P. Venkat Reddy, Assoc.Prof./CE                  | – | Member       |
| 6. Mr. P. Satish Kumar, Assoc.Prof./ME                  | – | Member       |
| 7. Mr. M. Sampath Reddy, Assoc.Prof./ECE                | – | Member       |

- |  |   |        |
|--|---|--------|
| 8. Mr. Ch. Sandeep, Assoc. Prof./CSE                 | – | Member |
| 9. Dr. P. V. Raja Shekar, Addl. Controller of Exams. | – | Member |

**The following are the functions of IQAC:**

- Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- Arrangement for feedback responses from students, parents and other stakeholders on quality-related institutional processes.
- Dissemination of information on the various quality parameters of higher education.
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles.
- Documentation of the various programmes/activities of the college, leading to quality improvement.
- Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of good practices.
- Development and maintenance of institutional database through MIS for the purpose of maintaining / enhancing the institutional quality.
- Development of the Annual Quality Assurance Report (AQAR) of the college based on the quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA, AB) in the prescribed format.
- Bi-annual development of Quality Radars (QRs) and Ranking of Integral Units of Colleges based on the AQAR.
- Interaction with SQACs in the pre and post accreditation quality assessment, sustenance, and enhancement endeavours.

**2.3.3. How learning is made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, Collaborative learning and independent learning among the students?**

Learning is made student-centric by laying stress on specific learning outcomes for all courses and making it more participatory and interactive through the following types of participatory activities:

Group Activities like Group discussions, Brainstorming, Field survey/Field work/Field visits and Academic debates which strengthen the knowledge base and contribute to skill formation improving their managerial skills both at personal and interpersonal level.

The institute also organizes special training programmes which include aptitude skills, personality development, spoken English classes and communication sessions with an aim to develop the students to face on campus as well as off campus interviews.

Students are also encouraged to use library independently that enhances their knowledge.

Student chapters of various professional societies (like IEEE, ISTE, IETE, IEI, CSI etc.,) are formed involving students to conduct the technical, co-curricular and extracurricular activities to improve their skills.

Online journals are made available for staff and students to learn the latest development on research and on advanced topics of engineering and technology.

Although the traditional chalk and lecture method is predominantly used, different other methods are adopted to make teaching interesting and interactive. The various other methods used by the departments are:

- Students' seminars
- Invited lectures by external speakers
- Use of audio-visual aids
- Interactive sessions
- Group discussions among the students
- Case studies and projects
- Use of overhead projector
- Power-point presentations
- Field trips

#### **2.3.4. How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?**

The college concentrates on improving the critical thinking of the students. To encourage the artistic temper among the students, the faculty motivate them to participate in various activities. At the same time, to encourage the scientific temper



among students, the faculty engages the students in various practical works. To sharpen the critical thinking of students, various group discussions, debates and seminars are organized in which students explore new ideas and also get a chance to listen to the expert views of eminent professionals.

The following activities conducted by the institution/ departments to improve critical thinking and creativity of the students:

- Extensive problem solving skills are practiced during aptitude classes
- Mini projects and final projects are designed and developed as a part of creativity, innovation and idea mapping.
- Many students participate at Workshops/ Project expo to exhibit their scientific temperament and talent.
- Industrial visits are organized by the department for the students to get abreast of the latest technologies.
- Mock interviews are conducted by in-house and outside experts.
- Participatory learning through group discussions, role play, case study, debates, field visits, model making supplement class room teaching are conducted regularly.

**2.3.5. What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.**

In order to enhance the teaching practices, the departments has drawn up various strategies for improving the learning outcomes and to meet workplace challenges. By incorporating these strategies the pass percentage of the students has improved significantly which in turn has resulted in enhanced student satisfaction.

To improve the teaching and learning process, the college

- (i) Has signed up an MOU with Indo-US Collaboration for Engineering Education (IUCEE). IUCEE is building a solid base for engineering education and research by strengthening the four pillars of education:
  1. Learner-centric teaching
  2. Research excellence

3. Outcomes based quality supported by accreditation
  4. Innovation and entrepreneurship
- (ii) Faculty development program WIPRO Mission 10X for improving the effective teaching abilities among the faculty.

The various strategies implemented are listed below.

#### Updated Learning Resources.

- e-learning facility with OHP, LCD (CD lecture material for all the courses) along with INDEST digital library
- Providing course material, handouts, Lab manuals to acquire hands-on-experience in the experimentation modules of various courses
- Campus wide access through Networks has facilitated open resources like NPTEL Lectures.

*Innovative teaching / learning process through controlled experimentation:*

- Adopt concept based and problem solving (Assignments) approach to facilitate the students to acquire in depth fundamental knowledge in core subjects of the discipline.
- Teaching using multimedia and Webinars etc

*Expert Lectures:* Inviting experts from both academia and industry to deliver expert lectures in emerging areas

#### Learning Resources sharing

- In addition to the syllabus mentioned in the curriculum, the students are provided with the e-content through national and international portals such as:
- **NPTEL** <http://nptel.iitm.ac.in>
- **MIT Open Courseware** <http://ocw.mit.edu/index.htm>
- **DELNET**
- **SONET**
- **IUCEE Webinars etc.**
- **ELSDM (JNTUH)**

**2.3.6. How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

The institute exposed the students and faculty members to acquire advance level of knowledge and skills in the following ways:

The students and faculty are exposed to advance level of knowledge and skills through the following activities.

- The teachers are deputed to attend various seminars/ workshops/ conferences etc., organized by academic and research institutions so that they get acquainted with the best practices.
- Utilizing research support available from different organizations like UGC (Minor and Major research projects), AICTE and DST.
- Institution organizes workshops / conferences / faculty development programmes to enhance subject skills by calling eminent professors/scientists from various reputed organizations.
- Industrial tours have been organized by the college for both students and faculty to get industry exposure.
- Encouraging students and faculty to participate/present papers in different national and international conferences.

**2.3.7 Detail (process and the number of students \benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?**

The academic and personal counseling (of 60 studnets approx) is taken care by the teachers of that class. The HOD is invariably chairing these counsellings. One of the faculty member will act as a convenor for these sessions. The student reprentative are drawn among top, average and below average students. This comprises of the committee for counselling at the department level for each of the program later this is even extended for counselling at institutional level with the inculsion of the principal in to this committee.

For example first year class coordinators are listed below:

S. No.	Branch	Class In charge
1	ECE –A	Ms. G. Anusha, Asst. Prof.
2	ECE –B	Sri. N. Ch. A. Sree Kiran, Asst. Prof.
3	ECE –C	Dr. N. Srivani, Asst. Prof.
4	CSE –A	Dr. E. Purushottam, Asst. Prof.
5	CSE -B	Mr. J. Sunil, Asst. Prof.
6	CSE -C	Sri. T. Kiran Kumar, Asst. Prof.
7	EEE -A	Ms. M. Catherine, Asst. Prof.
8	EEE -B	Sri. K. Devender, Asst. Prof.
9	ME -A	Ms. V. Haripriya, Asst. Prof.
10	ME -B	Dr. V. Radhika Reddy, Asst. Prof.
11	CE -A	Sri. B. Ravindar, Asst. Prof.
12	CE -B	Ms. R. Srivani, Asst. Prof.

The responsibilities of the class coordinators are:

- a) Monitoring Attendance
- b) Counseling students
- c) Interacting with parents
- d) Monitor the performance of students
- e) Maintain class discipline and general behavior
- f) Monitor the syllabus completion
- g) Nominate class representatives

The faculty members act as mentors to provide professional / career advancements and guidance to the students. They also take care of the grievances of the students with respect to course work as well as laboratory work. The mentors take the responsibility of overall development of the students during their study.

No. of faculty mentors: **All faculty members**

No. of students : **20** per mentor

Frequency of Meeting : **Monthly per semester and also need based.**

**2.3.8. Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

The college is a Wi-Fi enabled campus. Each department has an exclusive well equipped AC seminar hall and e-classroom. The use of modern multi-media teaching aids like OHP, LCD projectors, Internet enabled computer systems are usually employed in class room instructions. The students are also encouraged to use computer software packages for analyses and experimental work of their projects. The college encourages teachers to enhance their subject knowledge and research in their respective fields using library resources and software. Creative assignments are prepared by the faculty in all the subjects and students are asked to prepare the solutions by referring the books and other e-learning materials. Seminars / symposia are conducted regularly every year to bring out inherent talents of the budding engineers. Special guest lectures are also arranged on the latest topics by eminent academicians/industrialists. The faculty members are encouraged to participate in National/International level seminars by extending academic leaves and the required financial assistance. The faculty members in turn transfer their knowledge to their students either in the classroom or by arranging special lectures for this purpose.

The impact of such practices leads to the developed of innovative products. One of the innovative project of Mechanical Engineering students is the development of an Aero Solar Car.



Aero Solar Car- Developed by Mechanical Engineering Department

**2.3.9. How are library resources used to augment the teaching-learning process?**

The college has a well-equipped fully computerized library which contains text books, reference books, advanced books, journals and periodicals on various subjects, which remains open from 8:00 am to 8:00 pm on every working day. There are many old and rare books and journals. Teachers and students visit the library regularly. There are other support services available in the library, for example:

- Computer facility is available in the library.
- Both teachers and students have access to internet service.
- There is broad band connection in the library.
- Reprographic facility is available for the students and staff.
- Online access to Journals is provided by the library. The Library catalogue is computerized.

Thus, the library contributes a lot in the teaching-learning process of the college. The question papers of college and university examinations of previous years are preserved and are available in the library for helping the students in preparation for examinations. Books are used by the faculty not only for classroom teaching, but also for advanced level of learning.

**2.3.10. Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.**

Yes, though the institute could complete the curriculum within the time frame, it has some times faced the following challenges:

- a) Due to late admissions at first year level, the instruction period is usually less. Faculty take it as a challenge and completes the syllabus in time by conducting extra classes and also motivating the students to prepare on day to day basis.
- b) Some times teachers need to conduct bridge courses particularly to the lateral entry students admitted into second year to meet the curriculum gap so as to make them comfortable with the curriculum subjects.
- c) Unforeseen interruptions to the class work are compensated by arranging extra classes beyond working hours.
- d) The IQAC monitors the syllabus coverage in every subject and suggests suitable remedial measures to the teachers concerned.

**2.3.11. How does the institute monitor and evaluate the quality of teaching learning?**

There is a well-established mechanism by which the institution continuously monitors and evaluates the quality of teaching:

- Classroom attendance of the students is closely monitored.
- Regular interaction between students and monastic members.
- Continuous assessment holding class tests, terminal examinations.
- Students feedback.
- Regular Parent-Teacher meetings.
- Participation of students in seminars.
- Principal and the faculty members of the concerned department individually meet the parents of students with unsatisfactory academic performance

Every department will carry out a survey of its graduating students towards the end of their final semester. The survey sought to find out degree of achievement of the program outcomes that are related to various courses, and the degree of student satisfaction with the courses in terms of its content, related text books, laboratory facilities, and faculty performance. The sample survey forms are enclosed.

## Student Feed Back

## Branch: III-Year II-Sem (2011-12)

Note: Students are to award the points against each item. The scale is on 1 – 5 i.e.

Excellent – 5, Good – 4, Average – 3, Below Average – 2, Not Satisfactory – 1.

THEORY SUBJECTS (Subject Names)	DWDM	ES	CF	NS	CG	WT
1. Did the teacher help in understanding concepts and principles:						
2. Teachers' command over the subject.						
3. Teacher's enthusiasm over teaching.						
4. Did the Teacher give examples and illustrations?						
5. Did the Teacher cover all the units with required importance?						
6. Accessibility of the teacher outside the class.						
7. Interaction with the students during the session.						
8. Teacher's ability in controlling the class.						
9. Punctuality of teacher in engaging the class.						
10. Standard of Assignment for learning subject.						
11. Discussion of solution to question papers, assignments and typical questions.						
12. Teacher's communication skills.						
13. Overall rating of the teacher.						
LABORATORY. (Lab Names)	DWDM Lab	ES Lab	WT Lab			
1. Did the teacher help you in understanding the experiments?						
2. Punctuality of the teacher in engaging the lab session.						
3. Availability of equipment Instruments /tools.						
4. Overall rating of the teacher.						
5. Overall rating of the technical staff.						
LIBRARY: Availability of prescribed books for that subject						



**Comments:**

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**Suggestions:**

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### Graduating Seniors Exit Survey

#### Dear Student:

We appreciate your assistance in helping us to improve our educational program in order to better serve the current and future Mechanical Engineering students. Your opinion regarding engineering education at SREC is very valuable to us. Please take a few moments to complete the following survey.

#### A. General Information:

1. Your Full Name : .....

*Please give atleast one address at which we might best be able to reach you in future:*

2. Residential Address : .....

.....

.....

3. Phone Number (Res) ..... 4. Mobile Number: .....

5. Email Id : .....

6. (a) Are you planning to pursue higher qualification? Yes / No

(b) Are you looking for a permanent job? Yes / No

#### B. Overall Evaluation

Please rate your overall impressions of SR Engineering Education

**3. Strongly Agree**

**2. Agree**

**1. Disagree**

S.No	Category	3	2	1
1	I am pleased with the quality of education at SR Engineering College			
2	I made the right choice by choosing Engineering Profession			
3	I made the right choice in joining SR Engineering College			

**C. Your assessment of Strengths and Weaknesses of Instruction & Facilities**

Using the following scale, please tell us how well you think you were satisfied at graduation in the following areas:

4. Well Satisfied

3. Satisfied

2. Moderately Satisfied

1. Not Satisfied

S.No	Criteria	4	3	2	1
1	Quality of Instruction by the faculty in Mechanical Engineering				
2	Quality of Instruction by the faculty in Interdisciplinary Engineering				
3	Quality of Instruction by the faculty in Mathematics				
4	Quality of Instruction by the faculty in Sciences (Physics & Chemistry)				
5	Quality of Instruction by the faculty in Humanities & Social Sciences				
6	Quality of Instruction by the Lab Instructors				
7	Quality of Academic Advising (Counseling)				
8	Quality of Placement training and Career Planning				
9	Quality of Computing facilities				
10	Quality of Laboratory facilities				

**D. Information for Assessment of Program Educational Objectives (PEO)**

The following are the educational objectives of the Mechanical Engineering Program; please indicate how important these educational objectives are to you during your graduation using the following scale:

4: Extremely important

3: Important

2: Moderately important

1: Not important

Program Educational Objectives (PEO)	4	3	2	1
I. To inculcate necessary aptitude and ability to pursue higher education at masters and doctoral level in order to expand and fulfill the needs of higher education and to meet the needs of the industry.				
II. To acquire thorough knowledge of mathematical and physical sciences and to be in a position either independently or collectively to interpret, analyze, formulate and solve Mechanical Engineering problems.				
III. To be adequately equipped through classroom instruction and laboratory experiments to visualize and tackle any engineering problem requiring professional expertise of mechanical engineer like design, modeling, simulation and development of a product from concept to prototype.				
IV. To build teamwork skills and ability to communicate and deal with people in different professional, ethical, social and economical contexts.				
V. To create the requisite academic ambience that nurtures the student ability to cope up with situations that emerges in the professional context with confidence through life long learning.				

**E. Information for Assessment of Educational Program Outcomes:**

Using the following scale, please tell us how well you were prepared at graduation in achieving the outcomes listed below:

**4:** Well prepared

**3:** Adequately prepared

**2:** Inadequately prepared

**1:** Not at all prepared

Outcome	4	3	2	1
(a) Ability to acquire and apply methodically the knowledge of mathematical and physical science to engineering problems.				
(b) An ability to identify, formulate and solve Mechanical Engineering problems				
(c) Skill to design and conduct experiments, analyze and interpret data.				
(d) Ability to design and develop products or processes that meet definite engineering goals.				
(e) An ability to function on multi-disciplinary teams.				
(f) Ability to learn and use modern scientific and engineering tools to advance further the knowledge acquired.				
(g) An ability of understanding professional and ethical responsibility				
(h) Ability to communicate effectively in written, oral and graphical forms.				
(i) Ability to assess the impact of scientific findings on today's social, environmental, economical concerns.				
(j) A recognition of the need for, and an ability to engage in life-long learning				
(k) Ability and aptitude for higher education in specialized areas, able to participate and succeed in competitive examinations like GRE, GATE, TOEFL etc.,				

**F. Any other Suggestions:**

## **2.4. Teacher Quality**

### **2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum**

#### **Recruitment:**

Faculty members are recruited as per AICTE norms with proper advertisement in local and national level newspaper and naukri.com. For this purpose an appointed selection committee holds interview with the applicants at the institute and eligible candidates are selected and appointed to work at the institute.

#### **Retention:**

The faculty members are encouraged for their academic advancements through technical/research paper presentations/ publications in conferences/journals. The registration fees for the conference is paid by the management along with academic leave. This provision encourages a sense of belongingness in them for the institute and they work with all commitment. Faculty members recruited with PG qualifications are always encouraged and motivated for doing Ph.D and research activities. The retention rate of faculty is very high because all the faculty members are paid with the latest scale of pay, allowances and annual increments. This has resulted in the expected level of professional growth of the institute during the span of last ten years as more than 90% of the faculty members are post graduates who have more than 5 years of teaching experience. Some of them have registered for their PhD programmes and some are already Ph.D holders.

### **2.4.2. How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details**

The institution is working in the direction of coping with the growing demand or scarcity, qualified senior faculty are being recruited to teach new programmes. For modern areas of study in related subjects experts from industry as well as retired professionals are invited as part-time/guest lecturers to fulfill the subject needs & the existing faculty are taking the help of NPTEL Videos and IEEE web- site.

**2.4.3. Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality**

**a) Nomination to staff development programmes**

<b>Academic Staff Development Programmes</b>	<b>Number of Faculty</b>
Refresher courses	32
HRD Programmes	90
Orientation programmes	20
Staff training conducted by the College /University/other Colleges	426
Summer / winter schools, workshops, etc.	---
Any other (please Specify)	---

**b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning**

<b>S.No</b>	<b>Name of the Coordinator</b>	<b>Name of the workshop / FDP</b>	<b>Program date (s)</b>
1	P.Satish Kumar, L.Radhakrishna	I-Botics	7th - 8th March, 2015
2	Md.Afzal Ali	Mission Engineers	7th - 8th March, 2015
3	M. Sheshikala T. Vishnuvardhan reddy	Android application development	1 <sup>st</sup> mar 2015
4	Y. Manjusree, Asst. Professor, EEE Dept.	Workshop on – Recent Trends in Power System Protection”	12 <sup>th</sup> February 2015
5	B.Satyavani	Workshop on – Simulation of Power Electronic Converters Using MATLAB”	12 <sup>th</sup> February 2015
6	P.Soumya, Sr. Asst.	“A Traditional Novel Approach for Skill Enhancement of Teaching – Learning Process in Engineering Education”	10 <sup>th</sup> February 2015
7	P.Ashok	Information Security Education & Awareness	10 <sup>th</sup> Jan 2015
8	A.V.V. Sudhakar, Assoc. Professor, EEE Dept.	“ Lagrange – Relaxation for Solving Profit Based Unit Commitment” by	17 <sup>th</sup> December 2014

S.No	Name of the Coordinator	Name of the workshop/FDP	Program date (s)
9	A.V.V. Sudhakar, Assoc. Professor, EEE Dept.	“Differential Evolution for Solving Multi-Area Economic Dispatch”	18 <sup>th</sup> November 2014
10	B.Subhash	“The Use of NI – Labview in Engineering Education” , Mr. V. Sunil Kumar, Director, New Lavenir, Bangalore.	8 <sup>th</sup> October 2014
11	P.Kumaraswamy	Linux internals and Network administration	27 <sup>th</sup> sept 2014
12	K.B.V.S.R Subhramanyam, A.V.V sudhakar	“Energy Conservation For National Growth” for EEE students by .Mr. Somana Ganapathy Retd. S.E AP Transco & former Professor, NIT, Jamshedpur.	24 <sup>th</sup> September 2014
13	Dr. C. Venkatesh	“Research and Technical Paper Presentation”	2 <sup>nd</sup> September 2014
14	Dr. D. Giridhar Kumar, Divisional Manager, Turbo Machine Division, Dresser Rand Company Private Limited, Pune (Mr. S.Ugendar Assoc. Prof Mr. A.Anil Kumar Asst.Prof. are the coordinators )	“Application of Turbo machines / Rotating Equipment in Energy, Oil & Gas and other Industrial Sectors”	12 <sup>th</sup> August, 2014
15	Mr. Goutham Raj Divisional Head (Planning & IE) of MRF Tyres (Mr.B. Satish Kumar Assoc. Prof., Coordinator)	“Overview of Tyre Manufacturing Industry”	27 <sup>th</sup> July 2014
16	A.V.V Sudhakar	“Power Quality Concern And Standards”	25 <sup>th</sup> June 2014
17	Prof. Sreenivas Jayanti from IIT Chennai	“Fuel Cells in Automobile Industry”	11 <sup>th</sup> July 2014
18	AVV Sudhakar	“Power System Deregulation”	1 <sup>st</sup> July 2014
19	For All Staff Members	“Blackboard Software”	7 <sup>th</sup> June 2014
20	A.V.V Sudhakar	Faculty training on “Blackboard Learn Software” by Mr. Abu Osman, Scalable IT solutions, Hyderabad.	6 <sup>th</sup> & 7 <sup>th</sup> June 2014

S.No	Name of the Coordinator	Name of the workshop/FDP	Program date (s)
21	Dr. V.Mahesh Prof & Dean was Organizing Secretary Mr. S.Ugender Assoc. Prof., Convener:	“Next Generation Education for Entrepreneurial Engineers (ICNGE3)”	10th - 11th March 2014
22	Mr. P.Satish Kumar, Assoc. Prof and Mr.L.Radhakrishna, Asst. Prof.: Coordinators	“Robotrix”	1st & 2nd March, 2014
23	Mr. S.Ugender Assoc. Prof Mr. A.Anil Kumar Asst.Prof.: Coordinators	“Moto Entrant”	27th Feb to 1st March, 2014
24	D. Raja Babu	Transient Stability Studies of Power Systems	8th February 2014
25	Dr. C. Venkatesh	Economic Load Dispatch Studies using MiPower	28th Jan 2014
26	K.B.V.S.R Subhramanyam	Maintenance of 132kV/ 33kV Substation	22nd Jan 2014
27	A.V.V Sudhakar	Power System Deregulation in Indian Context	6th Jan 2014
28	Tirupathi R. Chandrupatla ( Dr. V. Mahesh Professor & Dean : Co-ordinator:)	“Optimization, Quality & Reliability”	23rd December 2013
29	Tirupathi R. Chandrupatla ( Dr. V. Mahesh Professor & Dean : Co-ordinator:)	“Finite Element Analysis- An Overview”	23rd December 2013
30	Dr. Syed Musthak Ahmed	Embedded Systems using Arduino	21st & 22nd December 2013
31	Dr. C. Venkatesh	MATLAB-Simulink and its Application in Electrical Engineering	21st December 2013
32	Y.Manjusree	Transmission Line Protection	19th December 2013
33	Mr. Santosh Brukade and Mr. M. Swapnil Nandgare, Engineers, Vinus Instruments Company Limited, Mumbai	“Computerized Universal Testing Machine”	11th Nov, 2013



S.No	Name of the Coordinator	Name of the workshop/FDP	Program date (s)
34	P.G. Shastry, R&D Director, Ramkey	“Outcomes - Based Engineering Education for Enhanced Employability”	6th Oct 2013
35	Mr. M. Sampath Reddy	Application Development using ARM, RASPBERRY and Texas Instruments Beagle Embedded Boards	28th & 29th September 2013
36	Dr. G.Venkateswarlu, Professor, MED, Sree Chaitanya College of Engg., Karimnagar.	Advances in Materials Technology	17th Sep. 2013
37	Dr. C. Venkatesh	Introduction to PSCAD/EMTDC	11th September 2013
38	B.Subhash	Renewable Energy Sources	23rd August 2013
39	Dr. C. Venkatesh	Advances in Power Electronics and Power Quality Issues	17 <sup>th</sup> - 29 <sup>th</sup> June 2013
40	Mr P.satish Kumar, Mr L.Radha Krishna	A two day workshop on “Autobotics”	21 <sup>st</sup> to 22 <sup>nd</sup> March, 2013
41	Mr.B.Satish Kumar, Mr Manoj Kumar	National Level Student Technical Symposium - Technotrendz-13	22nd – 23rd March, 2013
42	Mr.B.Satish Kumar	A One month training program on “Altair Hypermesh & Hyperworks Fundamentals”	16th January to 15th February, 2013
43	Dr.V.Mahesh	A one day orientation workshop on “Outcome Based Accreditation Process & Parameters”	23rd November, 2012
44	Mr P.satish Kumar	Resume Building and Interview Etiquette	29th September, 2012
45	Mr.S.Ugander, Mr D.Srikanth Rao	“Product Life Cycle Management”	13th to 14th September, 2012
46	Dr. Syed Musthak Ahmed	Emerging Trends in Electronics Hardware Design and Manufacturing Technology	27th July 2012

S.No	Name of the Coordinator	Name of the workshop/FDP	Program date (s)
47	Dr.C.V.Guru Rao R.Vijaya Prakash	"Computer Programming & Data Structures for the Engineering Colleges"(DAPO/TR4TOEC/BIET2012 dt: 06/20/2012)	Organized from 25th to 31st July , 2012
48	Mrs.C.Neelima Devi	Training on CNC –XL Turn machine	25 th - 26th June, 2012
49	Dr. V.Mahesh, Dr. P. Sammaiah,	employability skill	25th and 26th April, 2012
50	Dr. V.Mahesh, Dr. P. Sammaiah, Mr.V.Devender	Advances in Materials and Processing Technologies	3rd- 4th Feb, 2012
51	C. Venkatesh	MATLAB-Simulink and its Application in Electrical Engineering	9 <sup>th</sup> Dec., 2011
52	Manohar Gosul Asst Prof, CSE P.Kumara Swamy, Asst Prof.-CSE	‘C’ – Language	31st October 2011 to 5th November 2011
53	Dr. P. Sammaiah	“Applications of Electric Motors in NC/CNC machines”	23th October, 2011.
54	Dr. P.Sammaiah	“Welding processes and their applications ”	30th September, 2011
55	Prof. P Venugopal Rao	Faraday Memorial Lecture" on the ocassion of Engineers day	22nd September 2011
56	Mr.Y.Nagendar Asst.Professor-CSE	A One Day program on Classele – Cognizant Quiz Racer	9th September, 2011
57	Mr.S.Yugender	Project Expo – 2011	15th September, 2011
58	Mr.A.Padma Rao	An essay writing competition	18th August, 2011
59	D. Raja Babu	Contributions of Visvesvaraya	15th September 2011
60	Prof. P Venugopal Rao	Distributed Generation – Merits and Demerits	15 <sup>th</sup> August 2011
61	Mrs.C.Neelima Devi	NC/CNC machines	30th June 2011
62	A.V.V Sudhakar	Micro Grid and Distributed Generation	20 <sup>th</sup> June to 2nd July, 2011

S.No	Name of the Coordinator	Name of the workshop/FDP	Program date (s)
63	Dr. V.Mahesh, Head, Dept. Dr. P. Sammaiah, D.Srikanth Rao,	“Integrating Teaching of Mechanics, Design & Manufacturing”	18th to 22nd June, 2011
64	Dr. V.Mahesh	“Patent Based Projects”	12th May, 2011
65	A.V.V. Sudhakar	Patent Based Projects	12th May 2011
66	C. Venkatesh	MATLAB-Simulink – Programing and Simulation	2 <sup>nd</sup> to 9 <sup>th</sup> May 2011
67	C. Venkatesh	Power System Transients and Harmonics	18 <sup>th</sup> and 19 <sup>th</sup> March, 2011
68	C. Venkatesh	Technical Paper Format and Presentation Tip	03 <sup>rd</sup> March 2011
69	Dr. V.Mahesh	“Global Climate Changes” in Association with AP Pollution Control Board	30th December 2010
70	C. Venkatesh	PSCAD/EMTDC Simulation for Power Electronics Applications	10 <sup>th</sup> December 2010
71	Dr. P. Sammaiah	“Health Monitoring of Machines”	24th October, 2010
72	Dr. V.Mahesh, Head, Dept. of ME.	“Applications of Electric Motors in Robots”	16th October, 2010.
73	A.V.V. Sudhakar	AC/ DC Power Transmission	13th October 2010
74	Dr. V.Mahesh, Head, Dept. of ME.	“Recent Innovations in Automobile Engineering”	6th October 2010
75	A.V.V. Sudhakar	Innovative Ideas for Young Engineers to Pursue their Project Works” by Dr. P. Ravi Kumar, NIT, Warangal for IV EEE students	01 <sup>st</sup> Oct., 2010
76	Prof . P Venugopal Rao	Faraday's Innovations	15th sept. 2010
77	Dr. P. Sammaiah	“Solidification of Metals”,	30th August, 2010
78	Dr. P.Sammaiah, Assoc. Professor	Enhancement of Teaching Skills	11th August, 2010.
79	Dr. P.Venkateswarlu	“Basics of Heat Transfer”	4th August, 2010
80	Dr. P.Sammaiah, Assoc. Professor	“Advanced Welding Technologies”	14th July, 2010

S.No	Name of the Coordinator	Name of the workshop/FDP	Program date (s)
81	Dr. P.Sammaiah	“Engineering Graphics”	10th July 2010
82	Mr. M. Sampath Reddy Ms. S. Rohini	ARM Controllers and its Application	19 <sup>th</sup> to 23 <sup>rd</sup> May 2010
83	Dr. V.Mahesh, Coordinator Dr. G.V Praveen,	“An Overview of Research & Innovation”, organized on 1st May’ 10	1st May 2010
84	Dr. P.Sammaiah,	“Transient Thermal Analysis of a typical Steam Turbine Casing	19th March, 2010
85	Dr. A.Suresh C.Neelima Devi	“Introduction to ProE”	17th – 18th March 2010
86	Dr. V.Mahesh, Convener Mr. S. Ugender, Coordinator D.Srikanth Rao, Coordinator	“Robokriti-Nxt”	20th – 21st Feb’2010
87	Dr. A.Suresh	“Composite Materials”	6th January 2010
88	Mr. P.Sammaiah Mr. S.Sarangapani	“Micro Teaching”	27th – 28th October 2009
89	Mr.S.Sarangapani	“Application of DC Motors in Mechatronic Products”.	24th October, 2009
90	Mr.S.Sarangapani	“Applications of Heat Transfer”	15th October 2009
91	Mr.D.Srikanth Rao	“Micro Processors”	15th September, 2009.
92	Mr. A.Anil Kumar Ms. C.Neelima Devi	“Introduction to CAD Software”	3th -5th September 2009
93	Mr.S.Sarangapani	“Fundamentals of Heat Transfer”	14th August 2009
94	Mr.Srikanth Rao	“Signal Conditioning	7th August, 2009
95	Mr.S.Sarangapani	“Production planning and Control	27th July, 2009
96	Mr. P. Prasad Rao Mr. M. Sampath Reddy	VLSI & Embedded Systems	14th to 18th May 2009
97	Mr. P. Prasad Rao	VLSI Design	May-06

- **Teaching learning methods/approaches**

The college organizes programmes to encourage teachers to prepare computer aided teaching / learning materials. The college also supports the faculty by providing infrastructural support.

- **Handling new curriculum**

The College has experienced & qualified faculty to handle the new curriculum effectively. HOD conduct meetings with the faculty members and brief them about the new syllabus & devise methods to empower the teachers to handle the new syllabus.

- **Content/knowledge management.**

Faculty attends National & International seminars & workshops. They also organize seminars. Through these they interact with academicians and industry people and update their knowledge & skills.

- **Selection, development and use of enrichment materials**

The college organizes the seminars/ workshops/conferences and disseminate the practices in all the aspects of teaching and learning process. Further the faculty have been deputed as a resource persons and for presenting papers in leading national and international conferences. Orientation program is organized for newly inducted faculty by the concerned department head.

- **Assessment**

The self-appraisal report & HOD class visit reports are the major yard sticks used for the promotion of the faculty. It gives a clear picture in terms of their performance & research needs. Suggestions to improve the academic system are given by the faculties through self-appraisal report are used as a reference by the college.

- **Cross cutting issues**

Seminars and workshops are conducted where in experts from the above mentioned field are invited to share and deliver their knowledge and experience. There is different association in the organization such as Red Ribbon Club & Youth Red Cross

to sensitize and gender issues and empowerment of women and improvement of socially and economically weaker society.

The cross cutting issues like climate, gender, environment education, human rights etc. finds an ample space when it comes to applying them positively into the curriculum. The subject of environment education is a part of the college curriculum.

#### **Audio Visual Aids/multimedia.**

Our faculty have been trained to deliver content using audio visual aids and multimedia in the classroom/seminar hall. We have latest computer aided packages, as per the requirement. It includes projectors, computers, sound system etc. Faculty members are provided with computers with internet browsing facility for preparation of teaching/learning materials.

- **OER's (Open Educational Resources)**

The college provides the facility of open educational resource. Teachers are requested to develop and share their notes and teaching material with other teacher through the hard copies/soft copies and the same is also shared with the students. Complete course materials, modules, text books, videos, soft copies and any other tools, materials are used to support access to knowledge for faculty members. NPTEL, Blackboard software

- **Teaching learning material development, selection and use.**

The faculties are given free access to internet which helps them to collect learning material. The college has a well-stocked library containing books and journals of various subjects. Further the college organizes seminars and conferences which help as a learning source for the faculty. The use of audio visual devices and computers in classroom to empower the new faculties was trained by departmental senior Faculties.

#### **c) Percentage of faculty**

- Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies – 05%
- Participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies - 50%

- Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies -65%

**2.4.4. What policies/systems are in place to recharge teachers? (e.g.: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)**

SREC provides resources for all faculty and staff to pursue opportunities to develop their skills. For faculty, SREC pays for research assistance, to attend research and teaching workshops and seminars, conferences, summer support and funding for acquiring research resources. For staff, SREC pays for advanced and vocational training.

The Institution believes that the research and consultancy activities by the faculty enhance the quality of teaching. In this direction, the faculty members are encouraged to take-up research projects from public or private sector organizations. Better research facilities are provided for consultancy activities. The institution is making the best efforts to get funds from research organizations in the form of projects. A good number of faculty members are working in some latest areas of interest and taking up innovative projects works.

Presently, the institute is offering:

- Assistance by sponsoring the faculty to attend conferences / workshops /seminars (the registration fee is being paid by the college)
- Granting study leave for pursuing higher studies/to visit reputed institutions/research organizations.
- Financial support for faculty to publish in national and international.
- Faculty members are sponsored for Ph.D programme under Quality Improvement Program (QIP) and Part-Time based.
- Performance based incentives are given to the Faculty

The following are some of the initiatives taken up by the institute for enhancing the research and consultancy activities.

S. No	Activity	Expected Outcome
1.	Collaboratories / Incubation Centers: <ul style="list-style-type: none"> <li>Research Opportunities to students and Faculty beyond regular Academic Lab work</li> <li>Establishment of Microsoft Innovation Center</li> </ul>	<ul style="list-style-type: none"> <li>Better support for UG / PG programs</li> <li>Enhanced Research capabilities for faculty and student</li> <li>Improved understanding of research methodologies and approaches</li> </ul>
2.	Industry exposure: Improved Industry Interaction and collaborations with industry experts	
3.	Created good research facilities.	
4	Monetary benefits for the faculty: <ul style="list-style-type: none"> <li>Productive and promising faculty members are sent to the International conferences in their field on a fully expense paid trip.</li> <li>High amount of credit is given to those who supervise M.Tech./Ph.D. in emerging areas.</li> </ul>	<ul style="list-style-type: none"> <li>Increased opportunity to take up consultancy works</li> <li>Identification of research areas for faculty</li> <li>Improved understanding of industry trends and developments</li> </ul>

**2.4.5. Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**

SREC faculty comprises of the cream of the finest minds who are dedicated to their profession. Some faculty members are publishing their contributions at National and International level. Faculty members are being awarded for their contribution in teaching as well as research with cash and/or with additional increments.



**2.4.6. Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?**

The college has introduced evaluation of teachers by students on regular basis. These feedbacks are taken twice in a semester which mainly focuses on the various teaching skills of the faculty members, like punctuality, presentation, communication, knowledge, content covered, innovative practices, etc., Faculty research performances are discussed twice in a year in research committee meetings. If any faculty member doesn't meet the benchmark on feedback he/she is called upon and advised for future improvement. At the end of every academic year a self-appraisal form is filled by the individual faculty and the same is submitted to HOD's of respective departments. The HOD evaluates the performance of the individual faculty member and the confidential reports are forwarded to higher authority for necessary actions.

**2.5. Evaluation Process and Reforms.**

**2.5.1. How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?**

The details of the academic regulations and examination system are communicated to the students, parents and other stakeholders through various channels of communication such as the institute information hand book issued to each student, orientation program as well as through academic committees. The details of the components of evaluation are available in the hand book issued to each student. The faculty members make the students aware of the evaluation pattern and academic regulations by announcing in the classrooms.

The academic calendar issued by the examination branch has detailed information about the schedule of the internal and external examinations for the semester, which is announced before the start of the semester. The academic calendar is circulated to all the departments as well as displayed on the notice boards before the commencement of the semester.

Any changes in evaluation processes and regulations are brought to the notice of students from time to time through circulars by displaying the same on the notice boards/announcing in college website and read out in the class rooms..

### 2.5.2. What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

SR Engineering College has initiated several evaluation reforms in line with UGC/AICTE guidelines and as approved by the Academic Council of the Institute. The following are the reforms adopted by the institution; the details are available in the information hand book.

#### Examination Reforms:

S.No.	University	SR Engineering College
1	<b>Internal (Theory) Evaluation</b> For each theory course, the mid-term examination is evaluated for <b>25 marks</b> . Each mid-term examination consists of one objective paper, one essay paper and one assignment. The objective paper and the essay paper shall be for 10 marks each. The Objective paper is set with 20 bits of multiple choice, fill in the blanks and matching type of questions for a total of 10 marks. The essay paper shall contain 4 full questions (one from each unit) out of which, the student has to answer 2 questions, each carrying 5 marks. Five (5) marks are allocated for assignments. The total marks secured by the student in each mid-term examination are evaluated for 25 marks, and the average of the two mid-term examinations shall be taken as the final marks secured by each candidate.	<b>Internal (Theory) Evaluation</b> For each theory course, the internal examination is evaluated for <b>30 marks</b> . Each internal examination is evaluated for a maximum mark 30, out of which 20 marks are allotted to internal examination question paper. The internal examination question paper shall consist of Part-A and Part-B. Part-A is of objective type comprising of 10 questions of short answer type carrying each of half mark i.e., 0.5. Part-B comprising of 5 questions out of which 3 are to be answered and each question carry 5 marks. The time duration of each internal examination is 1½ hours. The balance of 10 marks in the internal evaluation shall be allotted on the basis of the percentage of attendance a student has put in. The average of the marks obtained in two internal examinations and the marks awarded for attendance will be considered to finalize the internal examination marks in that course.
2	For the subjects having design and/or drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing) and Estimation, the distribution shall be <b>15 marks</b> for day-to-day work and <b>10 marks</b> for internal tests.	The courses having design and / or drawing such as Engineering Graphics, Machine Drawing, etc., shall be evaluated on par with theory courses with due weightage of <b>05 marks</b> for day-to-day work, <b>05 marks</b> based on the percentage of attendance a student has put in and <b>20 marks</b> for internal exam.
3	<b>External (Theory) Evaluation</b> The end semesters examination will be conducted for <b>75 marks</b> which consists of two parts viz. i) Part-A for 25 marks, ii) Part –B for 50 marks for a duration of	<b>External (Theory) Evaluation</b> Each Course shall be evaluated for maximum mark of <b>70</b> and the duration of external examination will be of 3 hours. The Question paper contains two sections

	3 hours. Part-A is compulsory question which consists of ten sub-questions. The first five sub questions are from each unit and carry 2 marks each. The next five sub-questions are one from each unit and carry 3 marks each. Part-B consists of five Questions carrying 10 marks each. Each of these questions is from one unit and may contain sub-questions. For each question there will be an “either” “or” choice.	(Part-A and Part-B). Part-A: carries 20 marks comprising of 10 questions of short answer type each carrying 2 marks. Answering all questions shall be compulsory. Part-B: carries 50 marks comprising of 8 descriptive type questions out of which 5 questions shall be answered, each carrying 10 marks. Courses related to Design / Drawing will have only descriptive questions, which shall be evaluated for maximum mark of 70.
4	<b>Internal Examinations (Laboratory)</b> Out of the <b>25 marks</b> for internal evaluation, day-to-day work in the laboratory shall be evaluated for <b>15 marks</b> and internal practical examination shall be evaluated for <b>10 marks</b> conducted by the teacher concerned.	<b>Internal Examinations (Laboratory)</b> For practical courses there shall be a Continuous Internal Evaluation during the semester for <b>25 marks</b> . The evaluation of laboratory classes is divided into two major components namely, evaluation on a continuous basis for <b>20 marks</b> (Experiment (10 Marks) and Submission of Record Book (10 Marks)) and internal assessment laboratory test for <b>05 marks</b> .
5	<b>External Examinations (Laboratory)</b> The end semester examination shall be conducted with an external examiner and the laboratory teacher. The external examiner shall be appointed from the clusters of colleges which are decided by the examination branch of the University.	<b>External Examinations (Laboratory)</b> Each practical course shall be evaluated for <b>50 marks</b> . The examination shall be conducted by the concerned internal examiner, duly assigned by that department, along with an External Examiner (doctorate from reputed institute).
6	<b>Industry Oriented Mini-Project</b> There shall be an industry-oriented Mini-Project, in collaboration with an industry of their specialization, to be taken up during the vacation after III year II Semester examination. However, the mini-project and its report shall be evaluated along with the project work in <b>IV year II Semester</b> . It shall be evaluated for 50 marks. The committee consists of an external examiner, head of the department, the supervisor of the mini-project and a senior faculty member of the department. There shall be <b>no internal marks</b> for industry-oriented mini-project.	<b>Industry Oriented Mini-Project</b> There shall be an Industry Oriented Mini-Project, in collaboration with industry, to be taken up during the summer vacation after III year B.Tech II Semester examinations and shall be evaluated during the <b>IV year B.Tech I Semester</b> . The industry oriented mini project shall be submitted in the form of mini project report and presented before a Mini Project Evaluation Committee (PEC). There shall be <b>50 internal marks</b> for industry oriented mini project. The committee shall evaluate the progress of the mini-project work by conducting two (2) presentations. Each presentation shall be evaluated for <b>10 marks</b> . Mini-project report shall be evaluated for <b>20 marks</b> . A balance of <b>10 marks</b> is for continuous evaluation by supervisor.

7	<p><b>Seminar</b></p> <p>There shall be a seminar presentation in IV year II Semester. It shall be evaluated by the departmental committee consisting of head of the department, seminar supervisor and a senior faculty member. The seminar report shall be evaluated for 50 marks. There shall be no external examination for the seminar.</p>	<p><b>Technical Seminar</b></p> <p>There shall be a Technical Seminar to be presented by every student in IV year B.Tech II Semester. The student shall prepare a Seminar Report, showing his understanding of the topic, and submit it to the department. There shall be no external examination for seminar. Seminar shall be evaluated by a Seminar Evaluation Committee (SEC) consisting of the Head of the department, Seminar Supervisor and an approved panel of Internal Faculty Members to be nominated by the Head of the Department with the consent of administration. The evaluation of seminar consists of two components namely <b>Report and Presentation</b> each for 50 marks.</p>
8	<p><b>Major Project Work</b></p> <p>Out of a total of 200 marks for the project work, 50 marks shall be allotted for Internal Evaluation and 150 marks for the End Semester Examination. The evaluation of project work shall be made at the end of the IV year. The Internal Evaluation shall be on the basis of two seminars given by each student on the topic of his project.</p>	<p><b>Major Project Work</b></p> <p>The Major Project Work shall be started by the student in the beginning of the IV year I Semester. Major Project work shall be evaluated for a maximum mark of 200, out of which 50 marks shall be for Internal Evaluation and 150 marks for the External Evaluation. The External evaluation of project work shall be conducted at the end of the IV year B.Tech II Semester. The committee is to assess the progress of the major project work by conducting two (2) presentations in II-Semester by allocating 50 marks for each presentation and 50 marks for continuous evaluation by supervisor. Final Project Seminar: Together with thesis, a presentation to be made and the execution of the project work carried out should be demonstrated to the committee.</p>

### 2.5.3. How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

The institute has developed several mechanisms for the effective implementation of evaluation reforms, which are monitored by academic and examination committees and thereby the evaluation reforms are followed in the best of the spirit. The answer scripts of internal examination are shown to the students after evaluation, discrepancies/doubts, if any, will be clarified. Whenever class tests are conducted, the

results are shown to the students to encourage them or to counsel them for better future performance. Students can apply for re-evaluation/re-counting procedures for the external examinations.

**2.5.4. Provide details on the formative and summative evaluation approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

- Evaluation through seminar, group discussion, quiz, class tests, surprise tests approaches give a lot of information about student achievements after teaching a particular topic.
- The concerned faculty gets information about the students ability and plans for further improvements.
- Regular attendance fetches marks with an added advantage of improved performance in internal and external examinations.
- For smooth conducting of classes the students are grouped and each group is guided by one faculty. Faculty act as mentors and counsel student groups.

**Examples:**

- Students excelled in academics and secured university ranks. Some students have been sent to attend symposiums/workshops where students were selected based on academic performance.
- Students are appreciated by the institute for their academic excellence and incentives in the form of free text books are provided.
- Students became more regular to the classes as the evaluation system contains internal marks for good attendance.

**2.5.5. Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the students results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.**

The institution evaluates the students through two internal examinations and one external (end semester) examination per semester in each course. The attendance and marks are displayed on the notice board / website and the internal marks reports are

sent to the parents for assessment. The parents are informed through letters and over telephone (for academically weak students).

The HoDs under the guidance of the Principal monitor the students' performance during class review meetings. The HoDs along with the class coordinators counsel the students appropriately. The final marks report of the semester is sent to the Principal after evaluation in a fair and confidential manner.

The analysis of the students' results/achievements (Programme/Course wise for the last four years) will be submitted at the time of "PEER TEAM" visit.

**2.5.6. Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.**

There is complete transparency at all stages of internal assessment. The criterion adopted is as mentioned in the information hand book of the institute, which is in compliance with University. All the students are familiar about the internal assessment in both theory and laboratory courses. The average performance of the two internal exams and the weightage given to attendance will be considered for internal evaluation. After preparing the assessment report, it is submitted by the concerned teacher and the same is displayed on the notice board at the end of the session. The internal marks reports are also sent to the parents for their wards' assessment. The internal assessment is made by the faculty members keeping in mind the following aspects / factors of students' performance during the academic year:

- Class attendance
- Class assignments
- Punctuality in submitting the reports
- Score in the internal examination etc.

The complete details are mentioned in the information hand book.

**2.5.7. What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?**

The answer scripts of internal examinations are shown to the students after evaluation to bring out the discrepancies, if any, to the notice of teacher concerned, and the necessary corrections will be made.

If student is not satisfied with the marks awarded in any theory/laboratory course after bringing it to the notice of the teacher concerned, he/she may represent the same to the Controller of Examinations through the HoD concerned. All such representations are taken positively and reassessment will be made by a competent teacher, if necessary.

Further, there is a provision for re-evaluation and re-counting of the answer scripts of external examinations (theory) and is permitted on request. The candidate has to pay the requisite fee for the purpose. The Controller of Examinations coordinates with the other members of the Examination Committee and assists students in the redressal of their problems regarding conduction of examination, evaluation process and declaration of results.

The grievances of the students, if any, are communicated by the Principal of the Institute to the Registrar / Director of Evaluation / Controller of Examinations of the university and a prescribed fee, in few cases, is to be paid by the student for the purpose.

## **2.6. Student Performance and Learning Outcomes**

### **2.6.1. Does the college have clearly stated learning outcomes? If 'Yes' give details on how the students and staff are made aware of these?**

**YES.**

The college has clearly stated learning outcomes. The learning outcomes of the college are made known to the students and staff by displaying in the departments and at all prominent places of the college. All the stakeholders are involved in establishing PEOs & POs.

College conducts orientation programmes to all its faculty and students about the PEOs & POs. The POs are published at *College website* <http://www.srecwarangal.ac.in> as mandatory disclosure *Faculty Meetings* to frame and monitor as well as revise the PEOs and POs based on the feedback from the stakeholders.

The POs are published at

1. *College website* <http://www.srecwarangal.ac.in> as mandatory disclosure
2. *Syllabus books* issued at the time of enrollment.
3. *Central Notice board* displayed at length round the year.
4. *Departmental Notice Boards* displayed at length round the year.



5. *Lesson Plans* to be given by the faculty of the concerned subject.
6. *Student awareness program* to educate the importance of PEOs and POs.
7. *Student Induction Program to introduce* the concepts of PEOs and POs.
8. *Faculty Meetings* to frame and monitor as well as revise the PEOs and POs based on the feedback from the stakeholders.

**2.6.2. How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?**

The college follows the academic calendar and accordingly plans for lecture, tutorial and laboratory hours in all the theory and practical subjects.

The class time tables are prepared in such a way that the required number of hours are assigned for all the theory and practical subjects and also include the hours for association/pre-placement training/library/games and sports activities. ICT is effectively used wherever necessary to impart teaching and delivering seminars.

Tutorials are conducted regularly in analytical / design subjects. Assignments are made compulsory in all the theory subjects. Seminars are arranged by the students on advanced topics. Industrial tours are arranged to expose the students to practical pursuits. Mini projects / model making are made part of the learning.

Performance evaluation through internal and external examinations in both theory and lab.

Performance evaluation by conduct of tutorials and assignments. Performance evaluation in project work/seminars/comprehensive viva voce.

**2.6.3. What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered?**

In the introductory classes of an any course faculty make the students aware of social and economical relevance of the course. Faculty focuses on how the study of the course can be economically and socially significant by explaining the job opportunities and scope in further studies and research work in the subjects. During the course department organizes seminars/workshops/invited lectures to discuss the issues relating to impact of studying the subjects on the society.

The college conducts soft skills training programme, quantitative aptitude, verbal ability classes for students to meet the expectation of the industry/organization. The



curriculum encourages the students to do their mini project in reputed research and development organization. Students can use their innovative ideas to do their projects. Our institution has structured committees like Training and Placement Cell, R& D Committee, Cultural committee, NSS Cell, Mentor committee etc. to help students to achieve social and economic responsibilities.

Several seminars/workshops are conducted to create awareness on entrepreneurship by inviting industry experts.

#### **2.6.4. How does the institution collect and analyze data on student learning outcomes and use it for planning and overcoming barriers of learning?**

The college collects the data on learning outcomes from the stake holder's by following the procedure given below:

- Midterm and continuing evaluation comprising of assignments
- Giving unit wise objective and analytical type questions consisting of short and descriptive questions
- Exit feedback will be taken from the outgoing students every year.
- The feedback from the alumni and also from the employer is collected.
- The data pertaining to the graduates seeking higher education and involved in research is also collected.
- The feedback collected is analyzed and the necessary modifications in the curriculum and evaluation strategies are suggested to meet the desired learning outcomes

#### **2.6.5. How does the institution monitor and ensure the achievement of learning outcomes .The institution has a clearly defined, set mechanism to monitor the learning outcomes**

The principal, HOD periodically monitors the progress of the student performance. The faculty member maintains lesson plan and the topics delivered by the member in a session, along with this faculty member is also maintains a teaching diary. These are submitted to the HOD for verification. This enables the higher authorities to monitor progress of learning and to achieve further. In case of any discrepancy, corrective measures are recommended for further improvement.

Apart from this based on the participation in the class and the marks scored in the tutorials and assignments the student is judged by the staff members and appropriate

action is taken. As the lab courses are continuous assessed, students who lag in these courses are given additional help and guidance. Counseling is given to slow learners, parents of such students are called to meet their respective faculty member.

**2.6.6. What are the graduate attributes specified by the college / affiliating university?  
How does the college ensure the attainment of these by the students?**

The following graduate attributes

- i. Engineering Knowledge
- ii. Problem Analysis
- iii. Design & Development of Solutions
- iv. Investigation of Complex Problem
- v. Modern Tools Usage
- vi. Engineer and Society
- vii. Environment & Sustainability
- viii. Ethics
- ix. Individual & Team work
- x. Communication
- xi. Life long learning

The students admitted to the institution are trained in all possible ways, so that they are readily employable in the industry. This is done by way of cultivating and motivating them to improve their knowledge, presentation skills, and skills set. The students are also participating in social transformation by means of national social service (nss) scheme and others. The faculty members are constantly putting their efforts to prepare the students academically strong and to be competent with the industry. The institution strives towards achieving excellence in all the programs it offers.

Periodic contacts with alumni and discussion with old students help the institute to cope with the needs of the industry.

## **CRITERIA III**

### **RESEARCH, CONSULTANCY AND EXTENSION**

### 3.1. Promotion of Research

#### 3.1.1. Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

The institute is in the process of submitting proposals to establish recognized Research Centers in the branches of Electronics & Communication Engineering, Computer Science Engineering, Electrical and Electronics Engineering, Mechanical Engineering, Civil Engineering and Basic Sciences & Humanities to the J.N.T. University, Hyderabad.

The Institution has all the required infrastructural facilities to establish the research centres in various departments.

#### 3.1.2. Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes, The Institute has a Research Committee comprising of the following members:

S.No	Name & Designation	Role
1	Dr. V. Mahesh, Dean (Research)	Chairman
2	Dr. Syed Mustak Ahmed, Head (ECE Dept)	Member & Convener
3	Dr. G.V. Praveen, Head (CE Dept)	Member
4	Dr. Ch. Narasimham, Head (CSE Dept)	Member
5	Dr. C. Venkatesh, Head (EEE Dept)	Member
6	Dr. P. Sammaiah, Head (ME Dept)	Member
7	Dr. P.V RamanaRao, Head (H&ScDept)	Member
8	Mr. N.Suman Kumar, Head (BM)	Member

#### Functions of “College Research Committee (CRC)”:

- Create awareness among the students and faculty on the culture of research and aptitude.
- Encourage faculty to organize / participate in conferences, seminars, workshops, and faculty development programmes
- Provide adequate infrastructure and support in terms of technology and information needs.
- Facilitate timely auditing and submission of utilization certificates.
- Arrange guest lectures under Institute-Industry-Interaction programme to promote research on industry needs.

- Provide autonomy to the principal investigators as per the guidelines provided by the funding authorities.
- Maintain database of faculty involved in guiding Ph.Ds, paper publications and research projects from external funding agencies.
- Depute senior faculty to various research organizations for getting collaborative projects and adopting best practices.
- Sponsor faculty and students to present papers at National / International conferences.

### Recommendations

- Establish recognized Research Centres of the J.N.T University, Hyderabad and Other National agencies.
- Motivate the faculty to apply for research grants from different funding agencies
- Provide financial incentives to the faculty who involve in active research and in getting projects from external agencies
- Encourage faculty members to pursue Ph.D.
- Encourage faculty and students to publish/present papers in National and International journals/conferences.
- Subscribe for International / National level journals to the library and to the department.
- Organize more seminars/conferences/workshops
- Modernize the existing laboratories with additional experimental set ups / instruments and technology for utilizing the labs for research activity
- Provide budget for in-house R & D projects.

### Impact on recommendations

- The institute is in the process of submitting proposals to establish recognized Research Centers in all disciplines to the J.N.T. University, Hyderabad.
- Faculty members of various departments have obtained research grant from different government funding agencies like DST, AICTE, UGC etc.
- Number of research papers published by faculty and students in national and international journals and conferences is increasing every year.
- More number of faculty got enrolled in to Ph.D and few of them have obtained their degree

- Research oriented seminars; conferences and workshops are organized in greater number.
- Existing laboratories are strengthened with additional equipment and experimental set-ups to promote research activity in the campus.

### 3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

- **Autonomy to the principal investigator**

The principal investigators who were sanctioned projects from various organizations like AICTE, DST, UGC etc., are given full autonomy in executing their project as per the guidelines of the funding agencies and also additional resources will be provided, if required.

- **Timely availability or Release of Resources**

Institute provides all facilities and maintains timely release of project funds for successful completion of the project in time.

- **Adequate infrastructure and human resources**

All the departments have established adequate lab facilities with necessary software and computing facilities to carryout research projects. Institute has recruited senior faculty possessing Ph.D degree competent to take up and guide research projects. The central library and digital library facilities are enhanced with the availability of national and international journals, handbooks, reference books and material related to research activity.

- **Time-off, reduced teaching load, special leave etc. to teachers**

The workload of the faculty who are involved in research projects will be adjusted so that they will have enough time to spend for their project. In addition, they will be sanctioned academic leave for attending the workshops/seminars relevant to their research projects and associated works. Cash awards are introduced to faculty publishing papers in reputed journals.

- **Support in terms of technology and information needs**

The institute encourages the students and faculty to utilize the laboratories, library, computer centre and software for carrying out their research projects and also provides facility for obtaining the necessary information and technology from external sources. The institute will also procure necessary equipment for

experimental projects, subscribes to research journals, procure reference books and textbooks to strengthen the library facilities.

- **Facilitate timely auditing and submission of utilization certificate to the funding authorities**

During the execution and after completion of the project by the principal investigator, the institute arranges for auditing, assists in sending the utilization certificate to the respective funding authority.

### **3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?**

The efforts made by SREC in developing scientific temper, research culture and aptitude among students are listed below:

- Research Committees are formed at both institute and department level to promote research and consultancy activity in the institute.
- The students are encouraged to participate in various technical fests, project exhibitions and technical paper competitions.
- All the departments of the institute organize seminars, workshops and conferences to develop scientific temper among the students as well as to provide an opportunity to meet the distinguished experts of the related area.
- Project expo is conducted periodically and the best project is awarded with certificates.
- Guest lectures by eminent academicians, researchers and industrialists to create awareness among the students on research.
- Involving students in research projects currently handled by various faculty
- Collaborating with reputed universities in India and abroad to promote research culture.
- Arranging expert talks through webinars on latest technologies.

### **3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.**

- Faculty is engaged in doing research projects sponsored by various national funding agencies.

- Senior faculty registered themselves as supervisors in the panel list of different universities and are guiding research scholars.
- The faculty members are actively involved in guiding student projects at both UG and PG level. They have published papers in various national & international conferences and journals.

#### Faculty involved in funded research projects

Sl. No	Name of the faculty	Department	Title of the Research Project	Funding Agency
1	Dr. V. Mahesh	M.E.	Understanding design fixation in Indian engineering students	DST
2	Dr. R.Archana Reddy	H&Sc.	Mathematical modeling in immunology	DST
3	Dr. V. Radhika	H&Sc.	Design and development of a house hold filter cartridges for deflouridation	DST
4	Ms. S. Poornima	C.S.E.	Detecting and preventing information leakage in software for security and intellectual property protection	DST
5	Ms. V.Haripriya	H&Sc.	Synthesis and antimicrobial assay of some new derivatives of quinoxalines	DST
6	Dr. C.Venkatesh	E.E.E.	Real-time monitoring and control of electrical drives using NI Lab VIEW under MODROBS	AICTE
7	Dr. A.Subbarao	E.C.E.	Software controlled caches for embedded processors	SERB
8	Dr. G.V. Praveen	C.E.	Livelihood enhancement of women construction workers through ecofriendly construction technology application in Warangal District, Telangana	DST
9	Dr. P.Sammaiah	M.E.	Livelihood enhancement for rural women of Hasanparthy Mandal, Warangal District of Telangana through value addition to locally grown vegetables and spices by biomass based tray dryers	DST
10	Dr. V. Mahesh	M.E.	Rural Women Technology Park in Hasanparthy Mandal of Warangal district of Telangana Region, AP	DST
11	M.Sheshikala	C.S.E	Anonymization and	UGC



			Aggregation to Preserve the Privacy of Personal Data	
12	A. Devaraju	M.E.	Influence of Ultrafine Grained Structure on Mechanical Properties of Friction Stir Welded 2014 Aluminum Alloy	UGC
13	N. Praveena Devi	M.E.	Investigations to Develop Thermo Magnetic Based Heat Transport Device for Cooling of High Heat Flux Electronic Devices	UGC
14	V.Devender	M.E.	Development and Testing of Biodegradable Composites	UGC
15	J.RaviChander	E.C.E.	Distribute Localization for Wireless Sensor Networks Using Particle Swarm Optimization	UGC
16	N. Ch. Ramgopal	H&Sc.	Fully Developed Flow of Two Immiscible Micropolar and Newtonian Fluids Through Non-Porous/Porous Horizontal Circular Cylinder	UGC
17	G.SatheeshRaju	M.B.A.	A Study on Innovative Models in Engineering Education to Encourage Entrepreneurial Ideas and Nurturing Them Towards Technopreneurship	UGC
18	N. Suman Kumar	M.B.A.	New Age Media Effects on Children & Their Role in Family Purchase Decisions	UGC

#### Faculty Guiding Ph.D Scholars

S. No	Name of the faculty	Department	No. of Research Scholars	University
1	Dr. Syed Musthak Ahmed	ECE	1	JNTUH
2	Dr. Gandikota Prasad	ECE	1	JNTUK
3	Dr. T. Anil Kumar	ECE	7	JNTUH
4	Dr.C.V.Guru Rao	CSE	30	JNTUH, OU, Kakatiya University, Rayalaseema University
5	Dr.Ch.Narasimham	CSE	07	JNTUK, KL University, Bharatiar University
6	Dr. Kadampur	CSE	02	Shivaji University,

	Md.Ali			KL University
7	Dr. V. Mahesh	Mechanical Engineering	2	NIT Warangal, JNTUH
8	Dr. P. Sammaiah	Mechanical Engineering	2	ShriJagdishprasadJhabarmalTibrewala University, Rajasthan

**Faculty Pursuing Ph.D**

S.No	Name of the faculty	Department	Name of the University / Institute	Expected year of completion
1	M. Sampath Reddy	ECE	JNTU, Hyderabad	2016
2	K. Rajkumar	ECE	JNTU, Hyderabad	2016
3	S.Umamaheshwar	ECE	JNTU, Hyderabad	2016
4	P. Anuradha	ECE	JNTU, Hyderabad	2017
5	J. Ravichander	ECE	JNTU, Hyderabad	2016
6	N.Govardhan	ECE	JNTU, Hyderabad	2016
7	G. Renuka	ECE	JNTU, Hyderabad	2017
8	V. Ramakrishna	ECE	JNTU, Hyderabad	2017
9	CH. Sridevi	ECE	JNTU, Hyderabad	2016
10	A.V.V.Sudhakar	EEE	JNTU, Hyderabad	2015
11	K.B.V.S.R.Subramanyam	EEE	JNTU, Ananthapur	2015
12	D.Rajababu	EEE	JNTU, Hyderabad	2017
13	B.Subash	EEE	JNTU, Hyderabad	2017
14	Y.Manjusree	EEE	Nagarjuna University.	2017
15	E. Raju	CSE	Osmania University	2016
16	J. Bhavana	CSE	Dravidian University	2016
17	P.Kumaraswamy	CSE	JNTU, Hyderabad	2017
18	M.Sheshikala	CSE	KL University	2017
19	A. HarshaVardhan	CSE	JNTU, Hyderabad	2017
20	V.Deepika	CSE	GITAM University, Hyderabad	2018
21	A.Srinivas	CSE	KL University	2018
22	K.Srinivas	CSE	JNTU, Hyderabad	2018
23	Mr. S. Ugender	ME	JNTU, Hyderabad	2015
24	Mr. D. SrikanthRao	ME	Osmania University	2016

25	Mr. P. Sathish Kumar	ME	Kakatiya University	2016
26	Mr. B. Sathish Kumar	ME	JNTUKakinada	2016
27	Mr. V. Devender	ME	JNTU, Hyderabad	2017
28	Mrs. N. Praveena Devi	ME	Andhra University	2018
29	Mr. N. Ch. Ramgopal	Mathematics	Visvesvarya National Institute of Technology, Nagpur	2016
30	Ms. V. Haripriya	Chemistry	JNTU, Hyderabad	2016
31	Ms. N. Saroja	Chemistry	K LUniversity	2017
32	N. Suman Kumar	MBA	Kakatiya University	2015
33	D. Srinivas	MBA	Kakatiya University	2017
34	M. RajyaLaxmi	MBA	JNTU, Hyderabad	2018

**3.1.6. Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.**

The institute organizes interdisciplinary and department-wise workshops, training programmes and seminars focusing mainly on capacity building in terms of research and also to create research culture among staff and students. The number of programmes organized in each department during the last 5 years is given below.

Department	Number of programmes organized				
	2010-11	2011-12	2012-13	2013-14	2014-15
Electronics & Communication Engineering	10	8	7	9	9
Electrical & Electronics Engineering	9	6	3	8	17
Computer Science & Engineering	9	8	13	6	6
Mechanical Engineering	12	11	6	9	6
Civil Engineering	2	2	3	3	3
Humanities & Sciences	3	2	1	2	2
Business management	14	14	12	16	16
<b>Total</b>	<b>59</b>	<b>51</b>	<b>45</b>	<b>53</b>	<b>59</b>

The details of the events are given in the Respective Department Evaluation Reports.

**3.1.7 Provide details of prioritised research areas and the expertise available with the**

**institution.**

Faculty members of various departments are actively engaged in doing research in the following thrust areas.

S.No	Research Area	Name of the Faculty
<b>Department of Electronics and Communications Engineering</b>		
1	Optical MEMS and VLSI	Dr. Syed Musthak Ahmed
2	Neural Networks	Dr. Gandikota Prasad
3	Signal processing	Dr.T. Anil Kumar
4	Wireless communication	Dr.G. Krishna Murthy
5	Microwave Engg.	Dr. A. SubbaRao
6	Signal processing	M. Sampath Reddy
7	Microwave & Radar Engg.	K. Rajkumar
8	Signal processing	S. Umamaheshwar
9	VLSI & Embedded Systems	P. Anuradha
10	Wireless communication	J. Ravichander
11	VLSI	N.Govardhan
12	VLSI	G. Renuka
13	Signal processing	V. Ramakrishna
14	VLSI	CH. Sridevi
<b>Department of Electronics and Electronics Engineering</b>		
15	Power Quality Analysis & improvement, Power Electronic Converters	Dr. C. Venkatesh
16	Multi Area Operation of power systems in Deregulation	A.V.V. Sudhakar
17	Voltage and Frequency Control of an isolated Wind generating station	D. Rajababu
18	Gas insulated substations	K.B.V.S.R. Subrahmanyam
19	Smart grid and its scenario	B. Subhash
20	Multi Transmission Line Protection	Y. Manjusree
<b>Department of Computer Science and Engineering</b>		
21	SoC designs	Dr.C.V.GuruRao
22	Network Security	Dr.Ch.Narasimham
23	Data mining	Dr.Kadampurmd.Ali
24	Data mining	Dr.VijayPrakash
25	Network Security	Dr.S.P.Anand Raj
26	Web mining Techniques	E. Raju
27	Data mining	J. Bhavana
28	User Authentication Techniques	P.Kumaraswamy

29	Data mining	M.Sheshikala
30	Image processing	A. HarshaVardhan
31	Mobile ad-hoc networks	V.Deepika
32	Mobile ad-hoc networks	A.Srinivas
33	Network Security	K.Srinivas
<b>Department of Mechanical Engineering</b>		
34	Nano Fluids, Heat Transfer.	Dr. P. Venkateswalu
35	Computer Integrated Manufacturing, Scheduling, Supply Chain Management, Composites and Cognitive Sciences	Dr. V. Mahesh
36	Metal Joining Process, Coating & Solid State Welding	Dr. P. Sammaiah
37	CAD/CAM	T.VenkateswaraRao
38	Welding, study on material behavior.	S. Ugender
39	Composite Materials	D. SrikanthRao
40	Manufacturing, Characterization of Friction Stir Welded Joints for Aluminum Alloys.	P. Satish Kumar
41	Optimization and Scheduling.	B. Satish Kumar
42	Bio-Composite Materials, Graphene Materials.	V. Devender
43	Thermal Sciences.	N. Praveena Devi
44	Friction Stir Welding and Processing, Composite Materials and EDM.	Dr. A. Devaraj
<b>Department of Civil Engineering</b>		
45	Reinforced Earth	Dr.G.V.Praveen
46	Water Resource Engineering	Dr.M.Tholkapiyan
47	Multi Storeyed Structures	Dr.S.S.Phani
<b>Department of Humanities &amp; Sciences</b>		
48	Fluid Dynamic (Micro Polar & Couple Stress Fluids)	Mr. N. Ch. Ramgopal
49	Synthesis of Heterocyclic Compounds	Ms. V. Haripriya
50	Synthetic Organics Chemistry	Ms. N. Saroja
51	Mathematical Modeling in Life Sciences	Dr. R. Archana Reddy
52	Molecular Spectroscopy & Materials Science	Dr. P. V. RamanaRao
53	i) Device Materials ii) Photonics iii) Cognitive Science	Dr. P. V. Raja Shekar
54	Material Science & Nanotechnology, SSSP	Dr. E. Purushotham
55	Computational Fluid Dynamics	Dr. G. Swamy Reddy
56	Electro- Analytical Chemistry	Dr. V. Radhika Reddy
57	Synthesis of Organics Chemistry (Green-	Dr. N. Srivani

	Synthesis)	
58	Synthetic Organic Heterocyclic Chemistry (Green- Technology)	Dr. A. Vinay Chandra
<b>Department of Business Management</b>		
59	Advertising and Consumer Behavior	N. Suman Kumar
60	Retail Inventor Study	G. Surendar
61	Service Quality of Commercial Banks	D. Srinivas
62	Impact of Employee attrition in selected IT organisations.	M. RajyaLaxmi

### 3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

The college organizes various guest lectures, seminars and workshops through which the faculty and students interact with academicians and experts from industry and academia who have excelled in their relevant fields.

The following members visited the college during the last 5 years.

S.No	Name of the Resource Person and affiliation
<b>Department of Electronics and Communication Engineering</b>	
1	V. Sunil Kumar, Free Lancer, NI, Bangalore
2	Dr.T.Kishore Kumar, Assoc.Prof, NIT, Warangal
3	Dr.B.RamaSubba Reddy, Professor, SRITW Warangal
4	Mr.ShanthiSwaroop, Physiologist, Director L'avnir, Hyderabad
5	Mr.Benson, Physiologist, Director L'avnir, Hyderabad
6	Dr.Anjaneyulu, Assoc.prof, NITWarangal
7	Dr.N.Vijaya, NIT, Warangal
8	Dr.K.Padma, NIT, Warangal
9	V.Rama, NIT, Warangal
10	Dr.MithunM.Bhasakar, Lead analyst –Energy and Utilities, Msat&IEEE secretary
11	Dr.Mohd.AliKadampur, Dean,R&Ddepartment, ADCET, AshtaSangli, Maharastra
12	Mr.Mohd.Shujaddin Ahmed, Design Engineer, XilinxIndia, Hyderabad R&D center
13	Prof. Ganapati Panda, Dy.Director,IIT, Bhubaneswar
14	Dr.Amit Kumar, secretary, IEEE Hyderabad section
15	N.Venkatesh, Vice-president, Advance TechnologiesRedpine Signals Inc.Huderabad
16	Dr.P.LaxmiNarayana, NERTU,OU, Hyderabad
17	Dr.G.Rama Murthy, Assoc. Prof, IIIT, Hyderabad
18	P.Naveen Kumar, Sr.Asst. Prof, Special Officer, OU, Hyderabad
19	Mr.Mohd.Shujaddin Ahmed, Design Engineer, XilinxIndia, Hyderabad R&D center

20	Dr.A.Ramachandra, Prof.&HOD(ME), AMC Engineering College, Bangalore
<b>Department of Electrical and Electronics Engineering</b>	
21	Dr. V.T. Somasekhar, Prof., EED, NIT, Warangal
22	Dr. K. Naga Sujatha, EED, JNTUCE, Jagithyala
23	Dr. K. Uma Rao, Prof., EEE Dept., RVCE, B'lore
24	Dr. N. Viswanathan, Prof., EED, NIT, Warangal
25	Dr. S. Srinivas, EED, IIT Madras, Chennai
26	Dr. K. Siva Kumar, EED, IIT Hyderabad
27	G. Praveen, DynaFusion Technologies Pvt. Ltd., Bangalore
28	Dr. K. Vaisakh, AUCE, Vizag
29	T. Umesh, Cranes Software Intl. Ltd., B'lor.
30	Dr. Krishna Bhanu, GVP, Vizag
31	Dr. P. Satish Kumar, OUCE, Hyderabad
32	Dr. A. Jaya Laxmi, JNTUCE, Hyderabad
33	Dr. Nagalaxmi, OUCE, Hyderabad
34	Prof M. Ramamoorthy, Former Director General, CPRI, Bangalore, Presently Visiting Prof. at Osmania University, Hyderabad
35	ShriBabu Narayan, Additional Director, CPRI, Bangalore
36	Prof. M. Sydulu, Professor, EED, NIT, Warangal
37	Prof. DVSS Siva Sarma, Professor, EED, NIT, Warangal
38	Prof. Abdul Gafoor, Head, Dept. of EEE, Bapatla Engineering College, Bapatla
39	Prof. P. Venugopal Rao, Head, Dept. of EEE, SR Engineering College
40	C. Venkatesh, Dept. of EEE, SR Engineering College
41	Dr. C.V.K.Bhanu, Prof.- GVP- Vizag
42	D.M.Vinod Kumar, Prof., NIT, Warangal
43	Dr.SailajaKumari NIT, Warangal
44	Dr. R. Gnanadas, Prof., Pondicherry Engineering College
45	Dr.Sharmila, Assoc Prof., Anna University
46	MitunM.Bhaskar, NIT, Warangal
47	Dr. C.RADHAKRISHNA Former Director UGC – ASC, JNTUH,
48	SomanaGANapathy, Ret., SE AP Transco
49	V.Sunil Kumar, Director Lavenir Bangalore
50	P.Ravikumar NIT, Warangal
<b>Department of Computer Science and Engineering</b>	
51	Prof SanthoshPande, Michigan University
52	Prof. William oaks, Purdue University
53	Prof. MD.Yusuf , University of central Missouri
54	Prof.Alice Greife, University of central Missouri
55	Dr. Thammi Reddy, GITAM University
56	Prof.AliceGreife, University of central Missouri
57	PB Ranga, TCS Ltd, Hyderabad
58	Dr. S.ViswanadhaRaju, Professor in CSE and HEAD, JNTUH
59	Dr.R.Sridevi , Associate Professor, Dept.of CSE,JNTUHCEH
60	Dr. D.L.V.N.Somayajulu, Professor, Dept.of CSE, NITW
61	Dr. OBV Ramanaiah, Professor, Dept.of CSE,JNTUHCEH
62	Dr. S.Ramachandram, Professor, Dept.of CSE, OU, Hyderabad
<b>Department of Mechanical Engineering</b>	
63	Prof SanthoshPande, Michigan University



64	Prof SrinivasPalanki, University of SouthAlabama
65	Prof SanjeevKhanna, University of Missouri
66	Prof. Sridhar Condoor, Saint Louis University, USA
67	Mr. JedsonParakala, Software Engineer, IBM
68	Prof. ThirupathiChandrapatla, Profesora and Founding Chair, Rowan University, USA
69	Mr. K. Ravikanth, Software Engineer, L & T Company
70	S.S. Subramanyam, DGM-Cyient Technologies, Hyderabad
71	Mr. VenugopalBurugupally, Engineering Manager, L&T, Hyderabad
72	Dr. D. Giridhar Kumar, Engineering Manager, Dresser-Rand, Pune
73	Mr. Goutham Raj, Divisional Head (Planning & IE), MRF Tyres
74	Prof. SrinivasJayanthi, IIT Madras
75	DrP.Ravi Kumar, NIT-Warangal
76	Dr.K.Easwara Prasad, JNTU –Hyd
77	Prof. K. Prasad Rao, Department of Metallurgical and Materials Engineering IIT Madras
78	Dr.G.Madhusudanreddy, Sc'G', DMRL-Hyd
79	S. VasudevaRao, AGM (Retd), BHEL R&D, Hyderabad
<b>Department of Civil Engineering</b>	
80	Prof.G.V. Rao, IIT Delhi
81	Prof.P.V. Sivapullaiah, IISc Bangalore
82	Prof.K.V. Jaya Kumar, NIT, Warangal
84	Prof.V. Ramana Murthy, NIT, Warangal
85	Prof.Sasi, NIT, Warangal
86	Dr.S.Shankar,NIT, Warangal
<b>Department of Humanities &amp; Sciences</b>	
87	V. P. Saxena, Sagar Institute of Research & Technology Excellence, Bhopal
88	Prof. N. Ch. PattabhiRamacharyulu, Dept. of Mathematics, NIT, Warangal
89	Dr. J. V. Ramanamurthy, Dept. of Mathematics, NIT, Warangal
90	Prof. K. V. V. SheshagiriRao, KITS, Warangal
91	Prof. G.Sarojamma, Dept. of Applied Mathematics, Sri PadamavathiMahilaVisvavidyalam ,Tirupati.
92	Prof. TKV Iyengar, Dept. of Mathematics, NIT, Warangal
93	Prof. A. LeelaRatnam Dept. of Applied Mathematics, Sri PadamavathiMahilaVisvavidyalam, Tirupati
94	Prof. TKV Iyengar, Dept. of Mathematics, NIT, Warangal
95	Dr. N. Dinakar, Dept. of Physics, NIT, Warangal
96	Prof. V. RamanaRao, Dept. of Physics, NIT, Warangal
97	Dr. VN Mani, Scientist in SEIMENS
98	Prof. Rajitha, Dept. of Chemistry, NIT, Warangal
99	Prof. P .Ramchandraiah, Dept. of Chemistry, NIT, Warangal
100	Prof. Lakshma Reddy, Dept. of Chemistry, NIT, Warangal
101	Prof. M.Singaracharya, Dept. of Microbiology, Kakatiya University
102	Dr. Himabindu, Dept. of Environmental Science, JNTUH
103	Prof.G.Damodar, Dept. of English, Kakatiya University
104	Dr.SridharRaju, Psychiatrist
105	Prof.G.Damodar, Dept. of English, Kakatiya University
106	Prof. V.Srinivas, Dept. of English, Kakatiya University



107	ShantiswaroopSriramula, Dept. of Psychology, Kakatiya University
108	Benson Cheripelli, Counseling Psychologist, Kakatiya University
<b>Department of Business Management</b>	
109	Dr. P. Ramlal, Asst Professor, School of Management studies, NIT, Warangal
110	Mr. Amar Singh, Manager -HR, Intergraph consulting, Hyderabad
111	Mr. ILYAS, Area Manager - Bajaj Allianz, Warangal
112	GopuVenkatswamy, Professor, Retd. Professor, OU, Hyderabad
113	ChanduSamabasivaRao, (Ex-NASA employee), Senior Consultant, ASISTOB, Hyderabad
114	Mr. Srinivas, Assistant HR Manager, Bank of America, Hyderabad
115	MadhukarKaitha, H R Officer, HPCL, Mumbai
116	M. Gopala Krishna, Former Chairman, APSFC, Hyderabad
117	George & Jack, CMD, Global TCA, Ex-Manager Times job (South-Asia Incharge), Hyderabad
118	LokaPrabhakar, Former Executive - Indian Air Force, Hyderabad
119	Durgaprasad, CMD, an SSI at ECIL, Hyderabad
120	Ramakrishna, Territory Manager, Hindustan Unilever Ltd, Warangal
121	Krishnamachary, Professor, Dept. of Business Management, K U, Warangal
122	K. Krishna Reddy, Professor, Dept. of Business Management, K U, Warangal
123	K.V. Shastry, Retired Professor - IIM, Bangalore
124	G. Ramprasad, Senior Training Manager, SBI Life, Hyderabad
125	Amarsingh, CMD, Learning Coordinates Limited, Hyderabad
126	KeshavaRao Professor, Dept of English, NIT, Warangal
127	Dr. K.L. Srivastava, Director, Centre for social Initiative & Management, Hyderabad
128	RammohanKatla, Lead - Partnership & Training, CSIM, Hyderabad
129	Shiva Prasad Konduru, Director, Parameshwara Financial Services, Warangal, Analysis of Investment Options, 21-Jun-11.
130	Mahipal, Business Dev Manager, Reliance Mutual Fund, WarangalMutual Fund - An Investment tool, 22-Jun-11.
131	Mr. Gaurav, HR Executive, Mahindra Satyam,Hyderabad
132	M. Santosh Kumar, Finance executive, Microsoft BPO, Hyderabad
133	Prof. Prasada Reddy, Lund University, SWEDEN
134	Dr. R. Aryasri, Professor, JNTUH, Hyderabad
135	Prof. Purushotham Reddy, Construction Development Institute, Hyderabad
136	Vinayak – Executive – NSE, Hyderabad
137	Mr. Krishna Prasad, CEO – D3H Retail (ToonZ), Hyderabad
138	Mr. ShantanuGhosh, Freelancer, Alumni of IIM-Lucknow
139	Mr. Ramesh Vemuganti, Freelancer, Ex-President – Hyderabad Management Association, Hyderabad
140	Mr. BiplabHaldar, Director, Sagar Business School, Hyderabad.
141	RamchanderMaddela, Vice-president – HR, Abhijeet group, Nagpur
142	PrasanthDussa, Sycuz LLC, California, USA
143	Vijay Gunti, Rukshitha Technologies, Hyderabad
144	Pramod Reddy, Freelancer - Harvard Law Alumni Technology Management
145	Vishnu Kumar B, Securities and Exchange Board of India, Hyderabad
146	Sridhar Pabba, Manager-Sales, HDFC Limited, Warangal
147	T. Satyanarayana Chary, Telangana University, Nizamabad

148	T. SrinivasRao, HR Trainer, ITM Business School, Warangal
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### 3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

The faculty members who are pursuing their Ph.D are granted leave to carry out their research work and to meet the respective guides. Approximately 4 to 5% of faculty have availed the leave for research activities. The following faculty have availed sabbatical leave for research work.

Name of the faculty	Department	Purpose
G.V Praveen	Civil Engineering	To pursue PhD at NIT, Warangal on full time basis.
C. Venkatesh	Electrical & Electronics Engineering	To pursue PhD at NIT, Warangal on full time basis.
U. Venkanna	Computer Science and Engineering	To pursue PhD at NIT, Tiruchinapalli on full time basis.
R. Vijayprakash	Computer Science and Engineering	Academic leave for one month to carryout research work at KakatiyaUniversity, Warangal
S.P Anandaraj	Computer Science and Engineering	Academic leave for one month to carryout research work at St. Peters University, Chennai.
A.V.V Sudhakar	Electrical & Electronics Engineering	Academic leave for one week to carryout research work
D. Rajababu	Electrical & Electronics Engineering	Academic leave for one week to carryout research work
Ch.Ramgopal	Humanities & Sciences	Academic leave for three months to carryout research work
V. Haripriya	Humanities & Sciences	Academic leave for 15 days to carryout research work

The faculty who availed such encouragement given by the college have contributed to improve the quality of research in the following ways.

- Dissemination of their enhanced knowledge levels in research to their colleagues and students and also to improve teaching learning process.
- Guiding Ph.D scholars, PG & UG student projects
- Organizing conferences, workshops, seminars in the advanced technologies
- Applying for research projects from various external funding agencies.
- Contributing in obtaining eligibility status for applying Research Centre recognition by J.N.T University, Hyderabad

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).**

- The institute organizes project expo like “AVISHKAR”, “Ideation Fest”, “Weekly Innovation Challenge”, “Tinker Camp” every year to exhibit the innovative products developed by the students. This expo is open to all the students, and helps in motivating them towards research.
- The contributions made by the students and faculty are published in various journals and conference proceedings.
- The institute has introduced a unique program EPICS (Engineering Projects in Community Services) in collaboration with Purdue University, USA. Students participating in EPICS, design and build real systems to solve engineering based problems for local community service. Work done under EPICS is published in an International Conference held at Vizag and one more paper is likely to get published in American Society for Engineering Education (ASEE) conference to be held at Seattle, USA.
- The research contributions of the institute are communicated to student community through news bulletin printed by the institute.

**3.2. Resource Mobilization for Research**

**3.2.1. What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.**

The budget allocated by the institution for research is as shown in Table below.

Academic year	Research equipment	Conferences / Workshops/ Seminars	Journal subscriptions	Travel expenses	Consumables	Percentage of total institutional budget
2013-14	3,594,215	1,290,830	583,357	452,988	954,176	5.34
2012-13	3,118,621	851,511	466,005	138,602	370,588	4.69
2011-12	937,089	347,521	90,874	124,765	173,559	2.56
2010-11	1,340,943	406,744	164,564	89,672	191,080	3.89

**3.2.2. Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty**

**that has availed the facility in the last four years?**

Yes, there is a provision to provide seed money to the faculty for research. Faculty members are financially supported to attend and present research papers in the International/National conferences. Faculty members are supported with financial assistance for publication of research papers in journals.

The amount disbursed and the percentage of the faculty availed the facility in the last four years is given below:

Year	Seed Money disbursed by the institute	% of the faculty availed
2013-14	1,478,704	42 %
2012-13	990,113	34.9%
2011-12	472,286	32.5%
2010-11	496,416	31.0%

**3.2.3 What are the financial provisions made available to support student research projects?**

The departmental project committees after assessing the project proposals, recommend suitable projects for financial assistance. The students in IV/II semester are considered for the sanction of financial assistance. The institute also funds the projects developed by junior students if they are innovative.

**3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.**

The institute encourages the departments to undertake inter-disciplinary research and to organize workshops and seminars. One of the challenge faced by the institute in organizing interdisciplinary research is, most of the students are interested in doing projects and research in their native domain. The other challenge is the curriculum offered by affiliating university is not conducive for inter-disciplinary research. These challenges are overcome by several initiatives like organizing workshops, guest lectures and arranging interdisciplinary seminars on the current issues in electronics, computers, mechanical, electrical & civil.

The institute has organized following workshops to encourage inter-disciplinary research among faculty and students.

1. IEEE student branch of the institute organizes **RSPAC** (Regional Students Professional Awareness Congress) every year to network the students with

industry and academia experts. The faculty and students of various departments interact each other and discuss on scope for inter-disciplinary research.

2. Faculty in charge of IEEE section has organized **Section Students Congress** (SSC) and **Leaders Congress** (LC) for the students to enhance their skills and technical update.
3. The institute organizes **Robotics Workshop** every year. Students of various departments take part in this workshop and develop different kind of Robots which need inter-disciplinary knowledge.
4. IUCEE chapter of the institute organizes workshops in association with Student Platform for Engineering Education Development (SPEED) every year to encourage inter-disciplinary activities among students.
5. Professional chapters of the institute organizes number of technical activities of inter-disciplinary nature every year
6. Institute organizes a national level technical fest “TECHNOTRENDZ” every year for student paper presentations.

### 3.2.5. How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- Basic research facilities are available in all departments. Each department has relevant infrastructure and instruments for basic research work.
- Wi-Fi facility is available in the campus to help faculty and students review their academic as well as research programs.
- Students are facilitated to use the equipment, NPTEL, books, Journals, Magazines even beyond the college timings and also during summer vacations.

Utilization of various equipment and research facilities are ensured by:

- Maintaining Logbooks and usage registers.
- The Departmental Research Committee monitors the research activities and keeps track of the usage of the various resources and facilities for research.
- Number of training programmes offered by the departments using the research facilities.

### 3.2.6. Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If ‘yes’ give details.

Yes, the institution has received special grants from funding agencies for developing research facilities. The details are tabulated below.

S. No	Title of the Project	Funding agency	Amount sanctioned (In Lakhs)
1	Funds for Improvement of Science & Technology (FIST)	DST	14.00
2	MODROBS	AICTE	12.40

**3.2.7. Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organisations. Provide details of ongoing and completed projects and grants received during the last four years.**

Faculty members are financially supported to attend various workshops and conferences, which are being organized by reputed organizations. The institute organizes in-house research orientation programmes to motivate the faculty towards research. They are encouraged to apply for funded research projects.

The details of ongoing research projects are provided below.

Nature of Investigator	Duration Year		Title of the Project	Name of the funding agency	Total Grant		Total Grant received till date
	From	To			Sanctioned	Received	
Major Projects							
Dr. V. Mahesh	2012	2015	Understanding design fixation in Indian engineering students	DST	4,930,000	3,821,600	3,821,600
Dr. R.Archana Reddy	2012	2015	Mathematical modeling in immunology	DST	2,160,000	2,030,000	2,030,000
Dr. V. Radhika	2012	2015	Design and development of a house hold filter cartridges for deflouridation	DST	2,310,000	2,120,000	2,120,000
Ms.S. Poornima	2012	2015	Detecting and preventing information leakage in software for security and intellectual property protection	DST	2,055,000	1,935,000	1,935,000
Ms. V.Haripriya	2012	2015	Synthesis and antimicrobial assay of some new derivatives of	DST	1,608,000	1,463,000	1,463,000

			quinoxalines				
Dr. C.Venkatesh	2013	2014	Real-time monitoring and control of electrical drives using NI LabVIEW under MODROBS	AICTE	1,550,000	1,240,000	1,240,000
Dr. A.Subbarao	2014	2017	Software controlled caches for embedded processors	SERB	2,350,000	1,676,000	1,676,000
Dr. G.V. Praveen	2014	2017	Livelihood enhancement of women construction workers through ecofriendly construction technology application in Warangal District, Telangana	DST	Waiting for financial grant	---	---
Dr. P.Sammaiah	2014	2017	Livelihood enhancement for rural women of HasanparthyMandal, Warangal District of Telangana through value addition to locally grown vegetables and spices by biomass based tray dryers	DST	Waiting for financial grant	---	---
SR Engineering College	2014	2019	Funds for Improvement of Science and Technology Infrastructure(FIST)	DST	15,00,000	14,00,000	14,00,000
Dr. V. Mahesh	2015	2018	Rural Women Technology Park in HasanparthyMandal of Warangal district of Telangana Region, Andhra Pradesh	DST	Waiting for financial grant	---	---
<b>Minor Projects</b>							
M.Sheshikala	2015	2017	Anonymization and Aggregation to Preserve the Privacy of Personal Data	UGC	60,000	45,000	45,000
A. Devaraju	2015	2017	Influence of Ultrafine Grained Structure on	UGC	240,000	180,000	180,000

			Mechanical Properties of Friction Stir Welded 2014 Aluminum Alloy				
N. Praveena Devi	2015	2017	Investigations to Develop Thermo Magnetic Based Heat Transport Device for Cooling of High Heat Flux Electronic Devices	UGC	450,000	425,000	425,000
V.Devender	2015	2017	Development and Testing of Biodegradable Composites	UGC	295,000	207,500	207,500
J.Ravi Chander	2015	2017	Distribute Localization for Wireless Sensor Networks Using Particle Swarm Optimization	UGC	440,000	395,000	395,000
N. Ch. Ramgopal	2015	2017	Fully Developed Flow of Two Immiscible Micropolar and Newtonian Fluids Through Non-Porous/Porous Horizontal Circular Cylinder	UGC	Waiting for financial grant	215,000	175,000
G.Satheesh Raju	2015	2017	A Study on Innovative Models in Engineering Education to Encourage Entrepreneurial Ideas and Nurturing Them Towards Technopreneurship	UGC	Waiting for financial grant	100,000	65,000
N. Suman Kumar	2015	2017	New Age Media Effects on Children & Their Role in Family Purchase Decisions	UGC	Waiting for financial grant	80,000	55,000

### List of Sponsored Programmes

Sl. No.	Name of the Faculty/ Coordinator	Title	Scheme	Agency	Date
1	A.V.V. Sudhakar	Micro Grid and Distributed Generation	Two weeks SDP	AICTE	20 <sup>th</sup> June to 2 <sup>nd</sup> July, 2011
2	Dr.P.Sammaiah	Advances in Materials and Processing Technologies	Two Day Workshop	DST	3 <sup>rd</sup> & 4 <sup>th</sup> February, 2012



3	A.V.V. Sudhakar	Emerging Trends in Renewable Energy & Its Applications	Two Day National Conference	DST	18 <sup>th</sup> & 19 <sup>th</sup> January, 2013
4	Dr.C.Venkatesh	Advances in Power Electronics and Power Quality Issues	Two weeks FDP	AICTE	17 <sup>th</sup> to 29 <sup>th</sup> June, 2013
5	Dr.T. Anil Kumar	IEEE International Conference on Signal and Image Processing Applications, 8-10 October, 2013, Malaysia	International Travel Grant	UGC	8 <sup>th</sup> to 10 <sup>th</sup> October, 2013
6	Dr.T. Anil Kumar	International Conference on "Recent Advances in Communication, VLSI & Embedded Systems" (SB/SS/1481/13-14, Dated:10/03/2014)	Two Day International Conference	DST	19 <sup>th</sup> & 20 <sup>th</sup> December, 2014

### 3.3. Infrastructure for Research (Research Facilities)

#### 3.3.1 What are the research facilities available to the students and research scholars within the campus?

- College has an exclusive R & D Cell with required computational facilities.
- A central computer center (Jawahar Knowledge Centre) with internet facility is provided to all the students
- A digital library provides access to number of e-journals
- The central library provides printed journals, reference material and thus supports the research work of students and faculty
- The equipment, machinery and software available in the laboratories are used for research in the new and emerging areas.
- Library is kept open till 8.00pm and laboratories are kept open beyond working hours to complete their projects or research work.

#### 3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

- The Departmental Research Committees identifies the thrust areas of research.
- Institute makes budget allocation every year to enhance the research facilities for

procuring advanced equipment in laboratories and to enhance the R & D activities in the emerging areas.

- Faculty members are motivated to apply research projects for possible funding from government agencies like AICTE, DST, UGC etc., under various schemes like Major Projects, Minor Projects, FIST, MODROBS, Research Promotion Scheme (RPS) etc., mainly to establish research facilities.
- Encouraging faculty and students to attend research programmes, workshops, seminars, and conferences conducted in the Institute and at other organizations. Institute provides registration fee, conveyance, on-duty leave for attending such programmes.
- Encourage faculty members to organize research workshops, seminars, Conferences, with funding internally and from funding agencies like AICTE/UGC/DST etc.

**3.3.3. Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments/ facilities created during the last four years.**

Yes, as mentioned in 3.2.6, the institution has received special grants from funding agencies for developing research facilities. The details of the facilities created are tabulated below.

S. No	Title of the Project	Funding agency	Amount sanctioned (In Lakhs)	Facilities created
1	Funds for Improvement of Science & Technology (FIST)	DST	14.00	<p><b><u>Dept. of ECE:</u></b></p> <ul style="list-style-type: none"> <li>• Lab View Software</li> </ul> <p><b><u>Dept. of EEE:</u></b></p> <ul style="list-style-type: none"> <li>• Solar Flat Plate Thermo syphon water heating system.</li> <li>• Solar based 1-phase AC generator module</li> </ul> <p><b><u>Dept. of CSE:</u></b></p> <ul style="list-style-type: none"> <li>• Dual Core Computers (Intel 3<sup>rd</sup> generation, 2GB DDR3 RAM, 500GB HDD, 18.5" LED Monitor) with NVIDIA graphics card</li> </ul> <p><b><u>Dept. of ME:</u></b></p> <ul style="list-style-type: none"> <li>• Proprietary 3D Simulation Software "FLEXSIM"</li> </ul>
2	MODROBS	AICTE	14.40	NI Multisim Education Edition with NI ELVIS

### 3.3.4. What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

The institute encourages the students to carry out their projects in public sector research organizations and private industries such as

<ul style="list-style-type: none"> <li>• INFOSYS Campus Connect</li> <li>• CISCO Networking Academy</li> <li>• MICROSOFT I-Spark Center</li> <li>• IBM center of Excellence</li> <li>• ICICI – “Online Banking Certification Course”</li> <li>• BSNL, Hyderabad</li> <li>• NTPC, Ramagundam</li> <li>• BHEL, Hyderabad</li> <li>• CITD, Hyderabad</li> <li>• Ashok Leyland, Chennai</li> <li>• Sona Power Steering Ltd., Chennai</li> <li>• Vizag Steel Plant, Visakapatnam</li> <li>• K.T.P.S., Paloncha</li> <li>• Cranes Software Ltd., Bangalore</li> <li>• ANSYS R&amp;D Centre, Hyderabad</li> <li>• Surya Industries, Industrial Estate, Warangal</li> <li>• A.G.I. Glass Pac, Hyderabad</li> </ul>	<ul style="list-style-type: none"> <li>• ECIL, Hyderabad</li> <li>• MTS Technologies Pvt. Ltd., Hyderabad</li> <li>• Delegate Technologies Pvt. Ltd, Hyderabad</li> <li>• Diesel Loco Shed, Kazipet</li> <li>• UTL Technologies Pvt. Ltd., Hyderabad</li> <li>• Spriha IT Solutions, Hyderabad</li> <li>• Indian Service Machine, Bangalore</li> <li>• Bilt Graphic Paper Product Ltd, Kamalapuram</li> <li>• Tata Motors Warangal</li> <li>• Scientific Engineering House, Industrial Estate, Hyderabad</li> <li>• NEDCAP, Warangal</li> <li>• Sralax Systems, Hyderabad</li> </ul>
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### 3.3.5. Provide details on the library/ information resource centre or any other facilities available

In addition to the central library, every department has a departmental library, well stocked with books on state of the art technologies and new frontiers of research. Books are regularly procured for the libraries and e-journals are subscribed regularly.

Working hours of central library: 8.00 AM to 8.00 PM

Sundays and Holidays: 10.00 AM to 4.00 PM

Books		Journals		
Titles	Volumes	National Journals	International Journals	E-Journals
7,565	39,260	51	40	275

<b>Digital Library</b>	
Online Journals	275
Membership	Elsevier
Internet Bandwidth	30 MBPS
Lecture Notes/Videos	NPTEL- IIT Lecture Notes/Videos AP SONET Lecture Notes/Videos INFOSYS Lecture Notes IUCEE Webinar videos JNTUH – eLSDM DELNET

**3.3.6. What are the collaborative research facilities developed / created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.**

Efforts are being made to have collaborative research facilities in the college campus as per the curriculum of SR Engineering College. The following infrastructure exists in the college, which can be utilized effectively by the faculty and students time to time.

- Infosys Campus Connect
- Microsoft Innovation Centre
- ORACLE Academy Partner
- IBM Centre of Excellence
- CISCO Network Academy

**3.4. Research Publications and Awards**

**3.4.1 Highlight the major research achievements of the staff and students in terms of**

- Patents obtained and filed (process and product) -
- Original research contributing to product improvement

The following products and services are developed by faculty and students of the institute.

- Dr.V.Mahesh, Professor in Department of Mechanical Engineering has designed

and developed a 1. *Field Pull-out testing unit for reinforced earth technology* and 2. *Shaking Table for testing Model Reinforced Earth wall*. The equipment was developed for a research work at Department of Civil Engineering, N.I.T, Warangal. They are tested on field and are working satisfactorily.



Figure: Field Pull-out testing unit for Reinforced Earth Technology



Figure: Shaking Table for testing Model Reinforced Earth wall

- Students of Mechanical engineering developed a Portable Line Boring Machine.
- Cost Effective Bike, AeroSolar Car and Residential Wind Mill are the other products developed by students.
- [www.merawarangal.in](http://www.merawarangal.in) and [www.examdunia.in](http://www.examdunia.in) are the two websites created by the students of SR Engineering College to help the society and student community.
- Research studies or surveys benefiting the community or improving the services  
Research studies benefiting the community or improving the services are made and following publications are the result.
- A **RuaralWomen Technology Park** is sanctioned to the institute to empower women of the surrounding villages. They will be trained in the areas of Weaving and Handloom Sector, Metal Art Ware, Banana Fiber Extraction, Agro and Forest based Processing Technologies. The project is sponsored by Department of Science & Technology, New Delhi.
- **Dr. G.V Praveen**, Department of Civil engineering is working on the project “Livelihood enhancement of women construction workers through ecofriendly

construction technology application in Warangal District, Telangana” to benefit the community in Warangal district.

- **Dr. Radhika**, Department of H&Sc is working on a project “*Design and Development of House Hold Filter Cartridges for Defluoridation*” to benefit the community in the neighbouring villages of the institute. The project is sponsored by Department of Science & Technology, New Delhi.
- **Dr. P.Sammaiah**, Department of Mechanical engineering is working for the project “*Livelihood enhancement for rural women of Hasanparthy Mandal, Warangal District of Telangana through value addition to locally grown vegetables and spices by biomass based tray dryers*”
- **Research inputs contributing to new initiatives and social development**  
SREC has initiated a unique program, Engineering Projects in Community Services (EPICS) in which teams of undergraduates are designing, building, and deploying real systems to solve engineering-based problems for local community service and education organizations. S. R. Engineering College has made a Memorandum of Understanding with Purdue University from the academic year 2014 – 15.



Prof. William Oakes, Director, EPICS, Purdue University, USA visited SREC and addressed students during a Two Day Workshop on Engineering Projects in Community Services (EPICS).

**3.4.2. Does the Institute publish or partner in publication of research journal(s)? If ‘yes’, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

Yes, The institute has plans to publish two research journals from the academic year 2015-16 onwards. Two titles are identified (i) SRJournal of Entrepreneurship and Management and (ii) SR Journal of Engineering and Technology.

### 3.4.3 Give details of publications by the faculty and students:

- Publication per faculty
- Number of papers published by faculty and students in peer reviewed journals (national / international)
- Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database- International Social Sciences Directory, EBSCO host, etc.)
- Monographs
- Chapter in Books
- Books Edited
- Books with ISBN/ISSN numbers with details of publishers
- Citation Index
- SNIP
- SJR
- Impact factor
- h-index

S.No	Activity	During			
		2014-15 Till Date	2013-14	2012-13	2011-12
1	Publication per faculty	--	0.86	0.85	0.62
2	Number of papers published by faculty and students	64	81	67	48
3	Number of publications listed in International Database	95	124	106	58
6	Books Edited	2	1	1	-
7	Books with ISBN/ISSN numbers with details of publishers	3	2	1	-

The details of ISBN/ISSN, Impact Factor and International Database Reference are available in the respective departments.



**3.4.4 Provide details (if any) of**

- research awards received by the faculty
- recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally
- Incentives given to faculty for receiving state, national and international recognitions for research contributions.

**Research Awards received by the faculty**

- **Dr. G.V Praveen** received **IGS-Shri R. N. Prasad Biennial Prize** for the best paper on “Slope Stability and Land Slides” for year 2007-08 by **Indian Geotechnical Society**, New Delhi.
- **Dr. C.V Guru Rao** and **Dr. Syed Musthak Ahmed** were recognized as **Evaluators** for National Board of Accreditation, New Delhi
- **Dr. V.Mahesh& Dr. C.Venkatesh**were recognized as **Master Trainers** of New accreditation process by National Board of Accreditation, New Delhi
- **Dr. G.V Praveen** received **Best Paper** award in the 1<sup>st</sup>International Conference on Next Generation Education for Entrepreneurial Engineers (ICNGE3) organized by SREC, Warangal
- **Dr. C.Venkatesh& Mr. B.Subash**received **Best Paper** award in the 1<sup>st</sup> International Conference on Next Generation Education for Entrepreneurial Engineers (ICNGE3) organized by SREC, Warangal
- **Dr. V.Mahesh, Chaired** a session in 2<sup>nd</sup> ICTIEE 2015, BMS College of Engineering, Bangalore
- **Dr. Syed Musthak Ahmed** received **Life time achievement award** in 2012 for his contribution to community for social service by Wakf Board
- **Dr. Syed Musthak Ahmed**, Student activities Chairman (SAC), IEEE Hyderabad section for academic year 2012, 2013
- **Dr. Syed Musthak Ahmed**, Section Executive Member(SEC), IEEE Hyderabad section for academic year 2012, 2013
- **Dr. Syed Musthak Ahmed**,Vice Chairman, IEEE Education Society Chapter, IEEE Hyderabad Section for the academic year 2015
- **Dr. Syed Musthak Ahmed**,Indian Examiner for Ph.D scholars at Dr. M.G.R. University and Anna University, Chennai.
- **Dr. Syed Musthak Ahmed**,Co-chair for SIESCON11 conference, Dr. M.G.R.



University, Chennai.

- **K.B.V.S.R. Subrahmanyam** received **Best paper award** by ICEEE-11, Nagpur
- **Mr. S.Ugnder**, received **Best paper award** by *ICARME - 2013*

### 3.5 . Consultancy

#### 3.5.1 Give details of the systems and strategies for establishing institute-Industry interface?

The *Industry-Institute Partnership Cell* (IIPC) of the college is a dedicated cell working towards, to promote the close interaction with Industry and various departments of the institute, to train and develop the right kind of technical manpower necessary to sustain and promote industrial and economic growth.

##### *Mission of IIPC*

- Forge industry and professional body alliances to accomplish technology transfer and meet societal needs.
- To develop linkages with world-class R&D organizations and educational institutions in India and abroad for excellence in teaching, research and consultancy practices.
- To arrange industry visits and industrial trainings for the faculty and students

##### • *IIPC Objectives*

- Organizing workshops, conferences and symposia with joint participation of the academicians and the industries.
- Inviting industry experts to contribute in curriculum development in line with current industry requirements.
- To provide technical and non-technical consultancy services and training to industries particularly small scale & rural industries.
- Deputing faculty to industry for study and discussions or delivering lectures on subjects of mutual interest.
- To develop the Innovative Products
- Setting up of technology parks in collaboration with alumni and industry for cost effective opportunity for R&D leading to marketable products.
- Organizing the Industry Institute Interaction meets & Trade fairs
- Sending the students for Internships

Some of the events organized and activities undertaken by IIPC are listed below.

1. Guest Lecture By Sri. Subramanya Sastry DGM Infotech-Hyderabad
2. Guest Lecture by Sri Goutam Raj, MRF Industries, Sadasivapet-Hyderabad
3. Mr.Lachiram Nayak Sr DME Diesel Loco shed-Kazipet
4. Addressing Final year EEE students About Engineering Services Exams and Career opportunities In Indian Railways
5. Expert Lecture on Energy Conservation for Natural Growth by Sri.Somana Ganapathi Rtd SE of APGENCO
6. AAVISHKAAR-14,an Innovative Product Expo
7. Awareness Program On Core Engineering Streams-Employment Opportunities for EAMCET-2014 Aspirants
8. Prepared the Industry Database with Career Opportunities-It consists around 900 companies data with product details etc.
9. Sending the students for Internships' to the Reputed Industries like Mahindra & Mahindra,BHEL,KTPC,IVRCL etc
10. Organized the Industry Institute Interaction meet on 13.12.2014 with Experts from MECH,CIVIL, MBA related Industries & 31.01.2015 with experts from CSE,ECE, EEE related Industries experts.



**Industry Institute Interaction meet**

**3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?**

- Faculty is encouraged to take up consultancy and R&D assignments.
- Major areas of expertise are advertised through department homepage in the institute website, institute news bulletin and also through technical events/programmes.
- Interaction during workshops, seminars, guest lectures help the faculty to interact with external experts and thus their expertise is publicized.
- The faculty shall undertake consultancy  
When the College is approached for such help and the College assigns such engagement to the particular faculty or  
When the faculty himself/herself is approached by the outside agency for such help.
- In either case, the faculty shall take up the assignment by obtaining the approval of the Principal/Secretary in writing.

**3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

- By reducing the workload of faculty involved in major consultancy works
- By sponsoring the faculty to attend important workshops and seminars arranged by the leading technology consultants in relevant fields.
- Offering monetary benefits to faculty involved in consultancy as per the college policy.
- Faculty members are permitted to utilize the infrastructure and lab facilities for experimentation and use software for solving and analyzing their consultancy projects.

**3.5.4. List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.**

The consultancy was provided by the college faculty only on the gratuitous basis and no revenue is generated from the same.

**3.5.5. What is the policy of the institution in sharing the income generated through consultancy (staff involved: institution) and its use for institutional development?**

As stated in the previous point 3.5.4, the consultancy was provided by the college only on the gratuitous basis and no revenue was generated from the same.

However, if any income is generated by the staff through consultancy, it will be shared by the staff and institute in the ratio of 80:20. The money thus generated by the institute is used for development of research facilities in consultation with the concerned staff and department head.

**3.6. Extension Activities Institutional Social Responsibility (ISR) and Extension Activities****3.6.1 How does the institution promote institution-neighborhood community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?**

The institute promotes neighborhood community network by initiating the community development activities through its **National Service Scheme (NSS) Unit**. The NSS unit of the institute inculcates the spirit of service in the students mind by conducting various programmes like tree plantation, blood donation camps etc. The students of various departments form social service groups and take up service activities independently with the guidance of the faculty.

The recent major NSS activities are

- Program on personality development by lead India 2020 for school students of Upper Primary School, Ananthasagar.
- Program on computer education for school students of Upper Primary School, Ananthasagar.
- Awareness about Higher education to the students of UPS school, Jayagiri Village
- Awareness of environment and Prohibition of Plastic, Polythene covers at UPS, Jayagiri Village.
- Conducted an Elocution contest and Cultural activities at UPS Jayagiri Village.
- Donated School stationery to students of UPS Jayagiri Village.
- Tree plantation held at adopted village, Ananthasagar

- NSS camp on Swatch Bharath.
- Social assistance to Blind School children on many occasions
- Donated School Bags, Benches to students of Ananthasagar Village.
- Organized Blood donation camps at SREC in collaboration with Red Cross Society and Lions Club, Warangal
- Awareness programme on Nutrition and Healthy diet, Fitness (Yoga)
- Organized Health Checkup – Medical Camp by a Pediatrician Dr. P.Surender Reddy for the children of Ananthasagar village.
- Awareness programme and a Magic show on Superstitions by State Scientific Student Federation President.
- Awareness programme on HIV-AIDS
- Took out a Rally on Prohibition of Liquor
- Ethical Voting – An Awareness programme
- Election contest on Role of a Student in Building Healthy Society
- Clean & Green Programme
- Training on English by NSS Volunteers to UPS School children During NSS Special camp
- SR Engineering college NSS UNIT Offered MID Day Meals to UPS School children



**Distribution of School Bags to students of UPS Ananthasagar village**

### **3.6.2. What is the institutional mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?**

Institute has a faculty coordinator for NSS activities, who records the students' involvement in various social activities. Extra-curricular activities, EPICS programme

and value education provide avenues to students to become aware of the social environment, the social evils, citizen responsibility and individual contribution to make the society a better place to live.

The institute is committed to attract students for participating in various social activities by ensuring consistent encouragement and motivation through number of NSS activities.

Civil Engineering students of SREC have done a project on “Waste Management” and provided suggestions to Municipal Commissioner, Warangal and he appreciated the contributions made by them.

Students of SREC volunteered to monitor General Elections through Webcasting.

### **3.6.3. How does the institution solicit stakeholder's perception on the overall performance and quality of the institution?**

Institute solicits both internal (governing body members, faculty, students etc.) and external (Parents, Alumni, Employers, public, or private sectors) stakeholders perception on the overall performance and quality of the institute.

- The external stakeholders are invited to visit the campus and visually inspect its infrastructural facilities, interact with the members of faculty to obtain necessary information on the overall performance and quality of the institute.
- A SWOT analysis is conducted periodically
- Parent-Teachers meeting are conducted to know about academic performance and quality of their wards and to provide constructive suggestions to improve the overall performance and quality of their wards and quality of institution.
- Periodically performance reports are being sent to the stakeholders through letters.
- The college takes exit feedback from recruiters during campus placement and utilizes them to hone up the skills of the students.
- A student can communicate his/her requirements and problems to the respective faculty/ head of department/ Principal directly or through the class representative
- Suggestion / Complaint box is placed at various places on the campus which are accessible to students.
- Students have the freedom to approach the Principal during working hours
- Regular faculty and staff meetings to keep them updated about changes and



developments of the institute.

- The Alumni meets are held regularly and any alumnus is free to give their suggestions for the overall improvement of the institute.

**3.6.4 How does the Institution plan and organize its extension and outreach programmes? Providing the budgetary details for last 4 years, list the major extension and outreach programmes and their impact on the overall development of students.**

The institute is sensitizing the students and faculty on institutional social responsibilities through National Services Scheme (NSS) as mentioned in 3.6.1. The details of the budget provided for the last 4 years towards outreach programmes is given below.



Donation of School Stationary Awareness on Higher Education to the Students of UP School, Ananthasagar Village

**3.6.6 Give details on social surveys, research or extension work (If any) undertaking by college to ensure social justice and empower students from underprivileged and vulnerable sections of society.**

The institute has made a conscious effort to promote social justice as a value in learning process. The institution is making sincere efforts to empower students from under privileged communities through following activities.

- Institute offers opportunities for personality development through training and placement cell.
- The college NSS unit has been organizing society welfare functions every semester. NSS training prepares students morally and ethically strong enough to face challenges and emergencies in day-to-day life.
- Social assistance to Blind School children on many occasions

**3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the College, comment on how they complement students' academic learning experience and specify the values and skills inculcated?**

- Participation in various socially relevant activities have resulted in inculcating the feeling of being socially awakened citizens in the students.
- The students who have been a part of this process have been spreading awareness in the institution and motivating other students as well to stand for the cause of social upliftment.
- Extension activities complement students academic learning experience and inculcated the values and skills.
- Professional society activities helped improve
  - Networking
  - Leadership qualities
  - Entrepreneurship development
  - Communication skills
  - Placement and higher studies
- NSS programme gives value in:
  - Leadership qualities
  - Health and hygiene
  - National Integration
  - Social service ecology
  - Environmental protection
  - Improved discipline.

**3.6.8 How does the College ensure the involvement of the community in its outreach activities and contribute to the community development? Detail the initiatives of the College, which have encouraged community participation in its activities.**

The institution is roping in communities to actively participate in all the extension activities. This has contributed to both community-institution networking and development.

The institution has established a Women Technology Park (WTP). The objective of WTP is to empower women in the society by providing training in the following areas:

- Metal Art Works



- Banana Fibre Extraction
- Weaving Technology

The women from the neighbouring villages viz., Hasanparthy, Ananthasagar, Pembrathy and Bachannapet get benefit from these training programmes and they become self employable.

**3.6.9 Give details on the constructive relationships (if any) with other institutions in the nearby locality in working on various outreach and extension activities.**

The institution has constructive relationships with other organizations and institutions of the locality. The blood donation camps are organized with the help of Red Cross Society, Lions Club, Warangal.

The institute has established Women Technology Park to organize various outreach and extension activities. It has constructive relationship with *Hasanparthy Handloom Weavers Co-operative Production and Sales Society, Hasanparthy, Warangal* and *Vishwakarma Brass, Copper and Silver Industrial Cooperative Society Ltd, Pembrathy, Warangal* to organize training programmes to empower women in the neighbouring villages.

**3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

The institute received an award from Andhra Pradesh State Branch of Indian Red Cross Society in appreciation of service rendered in Mobilizing Blood Donor Motivation during the year 2012-13.



Certificate of Merit awarded to **J.Ravi Chandra**, NSS P.O., SR Engineering College, Ananthasagar, Warangal by Sri. Ponnala Lakshmaiah, Hon'ble Minister for IT & C on the eve of Independence Day 15<sup>th</sup> August 2013

### 3.7. Collaboration

#### 3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

The IIPC of the institute organizes interactive sessions with experts of industry and other research organizations. All the departments interact regularly with the research laboratories and industry experts and the following benefits are accrued through such initiatives.

- Collaboration with industries and external research laboratories results in student industrial visits, summer internships and student projects.
- Collaboration with CISCO, IBM, Infosys, Oracle, Microsoft and other industries helps in conducting placement training programmes, personality development and other soft skills.
- Deputing faculty members for exposure to industrial practices
- Guest lectures by industry experts on state of art technologies.
- Number of webinars by foreign professors are organized through Indo-US Collaboration for Engineering Education (IUCEE)
- MOUs with US universities helps the faculty to interact with the professors in those universities and can obtain guidance in research activities.
- The institute collaborates with reputed institutes like NITs and IITs by inviting professors to provide expert talks to both students and faculty on latest technologies.

#### 3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

The institute has signed MoU with various institutions and industries to conduct activities like training, placement, development of training facilities for students, guest lectures, participation in technical events and advanced learning.

##### MoUs with the International Universities

1. Wayne State University, Detroit, Michigan, USA
2. University of Missouri, USA
3. University of PURDUE, USA

4. Idaho State University, Idaho, USA
5. University of South Alabama, USA
6. Saint Louis University, USA
7. Umass, Lowell, USA
8. University of Central Missouri, USA
9. Institut Supérieur D'Electronique De Paris (ISEP), Catholic University of Paris, France
10. Indo-US Collaboration for Engineering Education (IUCEE)
11. Student Platform for Engineering Education Development (SPEED)

#### **MoUs with the industries**

1. Oracle India Private Limited, Gurgaon
2. Infosys Ltd, Electronic City, Hosur Road, Bangalore
3. IBM, Subramanyam Arcade, Bannerghatta Road, Bangalore
4. CISCO, ITdays System Integrators Pvt. Ltd , Chennai
5. Microsoft Corporation (India) Private Limited, Gurgaon
6. Hallmark Engineers, Hyderabad
7. MTS Technologies, Hyderabad
8. Blue HR Solutions Pvt. Ltd
9. Datapoint IT consulting Pvt.Ltd
10. 1000KV Technologies, Hyderabad
11. Bits and Bytes(Aptech)
12. Abhinava Technologies , Karimnagar
13. Indian Service Machine, Bangalore
14. Spriha IT Solutions Private Limited, Hyderabad
15. KALVEN Technologies, Software Solutions, Hyderabad
16. Silicon Research Labs Private Limited
17. UTL Technologies Limited
18. Delegate Technologies Private Limited, Hyderabad
19. SRALAX Systems, Hyderabad
20. MoU with D3H (Toonz), Hyderabad
21. MoU with 1000k technologies, Hyderabad
22. 3Edge Solutions, Chennai

**3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories /library/ new technology /placement services etc.**

Interaction with eminent personalities from various reputed universities and industries is very useful for the creation of establishing better academic facilities for staff and students.

- Industry-Institute Community interactions by inviting academicians and industrialists to deliver guest lectures and to organize workshops and seminars helped the institution in many ways.
- Faculty and students are trained to meet the technological needs of industry and society.
- Awareness on importance of research for faculty and students is created by inviting eminent academicians and industrial personnel.

**3.7.4 Highlighting the names of eminent scientists/participants, who contributed to the events, provide details of national and international conferences organized by the college during the last four years.**

SREC invites experts from reputed academic and R&D institutions to share their experience and encourage the faculties and students for research work during the national and international conferences. Some of the eminent persons visited the institute during these conferences are:

Name of the Conference	Name of the Eminent Scientist/ Person
2 <sup>nd</sup> International Conference on Next Generation Education for Entrepreneurial Engineers (ICNGE3), 9 <sup>th</sup> & 10 <sup>th</sup> March 2015	Sri. M. Chandrasekhar, CEO, Achievement Labs, New Delhi
	PVS RavindraVarma, CEO – Formula HR Consulting & Career Pundits
	Raghupathi Surya Kishore, COO, Mingo foods India Pvt Ltd
	Dr.C. Narendra Reddy, Project Director - Housing Rights Network for Urban Poor, Montfort Social Institute
	Dr.VishwanathKokkonda, Strategic Business Unit Head & Delivery Lead at Yagnaum systems private limited, Hyderabad, India
	Pramod Reddy, Economist, lawyer and international economy consultant specializing in advising firms engaged in international trade

	Ravi Jeelakarra, Director - Operations with Bunisci Business Solutions Pvt. Ltd., Hyderabad
International conference on “Recent Advances in Communication, VLSI and Embedded Systems”, 19-20 December 2014	Professor K. Ashoka Reddy, Department of E&I Engineering, Kakatiya Institute of Technology & Science, Warangal (KITSW)
	Dr. P. Chandra Shekar, Chairman, BOS, Osmania University, Hyderabad
	Dr. V.Usha Shree, Dean (Academics), Director-IQAC & Professor of ECE Dept., J.B. Institute of Engineering and Technology (Autonomous), Hyderabad
	Dr. Narasimhasarma NVS, Dept. of ECE National Institute of Technology, Warangal
	Dr. Hemalatha Rallapalli, Dept. of ECE, University College of Engineering, Osmania University
	Dr. T. Srinivas, Applied Photonics Laboratory, Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore
International Conference on Next Generation Education for Entrepreneurial Engineers (ICNGE3), 10th & 11th March, 2014	Sri G.R Akadas, Director, MSME Development Institute, Hyderabad
	Dr. J.S. Juneja, Chairman, Global Projects & Services Pvt. Ltd, New Delhi
	Sri Ajit Yohanan, Head Innovators-IBM Bangalore
	Prof Sridhar Condoor, Saint Louis University, USA
	Sri Shyam Penumaka, Co-Founder, Sumedha Ventures Ltd
	Sri. Sudhakaramoorthy, Management Consultant
	Sri. Murali Bukkapatnam, President, TiE Hyderabad Chapter
National Conference on Emerging Trends in Renewable Energy and Its Applications” (NCETREA2013) on January 18th and 19th 2013	Dr. N. Subrahmanyam, Professor & Head, Department of Electrical Engineering, NIT, Warangal
	Mr. Sriphani Vissamraju, CEO, YesSV Solar Power Hyderabad
	Dr. K. Chandram, EEE&I Department & Nucleus Member in RCEDD BITS-PILANI K.K Birla GOA CAMPUS
	Dr. K. Siva Kumar, Department of Electrical Engineering IIT, Hyderabad
	Dr. A. Jayalaxmi, Professor, Department of Electrical Electronics Engineering JNTUH, Hyderabad
	Dr. N. Vishwanathan, Professor, EE Department, NIT, Warangal
	Dr. DVSS Siva Sarma, Professor, Department of Electrical Engineering, NIT, Warangal

1. How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite Examples (if any) of the established linkages that enhanced and/or facilitated-

The linkages with industries have resulted in several MoUs and the list of activities and benefits obtained are as below.

- a) *Curriculum development/enrichment:* The inputs taken during the interaction with experts from research organizations, academics and industries were beneficial in communicating the same during the BOS meetings.
- b) *Internship/ On-the-job training:* Collaboration with various industries have given the opportunity for the students to obtain internship and acquiring required training skills for placements. Campus connect programme by INFOSYS, IBM certification, CISCO Networking certification gave our students hands on experience and help them stand ahead of others in the job market.
- c) *Summer placement:* Students of B.Tech III year are doing mini projects in industry during summer vacation for three weeks as prescribed in the curriculum.
- d) *Faculty exchange and professional development:* Institute arranges workshops, seminars and conferences at department and inter- department levels to exchange the ongoing research activity in the fields of national importance and industry needs. Institute also deputed faculty to exchange their research expertise at workshops, conferences and training programs arranged at other colleges/organizations.
- e) *Research:* The linkages helped in enhancing the research culture in the college.
- f) *Consultancy:* The institute plans to enhance the consultancy works through interaction with industry through MOUs.
- g) *Extension:* --
- h) *Publication:* The number of research publications by faculty is increasing every year
- i) *Student Placement:*
  - IIPC of the institute provides the industry database to the students which is useful to know information about job market.

- Pre-placement training is offered to the students by the industry experts.
- Personality development programmes and frequent assessment tests in aptitude, reasoning and verbal evaluation of students by external assessment agencies.

j) *Twinning programmes: --*

k) *Introduction of new courses:* PG programs are introduced in various branches keeping industry demand in view. A new course, Master of Technology Management (MTM) is introduced which produce techno managers needed by today's industry.

l) *Student exchange:*

- Students are deputed to industries / research organizations during summer vacation for industry exposure and to take up the projects related to industry needs.
- Institute organizes Project Expos and experts from industry and research organizations are invited during these sessions and students exchange their knowledge and practical skills.
- The departments organize state-wise and inter-collegiate festivals, seminars and technical paper contests and students from various institutions exchange their ideas in thrust areas of engineering and other fields.
- The institution arranges industrial tours to the students every year to expose them to the practical aspects of industry and to fill the gap between theory and practical applications which enhance the exposure to real working environment.

m) *Any other: --*

**3.7.5 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations. Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.**

The *Industry-Institute Partnership Cell* (IIPC) of the college is a dedicated cell working towards, to promote the close interaction with Industry and various departments of the institute, to train and develop the right kind of technical manpower



necessary to sustain and promote industrial and economic growth. The mission and objectives of IIPC are discussed in 3.5.1.

- Institution has planned and established linkages/collaborations related to academic and research activities with various industries and research institutes to implement training programs for students and faculty members in various specializations.
- The institute invites both the academicians and industrialists from organizations like NIT Warangal, JNTU Hyderabad, Osmania University, IIT Madras, Infosys, IBM, MicroSoft etc., to interact with faculty and students to share their expertise in advanced technologies.
- College enters into MOU arrangements with various establishments mainly to establish the linkages / collaborations related to academic and research activities.
- Inviting experts from various divisions from other industries for delivering Guest Lectures, key note address in conferences, invited speaker in workshops and symposiums.
- Conducting joint technical programs and events with other organizations.



## **CRITERIA IV**

### **INFRASTRUCTURE AND LEARNING RESOURCES**

## 4.1 Physical Facilities

### 4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The institution has a well-defined policy of providing good infrastructural facilities for ensuring academic excellence. Adequate infrastructure facilities are the key for effective and efficient conduct of the educational programmes. The supportive facilities in the campus are developed to contribute to the effective ambience for curricular, extracurricular and administrative activities.

As per the physical infrastructure requirements, an annual plan for construction of additional buildings and infrastructure is prepared every year. The HODs will submit their budget estimations for the ensuing financial year. After meetings, budget allocations will be intimated to the departments concerned. Adequate budget is allotted each year to ensure that the planned infrastructure is in place before the start of the new academic year, which facilitates effective teaching and learning.

The SR Engineering College has Sprawling area of 28.09 acres of Land. The built-up area is of 32,438 Sqm. The Academic blocks consist of Conference Hall, Seminar Halls, Drawing Halls, Class Rooms, Central Library, Department Libraries, Examination section. The college is designed by one of the India's Leading Architects. All departments and all PG classrooms are provided with LCDs, Computing Facility.

### 4.1.2 Detail the facilities available for

- Curricular and co-curricular activities: classrooms, technology enabled learning spaces, seminar halls, conference hall, tutorial spaces, laboratories, specialized facilities and equipment for teaching, learning and research etc.
- Extra-curricular activities: Sports, outdoor and indoor games, NSS, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

#### *a. Curricular and co-curricular activities*

Facilities available for Curricular and co-curricular activities are listed below.

S.No	Facilities	Number
1	Classrooms	59
2	Drawing Halls	02
3	Seminar halls	05
4	Conference hall	01

4	Amphi Theatre	01
6	Laboratories	67
7	Equipment for teaching learning and research	LCD, NPTEL courses, e-journals

### ***Seminar Halls and Conference Hall***

- Four Air-Conditioned Seminar Halls of seating capacity 250 Students, provided with LCD Projector, OHP and In-Built Audio System.
- An Air-Conditioned Conference Hall is available for Staff Meetings/Board Meetings.
- Amphi - theater for out-door gatherings

### ***Class Rooms***

- 59 Class roomswith Overhead projector and LCD
- Designed for good acoustics, aesthetic appeal and ambience.
- Provided with wide exits and windows for natural ventilation and air circulation.

### ***Workshops and Laboratories***

- Laboratories with state-of-the-art equipment
- Adequate space to meet the AICTE norms
- Availability of laboratory manuals
- Availability of qualified and skilled lab assistants

### ***Technology Enabled learning facility***

The Classrooms have the provision of OHPs and LCDs. There is a separate computer centre, digital library with Internet access. All the departments have the necessary infrastructure in the respective laboratories for technology enabled learning for the students. The institute is a member of National Mission for Education using ICT (NMEICT)

#### ***b. Extracurricular Activities***

Facilities available for Extracurricular Activities are as listed below.

S.No.	Description	No. of items / No. of Play Fields
<b>Out Door Sports Facilities</b>		
1.	Basket Ball	01
2.	Badminton	02
3.	Cricket Grounds	02

4.	Foot Ball	01
5.	Kabaddi	02
6.	Kho-Kho	01
7.	Tennicoite	02
8.	Throw Ball	01
9.	Volley Ball	02
<b>Indoor Sports Facilities</b>		
10.	Chess	06 Boards
11.	Carroms	08 Boards
12.	Table Tennis	03 Tables

Sports Instructor: Sri. P. Srinivas, Physical Director, M. P. Ed, (Ph.D)  
Sri. P. Srinivas Reddy, Asst. Physical Director, M. P. Ed



In-Door Sports Facilities

### Sports:

SREC takes care regarding the physical fitness of the students. Every year SREC conducts **SR Champions Trophy** by inviting teams from colleges all over the state. More than 50 engineering colleges participate in this prestigious event.



Inauguration of SR Champions Trophy



S R Cricket Champions Trophy at SREC

**Cultural Activities:** Biennial cultural event “SPARKRILL” is conducted apart from Annual Cultural events is conducted.



SPARKRILL- A Student Cultural Festival

- The college conducts cultural events under SPIC MACAY Chapter every year.



Puppet Show under SPIC MACAY Chapter

- Activities under this also include Independence day celebration, youth week celebration, farewell to final years, Student FEST etc.

**NSS:**

NSS unit is available in the campus with Mr. J. Ravi Chander as coordinator and students as members.

- The NSS unit of the college organizes clean and green programs in nearby villages to bring awareness among general public and also takes their assistance in tree plantation and keeping surroundings clean, donation of various material to nearby schools.
- It also organizes blood donation camps frequently.

The various activities of NSS are detailed in section 3.6.1

**Public Speaking:** Activities under this include training in leadership skills and participation in group quiz, debates, seminars, conferences and workshops.

**Communication Skills Development:** Training on soft skills development is provided to students by experts.

**Yoga:** Yoga facility is available to students, staff member and faculty members.

**Health and hygiene:**

- NSS unit conducts blood donation camp, Medical camps, AIDS awareness camps.
- The college has setup a sewage treatment plant and the treated water is utilized for drinking purpose, gardens and parks.

**4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/ campus and indicate the existing physical infrastructure and the future planned expansions if any).**

The institute has developed the infrastructure and facilities as per the AICTE norms and beyond the norms as well to ensure all the academic requirements are met with. The available infrastructure is utilized optimally in the following aspects.

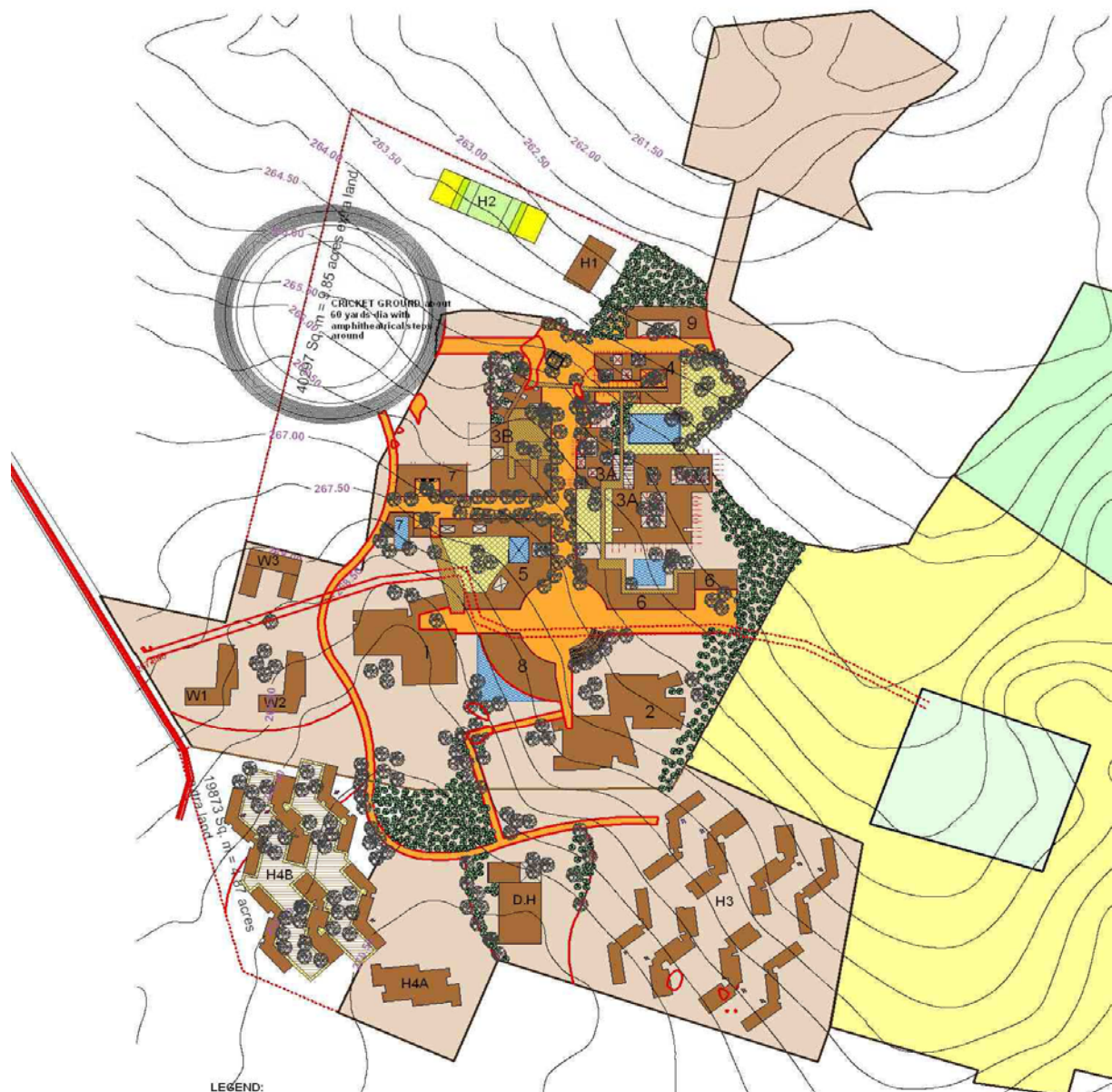
- The classrooms are used for conducting classes during working hours and also for tutorial and remedial classes
- The central library is open upto 8.00 pm.
- The laboratories are used for conducting practical classes.
- Seminar halls are used for conducting guest lectures, conferences and symposiums.
- Examination cell, Main office, Account section, Placement cell are available.

- Separate workshop and drawing halls are available
- Playgrounds are available for Badminton, cricket, volleyball etc.

The amount spent in building infrastructure is as shown below.

Items	Budget Allocated	Budget Allocated	Budget Allocated	Budget Allocated
	2013-14	2012-13	2011-12	2010-11
Building	225,000.00	200,000.00	195,000.00	180,000.00
Furniture	95,000.00	70,000.00	57,000.00	50,000.00
Equipment	130,000.00	112,000.00	102,000.00	95,000.00
Computers	150,000.00	139,000.00	132,000.00	115,000.00
Vehicles	500,000.00	415,000.00	410,000.00	400,000.00
Any other	25,000.00	21,000.00	15,000.00	12,000.00
Total	<b>1,125,000.00</b>	<b>957,000.00</b>	<b>911,000.00</b>	<b>852,000.00</b>





## LEGEND:

Block No	Name of the Block
1	Admin & 1st year B.E in all 7 streams of Enngg.
2	2nd, 3rd & 4th year B.E in EnE, EnC & Aviation
3A	2nd, 3rd & 4th year B.E in C.S, I.T & 3 year M.C.A course
3B	2nd, 3rd & 4th year B.E in MECH & CIVIL ENGG.
4	2 year MBA course
5	STUDENTS UNION BLOCK (S.U.B.)
6	CENTRAL LIBRARY + SEMINAR HALLS + COMPUTER CENTRE
7	INDOOR STADIUM with SWIMMING POOL
8	A.C AUDITORIUM for 2000 students
9	ADMIN & ORIENTATION BLOCK at campus entrance
H1	VISITOR'S GUEST HOUSING
H2	STAFF HOUSING
H3	BOYS HOSTEL BLOCKS for 1000 boys in 3 boys room format & 500 boys in 1 boys room format
H4A	existing GIRLS HOSTEL BLOCK for 200 girls
H4B	GIRLS HOSTEL BLOCKS for 400 girls in 3 girls room format & 400 girls in 1 girls room format
DH	DINING HALL for total 1250 students with all services attached

### PROPOSED MASTER PLANNING OF ENGINEERING COLLEGE CAMPUS AT WARANGAL, ANDHRA PRADESH



#### 4.1.3.1 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The college provided the required facilities for differently-abled students based on the number of students admitted in this category. Ramp is provided in all the Blocks.

#### 4.1.4 Give details on the residential facility and various provisions available within them:

- **Hostel Facility:** Yes, A Girls hostel with secured atmosphere and capacity of 300 students is available.
- For Boys hostel, the institute is having an agreement with Sri Somanatha Boys hostel, Balasamudram, Hanamkonda, Warangal



S. R. Engineering College: Girls Hostel

The various provisions made available in hostel are:

- **Recreational facilities, gymnasium, yoga center, etc.**

Institution has facilities such as indoor games, Yoga center etc. and the hostel has its own TV and reading room

- **Computer facility including access to internet in hostel**

Yes, Internet facility is provided with WI-FI technology.

- **Facilities for medical emergencies**

The College maintains a medical centre for routine tests with a male doctor visiting twice and a lady doctor visiting once in week. An Ambulance facility is available in the campus. In emergency, the patient is taken nearest multi specialty hospital.

- **Library facility in the hostels**

For hostel students, the main library is open from 8.00 am to 8.00 PM on all working days and it is open from 10.00 AM to 4.00 PM on Sundays and holidays.

- **Internet and Wi-Fi facility**

Yes. Internet is provided with Wi-Fi technology.

- **Recreational facility-common room with audio-visual equipments**

A Separate Audio-Visual entertainment hall and a Reading Room are available.

- **Available residential facility for the staff and occupancy Constant supply of safe drinking water**

Yes. The college provides constant supply of safe drinking water.

- **Security**

24 hours security is provided with well-recognized security authority.

#### **4.1.5 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

First-Aid facility is available. The College maintains a medical centre for routine tests with a male doctor visiting twice and a lady doctor visiting once in week. In emergency, the patient is taken to the nearest multi specialty hospital.

#### **4.1.6 4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

First-Aid facility is available. Doctor is available in college hour and attends the hostel students in case of emergency beyond college time.

#### **4.1.7 Give details of the Common Facilities available on the campus—spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.**

Common facilities are available in the campus with a separate space for IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility etc.

The institute has formulated various committees are listed below to oversee the functioning of all these cells.

### Internal Quality Assurance Cell (IQAC)

The IQAC of the institute is constituted with following members:

- |    |   |   |                  |
|----|---|---|------------------|
| 1. | Dr. C.V. Guru Rao, Principal                        | – | Chairman         |
| 2. | Sri. K.V.B.S.R.Subrahmanyam,                        | – | Member Secretary |
| 3. | Ms. J. Jena, HR, TCS, Hyderabad                     | – | Member           |
| 4. | Sri. K.Srinivasulu, Principal, KUCET, KU, Warangal. | – | Member           |
| 5. | Mr. P. Venkat Reddy, Assoc.Prof./CE                 | – | Member           |
| 6. | Mr. P. Satish Kumar, Assoc.Prof./ME                 | – | Member           |
| 7. | Mr. M. Sampath Reddy, Assoc.Prof./ECE               | – | Member           |
| 8. | Mr. Ch. Sandeep, Assoc. Prof./CSE                   | – | Member           |
| 9. | Dr. P. V. Raja Shekar, Addl. Controller of Exams.   | – | Member           |

### • Grievance Redressal Committee

A Grievance Redressal Committee of this institution is constituted with following members:

- |    |   |   |          |
|----|---|---|----------|
| 1. | Dr. P.V. Ramana Rao, Assoc. Prof./H&Sc        | – | Convenor |
| 2. | Mr. K. Raj Kumar, Assoc. Prof. / ECE          | – | Member   |
| 3. | Mr. P. Venkat Reddy, Assoc. Prof./CE          | – | Member   |
| 4. | Mr. N. Saroja, Asst. Prof./H&Sc               | – | Member   |
| 5. | Mr. K.V.B.S.R. Subrahmanyam, Assoc. Prof./EEE | – | Member   |
| 6. | Mr. S. Ugender, Assoc. Prof./ME               | – | Member   |
| 7. | Ms. P. Anuradha, Sr.Asst. Prof./ECE           | – | Member   |
| 8. | Ms. V. Swathi, Asst. Prof./CSE                | – | Member   |
| 9. | Mr. D. Ramesh Babu, Asst. Prof./MBA           | – | Member   |

### • Anti-Ragging Committee :

The Anti-Ragging Committee of the institution is partially modified and reconstituted with the following members:

- |    |  |   |          |
|----|--|---|----------|
| 1. | Dr. R.Archana Reddy, Assoc.Dean (AP)         | – | Chairman |
| 2. | Mr. K. Raj Kumar, Assoc. Prof./ECE,          | – | Convener |
| 3. | Dr. G.V.Praveen, Professor & Head/CE         | – | Member   |
| 4. | Dr. Syed Musthak Ahmed, Professor & Head/ECE | – | Member   |
| 5. | Dr. C. Narasimham, Professor & Head /CSE     | – | Member   |
| 6. | Dr. P.Sammaiah, Professor & Head/ME          | – | Member   |
| 7. | Dr.C.Venkatesh, Professor & Head /EEE        | – | Member   |
| 8. | Mr. N.Suman Kumar, Sr. Asst.Prof.&Head /MBA  | – | Member   |

- **Centre for Student Services and Placement (CSSP)**

The Centre for Student Services and Placement of the institution is constituted with the following members. The committee shall also take care of career counseling and guidance.

- Mr. M. Sampath Reddy, Assoc. Prof./ ECE – Convenor
- Mr. A. Harshavardhan, Asst. Prof./ CSE – T&P Officer
- Mr. B. Satish Kumar, Assoc. Prof./ME – Member
- Mr. D. Naveen Kumar, Asst. Prof./CSE – Member
- Mr. A. Pradeep Kumar, Asst. Prof./ECE – Member
- Mr. D. Raja Babu, Assoc. Prof. /EEE – Member
- Mr. T.Raj Kumar, Asst. Prof./CE – Member
- Mr. G. Sateesh Raj, Asst. Prof./MBA – Member
- Mr. T.V. Rao, Asst. Prof./ME – Member

- **Industry Institute Partnership Cell**

An Industry Institute Partnership Cell is constituted with the following faculty as members

1. Sri. B.Satish Kumar, Assoc. Prof/ME – Convener
2. Sri. KBVSR Subramanyam, Assoc. Prof/ EEE- Member
3. Sri. V.Thirupathi, Asst. Prof/CSE – Member
4. Dr. E.Purushotham, Asst. Prof/H&Sc – Member
5. Dr. A.SubbaRao, Assoc. Prof/ECE – Member
6. Sri. Y.Nagender, Asst. Prof/CSE – Member
7. Sri. P.Kiran Kumar, Asst. Prof/Civil – Member
8. Sri. G.Surender, Asst.Prof/MBA – Member

- **Women Empowerment Cell:**

The Women Empowerment Cell is constituted with the following faculty as members

- Dr. R. Archana Reddy, Assoc. Dean (AP) – Chairman
- Ms. N.Saroja, Asst. Professor, H&Sc – Convenor
- Dr. V.Radhika Reddy, Assoc. Professor, H&Sc – Member
- Ms. M.Sheshikala, Asst. Professor, CSE – Member

Ms. Y. Manjusree, Asst. Professor, EEE	-	Member
Ms. G.Renuka, Asst. Professor, ECE	-	Member
Ms. M.Sravanthi, Asst. Professor, CE	-	Member
Ms. N.Praveena Devi, Asst. Professor, ME	-	Member
Ms. M.Rajyalaxmi, Asst. Professor, MBA	-	Member

- Canteen:**

The Canteen Committee of the institution is constituted with the following members:

1. Dr. C. Narsihmam, Professor /CSE	-	Convenor
2. Mr. G. Rajeshwar Reddy, Purchase Officer	-	Member
3. Mr. B. Sharath Kumar, Administrative Officer	-	Member
4. Ms. S. Poornima, Asst. Prof./CSE	-	Member
5. Mr. K. Sangameshwar, Programmer/CSE	-	Member

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

### **4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?**

The Library Advisory Committee is constituted with the following faculty as members of the Committee:

1. Dr. G.V.Praveen, Professor & Head/CE	—	Chairman
2. Mr. D. Raja Babu, Assoc. Prof./EEE	—	Convenor
3. Mr. K. Srinivas Reddy, Assoc. Prof./ECE	—	Member
4. Dr. E. Purushotham, Asst. Prof./H&Sc	—	Member
5. Mr.Ch. Mahendar, Asst. Librarian	—	Member
6. Ms. V. Sruthi, Asst. Prof./CE	—	Member
7. Mr. A. Jaya Prakash, Asst. Prof./EEE	—	Member
8. Mr. V. Devender, Asst. Prof./ME	—	Member
9. Mr. K. Raj Kumar, Asstoc. Prof./ECE	—	Member
10. Ms. V. Deepika, Asst. Prof./CSE	—	Member
11. Mr. T. Kiran Kumar, Asst. Prof./H&Sc	—	Member
12. Ms. M. Rajyalaxmi, Asst.Prof./MBA	—	Member

The committee is required to meet periodically twice in a semester and evolve a broad strategy to improve Library operations with the following functions in mind.

- a) Annual Library Budget Allocation
- b) Department Allocation
- c) Library Automation
- d) Procurement of Books, Journals and Magazines
- e) Circulation of Books
- f) Reference Section
- g) Digital Library
- h) E – Learning Centre
- i) Book Bank

The committee will meet and discuss on the terms of reference as well as propose necessary steps to be taken up for improving library operation effectively.

#### 4.2.2 Provide details of the following:

- Total area of the library: **889 Sq. m.**
- Total seating capacity: **150 nos**
- Working hours (on working days, on holidays, before examination days, during examination days, during vacation)

Timings: Working days: **8.00 am to 8.00 pm (Monday to Saturday)**

Sundays and Holidays: **10.00 am to 4.00 pm**

The library has 39,260 books and is automated for issuing and receiving books. The status on required books is also made available to the students. A comprehensive Digital Library having subscriptions to e-journals and books from Science direct, DELNET & NPTEL with a high-speed internet facility. Staff and students can use this facility for their research work. The college has subscribed for a number of National / International Journals in different fields of engineering. The library can be accessed even after college hours



Issuing Section of Library



Reading Section of Library

**4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.**

Library expenditure on textbooks, reference books, journals and periodicals is shown in the Table below.

Library holdings	2010-11		2011-12		2012-13		2013-14	
	Number	Total cost	Number	Total cost	Number	Total cost	Number	Total cost
Text books	1400	276,983	1530	274,604	1760	246,248	1771	265,522
Reference Books	675	128,242	810	136,654	790	109,273	845	131,345
Journals/ Periodicals	55	81,794	58	82,204	61	79,679	75	136,925
e-resources	270	383,390	270	380,614	275	381,986	275	490,945



#### 4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- **OPAC:**The institute has provided an Online Public Access Catalogue facility -E Z Libraryto search the Library Collection
- **Electronic Resource Management package for e-journals:**Subscribed for Science Direct. 275 online e-journals are available.
- **Federated searching tools to search articles in multiple databases:**  
Yes. DELNET facility is available.
- **Library Website:** [www.srecwarangal.ac.in/library](http://www.srecwarangal.ac.in/library)
- **In-house/remote access to publications:**  
Yes. e-Books, e-journalsand Courseware can be accessed within the Digital Library.
- **Library automation:**  
Yes. All the data relating to the library is computerized.
- **Total number of computers for public access:** 44
- **Total numbers of printers for public access:** 01
- **Internet band width/ speed:**  
Yes. 30 Mbps Internetconnection is available.
- **Institutional Repository:**  
Yes. It consists of e-books and previous examination question papers, project reports
- **Content management system for e-learning:**
  - i. SONET and IUCEE Webinars lectures etc. are available.
  - ii. Courseware of National Programme for technology Enhanced Learning (NPTEL), INFOSYS material is also available.
  - iii. [www.freebookcentre.net](http://www.freebookcentre.net) for thousands of online technical books for ECE, EEE, CSE, MBA and many more branches.
- **Participation in Resource sharing networks/consortia (like Inflibnet):**  
No

#### 4.2.5 Provide details on the following items:

- Average number of walk-ins: 256 per day.
- Average number of books issued/returned: 156



- Ratio of library books to students enrolled: 10:1
- Average number of books added during last three years: 2395
- Average number of login to OPAC: 96
- Average number of login to e-resources: 50
- Average number of e-resources downloaded/printed: 50
- Number of information literacy trainings organized : --
- Details of “weeding out” of books and other materials: 850

#### **4.2.6 Give details of the specialized services provided by the library**

- Manuscripts : Yes
- Reference : Yes
- Reprography: Yes
- ILL (Inter Library Loan Service): Yes
- Information deployment and notification: Yes  
(Information Deployment and Notification)
- Download: Yes
- Printing: Yes
- Reading list/ Bibliography compilation: Yes
- In-house/remote access to e-resources: Yes
- User Orientation and awareness: Yes
- Assistance in searching Databases: Yes
- INFLIBNET/IUC facilities: No

#### **4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.**

- References services
- Book Bank services
- Periodical services
- New arrival services
- E-Library services
- Beyond working hours service

**4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.**

The physically challenged students are given top priority for issuing the books. The librarian helps such students every possible way. These students are helped by the staff to access the required books.

**4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?)**

Heads of the department takes the feedback from the students in the classrooms as well as in the class representative meetings about the library facilities. The feedback and suggestions from various departments are discussed during the library committee meeting and necessary steps are taken for the improvement of the service as per the suggestions.

**4.3 IT Infrastructure**

**4.3.1 Give details on the computing facility available (hardware and software) at the institution.**

Computers with Configuration

S. No.	Name of Computer	RAM/HDD/Processor	No. of Computers
1	HP Desktop	2GB/250GB/Intel Core i3	70
2	HP Desktop	1GB/80GB/Pentium 4	800
3	Apple	iMac 21.5" quad-core i5 2.7 GHz/8GB/1TB / MacBook Pro 13" dual-core i5, 2.5GHz, 500GB	5
Total Number of Computers			875

Servers:

1	IBM AX Server	1GB	74GB	Xeon Dual Core Processor	1
2	DELL Server	16GB	2TB	Xeon Dual Core Processor	1
3	HP Server	16GB	1TB	Xeon Dual Core Processor	1
Total Number of Servers					3

Computer-student ratio: 1:4

Standalone facility: Yes

LAN facility: Available to all labs

Licensed software: 14

Number of nodes/ computers with Internet facility: All

Licensed software

S.No	Engineering Software/Tool	Licensed	Open Source
1	My Power-5 Users	✓	-
2	LabView-35 Users	✓	-
3	Mentor Graphics	✓	-
4	MATLAB-25 Users	✓	-
5	Tanner-1 User	✓	-
6	Keil-25 Users	✓	-
7	Pro-Engineer-30 Users	✓	-
8	Autodesk Inventor Professional 2008 -05 Users	✓	-
9	CAM Package – 5 Users	✓	-
10	Ansys v11.0-5 Users	✓	-
11	Turbo-C	✓	-
12	Oracle-11i(in collaboration with Oracle Corp)	✓	-
13	IBM Rational Rose	✓	-
14	SCILAB(IIT-Bombay)	-	✓
15	PSCAD-Student	-	✓
16	MASM	-	✓
17	NS2	-	✓
18	Linux	-	✓
19	MSDN	-	✓
20	Kaspersky Antivirus	✓	-
21	Apache Web Server	-	✓
22	CNC – XL TURN Machine – 1	✓	
23	Basic Mechatronics Package – 5 Users	✓	

- Any other: 1. E-Learning Packages : ELSDM-JNTUH-COEERD  
2. WiFi : Service Provider-Bharathi Airtel

#### 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

- 30 Mbps Internet facility is available round the clock for the students and faculties inside the campus
- The Faculty and staff of the institute can access Internet in the central computer

center.

- The campus is Wi-Fi enabled for the easy use of Internet by the students and faculty.
- Each department has their own computing facility for their faculty and students.
- The students and faculty can have access to institute website: [www.srecwarangal.ac.in](http://www.srecwarangal.ac.in)

#### **4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

- Computer systems are upgraded with latest configuration periodically.
- Individual up gradation of the computers is taken up as per the need and requirements of the various departments.
- Enough provision is made available in the annual budgets for the procurement of the computer systems.
- The system administrator and maintenance staff regularly monitors all the computer systems in the campus.
- The trouble/problems experienced by the computers in the various laboratories are entered by the lab programmers/technicians in the complaint register, which is kept in the central office.
- The maintenance staff will then go to the respective labs for identification of the problems and resolves the same at the respective places.

#### **4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)**

The provision made in the annual budget for procurement, up gradation, deployment and maintenance of computers and their accessories is tabulated below.

Items	Budgeted in 2013-14	Budgeted in 2012-13	Budgeted in 2011-12	Budgeted in 2010-11
Procurement	285,000.00	250,000.00	260,000.00	250,000.00
Up gradation	160,000.00	180,000.00	175,000.00	145,000.00
Deployment & Maintenance	150,000.00	139,000.00	132,000.00	115,000.00
Total	<b>595,000.00</b>	<b>569,000.00</b>	<b>567,000.00</b>	<b>510,000.00</b>

**4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?**

- ICT enabled class rooms are used by faculty members to give lectures in power point format particularly to final year and third year students. The faculty members can also give latest information on current topic using the facility.
- The institution is providing the NPTEL Video course Materials of the various subjects of different engineering disciplines to the students as well as faculty members.
- The institution is having tie-up with *Infosys* to run the campus connect Program in our college to make the students industry ready. Faculty members are also get trained by Infosys with the latest Technology and the recent requirement of the Industry.
- Faculty members as well as Students are also utilizing the LCD Projector, High Speed Wi-Fi to attend the Webinars conducted by Infosys and other Industries.
- Students get trained in software by the industry experts in the various engineering disciplines like MATLAB, AUTOCAD, .NET, J2EE.
- The institution is having e-library to access the latest journals and study materials by the students and Faculty members.

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.**

- Well-equipped computer Labs, LCD projectors and OHPs are available to the faculty for conducting seminars, workshops, computer aided training, faculty development programmes and conferences.
- The central library with number reference books, hard copy journals and digital library with e-journals is available for both students and faculty members to update their knowledge.
- The air-conditioned seminar halls with PCs and projection systems support mass presentation.
- The campus is enabled with Wi-Fi access to avail Internet facilities.

**4.3.7. Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?**

Yes, the service availed is through NPTEL [National Programme on Technology Enhanced Learning] and online courses of various IITs.

**4.4: Maintenance of Campus Facilities**

**4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

The institute allocate sufficient fund for infrastructure development.

Items	Budget Allocated	Budget Allocated	Budget Allocated	Budget Allocated
	2013-14	2012-13	2011-12	2010-11
Building	225,000.00	200,000.00	195,000.00	180,000.00
Furniture	95,000.00	70,000.00	57,000.00	50,000.00
Equipment	130,000.00	112,000.00	102,000.00	95,000.00
Computers	150,000.00	139,000.00	132,000.00	115,000.00
Vehicles	500,000.00	415,000.00	410,000.00	400,000.00
Any other	25,000.00	21,000.00	15,000.00	12,000.00
<b>Total</b>	<b>1,125,000.00</b>	<b>957,000.00</b>	<b>911,000.00</b>	<b>852,000.00</b>

**4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?**

Yes. The following staff members take care of all the maintenance works of the Institution.

S.No	Name of the Staff member	Qualification	Designation	Duties & Responsibilities
1	Sri G. Rajeshwar Reddy	M. Com	Maintenance In-charge –1	Maintenance of academic infrastructure and to provide student and staff amenities
2	Sri. P. Satish Reddy	B. A	Maintenance In-charge - 2	Maintenance of academic infrastructure and to provide student and staff amenities

3	Sri. N. Sridhar Reddy	B. Sc	Maintenance Supervisor	Assisting the Maintenance in-Charge in executing the maintenance work.
4	Sri. S. JogenderRao	B. A	Maintenance Supervisor	Assisting the Maintenance In-charge in executing the maintenance work.
5	Mr. Jalapathi	SSC	Attender	---

For the maintenance of the equipment, the college has contracts with the hardware firms. The maintenance contracts help in the up gradation of equipment. The above staff members interact with the departmental heads and the management and ensure fulfillment of further requirement when necessary.

#### **4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?**

Annual maintenance and repair of the infrastructure are taken care by the college in a systematic manner. Day to day maintenance is carried out by the appointed staff for cleaning and maintenance of the building. The equipment, computers and electronic devices are maintained and repaired through the funds available in the institute. A team of qualified technical staff for maintaining computers and networking facilities are available.

#### **4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

- Two Generators of Capacity 125 kVA and 82.5 kVA with total Power backup of 207.5 kVA are used in case of power failure.
- The computer systems and other sensitive equipment are provided with UPS systems so that power failure will not cause any damage.
- The power is distributed with proper earthing to all the labs, class rooms, offices etc from Main Control Board via Sub control Board which is having advanced circuit breakers to ensure safe and secure power supply. The college electrician and the supporting staff are taking care of electrical equipments and their maintenance.
- The college consists of several overhead tanks at many places to provide constant supply of safe drinking water.

## **CRITERIA V**

### **STUDENT SUPPORT AND PROGRESSION**



## 5.1 Student Monitoring and Support

### 5.1.1 Does the institution publish its updated prospectus/handbook annually? If yes what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the college publishes following documents every year to create awareness about the rules & regulations and activities happening in the college and also updates the data on the college website

- **Hand book:** Rules and regulations of the institution and syllabus of the programs running in the institution.
- **Prospectus:** Institutional resources, Highlights of the departments, R & D activities, Various other happenings in the institution
- **College magazine:** The institution brings out an annual college magazine (*SREC Bulletin*) which contains in a nutshell, the curricular, co-curricular and extracurricular activities held during the academic year. It also includes research activities, technical/general articles from students and faculty.
- **College Website** provides following information about the college.
  - Highlights of the Institute
  - Academic calendar
  - Admission Policies
  - Academic Programs & Activities
  - Co-curricular & Extra-curricular activities
  - Facilities available
  - Placement details
  - Research and Development
  - Departmental Details
  - Rules & Regulations of the Institution

### 5.1.2. Specify the type, number amount of institutional scholarships /freeships given to the students during the last four years and whether the financial aid was disbursed on time?

Based on the economic condition and academic performance of the students, tuition fee waiver / reduction in fee and waiver of transportation fee are given to the eligible students.

Type of Scholarships / free ships	Academic year 2014-15	Academic year 2013-14	Academic year 2012-13	Academic year 2011-2012
Transportation fee concession	15	15	20	25
Hostel fee concession	3	2	4	5
Tuition fee concession	30	35	20	25
Permission for paying the fee in installment	125	115	120	105
Fee Wavier	2	1	-	1

**5.1.3. What percentage of students receives financial assistance from state government central government and other national agencies?**

About 60% of the students receive financial assistance from the state government

**5.1.4. What are specific support services /facilities available for students given below?**

The specific support services/facilities available for the students is given below:

**Students from SC/ST, OBC and economically weaker sections**

These students are financially supported by State / Central Government and separate Book Bank facility is made available.

**Students with physical disabilities:**

Ramp facilities and wheel chairs are available for the movement of physically challenged students. Support staff are provided to help them on the campus whenever required.

**Overseas students:**

Presently there are no overseas students on the campus.

**Students to participate in various competitions/National and International**

Financial Support for students is provided for attending the competitions / conferences within the country with respect to travel, registrations fee etc.

**Medical assistance to students:**

Health Centre is provided at the institution with a doctor visiting everyday and a Lady doctor visiting once a week.

### Organizing coaching classes for competitive exams

Coaching classes are organized for the students to crack the competitive exams. Special emphasis is given to communication skills, aptitude, reasoning and logical skills.

### Skill development:

A number of skill development programs are organized in the institution to enhance the abilities of students like soft skills, problem solving skills, creative thinking and innovation. The details of these programs are mentioned in Criterion I (Pl refer sub sec: 1.3.1)

### Support for “slow learners”

Academically weak students are identified every semester and remedial classes are conducted and special classes are arranged for clearing doubts of the students. These students are counseled by the senior faculty and faculty experts in particular courses.

### Exposures of students to other institution of higher learning/Corporate / business house etc.

- Students will be sent for Internships programs in Industry/R&D organization/IITs/IISc/ NITs etc.
- Students will be sent to the other institutions for participating in conferences / workshop etc.

### Publication of student magazines:

Each department organizes Technical fest where the students participate and organize many events. Also they bring out their contributions in the form of a magazine as listed below:

Publisher	Title of publication
Dept. of ECE	Ultriva
Dept. of CSE	Sputnik
Dept. of EEE	ElectroSparx
Dept. of ME	MechQuest
Dept. of CE	Artemis

### 5.1.5. Describe the efforts made by the institution to facilitate entrepreneurial skills among the students and the impact of the effort?

The college has set up a Center for Entrepreneurship Development (CED), to create the awareness among the students to become entrepreneurs. To promote entrepreneurial echo system in the campus CED organizes the following events:

1. Weekly innovation challenge
2. Business plan competition
3. Tinker camps
4. Ideation Fest
5. International Conference on Next Generation Education for Entrepreneurial education
6. Organizes Interaction with successful Entrepreneurs
7. Organizes Entrepreneurship awareness camps
8. Faculty Development Programmes in Entrepreneurship Development



FDP on Enterprenuership Chief Guest  
Mr.Kiran Koppada, Managing Director  
GRAHTEK SOFTWARE,



Enterprenuership awareness program funded  
by DST, Chief Guest Prof. Sathyamurthy  
addressing the students

### 5.1.6. Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as game, sports, quiz competitions, cultural events, flexibility in exam, special dietary requirements and special uniforms etc.

#### Promotion of participation of students

- Provides Sports Track Suit to students for participating in major tournaments.
- Encourages participation in inter collegiate tournaments conducted

- Presents merit certificates and mementos to winners and runners in intra-mural competitions for boys & girls on College Annual Sports Day.
- Encourages participation in various co-curricular and extra curricular activities.
- Conducts inter collegiate tournaments on a regular basis
- A three day state level cultural fest “*Sparkrill*” is organized every year.
- “Cash Awards” are given to the winners and runners of the tournaments conducted.
- Gymnasium facility is provided in the campus.

**a) Additional academic support, flexibility in examinations:**

- Academic support is provided for all those students participating in extra curricular activities in the form of arranging compensation classes. Due consideration in respect of attendance for the students participating in important literary, cultural or sports events.

**b) Special dietary requirement, sports uniform and materials:**

- College provides sports uniform to all the students participating in the inter-collegiate/inter University events and provides dietary supplements for these students.
- Special diet is provided for students in their coaching camps.

**c) Any other:**

The following committees are formulated to enhance student participation in extra curricular activities and co- curricular activities.

1. Sports and Games Committee

2. Student Activity Centre

- Literary Committee
- Cultural Club: Tarangini
- Nature Club
- Be Humane Club
- Science Club



SR Champions Trophy-2014



Sparkrill 2015-Cultural fest

**5.1.7. Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, GATE / CAT / GRE / TOEFL / GMAT / Central /State services, Defence, Civil Services, etc.**

The institution encourages the students to prepare for various competitive examinations through awareness programs, special coaching and training. The CSSP aims to achieve the success of students by conducting additional informative classes, inviting experts and organizing training programs in soft skills/aptitude and reasoning/domain skills etc.

The **Career and Guidance Cell** regularly guides and counsels the students for their career growth. The number of students who have succeeded in various competitive examinations is listed below:

Competative Exam	Qualified number of students
GATE	40
GRE	138
CAT	9
TOEFL	103
IELTS	39
PGECET	46

### 5.1.8 What type of counseling services are made available to the students (academic/personal/career/psycho-social etc.)

#### Academic Counseling:

The Heads of the departments along with a dedicated team of faculty counsel the students on several academic issues. There are Faculty Class Coordinators who regularly monitor the performance of the students and counsel the academically poor and irregular students.

#### Personal Counseling:

- The Faculty Class Coordinators bestow personal care in the case of academically poor and irregular students. The Heads of the departments also counsel these students on need basis.
- A Grievance Redressal Cell is constituted to look into the grievances of students and to attend to their problems.

#### Career Counseling:

- The college has constituted a **Career and Guidance Cell** which facilitates the students with information on various career prospects.
- The Cell also organizes meets with Professors of foreign Universities who visit the college and detail the students of prospects of PG education in their Universities.
- The Cell also educates the students on their preparation for various competitive examinations.

### 5.1.9. Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

**Yes,** The college has a structured mechanism for career guidance and placements of its students. In addition to the various career guidance activities mentioned in 5.1.8, following are the other activities of CSSP to provide job opportunities for the students.

### Campus Recruitment

Efforts are being made by the institution to improve the employability of the students and industries are invited to the campus to recruit students. For the past four years majority of the eligible candidates are absorbed by the industry before completion of the course.

### Center for Students Services and Placements (CSSP)

**CSSP** has been consistently striving to provide placement opportunities for UG / PG students in private / public /government sectors. Students are encouraged to enhance their skills to meet the requirements of present day industry. The major functions of this cell are:

- Organizing on / off campus drives
- Soft skills development programmes
- Quantitative, Logical and Analytical training
- Organize Invited talks by industry personnel.
- Campus recruitment training (Company specific training)
- Enhancing the programming skills of students.
- Career guidance through counseling
- Conducting personality development programmes
- Develop contacts with industries /companies
- Overseas collaborations
- Awareness programs for students to enroll for graduate programs
- Collaboration with Institute for **Electronic Governance-Jawahar Knowledge Center**, Hyderabad
- Conducting training programmes in collaboration with **Infosys Campus Connect**

### Special customized training based on Industry requirement

The suggestions of industry representatives on the Board of Studies of individual departments are taken to identify the customized training needs of individual departments. Industry relevant customized training is provided to final year students before the commencement of recruitment process. In addition, guest lectures are arranged on specialized areas relevant to the present day industry.



S.No	Department	Activity	Name of the Resource Person
<b>2014-15</b>			
1	IV B.Tech CSE	Workshop on Cloud Computing	Ms P Praveena & Ms A Pinkey (through JKC)
2	IV B.Tech Civil	Workshop on Auto CAD	Through JKC
3	IV B.Tech Civil, ME & EEE	Introduction about Internship	Maddela Ramchadra Murthy MD, IVRCL
4	IV B.Tech CSE/ECE/IT/ME/CE	Interaction Session with Globerena	Mr. Ravi Kumar, Executive- Customer Relationship, Globarena Technologies Pvt Ltd.
5	IV B.Tech CSE/ECE/IT/ME/CE	Atomic Energy from BARC	Mr. Balaji, Sr. Manager (C.Lab & Library), NFC, Hyderabad

6	III B.Tech CSE/ECE/IT/ME/CE	Awareness program on JKC, Globerena, Coign & Amcat	Ms.Kavya, JKC Mentor, Mr. Ravi Kumar, Executive- Customer Relationship, Mr. Pavan Kumar, Executive, Coign, Mr. B. Raviteja, Executive, Amcat
7	III B.Tech CSE/ECE/IT/ME/CE	Coding Contest	Through JKC
8	III B.Tech CSE/ECE/IT/ME/CE	Awareness program on Missouri Central University about PG Courses	Ms. Alliace Griffie, Dean, College of Applied Science and Technology & Mr. Mohmoud Younus, Professor of Computer Science
<b>2013-14</b>			
1	All B.Tech	Soft skills	Ajay, Trainer, Formula HR Phani, Trainer, Formula HR
2	CSE/ECE/IT	Quantitative	Fayaz, Trainer, Formula HR
3	CSE/ECE/IT	Reasoning	Neelima, Trainer, Formula HR
4	CSE/ECE/IT		
5	CSE/ECE/IT		Manoj Kumar, Trainer, Formula HR
6	All B.Tech	Aptitude	Mr. Sambaraju, Asst.
7	All B.Tech	Group Discussion	Mr. Syam Kolati, Asst. Prof., SREC
8	CSE/ECE/IT	C'Language & Java	Mr. Ashok, Asst. Prof. & Mr. Kumaraswamy, Asst. Prof., SREC

9	CSE/ECE/IT	C'Language & Java	Mr. Ashok, Asst. Prof. & Mr. Kumaraswamy, Asst. Prof., SREC
10	CSE/ECE/IT	C'Language & Java	Mr. Shashank, Trainer, Wipro
11	CSE/ECE/IT	Testing	Mr. Kranthi, Freelance Trainer
12	CSE/ECE/IT	.Net	Mr. Pavan Kumar, Freelance Trainer
13	CSE/ECE/IT	.Net	Mr. Mrutyunjay, Freelance Trainer
14	All B.Tech	C'Language	Mr. Sudheer, Asst. Prof., & Mr. Vishnuvardhan Reddy, Asst. Prof., SREC
15	All B.Tech	Infosys Pattern Training	Face Academy
16	CSE/ECE/IT	JAVA, DBMS, C++ & C	Mr. Sampath Kumar, Asst. Prof, Mr. J. Ramesh, Asst. Prof, Mr. Pramod, Sr. Asst. Prof & Mr. Kumaraswamy, Asst. Prof., SREC
17	All B.Tech	TCS Pattern Training	Face Academy
18	IV B.Tech Civil	Workshop	Mr. Vidya Sagar, Project Manager, D.G.S Technical services
19	IV B.Tech CSE	Workshop on Leadership	Dr. A. M. Rao, Vice President, Satyam Ventures
20	IV B.Tech CSE/ECE/IT/ME/CE	Economic Rejuvenation of India (Arthakranthi)	Atul Deshmukh
21	IV B.Tech Civil & ME	Workshop on Metro Design	Mr. B. Venugopal, L& T Metro
22	IV B.Tech CSE	Workshop on Android	Ms. Gouthami (through JKC)
23	All B.Tech	TCS Pattern Training	Face Academy
24	All B.Tech	Reasoning	Neelima, Trainer, Formula HR
25	All B.Tech	Aptitude	Mr. Sambaraju, Asst.
26	IV B.Tech Civil	Biz On Cloud	Rajendran, Java, CPP
27	IV B.Tech CSE	Aptitude	Mahesh, Trainer, Career Pandits
28	IV B.Tech CSE/ECE/IT/ME/CE	HR Skills	Syam Kolati, Asst. Prof, SREC
29	IV B.Tech Civil & ME	Soft Skills	Syam Kolati, Asst. Prof, SREC
30	IV B.Tech CSE	Aptitude	Mahesh, Trainer, Career Pandits
31	All B.Tech		

32	ECE & EEE	Soft Skills	A.Sharadha, Assoc. Prof, Vignan University
33	All B.Tech	Soft Skills	Indira, Freelancer
			Mr. Karthik
			Mr.E.Raju
34	All B.Tech	Aptitude	Bhaskar, Freelancer
			Mr. Venkat
35	All B.Tech	Mock GATE Exams	TIMES Institute
36	All B.Tech	Interactive session on MS Programme	Ms.Swathi
37	All B.Tech	Job Interview skills	Mr. George Royappa
38	All B.Tech	C' Language	Prof. Madhu Babu
39	All B.Tech	Aptitude Training	Mr. Rakesh Reddy
40	All B.Tech	Soft skills	Ms. Padmaja Gandhi
41	All B.Tech	Aptitude Training	Mr. Sambaraju

2012-13			
1	All B.Tech	Expert talk related to Campus Placement	Mr. Satyam Thopally Asst. Vice President of Mahindra Satyam
2	ECE & EEE	Guest Lecture on Embedded System and VLSI Design	Mr.Satish Gutta (Senior Project Manager for Automotive Robotics)
3		C'Language	Shobhan Babu
			Mr. Karthik
			Sambaraju
4	All B.Tech	Aptitude	Venkat
5	All B.Tech	Mock Interviews	Raghav / Srinivas
6	All B.Tech	Mock Gate Exam	Times
		Gate Scholarship Test	Times
7	All B.Tech	Expert talk related to Campus Placement	Mr. Satyam Thopally
8	All B.Tech ECE	Guest Lecture on Embedded System and VLSI Design	Mr. Sathish Gutta
9	All B.Tech	Interactive Session on MS Programme	Ms. Swathi, SRIIT
10	All B.Tech	Foundation / Induction Program	Mr. Srinivas (Freelance Trainer)

**5.1.10. Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.**

Yes, the institution has a Grievance Redressal Cell for addressing the student grievances.

So far the following grivences are reported

- Students asked for college transportation facility from Huzurabad
- Wi-fi facility for all the students
- Library facility up to 8.00 PM
- Need break in morning session after completion of the two periods
- Payment of fee on installment basis
- Bank Extension Counter

Based on the students representation following grievances were addressed by grievance redressal cell

- Transportation facility from Huzurabad is arranged
- Wi-fi facility for all the students provided with ID & Pass word
- Library facility made available from 8:00 AM to 8:00 PM
- Some students were given permission for paying the fee on installment basis
- Bank extension counter will be made available soon
- Need break was not accepted by the committee.

#### 5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

Yes, the College has a cell and mechanism to resolve issues of women harassment

The Women Empowerment Cell takes initiatives to look after the cases of sexual harassment of women students and related issues. The existing committee comprises of chairperson and other members from individual departments. However, no such incident has occurred in the College on its premises till today.

Members of Women Empowerment cell are

1) Dr.R.Archana Reddy, Assoc.Dean (AP)	-Chairperson
2) Ms.N.Saroja,Asst.Prof/H&Sc	-Convener
3) Dr.V.Radhika Reddy, Assoc.Prof /H&Sc	-Member
4) Ms.Y.Manjusree,Asst.Prof/EEE	-Member
5) Ms.Shashikala,Asst.Prof/CSE	-Member
6) Ms.G.Renuka,Asst.Prof/ECE	-Member
7) Ms.Sravanthi,Asst.Prof/CE	-Member
8) Ms.N.Praveenadevi,Asst.Prof/ME	-Member
9) Ms.Rajya Laxmi,Asst.Prof /MBA	-Member

**5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

Yes, the institution has an Anti-Ragging committee formed to make sure the campus is ragging free.

Dr.P.V.Ramana Rao	-	Convenor,
Mr.D.Raja Babu / EEE	-	Co-Convener
Mr. T.Naveen Kumar / CE	-	Member
Ms.M.Sheshikala / CSE	-	Member
Mr.Manohar Gosul / CSE	-	Member
Mr.N.Ch.Ramgopal / H&Sc	-	Member
Ms.G.Renuka / ECE	-	Member
Mr.J.Ravi Chandra / ECE	-	Member
Mr.L.Radha Krishna / ME	-	Member
Ms.B.Satyavani / EEE	-	Member
Mr.P.Srinivas / P.D	-	Member

**The basic functions of the anti-ragging committee are:**

- To create self confidence and congenial environment among the newly admitted students by way of conducting frequent interactive sessions to clear the doubts related to academic matters, social interaction and compatibility. The Heads of the department and Class coordinators ensure that a ragging free campus is provided for newly admitted students to have a pleasant and fruitful academic stay in this college.
- Faculty is deputed at various locations inside the college campus to monitor the student activities. Faculty sees that no student groups are formed and if any are observed, the group is dispersed to avoid any nuisance. The punishment for ragging activity is displayed at various places in the campus and notice boards to
- Make the students aware of seriousness of the administration for preventing ragging.
- To conduct an enquiry and identify the culprits on receipt of complaint.
- Based on the first hand information and prime-facie evidence, the committee submits its report to the Principal for necessary disciplinary action. Severe punishment will be imposed on the accused, if proven.

So far, no major ragging incidents have been recorded. A few minor issues were recorded and have been solved by HOD s and senior faculty members.

**5.1.13 Enumerate the welfare schemes made available to students by the institution.**

Following are some of the Welfare schemes implemented for the students:

- Health service is provided at the institute. A doctor visits during college hours and attends the hostel students in case of emergency beyond the college time. A lady doctor also visits the campus once a week especially for girl students. A full time nurse is available on the campus. Ambulance facility is provided.
- Providing scholarships for eligible students from the government.
- Providing books to meritorious students.
- Grievance redressal cell.
- Center for Student's Services and Placements (CSSP).
- Transport facilities.
- Cafeteria

**5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are it's activities and major contributions for institutional, academic and infrastructure development?**

The Institution has an Alumni Association which undertakes the following activities:

- Alumni meets are conducted every year.
- During these meets the alumni share their feedback and give suggestions to improve curriculum, facilities, placements, training etc.
- Alumni also participates in Board of Studies and gives their suggestions.
- Alumni assists the institute for getting Internships, Projects, Placements, Training etc.
- The recent alumini meet was conducted on 20<sup>th</sup> December, 2014 in which 146 alumini participated in the meet.



Photo graphs of Alumini Meet conducted on 20.12.2014

## 5.2. Student Progression

### 5.2.1. Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the trends observed.

Academic Year	% of students (UG to PG)	% of students (PG to Ph.D)	% of students employed	
			On campus	Off campus
2013-14	45%		33%	5%
2012-13	40%	--	31.5%	4%
2011-12	49%	--	29.5%	4%
2010-11	30.7%	--	25%	3.6%

It is observed that majority of the students are preferring to go for higher studies in abroad Universities due to which they are not participating in placement drives.

### 5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

#### Programme - Wise Success Rate (pass %) for the last Four Years

Batch	B.Tech				
	CSE	ECE	EEE	ME	CE
2010-14	86.52	86.01	81.90	91.89	92.96
2009-13	96.52	96.18	90.63	87.69	82.81
2008-12	99.09	95.93	81.25	92.19	-
2007-11	84.87	93.75	49.06	82.46	-

Batch	M.Tech			MBA
	CSE	ES	PE	
2011-13	84.21	90	96.15	91.11
2010-12	83.33	78.94	72.20	86.79
2009-11	66.66	100	88.80	88.33
2008-10	-	93.75	94.44	88.33

It is observed that the results of the institution are far better compared to the results of the affiliating University.

### 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?



Institution is arranging the campus interviews by inviting reputed organizations. The CSSP puts continuous efforts to improve the skill set of the student community leading to both higher education and employment.

#### Student's placement details

Year	No of Students placed
2013-14	112
2012-13	95
2011-12	53
2010-11	51



Alliance Global Placement Drive



Websynergies Placement drive

#### 5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

The institution has adopted certain practices over the years to minimize the student dropout rate. These include individual attention, extended library hours, printed subject notes, and remedial classes. The college also arranges doubt clearing classes for weak students. Class coordinators counsel the students on issues like, emotional and physical health, attendance shortage and communicate the same to parents/guardian to ensure that the students enrolled complete the course successfully.



### 5.3 Student Participation and Activities

#### 5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

##### a) Sports & Games Facilities:

The department of Physical Education looks after the Games and Sports activities. The department is headed by a qualified Physical Director and the required infrastructure is provided. The college has exclusive amenities for indoor games and also has good number of playgrounds for basketball, Cricket, Volleyball, Shuttle, Badminton, Kho- Kho, Kabaddi etc.

##### Major Activities:

South India Intercollegiate T – 20, S R Champions Trophy, inter-collegiate tournaments in Basketball & Table Tennis etc. are conducted every year.

##### Intramural activities:

Intramural competitions are conducted in months of February & March every year and the prizes will be distributed on Annual Sports Day.

##### Facilities for Girl Students:

The college encourages participation of girl students in intra and inter institutional sports & games competitions. The following are the sports & games arranged at the college:

**Indoor :** Caroms, Chess, Table Tennis etc.,

**Outdoor:** Volleyball, Basketball, Tennis, Throw ball, Tennicoit, Kho-Kho etc.

##### b) Literary and Cultural activities:

The “**Student Activity Centre**” organizes events with the help of various clubs like Literary Club, Nature Club, Science Club, Cultural Club and Be Humane Club. A three day cultural fest “**Sparkrill**” is organized every year in the month of January.

#### List of the students participations in sports events in the recent years

##### Inter Departmental Sports Competitions, 2014 – 2015

S.No	Name of the events	Name of the Departments	Member of Participations	Date	Received awards
1	Volleyball, Basketball, Football, Badminton, Kabaddi, Table	ECE, CSE, ME, EEE, IT, CE, MCA MBA & M.Tech.	1324	2014 – 2015	312

	Tennis, Carroms (Singles & doubles), Cricket, Chess, Kho-Kho Throwball				
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**3<sup>rd</sup> SR Staff Tournament 2014-15**  
**Inter Institutional Sports Competition Ananthasagar campus**

S.No	Name of the events	Name of the Colleges	Member of Participations	Date	Received awards
1	Cricket, Tag-of War, Volley Ball, Badminton, Table Tennis, Carroms (Singles & Doubles), Walking	SREC, VRCE, SRCP, SRIT(W) & Sparkrill School	296	5 <sup>th</sup> November – 4 <sup>th</sup> December- 2014	Winners – Sparkrill Int. School, Wgl. Runners- SRITW Ananthasagar, Warangal

**13<sup>th</sup> SR Champions Trophy – 2015**  
**South India Inter Engineering Collegiate (T-20) Cricket Tournament**  
**(Andhra Pradesh, Karnataka, Kerala, Pandicheri, Tamil Nadu & Telangana)**

S.No	Name of the events	Participation of Colleges	Member of Participations	Date	Received awards
1	Cricket	45 colleges	675	6 <sup>th</sup> -14 <sup>th</sup> January, 2015	Winners – TKRECT-Hyderabad Runners- VNRVJIET, Hyderabad 1 <sup>st</sup> Runners SRM, Chennai, 2 <sup>nd</sup> Runners – MREC, Hyderabad

**Inter Departmental Sports Competitions, 2013 – 2014**

S.No	Name of the events	Name of the Departments	Member of Participations	Date	Received awards
1	Volleyball, Basketball, Football, Badminton, Table Tennis, Carroms (Singles & doubles), Cricket, Chess, Kho-Kho Throwball	ECE, CSE, ME, EEE, IT, MCA MBA & M.Tech.	1228	2013 – 2014	279

**2<sup>nd</sup> SR Staff Tournament 2013-14**  
**Inter Institutional Sports Competition Ananthasagar Campus**

S.No	Name of the events	Name of the Colleges	Member of Participations	Date	Received awards
1	Cricket, Tag-of War, Volley Ball, Badminton, Table Tennis, Carroms (Singles & Doubles), Walking	SREC, VRCE, SRCP, SRIT(W) & Sparkrill School	552	29 <sup>th</sup> November – 8 <sup>th</sup> December, 2013	123

**12<sup>th</sup> SR Champions Trophy – 2014**  
**AP Inter Engineering Collegiate (T-20) Cricket Tournament**

S.No	Name of the events	Participation of Colleges	Member of Participations	Date	Received awards
1	Cricket	48 colleges	768	4 <sup>th</sup> -12 <sup>th</sup> January, 2014	Winners – TKRECT-Hyderabad Runners-MJCET, Hyderabad 1 <sup>st</sup> Runners SREC, Warangal 2 <sup>nd</sup> Runners – VIJIT, Karimnagar

**6<sup>th</sup> SR Staff Champions Trophy – 2014**  
**Inter Engineering Collegiate T-20 Cricket Tournament, Warangal, Karimnagar District**

S.No	Name of the events	Participation of Colleges	Member of Participations	Date	Received awards
1	Cricket	18 Colleges	288	9 <sup>th</sup> February – 9 <sup>th</sup> March, 2014	Winners – KITS, Warangal Runners-Srichaitanya Engg. College Karimnagar

Some of the recently organized events under various clubs like Science Club, Literary Club, Prakruti Club, Tarangini Club are listed below:

Sl.No	Date	Event
1	17.12.2014	Wiz-Quiz
2	24.12.2014	Math Run, Plantation
3	31.12.2014	Film Critics

4	07.01.2015	Short film contest
5	28.01.2015	Science Quiz
6	04.02.2015	Idea Presentation
7	11.02.2015	Competitions & Photography day
8	18.02.2015	Literary plays
9	28.02.2015	Poster Presentation

**5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National /International, etc. for the previous four years.**

The major achievements of the students during the last three years are listed below:

**Academic year 2014-15**

Sl. No	Name of the event	Name of the Tournament	Date	Organized by College & Year	Achievement
1	CRICKET	HCA, under 19 years Inter District Tournament at Adilabad	24-09-2014 to 30-09-2014	Adilabad District Cricket Association, Macherial, Adilabad	Semi finals
2	BASKET BALL, VOLLEY BALL AND CRICKET	Fr. Colombo Memorial, Basket ball, Volley ball and Cricket Inter collegiate tournament, Jangoan, Warangal teams	22 <sup>nd</sup> – 27 <sup>th</sup> September-2014	CJIT, Jangaon, Warangal	Basket Ball- Winners; Volley Ball- Runners; Cricket- I Round
3	BASKET BALL K.Kranthi Kiran	Telangana state 1 <sup>st</sup> Sr. Inter District Basketball Championship for Men & Women	12-12-2014 to 14-12-2014	Warangal district Basket Ball Association, at Govt. Jr. College Boys, Mahabubabad, Warangal dist.	Runner-up
4	SOFTBALL	Telangana State Softball Sr.Inter District Champion Ship-2014 (Men-Women) E. Vishnupriya Reddy EEE-IIYr	12-12-2014 to 14-12-2014	Softball association hyderaba. Balayogi stadium Gachibouli, Hyd.	Participation

5	CRICKET	Eenadu champions cricket tournament at Warangal dist. Team	17-01-2015 to 25-01-2015	Eenadu paper KU grounds Hanamkonda	Cricket Semifinals
6	BODY BUILDING	All India Inter University body building championship-2015 L.Kishore Kumar Nayak-CSE-IV Yr.	06-01-2015 To 10-01-2015	Punjab University, Punjab	All India 15 <sup>th</sup> Place

**Academic Year 2013-14**

S. No	Name of the event	Name of the Tournament	Organized by College & Year	Date	Achievement
1	CRICKET	12 <sup>th</sup> S R Champions Trophy 2014 (State Level Inter Engineering Colligate T20 Cricket Tournament	SR Engineering College, Ananthasagar, Warangal	From 04-01-2014 To 12-01-2014	1 <sup>st</sup> Runner up
2	CRICKET	JNTUH Zone-B Inter Engineering Colligate Cricket Tournament	Sindhura College of Engineering & Technology, Ramagudem, Karimnagar	From 05-02-2014 To 12-02-2014	Semi finals
3	CRICKET	State Level Engineering Collegiate Cricket Tournament	Prasad Engineering College, Janagaon, Warangal	From 25-02-2014 To 03-03-2014	Winner
4	CRICKET	VRCE State Level Champions League	Varadha Reddy College of Engineering Anathasagar Warangal	From 15-03-2014 To 24-03-2014	Winner
5	CRICKET WOMEN E.Vishnu Priya Reddy & B.Navatha	HCA Inter District Women Cricket Tournament	Khamman District Cricket Association, Kothagudem, Khamman District	From 26-09-2013 To 30-09-2013	Semifinals
6	VOLLEY BALL	National Institute of Technology,(NIT) Engg. Instructional Volleyball	National Institute of Technology,(NIT) Warangal	From 28-12-2013 To 30-12-2013	Quarter Finals

		Tournament			
7	VOLLEY BALL	JNTUH Zone B Inter Colligate Volley Ball Tournament	JNTUH College of Engineering, Nuchupally, Karimanagar	On 08-03-2014 To 09-03-2014	Quarter Finals
8	BASKET BALL	Inter Colligate Basket Ball Tournament	Kakatiya Institute of Technology & Science (KITS), Warangal	On 26-02-2014 To 27-02-2014	Semifinals
9	BASKET BALL	JNTUH Zone B Inter Colligate Tournament	JNTUH College of Engineering, Nuchupally, Karimanagar	On 08-03-2014 To 09-03-2014	Semifinals
10	FOOT BALL	Inter Colligate Foot Ball Tournament	Kakatiya Institute of Technology & Science (KITS), Warangal	On 26-02-2014 To 27-02-2014	Quarter Finals
11	BATMINTION	JNTUH Zone B Inter Colligate Tournament	JNTUH College of Engineering, Nuchupally, Karimanagar	On 08-03-2014 To 09-03-2014	II Round
12	TABLE TENNIES	JNTUH Zone B Inter Colligate Tournament	JNTUH College of Engineering, Nuchupally, Karimanagar	On 08-03-2014 To 09-03-2014	I Round

## 2012-13

S. No	Name of the event	Name of the Tournament	Organized by College & Year	Date	Achievement
1	CRICKET	12 <sup>th</sup> S R Champions Trophy 2014 (State Level Inter Engineering Colligate T20 Cricket Tournament)	SR Engineering College, Ananthasagar, Warangal	From 04-01-2014 To 12-01-2014	1 <sup>st</sup> Runner up
2	CRICKET	JNTUH Zone-B Inter Engineering Colligate Cricket Tournament	Sindhura College of Engineering & Technology, Ramagudem, Karimnagar	From 05-02-2014 To 12-02-2014	Semi finals
3	CRICKET	State Level Engineering Collegiate Cricket Tournament	Prasad Engineering College, Janagaon, Warangal	From 25-02-2014 To 03-03-2014	Winner

4	CRICKET	VRCE State Level Champions League	Varadha Reddy College of Engineering Anathasagar Warangal	From 15-03-2014 To 24-03-2014	Winner
5	CRICKET WOMEN E.Vishnu Priya Reddy & B.Navatha	HCA Inter District Women Cricket Tournament	Khamman District Cricket Association, Kothagudem, Khamman District	From 26-09-2013 To 30-09-2013	Semifinals
6	VOLLEY BALL	National Institute of Technology,(NIT) Engg. Instructional Volleyball Tournament	National Institute of Technology,(NIT) Warangal	From 28-12-2013 To 30-12-2013	Quarter Finals
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12	TABLE TENNIES	JNTUH Zone B Inter Colligate Tournament	JNTUH College of Engineering, Nuchupally, Karimanagar	On 08-03-2014 To 09-03-2014	I Round

### 5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

The institution collects feedback from the students at the end of every semester. The feedback comprises of 12 different aspects to be marked on a scale of 1 to 5 (with 5

being the best).

- Feedback given by graduates during exit survey about the program objectives and outcomes, faculty, infrastructure etc. are addressed and solved at the respective departments. Major issues that cannot be solved at this level are directed to the higher authorities.
- Feedback given by the employers on the performance of our graduates in industry, objectives and outcomes of various departments is taken into consideration for improving the quality of our programs.

**5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.**

The institution encourages the students to publish their articles in department newsletters / college newsletters / magazines etc. The students are part of the literary forum which takes care of the publications of newsletters and magazines. The different departments have departmental associations which organize technical talks and also publish Newsletters.

**5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

The college has a **Student Activity Centre** to organize and conduct co-curricular and extracurricular activities. This centre is constituted by nominating two students from each department and the meetings are held under the guidance of the faculty advisors. The student activity centre actively participates in planning and conducting the annual technical, cultural festivals like Sparkrill, TechnoTrendz, Independence Day, Republic Day, Womens Day, Engineers Day to showcase the culture and diversity of the nation.

Apart from the students activity centre, the college also has department wise students associations for organizing departmental events. The associations conduct the activities under the guidance of the faculty representatives.

The following are the activities generally undertaken by the departmental associations

1. Expert Lecture
2. Technical Talk



3. Technical Quiz
4. General Quiz
5. Aptitude Test
6. Workshop
7. Group Discussion
8. Essay Writing
9. Cultural events such as Dumb-C, Pictionary, Antyakshari

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

The students have representation in the following academic and administration bodies:

- Class Representatives
- Cultural Council
- Literary Club
- ISTE Student Chapter
- IETE Student Chapter
- CSI Student Chapter
- Departmental Societies / Associations

**5.3.7. How does the institution network and collaborate with the Alumni and former faculty of the Institution.**

The institution keeps pace and relation with former faculty and alumni and takes their advice on the institutional academic and other developments. The institution regularly keeps in touch with them through the alumni meets, face book, e-mail id, whatsapp etc.

**The alumni have immensely contributed to the development of the college in the following ways:**

- Providing guidance to the current students for the higher education and employment opportunities.
- Updating the current trends in the job markets and motivating the students to become entrepreneurs.
- Sharing their experiences by giving guest lectures.

- Help the college in bringing more companies and industries for campus placements and provide employment opportunities to the students..
- To review the changes and trends in the industry and giving inputs for design of curriculum.
- Provide feedback for evaluation of Program Educational Objectives.
- As few members of the alumni are entrepreneurs, they play an important role in motivating the students to become entrepreneurs.

The alumni association paves way for the present students to have informal meets and interactions with the alumni which motivates and channelizes their concentration in various areas of knowledge and skills that need to be improved or enhanced. The institution maintains a cordial relationship with the former faculty and invites them as guest speakers seminars/workshops/conferences etc. They are also invited for annual day, traditional day, Sparkrill etc.

Following are the best practices for student support and progression practiced by the Institution.

- Best Infrastructure facilities for all-round development of students
- Financial assistance to needy students
- Career Guidance Cell
- On Campus Health Service
- State of the art equipment and computers
- Sports and cultural activities
- Well maintained Hostels
- Transportation to all parts of the city
- Student friendly administration
- Industrial visits and field trips
- Participation in national/international seminars/workshops
- Online journals / Internet facilities
- Research Guidance
- Green campus with an excellent academic ambience for learning and progress
- Rewards to outstanding students.
- Centre for Student Services and Placements
- Value added courses
- Grievance Redressal Committee

## **CRITERIA VI**

### **GOVERNANCE AND LEADERSHIP & MANAGEMENT**

## 6.1 Institutional Vision and Leadership

### 6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institutions distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institutions traditions and value orientations, vision for the future, etc.?

#### Vision statement of the Institution

To be among the Top 20 Private Engineering Institutes in India by 2020

#### Mission statement of the Institution

- Design and implement curriculum that equips students with professional and life skills
- Recruit, develop and retain outstanding faculty to achieve academic excellence
- Promote and undertake quality research in thrust areas of science and technology
- Collaborate with industry and academia to meet the changing needs of society
- Foster innovation and cultivate the spirit of entrepreneurship among students

SR Engineering College established in a rural area has an intention and vision to serve society by providing education with global standards. With this the institution is putting its effort to achieve the vision by providing quality education, well equipped laboratory facilities, imbibe ethical qualities to students and reach the desired position to be among top 20 private engineering institutions in the country.

The mission statements are developed in such a way, the students of diverse category admitted to the institution will become a successful engineering professional. Vision of the institute is planned to achieve in five mission steps, which addresses students' all round development, guidance through well trained and qualified faculty, awareness to higher education, exposure to real world requirements and orientation to society contribution through product development and entrepreneurship.

The institution believes in providing value based education and equips the student with life skills through curriculum delivery and bridge courses. The curriculum is designed as per industry requirement and more on practical basis so that student is trained for solution searching for real world requirements. Industry collaboration is given priority in this regard.

The mission statements are achievable as the institution faculty work with dedication with following Code of Ethics:

1. Conduct all of our academic affairs with integrity.
2. Be committed to the SR Engineering College' *vision, mission, philosophy, and principles*.
3. Treat each other with dignity, respect, and sensitivity so as to create a caring environment that allows faculty, staff, and students to reach their greatest potential.
4. Stay focused-on and anticipate the needs of our constituents so we can prepare our students to be "shapers" of our society, not mere "reactors".
5. Set high expectations for ourselves and demonstrate initiative, judgment, flexibility, and teamwork so we may fulfill our mission and vision.
6. Have a compelling desire to advance the knowledge and apply this knowledge so that developing creative solutions is a major focus of life.
7. Have the vision, creativity, openness, and receptivity to challenge the status quo, to create learning and change, and view our role in the institution as part of a dynamic process rather than a set of static, fixed relationships with related tasks.
8. Constantly try to understand the contributions we can make to the *vision* and *mission* of the organization, and seek to contribute where there is a clear, comparative advantage.
9. Believe that lifelong learning, and the application of that learning, greatly enhances society.
10. Be culturally mature and demonstrate a strong appreciation for diversity and the richness it brings to life and learning.

#### **6.1.2 What is the role of top Management, Principal and Faculty in design and implementation of its quality policy and plans?**

The institution, S R Engineering College is governed by Sri Rajeshwara Educational Society, Warangal by well defined quality policy. The Management, The Director, The Principal and the staff/faculty are always stepping in together for designing and proper applications of the quality policy and plans. The Principal of the college is the head of the institution and provides requisite leadership to the system. The Chairman of the Academic Planning Committee keeps on meeting the college staff to discuss various policy matters and their application and adjudication. The Principal ensures

that all provisions of the University bye-laws, the Statutes and the regulations are observed. The Governing Body (GB) comprising of representatives from management, education experts, industry, University, AICTE, Department of Technical Education discusses the proposals of Academic Planning Committee and other key aspects in detail and arrive at the necessary strategies and plans to upkeep the quality of education in the campus.

#### Structure of the Governing Body:

Sri. A.Varadha Reddy	Educationalist	Chairman
Sri. A.Madhukar Reddy	Secretary-Cum-Correspondent	Member
Sri. A.Santhosh Reddy	SRES Nominee	Member
Sri. C.Narsimha Reddy	SRES Nominee	Member
Sri. A.Sadhana Reddy	SRES Nominee	Member
Prof. K.V.Jaya Kumar	Educational Expert Nominee	Member
Dr. G.V.Praveen	Faculty Member	Member
Dr. V.Mahesh	Faculty Member	Member
Dr. G.K.Viswanadh	JNTUH Nominee	Member
Sri. B.Srinivas	DTE Nominee	Member
Dr. C.V.Guru Rao	Principal	Member Secretary
Mr. Ravi Tyagi Dy. General Manager SIDBI, SME Development Centre, Mumbai	Industrial Expert Nominee	Member
Prof. S.M.Deshpande Emeritus Professor, IISC, EMU, JNCASR, Bangalore.	Educational Expert Nominee	Member
Mr. S.K.Jena Regional Officer, Southern Central Regional Office, AICTE, Hyderabad.	AICTE Nominee	Member

The Members of the Management, Director, Principal and other officers are always available to the faculty to present their views and ideas. The opinions of faculty and staff will be considered positively for evolving policies. The Principal provides academic leadership and in association with the various faculties, evolves strategies for academic growth. The faculty is actively involved in decision-making process.

The teachers hold periodic meetings. The recommendations of the Coordinators of the Committees are submitted to the Principal and Management for decision and implementation. Two faculty members of our college are in the capacity of faculty representatives, are members of the Governing Body. Hence they are actively involved in the decision-making process to sustain and enhance quality of education imparted by the institution.

### 6.1.3 What is the involvement of the leadership in ensuring?

- **The policy statements and action plans for fulfillment of the stated mission**

The management of the College has long term vision for both academics and administration. Management takes responsibility to provide the facilities for learning and growth of the college by providing budget under various heads for improving its infrastructure. It promotes research activities and encourages entrepreneurship by invited lectures so that the students are competent enough to meet the needs of industry.

They guide, initiate, persuade the faculty and staff to actively involve themselves in realizing the goals and objectives of the management of the College.

Management provides freedom and decentralization of power in order to work with commitment and acceleration.

Strategic Thinking Group (STG) is formed with Director, Principal, HODs, Deans and senior faculty who regularly meet to discuss about the strategy of actions to be implemented in order to make the missions achievable.

- **Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**

STG in the institution continuously monitors the status of activities performed at department and institution level. For this to happen, action plans for each mission statement are formulated with individual timeline and faculty coordinators are allotted to monitor each action. The action plans for operations are prepared under the supervision and guidance of the Director, Principal, Dean Academics, Dean Research and Heads of the Departments.

Action plans to achieve mission objectives are listed below:

Mission Statements	Action Plans
<p><b><u>MISSION – 1</u></b>  <b>Design and implement curriculum that equips students with professional and life skills</b></p>	<p>ACTION 1: Design curriculum in all UG and PG programs by incorporating courses that equips students with professional and life skills            ACTION 2: Implement curriculum through proper course delivery mechanism and organize co-curricular activities            ACTION 3: Identify the needs to meet the requirements of implementing curriculum and design new programs            ACTION 4: Assess the outcomes of curriculum of every program</p>
<p><b><u>MISSION – 2</u></b>  <b>Recruit, develop and retain outstanding faculty to achieve academic excellence</b></p>	<p>ACTION 1: Recruit qualified and diverse faculty in order to ensure excellence in education and research            ACTION 2: Develop the existing faculty by providing opportunities for growth and development in all domains            ACTION 3: Retain outstanding faculty and staff by rewarding merit            ACTION 4: Provide a healthy working environment</p>
<p><b><u>MISSION – 3</u></b>  <b>Promote and undertake quality research in thrust areas of science and technology</b></p>	<p>ACTION 1: Provide avenues in each department to undertake research in thrust areas and consultancy works            ACTION 2: Enhance interaction with industry and academia for collaborative research            ACTION 3: Build the capacity of faculty for productive research through Initiatives that promote research competency</p>
<p><b><u>MISSION – 4</u></b>  <b>Collaborate with industry and academia to meet the changing needs of society</b></p>	<p>ACTION 1: Collaboration with Industry            ACTION 2: Collaboration with Academic Institutes</p>
<p><b><u>MISSION – 5</u></b>  <b>Foster innovation and cultivate the spirit of entrepreneurship among students</b></p>	<p>ACTION 1: Cultivate the spirit of entrepreneurship among students            ACTION 2: Foster innovation among faculty and students            ACTION 3: Assessment of entrepreneurship achievement</p>

The Principal is concerned with the ultimate vision / mission of the Institution. Management takes responsibility to provide the facilities for learning and growth of the college by providing budget under various heads for improving its infrastructure. It provides various scholarship schemes, promotes research activities and encourages entrepreneurship so that the students are competent enough to meet the needs of industry. A democratic and participative style of leadership is implemented in the



institution, soliciting the total participation and active involvement of both teaching and non-teaching staff. The management has long term vision for both academics and administration. They guide, initiate, persuade and convince the staff to actively involve themselves in realizing the goals and objectives of the Management of the College. The administration also follows an open door communication system and often allows the staff to come up with their constructive suggestions and grievances if any.

- **Interaction with stakeholder**

Stakeholders are given priority and play a vital role in the activities of the institution. Their concerns and feedback are considered for proper design of curriculum; provide adequate learning material to the students; offer training / certification courses; support co-curricular and extracurricular activities.

Class Review meeting is conducted every week for each section separately by the Class Coordinator to identify the problems and provide solution. Monthly Review Meetings / feedback are also conducted separately by HOD, Principal and Management to obtain the concerns from the students. Semester feedback are taken from all the students and consolidated to understand the level of learning satisfaction of the students. Student Council is formed by a group of students from all programs who also provide suggestions and feedback to the management in order to improve learning resources.

Parents as stakeholders provide their feedback through monthly reviews and parent meetings. Continuous communication with the stakeholders is maintained. Another category of stakeholders are employers, wherein all the communications in all aspects are taken care by placement cell. Alumni interactions are organized once in every year during which feedback is taken. Program outcomes and Program Educational Objectives are assessed. Exit feedback is taken from the final year students at the end of their second semester. These inputs are considered for curriculum revision and proper planning of academic activities. SWOT analysis report is also taken from the students and faculty.

- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**

Training Need Analysis (TNA) is performed for students at Department level to identify the core / professional requirements. This analysis is used to design proper certification courses, industrial training, invited lectures or workshops for the students.

TNA for students is performed at institution level to identify ICT based teaching requirements, enhance research facility and awareness to entrepreneurial opportunities.

Further TNA of students is performed by the Training & Placement Cell to identify the training activities for students on communication, company specific trainings and higher education guidance.

TNA of faculty and non-teaching staff, HODs, Deans is performed for designing the skill upgrading, trainings, workshops for faculty to update their teaching capabilities and research career.

- **Reinforcing the culture of excellence**

We believe in striving for excellence. Faculty are encouraged towards research contribution by providing financial support to present papers in reputed conferences and journals. Faculty are encouraged to submit research proposals for funding agencies like DST, UGC, AICTE, etc.

Best practices are being followed to ensure student centric teaching, practice based delivery of teaching, regular industry interaction. Every week entrepreneurship activities are conducted by the Centre for Entrepreneurship Development (CED). Faculty provide (moral) instructions by reinforcing general discipline and attitude to be always followed by the students, best health practices, stringent hygienic measures to be ever adopted, goals / achievements of the students, judicious utilization of campus resources and on other matters of current relevance during the meeting.

At the time of examinations, general tips are given for intensive preparation to excel in exams. Remedial classes are conducted for slow learning students. Several students' clubs are formed and activities are conducted for the students in the areas of cultural (cultural club), environment consciousness (Nature Club), etc.

- **Champion organizational change?**

The College pioneers in the field of changes in organizational set up by becoming an outward looking organization with focus on benchmarking against the best.

It makes use of performance metrics in terms of pass percentage, placement percentage, presentation in conferences, journal publication, project proposals etc. to design appropriate strategies. These are communicated to the employees so that they execute and accomplish the requirement as per the strategies set.

**6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?**

SREC is committed to the procedures of continuous improvement and evolving modified strategies for the betterment of quality. The decisions taken by the appropriate regulatory bodies of the institution are closely monitored by the respective committee for the implementation of decisions, noticing the challenges during implementation and suggesting suitable actions.

Every committee has defined objectives and functions. These committees regularly monitor and review the tasks by conducting the scheduled meetings. Action plans for each mission statement and activities for each action plan are defined and faculty coordinators are allotted to these activities. Strategic Thinking Group of the institution conducts monthly review meetings to monitor the progress of actions and the steps planned for the coming month.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

Management provides adequate freedom to faculty for strengthening teaching–learning process, academic advancement, nurturing multifaceted talent in students, Entrepreneurship development and Research. Faculty are at liberty to formulate plans for supporting slow learners, preparing required learning material, organizing various programmes for curricular and extracurricular abilities, encouraging enthusiastic learners for professional competency, designing new experimental set up in laboratories, taking up in house R&D projects. The freedom of action will motivate faculty for creative and innovative practices, coordination and team work.

The improvement from time to time is monitored by various committees like:

Academic Planning committee

Department Research Committee

Timetable Committee

Class Review Committee  
Professional Bodies  
Sports Committee  
Disciplinary Committee  
Grievance Reddressal Committee  
Library Committee  
Internal Quality Assurance Cell (IQAC)  
Industry-Institute Partnership Cell (IIPC)  
Center for Student Service and Placement (CSSP)  
Strategic Thinking Group (STG)  
Purchase Committee  
Anti-ragging Committee

#### **6.1.6 How does the college groom leadership at various levels?**

Faculty are given freedom as committee coordinators for design and implementation of the functions related to students, faculty and institution mission. Under the guidance of the Principal, HODs are given the responsibility of curriculum reforms, implementation of teaching and learning strategies, industry collaborations, entrepreneurial initiatives. HODs shoulder various responsibilities of department activities related to student learning, faculty skill development, research contribution and resource utilization. HODs delegate the tasks to its faculty members and monitor the operation of the department activities. All the staff members are involved in all the activities in the College. The senior staff members are appointed as conveners of various committees and are given full autonomy in decision making. Various co-curricular and extra-curricular activities are conducted through student committees with office-bearers. In this way the college grooms leaders at higher levels, teaching staff, non-teaching staff and students.

Administrative mechanisms at various levels are:

1. An exclusive Examination Section headed by Officer-In-charge Examination is constituted.
2. Training and Placement Cell takes care of all the aspects related to placements.
3. Grievance redress cell to attend to the problems of students.
4. College administration is run through Management, Director, Principal, Deans, HODs and Professors. All decisions are implemented after a consensus is arrived at.

5. There is a centralized research committee with Director, Principal and Dean R & D to overview all R & D related activities at departmental and institutional level.
6. Maintenance of all buildings and other infrastructure is entrusted to maintenance team.
7. Physical Director attends to all sports activities of boys and girls.
8. Technicians in all departments look after the repair and maintenance of lab equipment under the supervision of the teaching staff.
9. HOD and senior faculty of each Department look after the teaching and learning process in each Department.

**6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?**

HOD is the delegated with department level authority and with operational autonomy but is subjected to Principal approval / endorsement. HODs along with staff members actively govern and administer the department. The department can decide procurement of requisite articles/ materials (for conducting practical classes), student academic activities, selection of candidates for internships, industry oriented mini projects and as class representatives. Academic responsibilities are fairly divided among all the staff members. Committees are appointed for the various academic and co-curricular activities to be conducted in the course of the academic year. The list of committees is displayed at the beginning of the year on the staff notice-board. This ensures transparency in policy execution. The responsibilities are communicated to the faculty members through regular staff meetings. Various co-curricular and extra-curricular activities are conducted through student committees having a lecturer-in-charge.

**6.1.8 Does the college promote a culture of participative management? If “yes”, indicate the levels of participative management.**

Yes

The Management is always open to discussion with the teaching and non-teaching staff which, in turn, encourages the involvement of the staff for the improvement of effectiveness and efficiency of the institutional process. There are regular meetings of office bearers and Management representatives.

Strategic Thinking Group (STG) in the institution conducts monthly review meetings of all action strategies of the mission statement. The discussions of these meetings are submitted to the Management through coordinator of STG.

## **6.2 Strategy Development and Deployment**

### **6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?**

Yes

The quality policy of the institution is

*SREC strives to establish a system of quality assurance by continuously assessing and upgrading the quality of teaching and learning practices by effective monitoring at different levels; institutional, departmental and individual levels to enrich student learning experience and employability. SREC continuously reforms and refines its internal quality assurance systems at institution level, measure and enhance the course design, content and delivery at department level and help faculty to innovate and improve teaching strategies to achieve and enrich student learning by adopting technology-enabled strategies.*

The College has very effective internal co-ordination and monitoring mechanisms. The Principal of the College takes initiative to ensure effective co-ordination between and among the functionaries of the College. On the basis of various policies formulated, objectives are laid down and plans made, a regular follow-up is maintained, thereby encouraging greater support and co-ordination. The Heads of Departments and teachers co-ordinate and plan their individual departmental activities and report to the Principal accordingly.

The Internal Quality Assurance Cell established in the year 2014 on the basis of the guidelines set forth by NAAC, helps the Principal to coordinate and monitor the various activities. The different reports such as departmental reports, performance appraisal reports, self appraisal reports, College annual reports, directives from government etc. become the base for analyzing and evaluating the overall performance of the institution. This also forms the basis for the future plan of action.

### **6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.**

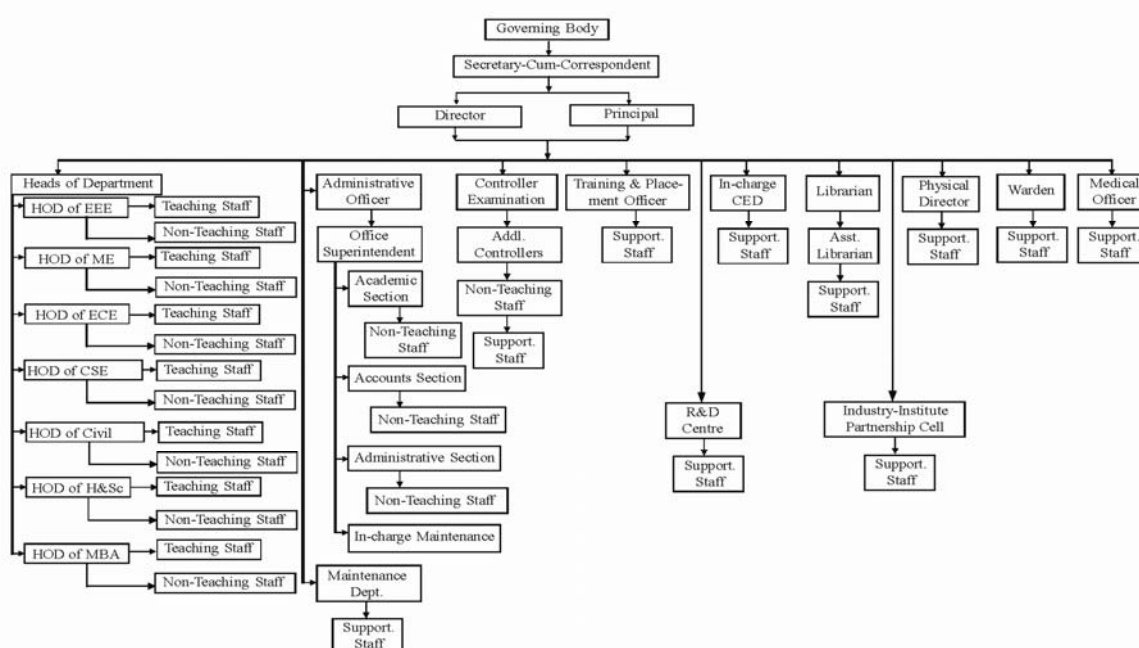
Yes

SREC strives hard in implementation of the set goals and management is supportive with regard to this. SREC has the plans of progressing the institution from an affiliated institution to an autonomous institution and further to a deemed university. Based on the quality policy, the institution has developed action plans in line with the missions of the institution. Various committees conduct regular meetings to collect requirements from the departments and to review the progress of the tasks assigned. Perspective plans are chalked out. The Library Committee, Industry-Institute Partnership Cell (IIPC), Internal Quality Assurance Cell (IQAC), Centre for Student Services and Placement (CSSP), R&D Cell, Center for Entrepreneurship Development are actively involved in building up the strategies for skill development of student and staff.

Key issues related to students, faculty and staff are identified by Strategic Thinking Group and Internal Quality Assurance Cell. Performance indicators are listed, assessed and improvement actions are taken with suggestions from the Principal. The detailed plans that are chalked out, freedom of power to faculty as coordinators and members of committees, well equipped laboratory facilities, encouragement given to students to participate in various co-curricular and extracurricular activities, regular review meetings help to achieve the set plans.

### 6.2.3 Describe the internal organizational structure and decision making processes.

Organizational structure of the institution is shown below:



#### **6.2.4 Give broad description of the quality improvement strategies of the institution for each of the following**

- **Teaching & Learning:**

Provision of State-of-the art learning resources in Central Library & Digital Library and department libraries.

Ergonomically designed classrooms

Development of student support material

Organization of remedial classes

Delivery of add-on-courses

Conduct of pre-placement training classes

Structured course files and lab manuals on all courses

Academic audit

Continuous improvement of resources

Lesson plans are prepared for a semester for all courses. These get verified and checked at different stages in accordance with syllabus and scheme of examination given by University. The teaching – learning process is facilitated through qualified, trained and experienced faculty. Apart from class-room teaching, students are encouraged to use library and internet facilities. Webinars are conducted through IUCEE chapter in the college. Laboratory facilities are improved as and when required by the budget allotted and through MODROBS scheme.

The effectiveness of teaching – learning process is reviewed on regular basis. The inputs for such review are taken from students' feedback, results of mid exams, quality of assignment submitted and final results of external exams. The teaching and learning process is reviewed by head of the department for the concerned teaching faculty and the feedback is communicated. The concerned faculty then plans for improvements which are monitored on a regular basis for their effectiveness. Remedial classes and bridge courses are conducted for slow learners. Guest lectures and seminars are conducted with the experts from industry and academia.

- **Research & Development**

Research proposal submission to sponsoring agencies

Allocation of budget for in house R & D



Incentives and rewards for publications  
Research financial assistance to students

Seminars and workshops are organized by the College to provide expert information on research methodology. The College promotes faculty participation in research by granting them leave, helping them in participation of faculty improvement programme. Infrastructure facilities like well equipped laboratory for student learning as well as for faculty research are made available. The equipments and consumables are purchased often, as and when required to strengthen research activities. The library is well equipped with required titles and volumes of text books and digital library. Students and faculty are sponsored for presentations in conferences hosted by other institutions both domestic and in abroad.

- **Community Engagement**

NSS activities  
Blood Donation Camps  
Development of software  
EPICS

Institution has initiated EPICS activities in association with Purdue University. Under this MOU several projects are done for society needs. Some of the projects are:

Design and Development of Low Cost Lavatory for rural areas  
Assistive Bed for Physically Challenged People  
Automated Medicine Box

NSS unit in the college organizes several activities such as blood donation camps, plantation and contribution to schools.

- **Human Resource Management**

Transparent policy document  
Transparent and scientific way of selections imparting related training  
Formulation and communication of policies of the college  
Support for academic advancement  
Systematic performance appraisal system and guidance to the people concerned

Systematic promotion policies

Structured delegation of power to Principal, Director, Deans, faculty, and administration staff.

An exclusive Examination Section headed by Officer-In-charge Examination is constituted. Training and Placement Cell takes care of all the aspects related to placements. Grievance redress cell to attend to the problems of students. College administration is run through Management, Director, Principal, Deans, HODs and Professors. All decisions are implemented after a consensus is arrived at. There is a centralized research committee with Director, Principal and Dean R & D to overview all R & D related activities at departmental and institutional level. Maintenance of all buildings and other infrastructure is entrusted to maintenance team. Physical Director attends to all sports activities of boys and girls. Technicians in all departments look after the repair and maintenance of lab equipment under the supervision of the teaching staff. HOD and senior faculty of each Department look after the teaching and learning process in each Department.

- **Industry interaction**

Organization of industrial tours

Guest lectures by the experts from industry

Curriculum revision

Industry participation is involved as members of Board of Studies (BOS) for curriculum revision. This enables to have course structure to meet industrial needs. Invited talks and seminars are organized for the students from industry experts. Industrial tours are organized for the students to bring awareness of industrial processes and working culture. Students of B.Tech III year II semester are allowed to Industry Oriented Mini project in the industries for a period of one month during their summer vacation. Students are permitted to do internships in the industries with prior permission of HOD and Principal. Industries visiting the institution during campus interviews address the students regarding their industry profiles and the qualities expected from students. Some of the students are allowed to do the project work in the industries. Certification courses are offered to the students in association with the industries.

Industry Institute Partnership Cell (IIPC) is constituted in the college which has

created a database of industries along with their contact addresses, production/working areas. This is made available to the students and department. IIPC conducts Industry-Institute Meet (IIM) to collect the suggestions from industry experts with regard to course structure design, certification courses and to make industry experts to be part of course delivery through webinars.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

The management and head of the institution are always in interactive mode with each other. The head of institution get the feedback from parents, alumni, industry, teachers, students and the public with regard to the teaching quality, curriculum, extra-curricular activities and infrastructural demands. In the meeting of the GB the information gathered from different sources are discussed with the participating members. After thorough discussion and deliberations the existing facilities and activities of the institution are reviewed and decisions are taken for their implementation after going through the available resources and modalities. The decisions taken and activities of the institute will be communicated to all stakeholders through college website and news letter. Parents are informed about the performance of students after every internal examination. The attendance of students is closely monitored and informed to parents every day. Performance of the students in the internal examination is communicated to parents. Students are counseled in this regard. Alumni of the College are provided facility to offer feedback through college website.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

Management listens to the voice of members of the college and encourages initiative of members. A qualitative suggestion of any member finds place in decision making. A systematic and participative management feature of the institution leads to the determination of right things. After making decision, concerned committees will implement with true spirit with the guidance and cooperation of all the members to make those right things right. Thus promoting Belongingness in faculty and staff pave ways for effectiveness and efficiency.

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

Governing body meeting was held on 30<sup>th</sup> November 2013 and following are the resolutions made during the meeting:

- Approval for Reconstitution of the Governing Body as per UGC norms.
- Approval for seeking Increase of Intake in ECE, CSE, EEE, ME & Civil branches.
- Approval for Presenting Institutional Development Proposal (IDP) under Government of India TEQIP Phase II Program for world Bank Funding.
- Approval for Seeking Permanent Affiliation to JNTUH.
- Approval for Seeking UGC Recognition under UGC Act 2(f).
- Implemented of VI Pay Commission Pay Scales in Deserving Cases
- To consider the commencement of Masters of Technology Management (MTM) Course w.e.f. academic year 2013-14
- To consider the admissions in UG and PG programs during the academic 2013-14









Members of GB present during the GB meeting held on 30<sup>th</sup> November 2013

**SR ENGINEERING COLLEGE**  
Approved by AICTE, New Delhi | Affiliated to JNTUH | Accredited by NBA  
Ananthasagar (V), Hasanparthy (M), WARANGAL - 506 371  
AUTONOMOUS


**Minutes of the Meeting of Governing Body**

**VENUE:** Board Room of Block-I **Date:** 30<sup>th</sup> Nov., 2013  
**Time:** 11 am

**Members Present:**

<b>Sri. A.Varadha Reddy, M.Sc</b> Sri Rajeshwara Educational Society, Warangal	<b>Educationalist</b>	<b>Chairman</b>	
<b>Sri. A.Madhukar Reddy, M.Com.</b> Secretary-Cum-Correspondent, S R Engineering College, Warangal.		<b>Member</b>	
<b>Prof. K.V.Jaya Kumar, Ph.D.</b> Professor, Dept. of Civil Engineering NIT, Warangal.	<b>Educationalist</b>	<b>Member</b>	
<b>Dr. G.K.Vishwanath, Ph.D.</b> Director, Academic & Planning, Professor & Head, Dept. of Civil Engg., JNT University Hyderabad.		<b>Member</b>	
<b>Dr. V.Mahesh, Ph.D.</b> Dean (Research), S R Engineering College, Warangal.		<b>Member</b>	
<b>Dr. G.V.Praveen, Ph.D.</b> Professor, Dept. of Civil Engineering, S R Engineering College, Warangal.		<b>Member</b>	
<b>Mr.B.Srinivas, Ph.D.</b> Principal, Govt. Polytechnic for Women, Warangal.		<b>Member</b>	
<b>Dr. C.V.Guru Rao, Ph.D.</b> Principal, S R Engineering College, Warangal		<b>Member</b>	

**Members Absent:**

<b>Sri. A.Santhosh Reddy, M.Sc.</b> Sri Rajeshwara Educational Society, Warangal.		<b>Member</b>	
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**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If “yes”, what are the efforts made by the institution in obtaining autonomy?**

Yes

Jawaharlal Nehru Technological University has provided facility for the affiliated institutions to take partial autonomy. SR Engineering College is one of the ten private engineering colleges to be sanctioned with partial autonomy. With this limited

autonomy status academic flexibility has been provided. Some of the courses like Professional Ethics and Values, Entrepreneurship Development, EPICS, Cognitive Engineering are introduced to meet the mission statements with regard to societal needs, ethics, and imbining entrepreneurial qualities to the students. Application has been submitted to UGC for the accord of Autonomous Status and UGC team visited the institution.

**6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?**

The institute has Grievance Reddressal Committee with faculty as members and Associate Dean as Convener. Prompt and effective disposal of grievances of various stakeholders are being done. The committee thoroughly discusses the grievances and suggests the solutions for redressing the grievance. If there is a need to redress the issue in GB, the college takes up the issue as an agenda point in GB. The college has Women Empowerment Cell which caters to the grievances and other needs of girl students.

Some of the grievances received from students and addressed are:

- Requirement of bus stop at the college entrance
- College bus facility from college to Jammikunta, Karimnagar district
- Temple inside the college campus
- Extension of Central Library timings for hostel students
- Wifi facility in the campus
- Students Council for representing students' issues

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

Nil

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If “yes”, what was the outcome and response of the institution to such an effort?**

Feedback is taken from the students every semester, every year from final year

students as Exit feedback and from Alumni. Class Review Committees will provide feedback once in a month. After thorough analysis, the head of the department provides his views and suggestions and communicates the same to the concerned faculty. Needed support and guidance will be provided by senior faculty. The improvement of the performance of that faculty will be monitored through subsequent feedback. The advisory committee consisting of the senior teachers collects the exit level feedback from the graduates regarding learning processes. The inputs obtained from them and further used to improvise the overall competency of the students for employability.

### **6.3 Faculty Empowerment Strategies**

#### **6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?**

- Training teachers for excellence
- Sponsoring Faculty & Staff for higher education
- Sponsoring Faculty & staff for attending workshops, conferences at national and international level by granting academic leave
- Organizing Faculty enablement programme
- Organizing skill development programme
- Organizing various professional development activities
- Encouraging faculty to deliver guest lecturers outside
- Systematic organization of professional society activities
- Providing industrial training to faculty
- Facilitating faculty to take up various roles in professional societies

#### **6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?**

- Training New Faculty on instructional design & delivery by the senior faculty of the organization.
- Training to faculty on revised courses by eminent external faculty from industry and institution.
- Deputing faculty to refresher courses

- Guest lecturers to faculty by external subject experts
- Formulation of various committees with Faculty in various cadres as members with proper allocation of work, assigning responsibility and grant of adequate authority and autonomy.
- Participative strategy of management
- Appreciation of the expertise merit and talent by providing opportunities for self expression.

**6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

Performance appraisal:

Performance Appraisal of the faculty is done with reward parameters to be considered for performance appraisal from following

Feed back

Examination results

Teacher's attitude commitment and achievement with regard to his non teaching duties

Peer analysis and review of performance

Consultancy

R &D which also includes publication of papers, books, etc.

The mandatory presentations he/she gives to his colleagues after his/her return from attending that programme.

At the end of every semester, every teacher has to submit a self-appraisal form.

Performance Appraisal of Faculty:

Every teacher will submit Teacher's Self Appraisal Form.

The Performance Appraisal of the Faculty may be evaluated according to the split up of marks as given below:



Sl. No.	Parameter	Marks		
		Professors	Assoc.Prof.	Asst.Prof.
1	Feedback Analysis	20	30	35
2	Result Analysis	35	30	35
3	Administration	25	15	10
4	R & D and Consultancy	20	15	10
Total Marks		90	90	90

The remaining 10 marks, for an exemplary academic performance, particularly in the field of utilizing his/her knowledge for imparting better education to students through development of labs, innovative and effective theory instruction, new knowledge creation and such other things - to be awarded by a committee.

**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

Review of the performance appraisal reports are collected from faculty and staff at department level by the HOD. Performance and contribution of each faculty and staff is taken into account and recommendations are made. These recommendations are submitted to the Principal. Principal discusses with management for necessary action.

**6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

**EPF:**

College pays its contribution of Rs.780/- per month for the teaching faculty who have ratified by the University, if the faculty member pays his contribution. 50% of teaching faculty are availing the benefit.

College pays its contribution of Rs.780/- per month for the non teaching faculty if the member pays his contribution. 95% of non-teaching staff are availing the benefit.

**Transport facilities:**

Free transport is provided for Professors and concessional transport for the other staff. 60% of teaching faculty and 50% non-teaching staff are availing the benefit.

**Medical Facilities:**

Free Medical consultancy is provided to the staff through medical officer. One medical officer and one medical assistant are appointed on part time basis.

100% of faculty and staff are availing the benefit.

**Leaves:**

Earned leave

Half pay leave

Leave not due

Casual leave

Maternity leave

Sabbatical leave

Extra ordinary leave

**6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

EPF: All the teaching faculty who are ratified and all the non teaching staff are eligible for EPF.

6<sup>th</sup> Pay: The entire teaching faculty who are ratified are eligible for 6<sup>th</sup> pay.

Incentive for acquiring Ph.D. degree during service:

Two increments will be given to those who are awarded Ph.D. degree during the service in this Institution.

Other Incentives :

- Rs.5000/- incentive to the faculty for publishing a research paper in International peer reviewed Journals.
- Rs.3000/- incentive to the faculty for publishing a research paper in National peer reviewed Journals.
- Rs.5000/- incentive to the faculty for the best academic performance.
- Registration fee along with TA and DA will be provided to the faculty for attending National and International Conferences / Workshops / FDP's.
- For every 6 months DA will be Enhanced.
- Promotions in teaching positions will be given as per the UGC norms.

**6.4 Financial Management and Resource Mobilization.****6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?**

Institution has well defined mechanism to monitor effective and efficient use of available resources. College obtains proposals from concerned departments in which all the teaching and non-teaching members of the department involve. College receives the needed infrastructural and facilities required by the departments. After assessing the projected income for an academic year, college allocates budget to each department and institution with minute details. While doing so, through discussion will be made in a GB meeting for prioritizing and transparency.

Purchases will be made with the recommendations of duly constituted purchase committee. The amounts withdrawn from the banks will follow a systematic mechanism of obtaining the signatures of the AO, Principal, Secretary & Correspondent and Chairman. In this process the expenditure made will be identified for budgeted expenditure, out of budget expenditure. In case of out of budget expenditure, ratification will be done in a special meeting conducted. In every GB meeting, Principal presents the Income and Expenditure details. GB allocates any additional budget required.

**6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

Every year, internal audit will be conducted by the committees appointed by the principal. After thorough verification, committees will submit their appraisals to the principal for follow up action. College accounts will be audited by the qualified chartered accountants. No major audit objections are identified.

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.**

Major Sources of Income:

Tuition fee

Term Loan from Banks and

## Promoter Society

Details	2013-2014	2012-2013	2011-12	2010-11
Income	178,022,764.00	149,836,208.00	120,649,329.00	99,879,538.00
Academic Expenses	94,898,603.00	74,870,284.00	57,615,283.00	48,877,191.00
Administrative Expenses	61,535,243.00	70,306,096.00	47,923,220.00	66,916,889.00

**Funds Available**

Particulars	Rs.
Total Reserve Fund / Contingent Fund	65,00,000.00
Less : Withdrawn for Library Expenses	-
Net reserve Fund	65,00,000.00

**6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

The addition funds are acquired by the institution, by motivating the faculty to apply for research projects, workshops / FDPs / Seminars grants to various funding agencies.

The funds thus generated are utilized for improving research infrastructure and organizing number of programs for faculty and students.

The funds obtained for projects and various programs are listed in 3.2.7

**6.5 Internal Quality Assurance System (IQAS)****6.5.1 Internal quality assurance Cell (IQAC)**

- a) **Has the institution established an internal Quality Assurance Cell (IQAC)? If yes, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes.

IQAC established on 04-04-2014

The Institute has established recently the Internal Quality Assurance Cell with the following composition.

**IQAC Committee**

Chair Person	:	Chairman of the College
Co-Chair Person	:	Secretary and Correspondent of the College
Convener	:	Principal of the College
Coordinator	:	Dr. R. Vijay Prakash
Members	:	All Heads of the Departments and Two Members from Society

The policy of the institution with regard to quality assurance is:

- Fixing quality parameters for various academic and administrative activities.
- Monitoring the organization of class work and related academic activities.
- Conducting Internal Quality Audits periodically to verify the effectiveness of measures taken in reaching the quality parameters.
- Documenting various programs / academic activities leading to quality improvement and reviewing their effectiveness in quality improvement/sustenance

**b) How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?**

All the decisions of the IQAC were approved by management for implementation and 90% of them were actually implemented.

**c) Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

Yes.

The following suggestions of the external members of IQAC have been implemented.

- Conduct of Industry related Certification Programme.
- Conduct of faculty enablement programme in collaboration with premier academic institutions.

**d) How do students of alumni contribute to the effective functioning of the IQAC?**

- The student members of Students Committee offer their observations / views for enhancing teaching – learning process and conduct of various co-curricular / extra-curricular activities in the institute.
- Alumni are very active and productive in analyzing the requirements of external environment and attributes of the other colleagues and communicating the remedial measures to be taken up at institution level.

- Alumni are sensitizing the students by conducting several interactive sessions.

**e) How does the IQAC communicate and engage staff from different constituents of the institutes?**

- The IQAC constituted different sub committees in which most of the staff members are involved in formulating and executing the decisions of IQAC. The decisions of IQAC are widely communicated to staff members through circulars / notices.

**6.5.2 Does the institution have an integrated framework for quality assurance of the academic and administrative activities? If yes, give details enumerating its impact.**

Yes : The administration is decentralized and is effectively carried out as per quality policy in line with the suggestions of IQAC

**6.5.3 Does the institution provide training to its staff for effective implementation of the quality assurance procedures? If yes, give details enumerating its impact.**

Yes : Faculty is being deputed to various training programme related to quality assurance procedures and standards.

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If yes, how are the outcomes used to improve the institutional activities? 13/3/2013**

Yes

Academic audit is conducted on the following:

- Course files and lab manuals
- Monthly students attendance
- Internal Exam Marks
- Semester Internal Marks
- Semester and exam marks
- Semester wise performance and comparison with other University affiliated colleges.
- Faculty development programme and their impact on teaching – learning process.
- Training programme to students.
- Co-curricular / extra-curricular activities.

Based on the report of internal academic audit, the courses of actions / measures being followed are reviewed and suitable remedial measures will be taken.

**6.5.5 How are the internal quality assurance mechanism aligned with the requirements of the relevant external assurance agencies/regulatory authorities?**

The internal quality assurance mechanisms are designed keeping in the requirements of various accreditation bodies like NBA, NAAC, UGC, etc.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operation and outcome?**

- The following points are considered for formulating the policies on Teaching - Learning Process
- The inter semester and end semester feedbacks on all the subjects are taken from the students in every semester.
- The feedback is analyzed and evaluated and every teacher is provided with a copy of feedback for making necessary corrections. Further, teachers are counseled by the head of the department, Principal and Director if required.
- The administration also receives the feedback by interacting with a selected group of students from each class.
- Monitoring is also done through class review committees (CRCs) to assess the uniformity in syllabus coverage, and also the quality of teaching.
- Annual review interviews are conducted to evaluate the knowledge and ability of the faculty to teach the curriculum subjects by external experts.
- The quality of course material and assignments prepared by the faculty are assessed internally and suitable suggestions for enriching the course materials and assignments are given by the senior faculty of the departments.
- New / creative assignments are prepared every year in all the subjects.

**Evaluation Procedures & Feedback**

The evaluation of faculty by the students through feedback forms is done twice in a semester. This feedback is analyzed and appropriate suggestions are given to the faculty by the HoD concerned and the Principal to see that they rectify the short falls. The feedback form mainly focusing on the various teaching skills of the faculty members, like presentation, communication, knowledge, content covered, innovative practices and laboratory work. The head of the institution interacts with few students of each class and takes the feedback on the teachers about the effectiveness of their classes and learning material provided. Performance and self-appraisals are

taken from the faculty at the end of every academic year and their performance is evaluated. Based on the evaluation report faculty are counseled or penalized.

**Syllabus:**

The institution is having permanent affiliation with JNTU Hyderabad. Further the university has granted an autonomous to frame the syllabus of its own. The departments will organize the Board of Studies (BoS) as generally the HoD will act as Chairman of BoS to frame the syllabus for the respective department. The members for the BoS have been drawn from the Affiliating University, Industry and other Senior Professors from NITs/Universities/Institutions of National Importance. Further, the resolutions have been sent to Academic Council comprises Senior Professors from Affiliating University, Experts from Academia and Industry. Principal will act as Chairman to this council. The syllabus suggested in BoS along with resolutions will be discussed in the Council and finally the council recommends the syllabus. Beyond Syllabus shall be given on where the skills are in demand for employment.

**Academic Calendar:** Number of instructional days, contact hours per week to be followed will be as per the directions of BoS and Academic Council. Additional teaching hours for the extra content shall be arranged after normal contact hours.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to various internal and external stakeholders?**

The institution communicates its quality assurance policies, mechanisms and outcomes through college magazines, newsletters, publications and website.



## **CRITERIA VII**

### **INNOVATIONS AND BEST PRACTICES**

## 7.1 Environment Consciousnesses

The campus stands unique with its lush green expanse, paved pathways, colorful plants, breeze and a serene, soothing environment. The strategic plan for growth has always been driven by a love of nature and sustainability of important resources like energy, water, clean air and green cover. The institution being located in a rural backdrop has always been eco- friendly and during the last five years; the management has been sensitive to issues related to environment and strives to create a green-campus by addressing the local climate change and environmental degeneration. The administration has constituted a team of individuals supported by a horticulturist who take care of the campus greenery and landscape. It is the objective of the management to create a world-class eco-friendly campus in a rural setting.

### 7.1.1 Does the College conduct a Green Audit of its campus?

Yes, SREC is conscious of its responsibilities to the environment and the construction activity in the campus progresses systematically according to a well-defined master plan developed by a leading architect from Bombay. The master plan is inclusive of a periodic environmental audit at different stages of development activity in the campus. The institution maintains a checklist of the following in connection with green audit, even though the institute does not undertake a formal annual audit:

- Energy audit to monitor consumption of electricity and its optimum utilization;
- Periodic assessment and disposal of unwanted stationery, waste materials/condemned equipment.
- Regular maintenance of facilities like water sump and sewerage.
- The NSS team engages student participation and service in maintaining neat and tidy environment and plantation activity in the college campus.
- The team of gardeners attends to the lawn maintenance and tending the plants in the campus.
- Services of a horticulturist are sought regularly.

### 7.1.2 What are the initiatives taken by the College to make the campus eco-friendly?

#### a) Energy Conservation

- Awareness among the students and staff on energy conservation is created by displays at appropriate places.

- Switching off all the electrical utilities whenever and wherever they are not required.
- All the departments are equipped with appliances and equipment that consume low power.
- The buildings are fitted with glass windows for maximum utilization of natural light
- The college has widespread arrangements for power distribution with a Central Substation, Control panel and Power room.

**b) Use of Renewable Energy**

An extensive survey and energy audit was conducted under a student project to prepare a report on energy needs of the campus and explore the possibility of developing a solar alternative to meet the power requirements of the campus. The report also evaluated and assessed the possibility of setting up a roof-top solar power plant of about 250 KW capacity on Block I & II which have adequate surface area for this purpose. We plan to prepare proposals for setting up a solar power plant in the campus to take advantage of the liberal incentives for solar alternative offered by the government.

**c) Water Harvesting**

The campus is partially surrounded by a canal which collects the rain water during the rainy season and leads the water so collected to a large pond serving as a reservoir. This helps to conserve water and improve the water table. Incidentally, the campus did not experience any water shortage in the last 10 years.

**d) Check Dam Construction**

At present, there is no check dam in the college premises.

**e) Efforts for Carbon neutrality**

There is no fossil fuel burning activity anywhere near the campus and the emissions from the college transport system to and from the campus is insignificant. Care is taken to restrict vehicular traffic within the campus and specific parking areas are allotted for faculty and students. The plantation in

the campus adequately balances the ill effects of the emissions from vehicular movement within the campus.

**f) Plantation/Greening Drives**

Periodic plantation program is undertaken by the NSS unit for increasing the green cover in the campus. The NSS unit regularly conducts awareness program on plastic free environment in and around the village. The master plan of the campus has sufficient scope for landscaping and greening of the campus. The service road leading to the campus is having plantation on either side of the road. There is a large neem tree plantation consisting of more than 100 trees behind block I by the side of the road leading to girls hostel.

**g) Hazardous Waste Management and e-Waste Management**

- The used chemicals and condemned batteries are disposed through outside agencies.
- Awareness programmes are arranged on waste management.
- Dustbins are provided at suitable locations in the campus.
- Electronic waste and unusable electronic items known to contain hazardous materials are collected and sent to a common dump for segregation and disposal.

## **7.2 Innovations**

Though restricted by the limited academic freedom of an affiliated institution, SREC has introduced a series of transformative and innovative options during last five years to respond to the complex needs of its stakeholders, as mentioned hereunder.

### **7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.**

**a. Innovative mechanism / process for internal quality checks**

In its quest for excellence, the institution seeks continuous innovation for quality assurance in academic programme & administration. Some of the mechanisms adopted are:

**Academic system**

1. Handouts with lecture plan, assignment questions, useful Uniform Resource Locators (URL) and references are distributed to the students in the beginning of the semester.
2. Content Preparation is made available to all the students.
3. Close monitoring of course coverage through frequent meetings of HODs with faculty members.
4. Class monitoring committee meetings are held thrice in a semester.
5. Periodic collection of student feedback on individual subject teachers.
6. Review of performance of teachers based on feedback and pass percentage of students at university examinations.
7. Faculty counselors for every 20 students.
8. Remedial classes, bridge courses to make up for weak and slow learners.
9. Inviting experienced academia from reputed institutions and industry experts for delivering guest lectures.
10. Incentives for those carrying out research and publishing papers/participating in Seminars / Conferences.
11. Parents are informed about the performance of students after every internal examination. The attendance of students is closely monitored and informed to parent's everyday. Also the performance of the students in the internal examination is communicated to parents. The students are counseled in this regard.

**Administrative system:**

Administrative mechanisms in place for quality assurances are:

1. An exclusive Examination Section headed by Officer-In-charge Examination is constituted.
2. Training and Placement Cell takes care of all the aspects related to placements.
3. Grievance redress cell to attend to the problems of students.
4. College administration is run through Management, Director, Principal, Deans, HODs and Professors. All decisions are implemented after a consensus is arrived at.
5. There is a centralized research committee with Director, Principal and Dean R & D to overview all R & D related activities at departmental and institutional level.

6. Maintenance of all buildings and other infrastructure is entrusted to maintenance team.
7. Physical Director attends to all sports activities of boys and girls.
8. Technicians in all departments look after the repair and maintenance of lab equipment under the supervision of the teaching staff.
9. HOD and senior faculty of each Department look after the teaching and learning process in each Department.

**b. Quality assurance for academic programme Performance Monitoring**

1. Right from the time of admission, performance of every student is carefully monitored. Based on the examination results, faculty counselors take up counseling of poor performers and try to assess the reasons for their poor performance. HOD's arrange special classes for poor performers.
2. Periodic meetings are conducted by the Principal and HODs to review the results of internal and external examinations.
3. The analysis of the results of end semester examinations is carried out, and further discussed by HOD with the Principal.
4. Teaching staff members guide the students in their projects, monitor their performance and counsel them regarding their performance, apart from regular teaching. Thus, teachers play different roles like project guides, counselors, etc.
5. This process ensures the quality of the teaching process.

**Administration**

Academic Coordinators and Class teachers closely monitor student performance and intimate the parents.

**Student evaluation**

1. At college level two descriptive tests in a semester are conducted for internal evaluation. The university conducts the end semester examination.
2. Evaluation procedure & guidelines are given to the staff for both theory & practical exams. Corrected answer scripts of internal exam are shown to the students. Students are encouraged to express their doubts and irregularities observed, if any, in the evaluation, to the notice of concerned teachers, and to HOD, if necessary. The results are monitored by the HOD.

**Automation of student information**

Automated information sharing mechanisms implemented by the institution enable close monitoring of student performance as well as attendance and helps in passing on the information to their parents.

**c. Quality assurance for administration**

SREC has a well-defined quality policy. The college has been granted the status of permanent affiliation by the university JNTUH in the year 2011. The UG engineering programmes CSE, ECE, EEE have been accredited for three years by National Board of Accreditation (NBA) in the year 2008. Application for renewal of CSE, ECE, EEE accreditation and for Fresh accreditation of ME programme has been submitted and renewal is awaited. Continuous quality enhancement is ensured and monitored on the basis of

- Enhanced placement record.
- Improvement in faculty expertise leading to qualified faculty.
- Provides opportunities to non teaching staff to enhance their skills and qualifications.

**d. Innovations in Research and Development and Extension**

Through its R&D centre, SREC has expanded its research activities into many areas and is in a position to attract funded projects. The research work is pursued and monitored by

1. Research committee oversees the R & D activities in the college.
2. R & D labs are established in each department.
3. Inter-departmental research projects are encouraged.
4. National and International Conferences are organized in the campus.

**SREC regularly sponsors**

1. Several state level events like seminars, workshops are conducted for students and faculty in order to update their knowledge.
2. The institute conducts a National level Student technical fest named **Technotrendz** and cultural festival called **Sparkrill** every year, in which the students from different engineering colleges participate to exhibit their talents in various technical, cultural and sports & games events.
3. The institute conducts a cricket tournament for SR Cricket Champions Trophy. Nearly 50 engineering colleges participate in this prestigious event.

**e. Modern ICT Tools**

For effective teaching-learning process, e-content, modern ICT tools such as LCD projector etc. are made use of in the classrooms and seminar halls.

**f. Installation of latest configuration computers**

The systems with old configuration were replaced by the systems with latest configuration. Majority of the computers are P IV with Dual Core processors.

**g. Engineers' day celebrations**

The institute conducts Engineers' Day Celebrations every year on 15<sup>th</sup> September since its inception. On this day, the students exhibit their creative technical exhibits. These exhibits are evaluated by judges from other institutions. This event increases innovative capabilities of budding engineers

**Students' exposure to industries**

The students go on frequent visits to different industries related to their branch so that they can observe the processes taking place there. This provides greater awareness and clarity on the concepts and techniques they learn in the classrooms.

**h. Group Insurance for Staff-members**

Group insurance facility is provided to the staff-members of teaching and non-teaching staff.

**i. Industry Institute Interaction**

The following points are considered for formulating the policies on Industry-Institute Interaction

**Industries role in curriculum planning**

Departmental Development Council is formed by each department in collaboration with industries for Curriculum planning as per emerging trends. The suggestions made therein are presented at the Board of Studies of the university by the members of the board from this college.

**Consultancy and Extension Lectures**

The College provides all the necessary facilities for consultancy work at institute level.



Guest lectures by eminent personalities / industrialists are arranged for the benefit of students and Staff members.

### **Continuing education and Industrial Internship**

College organizes Guest Lectures by industry experts / eminent personalities on latest technologies.

Professional Society membership is made obligatory to all faculty members of the college.

### **Industrial Visits and Industrial Training**

Local Industrial Visits are arranged for II year students by obtaining permission from industries.

III year students are permitted to set out for industrial tour. Industrial Training is arranged for III year students during summer.

### **Project Work**

Students are encouraged to take up Industry related projects. The college has entered into MOUs with the following industries in this regard.

MTS Technologies Ltd, Blue HR Services Pvt. Ltd, 3EDGE Solutions, Delegate technologies, Sralax Systems, Spriha IT Solutions Pvt.ltd

### **Placement**

The centre for student services and placements (CSSP) established with necessary infrastructural facilities provides training and placement assistance to students.

### **Learner Centered Teaching**

The College adopts a mix of different methods of teaching like interactive, discussion based, project based and seminars to supplement the normal lecture method, depending on the nature of the content of instruction.

### **Lecture Method**

The lecture method is used to the extent of 60 to 75 % to explain abstract and conceptual parts of the subject which demand critical thinking and analysis. Teacher presents the relevant data and diagrams through power point / chalk-board mode.

**Interactive Method**

The lecture method of teaching is supplemented with “discussion and interactive method” wherever needed.

**Project-based learning**

This method is mostly used for self learning to improve the learning ability of student and to reinforce knowledge received during the lecture. Being a technical institute, this method is extensively used to provide practical evidence of the theory learned. Students are asked to prepare projects with a clear concept of the principles learned. The teacher guides the students at various stages of developing the project, further gives timely inputs during the preparation of the project work.

**Seminar Method**

From time to time, the teacher involves the active students into the seminar method. A student is advised to come prepared on an assigned topic and present a seminar before the faculty and students. This method makes the student to undertake extensive reading and preparation, further; helps to improve the student’s communication and presentation skills.

**Computer –Assisted Learning (CAL)**

Computer-assisted Learning is a very effective method in teaching and learning process. It involves visualizing, analyzing and understanding complex topics and interpretation of large data and is extensively put in practice in this college.

**Shift from content to competency**

The practice of giving assignments and their evaluation and assigning project module for improving competency is strictly followed.

**Innovative Instructional Methods**

Experiential learning (learning by doing), inquiry and discovery, problem based learning, collaborative and cooperative learning in groups is encouraged.

**E-learning Applications**

Some Classrooms are in the range of Wi-Fi communication facility of the college and are equipped with latest systems, Projectors, etc., for facilitating e-learning.

**Innovative techniques in Assessment**

Surprise tests, online tests, seminars, assignments, etc. are conducted for assessment.

**Innovative to be Coherent and Integrated**

Talent Seeking programme, Orientation Programme, Bridge Courses to help students integrate the disparate elements of their college experiences are in place.

**Innovation in Infrastructural Planning**

A/C seminar halls, computer labs, e-classrooms, separate building for amenities, separate R&D labs for researchers, Microsoft I-Spark Centre in collaboration with Microsoft, Infosys Campus connect Program in collaboration with Infosys, IBM Excellence centre, CISCO Networking Academy, Wipro Mission10X are part of the infrastructure.

**Innovative ‘Higher Focus Course**

Special training programme – Research oriented sessions, Computer training, Personality development, Spoken English classes are organized.

**Innovative Incentives and Reward Schemes**

The institute encourages the students to do innovative projects with special awards and prizes. The College has instituted gold medals and cash awards to best outgoing student, best outgoing girl student, branch toppers, and best project work.

The college encourages all the students who have secured distinction in every semester by rewarding them with most useful books of their respective courses.

**Innovative Faculty Development Initiatives when sponsored to higher education**

Faculty with a minimum of two years service with satisfactory performance are given preference for the higher programme in the required specialization.

**Types of sponsorships:****Type – I:**

The college may sanction leave for higher studies providing service benefits like EPF etc. They should stay for a minimum period of one year.

**Type – II:**

a) With financial benefit,

- b) Without financial benefit, but with EPF etc.
- c) Without any benefit, but considering service

### **Type – III:**

Ph.D sponsorship is considered case by case. Faculty are sanctioned leave of absence for the period.

### **Innovative to be socially responsible**

NSS activities and all departments are undertaking activities like blood donation camps, visits to Orphanages, Medicine Distribution, Children Day Celebrations, Driving Rules Awareness Camp, Fire Demo, Meditation and Yoga Program, clean and green program, Man & Environment activity programme create awareness in people in respect of their role in developing hygienic environment.

AIDS awareness camp and vaccination programme are also conducted. The various activities are

- Distribution of school bags to students at Ananthasagar
- Blood donation camps
- Awareness of the importance of voting
- Prize Distribution for Winners of Games & Sports
- Counseling of Government School Children
- Plantation of Sampling
- Medical Camp Mega Blood Donation Camp
- Health Awareness Tips for Villagers
- Clean and Green Programme at Ananthasagar
- Old Age Home Visit

### **Other innovations that impacted the functioning of the college**

- The institute functions as per its Quality document which covers all the areas of the college, to ensure transparency.
- The institute forms various CELLS and COMMITTEES for implementation of curricular, co-curricular and extra-curricular activities.
- The proposals of the College Management Committee (CMC) shall be presented to the Governing Body for its consideration.

- The College Management Committee (CMC) headed by the Chairman of the college presents its proposals and policies to the Governing body. The CMC meets at least once in three months to take stock of Academic, Administrative, Maintenance and Developmental activities and communicates its decisions to the College Academic Committee (CAC) for follow up action.
- College Academic Committee (CAC) meetings headed by the Principal will be convened whenever necessary to chalk out a blue print of issues to be discussed and steps for their implementation.
- College Magazine, Handbook, Yearbook, Semi Annual Newsletter, Brochure, Department magazine, etc. are brought out.
- student exit feedback, feedback from faculty & staff on the institute, teacher's monthly report, proforma of appointment order, teacher's self appraisal report, performance appraisal of faculty, result analysis, proforma of intimation of retirement, self appraisal report of lab technicians, the semester wise feedback on teachers, the first in the middle of the semester and second at the end of the semester lead to improvement of the Teaching-Learning process.

### **Innovative Practices of Various Departments**

In addition to the above, various innovative practices have been adopted by all the departments which are explained in the evaluation reports.

- Robot club activities by mechanical engineering department
- Society of Automobile engineering (SAE) by mechanical engineering department.
- Cyberpunks : A department professional body of CSE
- I-Spark, Microsoft Innovation centre
- Ideation centre
- CISCO Network by the Department of CSE.
- R-SPAC: A department professional body of ECE.

## **7.3 Best Practices**

### **7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

Even though the college has quite a number of healthy practices, two of them, “Faculty Motivation & Retention” and “Students Motivation – Practical Exposure” deserve special mention in SREC. There is a growing need for educational institutions to become more accountable to the needs of the students and staff. SREC lays special emphasis for implementing these practices. These, in tandem with the Innovations mentioned earlier, have contributed, in a large measure, to the achievement of the institutional objectives as well as improvement in the quality of different activities of the college.

### **Best Practice - I**

#### **Faculty Motivation & Retention**

##### **Goal of this practice:**

The Goal is to motivate the faculty for higher studies and to provide opportunity to attend international conferences to enhance their skills and to retain them with special incentives. SREC encourages faculty to pursue their Ph.D program through external registration.

##### **Impact of the practice:**

Due to the great encouragement given by the Management, many of the staff members were motivated to register for Ph.D program and led to retention of the staff. Many staff members have registered for Ph.D at reputed institutes like IITs, NITs and Government Universities. Also, it is observed that the staff members are bonded to the college due to the excellent attitude of management and the encouragement given to them for improving their careers.

### **Best Practice II**

#### **Students Motivation – Practical/Industry Exposure and Mentorship**

##### **Goal of this practice:**

The goal of this practice is to impart practical exposure to students in upcoming technologies by conducting workshops, guest lectures and seminars by internal and external academicians/industrialists and through industrial visits.

##### **The Process:**

The students are expected to be strong in academics and have good industrial exposure. They are encouraged to update their knowledge with latest developments in their respective disciplines and allied subjects. In addition to good academic record,

the students need to develop leadership qualities and good communication skills and soft skills. In this aspect, eminent personalities from various reputed institutes and industries are invited to impart the practical exposure to the students through workshops, seminars, guest lectures, etc. Also, the students are motivated to share their ideas with the outside world by presenting their research work in National / International conferences. The students are monitored regularly by class monitoring committees and conduct of remedial classes where necessary. Regular tests on GATE and other competitive exams are conducted by the college. To gain industrial knowledge, the students are encouraged to visit the industries.

The objectives of the mentorship practice followed by the Institute are:

- Improvement of teacher-student relationship
  - Counseling students and interaction with them for problem solving
- Focusing to train **Best Practice - II**
- Students for improvement in the global economy and quality of life of the students and public in the society.
  - Guiding students to choose right career path for job, higher studies, Entrepreneurship, etc.

### **The Process**

Since the majority of the students is not matured enough to take their own decision in the vast changing scenario of technology and fast life, the mentorship activity of the institute guides and counsel the students in academic, non-academic matters including personal domain to achieve their best in life. In particular, the scheme aims at addressing deficiencies in attitudes, habits, and knowledge of the students regarding study and learning. Many other supporting methods have been introduced for better coordination of lectures, tutorials and practical classes. Advanced tutorials are arranged by the mentors in association with the respective subject teachers and experts focusing problem-based learning of modern technology. Towards the end of semester, students work collaboratively on assignments in small groups in their practical classes.

**Impact of the practice**

The morale of the students is thus increased due to the expertise training and measures taken by the college. There is recognition and appreciation by the students and they are actively participating in all the programs. As the outcome, discernible positive change has been observed in them.

**Best Practice - III****Establishment of Internal Quality Assurance Cell (IQAC)****SREC Quality Policy**

“S R Engineering College strives to establish a system of quality assurance by continuously assessing and upgrading the quality of teaching and learning practices by effective monitoring at different levels; institutional, departmental and individual levels to enrich student learning experience and employability. SREC continuously reforms and refines its internal quality assurance systems at institution level, measure and enhance the course design, content and delivery at department level and help faculty to innovate and improve teaching to achieve and enrich student learning by adopting technology-enabled strategies.”

The IQAC committee of SREC is constituted to implement the stated quality policy with the primary objective of evolving benchmark performance metrics at institutional, departmental and individual levels on parameters related to administrative, financial, academic and infrastructural matters. IQAC meets regularly to initiate and monitor various quality assurance functions on the following lines:

**Curriculum Design:**

IQAC ensures that the curriculum is designed to meet the student aspirations for employability in a dynamic industry environment, particularly related to IT and ITES areas. Periodic curriculum reforms are undertaken at a two years interval to upgrade the curriculum to meet industry needs by incorporating interdisciplinary subjects as electives to meet and enrich the learning experience of students. Lecture notes are prepared for new courses. Regular Board of Studies meetings are held to assess the courses and course content for each discipline paving the way for addition of new courses. After concurrence in the Academic Council the curriculum is placed before the Governing Body for final clearance/acceptance.

**Infrastructure and Laboratory Modernization:**

Since technology is playing a decisive role in modernizing learning spaces and laboratory work areas, IQAC takes initiative in suggesting and implementing up-gradation of classroom infrastructure with multimedia facilities. Novel laboratory



experiments are designed and introduced to remove obsolescence. Project and product-based multi-discipline learning experience is inculcated among students. Digital library with e-journals, video lectures and webinars from experts are provided in the library and in seminar halls. The campus has Wi-Fi facility. The library stocked a good number of titles on subjects of relevance to the students learning.

#### **Generation of Additional Financial Resources:**

Apart from regular tuition fee, additional funding avenues are regularly explored from sources like DST, UGC, AICTE, MNRE, MNES, etc. IQAC ensures that faculty regularly prepares and presents project proposals in current areas of research for attracting funding from reputed funding agencies. Faculty are encouraged to take up consultancy work and testing to generate additional funding possibilities. Suitable certified testing facilities are being created. SREC R&D Cell is the focal point to identify thrust areas and coordinate project progress.

#### **Staff Development:**

IQAC ensures that the faculty acquires additional qualifications specializing in research areas of current interest. IQAC identifies and sponsors faculty to conferences, workshops and faculty development programs. Faculty are encouraged to conduct workshops and conferences in the campus for the benefit of staff and students. It is the responsibility of IQAC to continuously monitor progress of teaching and nonteaching staff in acquiring additional skills and improving teaching and learning practices. Student performance at end exams and their feedback is used as a metric to assess faculty quality of teaching.

#### **Examination Reforms:**

The internal systems of student evaluation and assessment undergo regular changes to introduce modern methods of evaluation whenever curriculum reforms are sought. A switch-over from awarding marks to grading system is planned from academic year 2015-16. Software comprehensively catering to monitor the student records and services is being developed. IQAC is the supervisory body to ensure proper implementation of reforms in exam pattern, question paper structure and setting external examiners, spot valuation of answer-scripts and award of marks, recounting and revaluation etc.

#### **Student Support:**

IQAC monitors the response of various administrative and academic organs to quickly meet students' needs. Through the Centre for Student Services and Placement (CSSP), IQAC ensures that adequate training and skill development programs are initiated and regularly conducted to improve student campus placement. IQAC contributes to positively impact student attitudes and personality traits to develop desire for lifelong learning.