### **SELF STUDY REPORT**

**CYCLE-2** 

#### **Submitted to**

## NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL





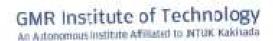
#### **GMR INSTITUTE OF TECHNOLOGY**

An Autonomous Institute, Affiliated to JNTUK, Kakinada Accredited by NBA and NAAC with "A" Grade, ISO 9001:2008 Certified Institution, GMR Nagar, Rajam-532127, A.P.

www.gmrit.org

	CONTENTS				
Ref.No	Content	PageNo's			
A.	COVERING LETTER	1			
B.	EXECUTIVE SUMMARY-SWOC ANALYSIS	2			
C.	PROFILE OF THE INSTITUTION	6			
D.	CRITERIA-WISE ANALYTICAL REPORT				
D1.	Criterion–I: Curricular Aspects	16			
D2.	Criterion–II:Teaching-Learning & Evaluation	24			
D3.	Criterion–III: Research, Consultancy & Extension	60			
D4.	Criterion–IV: Infrastructure and Learning Resources	98			
D5.	Criterion-V: Student Support and Progression	112			
D6.	Criterion–VI: Governance, Leadership and Management	152			
D7.	Criterion–VII: Innovations and Best Practices	176			
E.	EVALUATIVE REPORTS OF DEPARTMENTS				
E1.	Chemical Engineering	188			
E2.	Civil Engineering	208			
E3.	Computer Science & Engineering	226			
E4.	Electronics & Communications Engineering	247			
E5.	Electrical & Electronics Engineering	271			
E6.	Information Technology	292			
E7.	Mechanical Engineering	316			
E8.	Power Engineering	337			
F.	POST ACCREDITATION INITIATIVES	349			
G.	DECLARATION BY THE HEAD OF THE INSTITUTION	356			

#### A. COVERING LETTER





CN: Date: 20.0 -2015

From:

The Principal
GMR fishing of Technology
Rainm.

T.

The Director National Assessment and Accreditation Council (NAAC), P.D. Bex. No. 1075, Nagarbland, Bangathre-200032. Sir.

Sub: Sabmission of Self Stney Report (SSR) for the purpose of 2<sup>rd</sup> cycle of Accreditation by NAAC - GMR Institute of Technology, Autonomous), Rajam, Srikakulam (Usata), Anothra Pradoch — 332127 - Beg.

RAC Our Institute Truck ID: APCOUNT4060, rida LOI it 108 Outober 2014.

GMR Institute of Technology (Astonomous) was according by NAAC for the first cycle for five years w.r.f. 28.03.2016. The Self Study Report (SSR) is placed or the institute website www.gumi.img/artformaccing/ann.par on 1001.2015 for the second cycle of accordination by NAAC. The hard copy of SSR will be submitted shortly along with applicable accordination feedbackly do the needful at your cird to process the SSR.

Dis is for your kind authorisation.

Planking you sit.

Your singeres.

(Dr.(7.L.V.R.S.V. Frasal)

PRINCIPAL



#### **B. EXECUTIVE SUMMARY-SWOC ANALYSIS**

Institutions generally focus on either past or future while realizing the vision. While, GMR Institute of Technology honours & takes pride in building on the legacy of its past and accustomed to think about future for a greater role to be played in the field of higher education and in the society at large. The caption declaring that "Training tomorrow's engineers today" orients the institute vision towards a distinct horizon. Creativity threatens the status quo and entails risk and this is being demonstrated by an attitude towards the conversion of weaknesses into strengths and threats into opportunities. Institute in nearly two decades of its journey offering quality technical education to the aspirants of the rural area like Rajam (Srikakulam District of Andhra Pradesh), has crossed several mile-stones. To name a few, Accreditation by NAAC, Re-accreditation by NBA, Conferment of autonomy, identification of two departments of the institute as research centres by affiliating University, Gold medals for best academic performance at university level and creation of technology enabled academic environment.

GMR Varalakshami Foundation, the Corporate Social Responsibility (CSR) arm of the GMR group established GMRIT in the year 1997. Institute came into being deriving inspiration from the GMR group vision to bring the advantage of the advanced technological learning of highest standards to the students. Situated at Rajam about 100 KM from coastal city of Vizag (Visakhapatnam) in Andhra Pradesh, Institute takes pride in sprawling campus of 157 acres. The institute is affiliated to JNTUK, Kakinada offering eight B.Tech. and seven M.Tech. programmes with annual intake of 966 and maintains faculty – student ratio as per the norms. It is approved by AICTE, conferred with autonomy by UGC, accredited by NAAC with A grade, all the eligible UG programs accredited by NBA and is an ISO: 9001-2008 certified institution. Performance of the institute has been endorsed by some of the popular magazines listing among top 75 colleges in the country. Under industry-institute interaction initiative MoUs have been signed with corporates for academic and research collaborations.

Institute in its journey of 18 years turned out successful engineers, technocrats with professional ethics instilling core values and beliefs towards Nation building. Institute provides congenial and friendly environment for both students and faculty to face the challenges of their respective domains. The institute offers students and staff a cosmopolitan and challenging institute culture of getting used to technology enhanced learning systems. Apart from the curriculum, students are trained in holistic sense by instilling the value system, sprit of enquiry and self motivation with excitement.

Institute had grants, received from various funding agencies viz. AICTE, DST, UGC, BRNS, PCB and ISTE for laboratory development, faculty development

and promotion of research. Institute provides best of the Knowledge Resource Centre in an IT enabled environment with good number of titles & volumes of books and with online and print journal subscriptions. Teaching methodologies at the institute are improvised continuously on an ongoing basis by following several best examples and practices those exist, like timely feedback from students and other stake holders. Students are also trained to groom themselves and improve their soft-skills by providing regular training programs by academicians and professional trainers of the industry thereby making them employable and industry ready. Career Development Cell (CDC) with all the initiatives to train the students in the holistic sense is able to place good number of students every year in the reputed organizations.

IQAC continuously strives in ensuring the systems in place and submits the compliance report from time to time. Welfare measures enabling the staff and students to give their best are in place. Institute aims at making the students to get experienced with motivating and excited intuitive learning from their day one in the campus and take off with a demonstrable, personnel and technical development that will position themselves and the institution next to none.

A detailed SWOC analysis was carriedout in a structured manner involving all the faculty and staff members and this analysis together with the core values of GMRIT formed the basis for developing a strategic plan to evolve with the Vision of our Institution. Details of the SWOC analysis are

#### **Strengths**

- Enlightened, forward looking and financially sound management with a vision for bringing up the institution to the highest level of quality.
- Strong backup from GMR group.
- Effective, efficient, and collective academic leadership.
- Accredited by NAAC, NBA and an ISO 9001:2008 certified Autonomous institution.
- Highly transparent governance and administration with well-defined decentralization of authority.
- Highly qualified, experienced, stable, committed and students-caring faculty.
- Active alumni association with large membership and some of our alumni are in senior executive positions.
- Hostel facility for students and staff quarters for faculty on campus with all amenities like Modern Gym, Aerobic centre, club house, sports and games facilities, round the clock medical and ambulance facilities to create a work culture of utilization of resources beyond the working hours.
- Innovative facilities like Entrepreneurship development cell, Technology incubation centre to hone the skills of students.

- Wi-Fi facility with e-learning resources on campus LAN and round the clock web connectivity.
- Fee waiver policy for merit students at the entry based on EAMCET rank and cash prizes for encouraging the student in professional body activities like paper presentation, project exhibition etc.
- Well defined HR policy for faculty incentives for research contribution, faculty retention, consultancy, QIP and staff development programmes.
- Well defined AOP (Annual operating plan) for various capital and revenue expenditures.
- Association with professional bodies viz, ISTE, IE, IEEE, ASME, IETE, IIChE, CSI etc.
- ERP for all the institutional activities viz. finance, purchases, inventory and student academic data base with web reporting facility to the parent to access the progress of their wards.
- Green and eco friendly campus.
- Recognized as research centre by JNTUK, Kakinada.
- Best academic practices taking care cognitive levels of students with OBE philosophy.
- **Identified** as one of the training centres of NBA.
- Ministry of IT identified GMRIT as one of the centres of HAM Radio.
- Merit scholarships for academic excellence.

#### Weaknesses

- Industrial consultancy is to be strengthened considerably.
- Potential of networking with other institutions is not fully explored.
- Industry-Institute Interaction needs to be strengthened.
- R&D in cutting-edge technologies needs to be enhanced.
- Students with vernacular background and its impact on the employability.
- Limited scope for consultancy in the existing laboratories.
- Insufficient usage of resources to impart training to enhance employability.
- Less interaction/collaboration with reputed universities at national/ international level in terms of specialized courses and sharing the resources.

#### **Opportunities**

- Inter-disciplinary research and collaboration with other institutes to develop effective engineering solutions for the problems in the fields of bio-medical engineering, nano technology, alternate energy sources, environmental engineering, cloud computing, signal processingetc.
- Possibility of offering electives and add on courses in the emerging areas in collaboration with industries.

- Industry that is looking forward to partner in research projects, outsourcing their training programs, and extending consultancy projects to larger number of academic institutes.
- Networking and sharing of facilities with other institutions and industries.
- Leveraging the strong links with distinguished alumni to increase the interwaction with industry for development projects, consultancy works etc.
- Collaboration with foreign Universities for possible exchange programmes.
- Inviting senior professor /adjunct professor/distinguished professor in the specialized areas.
- Sharing the spare capacity of the infrastructure by offering vocational training to increase the non-tuition revenue.
- Establishment of Centre of Excellence for research and training and development in collaboration with industries and research laboratories in the specialized areas.
- Approach research organizations and funding agencies to improve the funding/research.
- Academic consultancy opportunity is there to be explored.
- Moving towards deemed university/ private university status.

#### **Challenges**

- Attrition of faculty in high-demand areas to industry and other institutes.
- Placing all the students in industry internship.
- Peer Competition from other institutions located in urban areas.
- Dynamic changes in educational and recruitment policies.
- Paucity in the availability of committed and quality faculty with passion for teaching.
- Students opting engineering education by chance and not by choice because of free education policy.
- Ensuring all the students employable.
- Impact of industry slowdown on the campus placements.
- Attracting meritorious students.
- Addressing academically weak students.

The results of the SWOC analysis together with the core values, vision and mission of the institute as well as the institute's perceptions about its social responsibilities formed the basis for developing the strategic plan. The institute is firm in its maintenance of financial stability to renew, upgrade or induct afresh infrastructure to the growing needs of the institution apart from attracting well qualified faculty who are willing to go that extramile within the given facilities for the growth of the institution.

#### C. PROFILE OF THE AUTONOMOUS COLLEGE

1. Name and address of the College:

Name: GMR Institute of Technology

Address: GMR Nagar, City: Rajam, Srikakulam Dist. State: Andhra Pradesh

Website: www.gmrit.org

#### 2. For communication:

Designation	Name	Telephone with	Mobile
		STD code	
Principal	Dr.CLVRSV.Prasad	O: 251592	9441406014
		R: 251592 (Ex. 132)	
E-Mail	prasad.clvrsv@gmrgroup.in	F: 251591(08941)	
Vice Principal	-	O: -	-
		R: -	
Steering	Dr.V.Chitti Babu	O: 251593	9491934294
Committee		R: -	
Co-ordinator			

- 3. Status of the Autonomous College by management.
  - i. Government
  - ii. **Private** √
  - iii. Constituent College of the University
- 4. Name of University to which the College is Affiliated

JNTUK- KAKINADA

- 5. a. Date of establishment, prior to the grant of 'Autonomy': (28/08/1997) b. Date of grant of 'Autonomy' to the College by UGC : (16/08/2012)
- 6. Type of institution:
  - a. By Gender
  - i. For Men

ii. For Women

iii. Co-education

 $\sqrt{}$ 

b. By shift

i. Regular

1

ii. Day

iii. Evening

<ul><li>c. Source of funding</li><li>i. Government</li><li>ii. Grant-in-aid</li><li>iii. Self-financing</li><li>iv. Any other (Please specify)</li></ul>	√
7. Is it a recognized minority institution?  Yes  No  If yes specify the minority status ( provide documentary evidence.	Religious/linguistic/ any other) and

8. a. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2 (f)	02.06.2011	-
ii. 12 (B)	21-05-2012	-

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

b. 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	Validity	Programme / institution	Remarks
AICTE	First Approval: 28.08.1997 Latest approval: 04.06.2014	2014-15	B.Tech & M.Tech	
JNTU	First Affiliation: 11.12.97 Latest Permanent Affiliation: 26.06.2013	2013-16	B.Tech & M.Tech	
NBA	04.01.2013 05.08.2013	03.01.15	B.Tech	ECE, EEE, ME, CE & CSE IT & Ch.E
NAAC	28.03.2010	27.03.15	B.Tech & M.Tech	

(Enclose the Certificate of recognition/approval)

Yes No V	For Excellence' (CPE)?
If yes, date of recognition:	(dd/11111/yyyy)
b. For its contributions/performance by a	ny other governmental agency?
Yes No V	
If yes, Name of the agency	
10.Location of the campus and area:	
Location *	Rural
Campus area in sq. mts or acres	157 acres
Built up area in sq. mts.	56992
<ul><li>(* Urban, Semi-urban, Rural, Tribal, Hi</li><li>11. Does the College have the following the available facility)? In case the College have the College h</li></ul>	facilities on the campus (Tick College has an agreement with
11. Does the College have the following	facilities on the campus (Tick College has an agreement with es provide information on the

- Health centre staff

  - O Qualified doctor Full time Part-time
     O Qualified Nurse √ Full time √ Part-time
- Other facilities
  - o Bank √
  - o ATM √
  - o Post office  $\sqrt{\phantom{a}}$
  - o Book shops √
- Transport facilities
  - \* for students √
  - \* for staff √
- Power house  $\sqrt{\phantom{a}}$
- Waste management facility  $\sqrt{\phantom{a}}$

12. Details of programmes offered by the institution: 2014-15

Sl. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualific ation	Mediu m of instruct ion	Sanction ed/appro ved Student intake	No. of students admitte d
1	UG (B.Tech)	Chemical	4 years	10+2	English	60	26
2	UG (B.Tech)	Civil	4 years	10+2	English	60	60
3	UG (B.Tech)	CSE	4 years	10+2	English	180	182
4	UG (B.Tech)	EEE	4 years	10+2	English	120	120
5	UG (B.Tech)	ECE	4 years	10+2	English	180	180
6	UG (B.Tech)	IT	4 years	10+2	English	60	45
7	UG (B.Tech)	Mechanical	4 years	10+2	English	120	120
8	UG(B.Tech)	Power	4 years	10+2	English	60	38
9	PG (M.Tech)	Power & Indl Drives	2 years	BE / B.Tech	English	18	11
10	PG (M.Tech)	Transportation Engg	2 years	BE / B.Tech	English	18	11
11	PG (M.Tech)	CSE	2 years	BE / B.Tech	English	18	11
12	PG (M.Tech)	Digital Electronics & Commn Systems	2 years	BE / B.Tech	English	18	13

13	PG (M.Tech)	VLSI & Embedded Systems	2 years	BE / B.Tech	English	18	14
14	PG (M.Tech)	Thermal Engg	2 years	BE / B.Tech	English	18	10
15	PG (M.Tech)	Environmental Engg	2 years	BE / B.Tech	English	18	11
16	Integrated Masters	-	-	-	-	-	-
17	M.Phil.	-	-	-	-	-	-
18	Ph.D.	-	-	-	-	-	-
19	Integrated Ph.D.	-	-	-	-	-	-
20	Certificate	-	-	-	-	-	-
21	Diploma	-	-	-	-	-	-
22	PG Diploma	-	-	-	-	-	-
23	Any other (Specify)	-	-	-	-	-	-

13.	Does the institut	ion offer se	elf-financed I	Programmes?		
	Yes ☑ No					
If y	es, how many?	15			]	
14.	Whether new pyears?	orogramme Yes √	s have been	introduced	during the	last five
	If yes	Number	DC 5	l		
		Number	PG-5 UG-1			

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

Particulars	Number	Number of Students
ScienceUnder Graduate	-	-
Post Graduate		
Research centre(s)		
Arts Under Graduate	_	-
Post Graduate		
Research centre(s)		
CommerceUnder Graduate	-	-
Post Graduate		
Research centre(s)		
Any Other (please specify) Engg &		
TechnologyUnder Graduate (B.Tech)	08	UG – 3418
Post Graduate (M.Tech)	07	PG – 206 (M.Tech &
	-	MCA)
Research centre(s)		

16. Are there any UG and/or PG programmes offered by the College, which are not covered under Autonomous status of UGC? Give details.

No

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

a.	annual system	-
b.	semester system	B.Tech & M.Tech
c.	trimester system	-

18. Number of Programmes with

- **Choice Based Credit System** b. Inter/multidisciplinary approach

Any other (specify) fixed credit system



UG-8, PG-7

Rs.24.948/-

19. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled) Rs. 74.917/-

(a) including the salary component

(b) excluding the salary component

With Salaries = 26,12,35,915 / 3487 = 74,917

Without Salaries = 8,69,95,033 / 3487 = 24,948

20.	Does the College have a department of Teacher Education offering NCTE recognized degree programmes in Education?
	Yes
	If yes, a. How many years of standing does the department have? years
	b. NCTE recognition details (if applicable)  Notification No.:
	c. Is the department opting for assessment and accreditation separately?  Yes No
21.	Does the College have a teaching department of Physical Education offering NCTE recognized degree programmes in Physical Education?
	Yes $\square$ No $\bigvee$
	If yes, a. How many years of standing does the department have? years
	b. NCTE recognition details (if applicable) Notification No.:
	Date:
	c. Is the department opting for assessment and accreditation separately?  Yes No
22.	Whether the College is offering professional programme?
	Yes No
	If yes, please enclose approval / recognition details issued by the statutory body governing the programme.
23.	Has the College been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

#### 24. Number of teaching and non-teaching positions in the College

Positions	Teac	ching	facult	y			Non- teach staff	ing	Techr staff	chnical ff	
	Prof	essor	Asso e Profe		Assis Profe						
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F	
Sanctioned by the UGC / University / State Government Recruited Yet to recruit	-	-	-	-	-	-	-	-	-	-	
Sanctioned by the Management/Society or other authorized bodies <i>Recruited</i>	20	0	28	06	125	23	58	03	50	04	
Yet to recruit	0	0	0	0	0	0	0	0	0	0	

\*M-Male \*F-Female

#### 25. Qualifications of the teaching staff

Highest qualification	Professor			ociate fessor		sistant fessor	Total
_	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	20	-	14	03	08	-	45
M.Phil.	-	-	-	-	12	01	13
PG	-	-	14	03	106	21	144
Temporary teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Part-time teachers							
Ph.D.	-		-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	_

26.	Number of	Visiting 1	Faculty/	Guest Faculty	y engaged	by the	College.	02
-----	-----------	------------	----------	---------------	-----------	--------	----------	----

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

Students	UG	<u> </u>	PC	j	Int rat Ma	ed ast	M.I 1.	Phi	Pł D.		Integated Ph.	ď	D.l tt./ D.s		Ce ific te		Di ma	plo ı	PC Di ma	plo
	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	1 7 4 9	6 8 4	1 4 3	6	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-
From other states of India	7 0	2 4	2	0																
NRI students	-	1	-	1	1	i	ı	-	1	1	ı	1	1	-	1	1	1	ı	1	ı
Foreign students	-	ı	-	1	1	ī	ı	-	1	1	ı	ı	1	-	1	1	1	1	1	ı
Total	1 8 1 9	7 0 8	1 4 5	6																

<sup>\*</sup>M-Male F-Female

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

UG | 2012-13 : 24/671 = 3.57% 2013 -14 : 20/584 = 3.42% 2014-15 : 10/652 = 1.53% PG | 2012 -13 : 0/45 = No drop outs 2013 -14 : 01/68 = 1.47%

- 29. Number of working daysduring the last academic year (2013-14): 235
- 30. Number of teaching days during the last academic year (2013-14): 199
- 31. Is the College registered as a study centre for offering distance education programmes 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 programmes offered.

32.	Provide Teacher-student ratio for each of the programme/course offered:  B.Tech: Teacher – Student ratio: 1:18.25, M.Tech: Teacher – Student ratio: 1:12
33.	Is the College applying for? Accréditation: Cycle 1 ☐ Cycle 2 √ Cycle 3 ☐ Cycle 4 ☐
	Re-Assessment :
34.	Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and reassessment only)
	Cycle 1: 28/03/2010 Accreditation outcome/results –NAAC 'A' grade3.24 out of 4.
	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
35.	a. Date of establishment of Internal Quality Assurance Cell (IQAC) 04/02/2009
	<ul> <li>b. Dates of submission of Annual Quality Assurance Reports (AQARs).</li> <li>(i) AQAR for year 2014-15 on 08.07.2015</li> <li>(ii) AQAR for year 2013-14 on 24.07.2014</li> <li>(iii) AQAR for year 2012-13 on 30.06.2014</li> <li>(iv) AQAR for year 2011-12 on 30.09.2014</li> <li>(v) AQAR for year 2010-11 on30.09.2014</li> </ul>
36.	Any other relevant data, the College would like to include. (Not exceeding one page)
	The institute has been conferred the status of autonomy with

- effect from the academic year 2012-13 by UGC and the
- Two departments of the institute have been recognized as Research Centers of affiliating UniversityJNTUK-Kakinada.
- All the eligible departments of the institute are accredited by NBA.

affiliating University JNTUK-Kakinada.

## D. CRITERIA-WISE EVALUATIVE REPORT D1. Criterion-I: Curricular Aspects

#### 1.1 Curriculum Design and Development

1.1.1 How are the institutional vision / mission reflected in the academic programmes of the college?

#### Vision

"To be among the most preferred institutions for engineering and technological education in the country...

An institution that will bring out the best from its students, faculty and staff – to learn, to achieve, to compete and to grow – among the very best...

An institution where ethics, excellence and excitement will be the work religion while research, innovation and impact, the work culture"

#### Mission

- To turnout disciplined and competent engineers with sound work and life ethics.
- To implement outcome based education in an IT-enabled environment.
- To encourage all-round rigor and instill a spirit of enquiry and critical thinking among students, faculty and staff.
- To develop teaching, research and consulting environment in collaboration with industry and other institutions.

### Process of academic programmes towards attainment of vision and mission:

- The curriculum and course structure of all the programmes is designed based on OBE philosophy. The innovative academic practices and full semester internship programme enables the student to be more employable and makes GMRIT as the most preferred institution.
- Regular feedback from all the stakeholders of the institution is analyzed and implemented in course and curriculum design for the holistic development of the student.
- Enhanced self learning through more number of laboratory courses and audit courses with continuous assessment reinforces the technical competencies of the student.
- Laboratory demonstrations, student projects, seminars, awareness talks, expert lectures from national and international industry / R&D personnel, industrial visits etc. are conducted on a regular basis. This would encourage the students to become familiar with current trends in technology and research, to develop self-learning and life-long learning interests, to become aware of professional, ethical and societal responsibilities.

## 1.1.2 Describe the mechanism used in the design and development of the curriculum? Give details on the process. (Need assessment, Feedback, etc)

The institution has followed the curriculum and syllabi prescribed by the University when it was non-autonomous till 2012. The university reviews the syllabi every two years. Since 2012, institute after being conferred with autonomy, Board of Studies (BoS) for each programme/department has been constituted in accordance with UGC regulations. Under autonomy, curriculum design and development has received great attention and the BOS meets every year to review/modify the course structure and content, keeping abreast with the industry requirements. Curriculum has been designed based on predefined program and learning outcomes. BoS of all the academic programmes have taken steps to make changes in the core areas like course design, assessment strategies and delivery methods in line with OBE. All the aspects like planning, implementation, assessment/evaluation and continual quality improvement emphasized.

Feedback from stake holders' viz. students, parents, alumni and industry is taken and analyzed. Various requirements of the stakeholders are understood and incorporated while establishing the PEO's. Feedback on every course is also taken at the end of the course and all these feedbacks are analyzed to fine-tune the syllabi. Feedback will also be used as an assessment tool to establish the attainment of the PO's and PEO's.

The Programme Outcomes (PO) are established to relate with the skills, knowledge and attitude that the student acquire during their study. PO's are defined in consistent with the graduate attributes as per NBA guidelines. Course design involves defining contents, course outcomes (COs), which describe what students are expected to know and be able to do at the end of the course. Attainment of these outcomes is established through mapping of CO's to the PO's.

## 1.1.3 How does the college involve industry, research bodies and civil society in the curriculum design and development process? How did the college benefit through the involvement of stakeholders?

Involvement of industry, research bodies and civil society in the curriculum design is done at different levels through Governing Body, Academic Council, Board of Studies & various stakeholders. Renowned people from industries, research bodies and civil society are made as part of various committees at the institutional governance level.

Governing Body, an apex committee constituted as per the UGC norms, has the representation from Management, AICTE, UGC, State Government, Affiliating university, Industry, Renowned academicians, Research organizations and Faculty. The committee meets thrice in a year and deliberates on strategic and policy decisions regarding administrative, academic and financial matters and decides the way forward for the institute.

Academic Council is an institute level committee comprising of the Principal, Deans, external members (Industry, Academicians from premier organizations and affiliating university nominees), HODs and nominated senior faculty members of the institution. The council meets at least once in a year and deliberates on feasibility and viability of various proposals received from BoS and ratifies based on the needs of the stakeholders.

**Board of Studies** (BoS) is a departmentlevel committee comprising of HoD (Chairman), all faculty members, academicians from premier institutions, affiliating university nominee, expert from industry andsenior Alumni. BoS meets at least once in a year to effectively review/modify the course structure, course design andcourse content keeping abreast with the industry requirements.

Advisory Board -Industry-Institute Interaction of the institute is actively involved in identification of industry requirements to improve the technical competency of the students and making them more employable. It facilitates the Industry-Institute Interaction in terms of establishment of Centers of Excellence (CoEs), Consultancy, Training centres, MoUs in potential areas and internships.

**Stakeholders** play a major role in the design of curriculum. The stakeholders include students, parents, alumni, employers, and society at large. Feedback from these stake holders are obtained and analyzed regularly to understand the various requirements of the stakeholders.

## 1.1.4 How are the following aspects ensured through curriculum design and development?

#### Employability:

The main objective of the design of the curriculum is to enhance the employability of the graduates of the concerned programmes through defined PEOs and POs. Further, Industrial Internships, Industrial visits, Industry based Projects, ElectiveCourses offered in thrust areas and enhanced practical exposure through more lab courses improve the employability of the students.In addition various soft skill training

programmes, Add-on courses and mock tests are conducted to improve the skill sets of the students as required by the Industry.

#### Innovation:

Term papers, internship, inter disciplinary and elective courses help the students to come-up with many innovative research ideas. Encouragement to participate in various conferences, project exhibitions and other technical competitions enhances their innovative skills. The hobby project club motivates the students toconceptualize and incubate their innovative ideas.

#### Research:

Term papers, Seminars, Open electives and Project Works enhance the attitude towards research. Encouragement to publish papers in the conferences & journals and participation in project exhibitions and other technical competitions enhances research capability.

## 1.1.5 How does the college ensure that the curriculum developed address the needs of the society and have relevance to the regional/national developmental needs?

To enable the students to meet various challenges of the society at the regional/national level, curriculum includes credited courses viz. Environmental studies, professional ethics, Electrical safety and hazards, Disaster management, Renewable energy sources etc.Besides, Institutealso aspires to strengthen the knowledge on ethical and social responsibilities through audit courses which are most important for sustaining any socio-technical system.

## 1.1.6 To what extent does the college use the guidelines of the regulatory bodies for developing or reconstructing the curricula? Has the college been instrumental in leading any curricula reform which has created a national impact?

The Institution follows the guidelines of UGC, AICTE and JNTUK-Kakinada (Affiliating University) for development and restructuring of curricula. All the committees constituted as per the regulations of the regulatory bodies ensure the development, design and implementation of various programmes. All the regulatory committees meet as per the schedule complying with the regulations to oversee the curriculum revisions meeting the industry requirements within the framework of affiliating university. Due weightage is given to science and core subjects complying with the guidelines. Continuous assessment and semester end evaluation procedures are designed and implemented as per the university guidelines.

Credited full semester internship offered by the institute is a rare feature in the curriculum, which is instrumental in making the students more industry ready and creating a national impact.

#### 1.2 Academic Flexibility

## 1.2.1 Give details on the following provisions with reference to academic flexibility

#### a) Core / Elective options

Each academic program follows the curriculum framework as per the mandatory guidelines of the affiliating university. Nearly 35% of the courses are offered as Electives from VI Semester to VIII Semester for Under Graduate programmes. The same is being followed during Iand II semesters of Post Graduate programmes.

#### b) Enrichment courses

Certification and Add-on courses are being organized beyond the curriculum to enrich the knowledge levels of the students. Some of the courses include: IBM-DB2,RAD, MATLAB, PRO/E, Ansys.

#### c) Courses offered in modular form

Though the courses offered may not strictly conform to modular mode, the curriculum is so designed that the basic requirements for the award of the degree satisfy the requisite number of courses under a particular stream. Each course has four modules in the curriculum proposed for autonomous students. Earlier it was made into 8 modules.

#### d) Credit transfer and accumulation facility

Transitory regulations are in place for the re-admitted/transferred students to ensure credit balance.

e) Lateral and vertical mobility within and across programmes, courses and disciplines.

NA

1.2.2 Have any courses been developed specially targeting international students? If so, how successful have they been? If 'no', explain the impediments.

NA

1.2.3 Does the College offer dual degree and twinning programmes? If yes, give details.

NA

1.2.4 Does the College offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?

NA

(However Institution is a private self - financing institution offering both UG and PG programmes)

1.2.5 Has the College adopted the Choice Based Credit System (CBCS)? If yes, how many programmes are covered under the system?

Yes. Institute adopts CBCS for all its UG and PG programs from the academic year 2015-16 as per the guidelines of UGC.

- 1.2.6 What percentage of programmes offered by the College follows
  - \* Annual System
  - \* Semester system
  - \* Trimester System

All programmes offered by the institute follow semester system.

1.2.7 What is the policy of the College to promote inter-disciplinary programmes? Namethe programmes and what is the outcome?

Inter-disciplinary PG programs Viz. M.Tech. (CSE) and M.Tech. (Environmental Engineering) are offered. Further, Every U.G. and P.G. program offers open elective and other inter-disciplinary courses to enhance the competency of the students to work in multi-disciplinary areas.

- 1.3 Curriculum Enrichment
- 1.3.1 How often is the curriculum of the College reviewed for making it socially relevant and/or job oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?

In order to keep the students abreast of the latest trends in the emerging areas and also to keep pace with the industrial needs and global competition, the curricula and syllabi are revised and enriched every two years. However, as and when the need arises there is a provision to upgrade the curricula and syllabi.

### 1.3.2 How many new programmes have been introduced UG and PG level during the lastfour years? Mention details.

The following new programmes are introduced in the last four years

S.No	Programme	Department	Academic Year
01	B.Tech. Power Engineering	Power Engineering	2012-13
02	M.Tech. VLSI & Embedded systems	Electronics & Communication Engineering	2012-13
03	M.Tech. Environmental Engineering	Chemical Engineering	2012-13
04	M.Tech. Thermal Engineering	Mechanical Engineering	2013-14

## 1.3.3 What are the strategies adopted for revision of the existing programmes? What percentage of courses underwent a major syllabus revision?

Curriculum is reviewed based on predefined program and learning outcomes. BoS of all the academic programmes take steps to make changes in the core areas like course design, assessment strategies and delivery methods. Feedback from stake holders viz. students, parents, alumni and industry is taken and analyzed. Various requirements of the stakeholders are understood and incorporated to establishPEO's. Feedback on every course is also taken at the end of the course and all these feedbacks are analyzed to fine-tune the syllabi.

The Programme Outcomes (PO) are established to relate with the skills, knowledge and attitude that the student acquire during their study. PO's are defined in consistent with the graduate attributes as per NBA guidelines. Course design involves defining contents, course outcomes (COs), which describe what students are expected to know and be able to do at the end of the course. Attainment of these outcomes is established through mapping of CO's to the PO's.

### 1.3.4 What are the value-added courses offered by the College and how does the College ensure that all students have access to them?

Some of the value-added courses offered by the various departments of the institute are given below:

Airfield Ground Lighting (AGL), High Tension (HT) systems, Waste water treatment, Water pumping systems, Microsoft. Net Fundamentals, Database Fundamentals, Networking Fundamentals, Web development using .NET Frame work, IBM Lotus Notes, IBM RTC, IBM-RAD, .NET Framework, Mobile Gaming, MAD using ADOBE FLASH, Pro/E and Ansys, CAD / CAM, J2JEE, CCNA, VLSI & Embedded systems.

All the interested students get the opportunity to register for the above courses as they are arranged during the weekends, summer/winter vacations. During the working days, they are offered beyond working hours.

1.3.5 Has the College introduced any higher order skill development programmes in consonance with the national requirements asoutlined by the National Skills Development Corporation and other agencies?

No. The institute has not introduced any programmes as per NSDC and other agencies. However, Institute has been identified by Andhra Pradesh State as one of the Skill Development Centres. NSS wing of the institution also involves the students in community development activities, social service activities, building moral and ethical values.

#### D2. Criterion-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?

Institute gives wide publicity in newspapers, handouts, institute website etc.regarding Infrastructure, facilities, faculty, merit scholarships, cash incentives for students with good EAMCET ranks. Institute also conducts road shows at various places to showcase the highlights of the institute.

The admission into professional engineering courses is done as per the guidelines of APSCHE. Besides, transparency in the admission process is also ensured by displaying the selected list of students in the institute website.

2.1.2 Explain in detail the process of admission put in place for UG, PG and Ph.D. programmes by the College. Explain the criteria for admission (Ex. (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common test conducted by state agencies and national agencies (v) others followed by the College?

Admission process is followed as per APSCHE guidelines and seats are categorized into A & B.

**The category A seats** (70%) are filled through common entrance exams conducted by state government:

- 1) EAMCET for B.Tech courses
- 2) ECET for lateral entry admission into B.Tech 2<sup>nd</sup> year.
- 3) GATE/PGECET for M.Tech courses

<u>The Category B seats</u> (30%) are filled by the college management by adhering to Government orders that are in vogue from time to time.

2.1.3 Does the College have a mechanism to review itsadmission process and student profiles annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

Every year after the admission process is completed, from the admitted student data, institutemaintains database with cut off ranks branchwise, category wise and genderwise. Based on the database, institute devises plans for the forthcoming years to attract good rankers by offering fee concessions / incentives to improve the quality of student intake.

## 2.1.4 What are the strategies adopted to increase / improve access to students belonging to the following categories

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

There is no specific strategy to improve access to students belonging to the categories mentioned above, as admissions are conducted by state govt.

## 2.1.5 Furnish the number of students admitted in the College in the last four academic years.

Category and gender wise admitted students for the last four years are given below.

	Acade	mic Year: 201	3-14	
Course	Categories	Male	Female	Total
	SC	71	16	87
	ST	14	3	17
B. Tech.	OBC	307	104	411
B. Tech.	General	184	80	264
	Others	6	0	6
	Total	582	203	785
	SC	9	2	11
	ST	1	1	2
M. Tech.	OBC	41	17	58
IVI. Tech.	General	15	5	20
	Others	1	0	1
	Total	67	25	92

	Acade	mic Year: 201	2-13	
Course	Categories	Male	Female	Total
	SC	70	23	93
	ST	17	7	24
	OBC	241	124	365
	General	181	76	257
B. Tech.	Others	14	0	14
	Total	523	230	753
	SC	6	4	10
	ST	0	1	1
	OBC	23	12	35
	General	18	5	23
M. Tech.	Others	2	0	2
	Total	49	22	71

Academic	Year: 2011-12			
Course	Categories	Male	Female	Total
	SC	52	30	82
	ST	19	5	24
B. Tech.	OBC	221	87	308
D. Tech.	General	153	69	222
	Others	14	1	15
	Total	459	192	651
	SC	8	2	10
	ST	0	0	0
M. Tech.	OBC	23	6	29
ivi. Tecil.	General	19	10	29
	Others	0	0	0
	Total	50	18	68

Academic	Academic Year: 2010-11								
Course	Categories	Male	Female	Total					
	SC	65	24	89					
	ST	19	8	27					
	OBC	194	97	291					
	General	183	59	242					
B. Tech.	Others	14	2	16					
	Total	475	190	665					
	SC	6	2	8					
	ST	1	0	1					
	OBC	18	5	23					
	General	7	5	12					
M. Tech.	Others	0	1	1					
	Total	32	13	45					

## 2.1.6 Has the College conducted any analysis of demand ratio for the various programmes offered by the College? If so, indicate significant trends explaining the reasons for increase / decrease.

Institute analyze programme wise demand ratio every year and based on the trends observed variation of intake in various programmes is planned.

Programme	Year	Number of Applications	Number of Students Admitted	Demand Ratio
	2013-14	840	782	93.09%
UG: B.Tech.	2012-13	780	752	96.41%
OG. B. Tech.	2011-12	660	655	99.24%
	2010-11	660	652	98.79%

PG: M.Tech.	2013-14	126	92	73.02%
	2012-13	126	72	57.14%
	2011-12	108	68	62.96%
	2010-11	90	45	50.00%

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

Institute has withdrawn M.Tech – CAD/CAM & MCA courses in the year 2012 & 2013 respectively based on demand ratio.

#### 2.2 Catering to Student Diversity

## 2.2.1 Does the College organize orientation / induction programme for freshers? If yes, give details of the duration of programme, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Institute conducts two day orientation program every year for the newly admitted students. The details of the program are given below.

#### Day 1 schedule:

- Introduction about the institute by Principal to parents and students.
- Ice breaking session: Combining the students of various branches and forming groups for facilitating interaction among them.
   Conducting various activities to involvement of different groups.

#### Day 2 schedule:

- Visiting respective departments.
- Introduction about academic regulations.
- Visit to central facilities.
- Visit to the laboratories.
- Cultural session.
- Information about anti ragging committee members and their phone numbers.
- Dress code.
- Discipline.

The feedback collected during these programs is utilized for the improvement in the contents of the programme and its organization during the subsequent years.

## 2.2.2 Does the College have a mechanism through which the —differential requirements of student population are analyzed

### after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

Institute has a review mechanism to identify and analyze the differential requirements of studentsbased on their EAMCET ranks, Academic background and vernacular background. The requirements are also identified through induction programme and parents and students meet.

## 2.2.3 Does the College provide bridge /Remedial /add - on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise?

Institute has a practice of conducting bridge/remedial/add-on courses.

- Bridge courses are conducted to the lateral entry students in selected subjects like mathematics, C-programming etc.
- Slow learners are identified based on their performance in continuous assessment and semester end examinations.
- Remedial classes are planned for those courses wherein the pass percentage is less than 85%. Two months prior to the supplementary examinations, remedial classes are conducted for those who have backlogs. In the class time table, weekly two periods (each of 50 minutes duration) are allotted for each subject.
- Add-on courses are conducted to enhance employability of students. Add-on courses viz. DB2, RAD, Embedded systems, MATLAB, Pro/E, Ansys etc., are conducted beyond the credit-based courses toenhance the skill sets of students.

#### **Details of Bridge courses offered**

**NIL** 

#### **Details of Remedial courses offered**

Department	Title of the Remedial course	Academic Year and Semester (I/II)	Courses intended for the classes of(I/II/II/IV)
BS & H	LLS –I, Maths-I, Engg. Physics, Engineering Chemistry	2013-14 (I sem)	I SEM
	English –I, Maths-I, Engg. Physics, Engineering Chemistry	2012-13 (II sem)	II SEM

	Petroleum Refining &	2013-14	
	Petrochemical Engineering	II Sem	IV-II
	Process Dynamics & Control	2013-14	III-II
		II Sem	111 11
	Organic Chemistry	2013-14 II Sem	II-II
	Probability & Statistics	H Sein	
	Plant Design for Chemical Engineers	2013-14 I Sem	IV-I
	Thermodynamics-II	2013-14 I Sem	III-I
	Momentum Transfer	2013-14	YY Y
	Thermodynamics	I Sem	II-I
Chemical	Organic Chemical Technology	2012-13 I Sem	III-I
	Mechanical Unit Operations	2012-13 II Sem	II-II
	Management Science Process Process Dynamics & Control	2012-13 II Sem	III-II
	-		
	Basic Electrical & Electronics	2011-12	
	Engg. Mathematics-III	(I Sem)	II –I
		. ,	
	Thermodynamics-I	2011-12	II –II
	Probability & Statistics	(II Sem)	
	Solid Mechanics	2013 - 14	II - I
	DDCS	2012 - 13	III – I
	FEMCE		IV – I
	SA – I		II – II
Civil	Structural Analysis – I	2011 - 12	II - II
	Surveying		II – I
	Hydraulic and Hydraulic Machinery	2010 – 11	II - II
	A.S.A		IV – II
	Computer Organization	2013 - 14	III SEM
	Principals of Programming Language	2013 – 14	II-II
	Computer Graphics	2012 - 13	III-I
CSE	MFCS	2012 - 13	II-I
CSE	P & S	2012 - 13	II-I
	Software Engineering	2010 – 11	II-II

	Principals of Programming Language	2010 – 11	II-II
	Database Management	2010-11	II-II
	OOP'S	2010 - 11	II-II
	Probability theory and stochastic processes	2013 – 14	II-I
	Electronic Devices and circuits		II-I
	Electronic circuits Analysis	2012 – 13	II-II
	Digital Image Processing		IV-I
ECE	Probability theory and stochastic processes		II-I
	Electromagnetic waves and transmission lines	2011 – 12	II-II
	Operating Systems		IV-I
	Mathematics-II		II-I
	Control Systems	2010 – 11	II-II
	Operating Systems		IV-I
EEE	Microprocessor	2012 14	III-II
	&microcontroller Control system	2013 – 14	II-II
	Electromagnetic fields		II-II
	Complex variables and	2012 – 13	III-I
	statistical methods		111 1
	Power systems		IV-I
	MEFA	2013 – 14	III SEM
	EDC		IV SEM
	ACD		IV SEM
	PPL		II - II
	ACD	2012 – 13	II- II
	ADS		III- I
IT	CAN		III- II
	EDC		II- I
	PPL		II - II
	EDC		II- I
	ACD	2011 – 12	II- II
	ES		IV- I

	SPM		IV –I B-SEC
	ACD		III -I B SEC
	USP	2010-11	II- I
	WT		III- II A SEC
	OS		II- II
	HT-A	2012 14	III-II
	KOM-B	2013-14	IV SEM
	EM-A		III SEM
	TD-A	2012-13	II-I
	MMS-A		II-II
	DOM-A		III-I
MECH	FEM	2011-12	IV-I
MECH	EM	2011-12	II-I
	DMM-I		III-I
	DOM	2010-11	III-I
	MOS		II-I
	CAD/CAM-A		III-II
	ICG		IV-II

#### **Details of Add on courses offered**

Department	Title of the ADD on	Academic Year	Courses intended for the
	course	and Semester	classes of(I/II/II/IV)
		(I/II)	
	Waste water treatment systems	2011-2012	IV - I
Chemical		2012-2013	IV - I
		2013-2014	IV - II
	Database	2013-14	IV - I
	Fundamentals		
	.Net Fundamentals	2013-14	IV - I
CSE	HTML5	2013-14	IV - I
	Fundamentals	2015-14	
	Networking	2012 14	IV - I
	Fundamentals	2013-14	

	Web Development		IV - I
	Using .Net frame	2013-14	
	work		
	Mobile Game		
	Application		
	Development with	2012-13	IV - I
	Action Script (Adobe		
	Flash)		
	IBM - Mastering		
	Servlets and JSP	2012-13	
	using RAD		IV - I
	LOTUS	2012-13	IV - I
	RTC	2012-13	IV - I
	RAD	2012-13	III-I &IV - I
	DB2	2012-13	III-I &IV - I
	DB2 – V 9.2	2012-13	IV - I
	TDS	2012-13	IV - I
	Water pumping	2012-13	IV-I
	systems at GHIAL,	2010-11	1 v -1
	Hyderabad.		
	Water pumping	2011-12	IV-I
	systems at GHIAL,	2011-12	1 V -1
	Hyderabad.		
CIVIL		2012-13	IV-I
CIVIL	Water pumping systems at GHIAL,	2012-13	1 V -1
	Hyderabad.		
	Hyderabad.		
	Water pumping	2013-14	IV-I
	systems at GHIAL,		
	Hyderabad.		
	HT and AGL systems	2013-14 and II	IV-I
	HT and AGL systems	2012-13 and II	IV -I
EEE			
	JSP & SERVELETS	2013-14	III-I
IT			
	MAD USING	2013-14	III-II,IV-I
	ADOBE FLASH		
	IBM LOTUS NOTES	2012-13	III-II,IV-I
	IBM RTC	2012-13	III-II,IV-I
	.NET FRAMEWORK	2012-13	III-II,IV-I
	.NET FRAMEWORK	2012-13	III-II,IV-I
	IBM DB-2	2011-12	III-II,IV-I

	IBM RAD	2011-12	III-II,IV-I
	IBM TDS	2011-12	III-II,IV-I
	IBM TGMC	2011-12	III-II,IV-I
	IBM DB2	2011-12	III-II,IV-I
	SOFTSKILS	2010-11	III-II,IV-I
	FOUNDATION PROGRAM	2010-11	III-II,IV-I
	PROE	2010-11& I	III-I &IV-I
	ANSYS	2010-11 & II	III-II & IV-II
ME	PROE	2011-12& I	IV-I
	BSDP	2011-12 & II	IV-I
	ANSYS	2012-13& I	IV-I
	PROE	2012-13 & II	III-I
	PROE	2013-14& I	III-II
	ANSYS	2013-14 & II	IV-I

# 2.2.4 Has the College conducted a study on the incremental academic growth of different categories of students; - student from disadvantaged sections of society, economically disadvantaged, physically challenged and slow learners etc.? If yes, give details on how the study has helped the College to improve the performance of these students.

Track sheets are maintained to assess the incremental academic growth of each student irrespective of the category. Slow learners are identified based on the performance of the students in Mid-Semester and Semester end examinations. Remedial classes are conducted to improve their performance.

### 2.2.5 How does the institution identify and respond to the learning needs of advanced learners?

• The advanced learners are identified by the teachers during their lectures in class room by means of getting feedback from the students orally and sometimes in writing. Students are subjected to various methods of evaluations like vocal responses, sample individual responses and written tests after each unit of syllabus. Based on their performance, students are identified as slow and advanced learners. They are supported in the best possible manner.

- The teachers take extra care in helping them with an additional and personal interest. They are provided with the additional time, advanced learning materials and assistance from the teachers.
- They participate in sponsored research and consultancy projects carried out by the faculty. Students are facilitated to get themselves engaged in innovative projects, model making, and presentation of papers in premier institutions.
- Further such learners are motivated for higher seats of learning and top most career options. A number of motivational lectures are organized to channelize their potential to accomplish better success.
- They are also encouraged to develop course materials and application software in association with faculty.

## 2.2.6 How does the institution cater to the needs of differently-abled students and ensure full adherence to government policies in this regard?

- The institution is fully adhering to governmental policies regarding the needs of differently-abled students.
- Students having vision and functional disability are provided with Scribes.
- Ramps and lifts are provided.
- Special counselingsessions are arranged.

### 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 and evaluation blue print, etc.)

Institute preparesannualacademic calendarfor all the UG and PG programmes well in advance before the commencement of academic sessions incorporating the schedules for all the Curricular, Co-Curricular and Extra-curricular activities enabling the faculty and students to plan accordingly. Academic calendar ensures minimum days of instruction as per UGC regulations apart from maintaining minimum weeks of instructions for every sessional examination complying with affiliating university norms.

#### **Teaching Plan:**

Course handout is prepared by the respective course teachersto ensure uniform pace of teaching for each theory course. Academic Monitoring Committee (AMC) constituted for each class monitors the syllabus progress on regular basis and reports the same to the HOD. In case of multi section courses, the course coordinator shall oversee the uniform course delivery and evaluation. Wherever, deviation is observed, HOD seeks clarification from the respective course coordinators. Each course is taught as per schedule ensuring fulfilment of course outcomes. Efforts are made to see that each student follows the fundamentals thoroughly. Feedback is collected from the students of each course twice in a semester (Mid and End semester). Based on the feedback received, corrective measures will be initiated by the HODs based on need.

#### **Evaluation blue print:**

The evaluation procedure in compliance with examination regulations, for all the theory or laboratory courses is kept transparent. To ensure transparency, scheme of evaluation for each course is posted on LAN/Notice boardafter the conduct of every sessional examination. To ensure uniform evaluation in multi section courses the scripts are evaluated question wise. Discrepancies reported by any student are rectified before the marks statement is finalized. Departments submit the data after finalization to central exam section and are later updated in students LAN portal for access to students/ parents.

In case of semester end examinations question papers are invited from external subject experts and the evaluationis done by conducting spot evaluation inviting the external experts under the supervision of controller of examinations/chief superintendent.

## 2.3.2 Does the College provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

Yes, Institute provides course handout prior to the commencement of the academic session. Course handout contains number of contact hours, delivery schedules, examination schedules, courseobjectives, outcomes &detailed syllabus for each course. Regular Academic Monitoring Committee (AMC) meetings and meetings among the teachers of the multi section courses facilitated by the Heads of the Departments shall ensure the effectiveness and review of academic progress. Teacher-Student interaction programmes and personal

counselling sessions are facilitated to improve the teaching-learning processes. In general each teacher focuses on the following aspects while handling the course:

- Presents the scope of a topic and the application of the principles involved.
- Notify the syllabus and periods allotted for a topic and the name of text / reference book that is relevant for the topic in course handout.
- Brings out important applications.
- Review of fundamentals and subject knowledge gained in each topicthrough tutorials.
- Encourages students to try out different ways of solving a problem.
- Review of performance in examinations to evaluate the level of understanding.
- Provides hands on experience to student on the equipments in a lab.
- Encourages study tours for industrial exposure.

## 2.3.3 What are the courses, which predominantly follow the lecture method? Apart from classroom interactions, what are the other methods of learning experiences provided to students?

All theory courses require lecture method. However, they differ in the number of lectures. Chalk and talk method is followed for most of the courses which are further supplemented by the teaching aids like LCD projectors and display models. In addition to the classroom lectures, LAN based courses, NPTEL video lectures, webinars etc. are used to make the subject easily comprehensible to the students. Every Department has been provided with intranet/internet connectivity. E-journals have been made available by online subscription. Apart from classroom interaction, other methods of learning experiences provided to the students are:

- Guest lectures by eminent persons from Institutions/Industry.
- Mini project, industrial study tours.
- Internship for hands on experience.
- Hobby project exhibitions at the institution level.
- Encouraging the students to present papers at Seminars/ Conferences.
- Access to e-journals and e-books.
- Visits to exhibitions/mock demonstrations organized by industries/software companies.
- Term paper to review research papers on topics of interest to foster scientific temper.

# 2.3.4 How 'learning' is made more student-centric? Give a list of participatory learning activities adopted by the faculty that contribute to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

- The faculty motivates the students to participate in model making, every year best model making is rewarded by giving cash prize and certificate.
- Institute facilitates internships for students in various industries across the country to enable hands on experience.
- Students are motivated to participate in paper presentations, software contests and various co-curricular activities in various events organized in and outside the college. Institute reimburses the travelling expenses for those who are presenting outside the college.
- Institute encourages participating in games & sports, NSS and other social activities to enhance their team-work skills, self-esteem, and ethical values.
- Students are encouraged to gain knowledge in interdisciplinary subjects through selection of open electives, seminars and discussions with experts.
- The scientific temper among students is enhanced by providing additionallaboratory hours, mini project and research activities.
- Students are encouraged to participate in project competitions andworkshops.
- Students are encouraged to prepare review paper as part of their term paper work on their topic of interest to come out with innovative ideas to fosterscientific temper.
- Students are encouraged to take up live / industry projects. Further faculty engages students in consultancy works of the department.
- To hone critical thinking process of students various group discussions, debates and seminars are organized in which students explore new ideas.

## 2.3.5 What is the College policy on inviting experts / people of eminence to provide lectures / seminars for students?

Institute has a policy of organizing minimum of ten 'Expert Lectures' per semester from GMR group and five 'Expert lectures' by inviting faculty from premier institutions and Industry. Institute also encourages the departments to organize seminars/conferences and

workshops at least once in a year in different thrust areas. As per the policy, the institute provides Honorarium, travel and local logistics to the invited guests/subject experts.

## 2.3.6 What are the latest technologies and facilities used by the faculty for effective teaching? Ex: Virtual laboratories, e-learning, open educational resources, mobile education, etc.

To supplement conventional teaching methods, faculty uses technology enabled teaching learning environment impart the subject knowledge. Further each Department is provided with adequate number of computers and internet facility, to access and to download online journals and subject matter e-books and e-journals. Seminar halls with audio visual aids, ICT (Information and Communication Technology) facilities are provided to conduct guest lectures, seminars, workshops etc. Class roomswith roof mounted LCD projectors, interactive projectors, touch screens etc. enables the teachers to use animations and simulations for effective teaching.

# 2.3.7 Is there a provision for the services of counsellors / mentors/ advisors for each class or group of students for academic, personal and psycho-socio guidance? If yes, give details of the process and the number of students who have benefitted.

Yes, Institute has a unique way of counselling system. Faculty handling each class acts as counsellor/mentor/advisor. Every faculty is allotted with 15 students. Staff Counsellor will arrange a meeting with students on a regular basis. The concerned students shall interact in the context of academic matters and personal problems. The information will be uploaded on to ERP from time to time. Counselling details can be accessed by the students and parents through web reporting. While counselling, identification of the students suffering with personal and psycho-socio problems is done. If necessary counselling in the presence of their parents/ Head of dept./ Principal is takenup apart from referring the case to an external counsellor/psychiatrist. Institute also has psychologist on campus to look after psycho-socio problems of the students.

For students who are disobedient, mentally depressed, irregular to the class work and have poor academic performance due tolack of interaction with staff members as well as co-students, counselling will be done to bring out a change in their attitude. As many as 5 % (approximately) of students got benefitted and have come out from their personal and psycho-socio problems.

2.3.8 Are there any innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years? If yes, did they improve the learning? What methods were used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

Some of the teachers use the following innovative techniques in addition to conventional lecture methods.

- The use of modern multi-media teaching aids like LCD projectors, Internet enabled computer systems are usually employed in class roominstructions.
- One tutorial class per week is allotted for each course wherein the fundamental understanding of the concepts and application of principles involved in the course are emphasized.
- Digital library facility enables students to collect extra learning material like NPTEL lectures, videos etc.
- The students are also encouraged to use computer software packages for analyses and experimental work of their projects.
- The Institute encourages teachers to enhance their subject knowledge andresearch in their respective fields using library resources and software. Institute encourages faculty to upgrade their knowledge by attending conferences, seminars and software training programmes. Institute extends financial assistance for the faculties who have attended those courses.
- The faculty members in turn transform their knowledge or technical knowhow to their students either in the classroom or arranging special lectures for this purpose
- Creative assignments are prepared by the faculty in all the subjects for PG students and they are asked to prepare the solutions by referring the books and other-learning materials.
- Seminars / symposia are conducted regularly every year to bring outinherent talents of the budding engineers.
- At least two special guest lectures are alsoarranged per semester on the latest topics by eminent academicians / industrialists.
- The Institute regularly arranges training programmes and orientation programmes for junior facultymembers to enrich their teaching skills and tune to the working culture.
- ELCS lab is established to improve the verbal skills of the students.
- The Institute is a Wi-Fi enabled campus covering a radius of 0.5 km. It enables faculty and students to use internet facility in class rooms, labs and hostels.

## 2.3.9 How does the College create a culture of instilling and nurturing creativity and scientific temper among the learners?

Institute has Student Activity Center (SAC) where students are encouraged to participate in various clubs. Institute facilitates the student'sactive involvement in term paper, working model projects, internship, paper/poster presentations and technical exhibitions which are the learning experiences that make students move away from dependence on routine learning. These methods will help to overcome problems like short attention span of students and absence of social interaction. There is a considerable improvement in the creative, critical, communication and problem solving skills of the students. Feedback from students has revealed the success and popularity of these methods.

Periodical Motivation lectures by eminent persons from institution/industry and interactive sessions with them help the students in creating interest in new areas. Institute organizes industrial study tours to help the students to understand the real time applications of the technology.

Cash prizes are instituted for academic excellence and merit prizes, medals for achievement in co-curricular & extra-curricular activities motivates the students and instil& nurture scientific temper among the learners.

## 2.3.10 What efforts are made to facilitate the faculty in learning / handling computer-aided teaching/ learning materials? What are the facilities available in the College for such efforts?

Institute encourages the faculty members for their quality improvement by sponsoring them to attend various workshops/ seminars/ conferences. Apart from sponsoring the faculty members to various Workshops / Conferences / FDP's conducted externally, Internal FDPs are also organized periodically. Faculty is provided with desktops and laptops with wi-fi connectivity enabling them to use technology and resources for class room delivery. Access to the E-content, digital library across the campus facilitates easy usage of the latest developments and trends in the class room lectures. The LAN course portal facilitates direct communication with the students for effective teaching. Laboratories are equipped with latest software packages, E-Journals and e- books to promote research among faculty.

## 2.3.11 Does the College have a mechanism for evaluation of teachers by the students / alumni? If yes, how is the evaluation used in

## achieving qualitative improvement in the teaching-learning process?

Yes, Institute takes the feedback from the students twice in a semester. The teacher is evaluated by the student in 15 parameters on 6 point scale. In case the feedback is less than or equal to 3 respective HODs of the departments shall analyze the situation and counsel the faculty appropriately. Faculty members are also advised to attend Faculty Development Programmes for improvement in the teaching-learning process.

Course end feedback taken at the end of the programmeand alumni feedback further facilitates the teachers to improve teaching-learning process. Inaddition, feedback is also sought from the alumni regarding attainment of PEOs/POs to refine curriculum and teaching-learning process.

# 2.3.12 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.

Institute puts all efforts to complete the curriculum according to the academic calendar. However, in case of any loss of the working days due to unforeseen situations like strikes / bundhs and other disturbances, the class work is compensated by conducting extra classes during working days apart from declaring weekly breaks as working days.

## 2.3.13 How are library resources used to augment the teaching-learning process?

The Institute has a Knowledge Resource Centre (KRC) which is fully provided with a comprehensive collection of titles and volumes, e-books, Hand books, Journals, magazines, Code books and other documents useful for the students, faculty and research scholars. To facilitate continuous availability of resources KRC operates for 14 hours without break during working days and 15 hours during examinations. Besides Knoeledge Resource Centre, each department maintains individual departmental library. The details of the department libraries are given in evaluative reports of the individual departments. To enable the students bring their own materials and read in the KRC, exclusive reading rooms for boys and girls are made available. Wi-Fi enabled web OPAC facility helps the student to check the availability and indent the books on demand. The digital library

facility provides access to all the e-books, online journals, Video lectures and LAN Courses portal supplementing the class room teaching and research. The details of available titles and volumes in KRC are:

TOTAL No of VOLUMES : 58055
TOTAL No OF TITLES : 15757
TOTAL AREA : 1618 sqm

SEATING CAPACITY : 500

JOURNALS (Print): NATIONAL : 95 INTERNATIONAL: 15

ONLINE JOURNALS : 618

SUBSCRIPTIONS TO :ASCE -ASME -IEEE-

ELSEVIER – SPRINGER – ASTM DIGITAL LIBRARY – MCGRAW HILL – J-GATE &

DELNET.

Branch wise titles and volumes break up:

Branch	Titles	Volumes
CIVIL	856	3979
EEE	1281	4923
MECH	2353	7793
ECE	1772	6360
CSE	2152	7844
CHEMICAL	479	2562
IT	1186	4091
BS&H	1917	8345
CHEM	249	1108
ENG	460	1690
MATHS	702	3232
PHY	226	1318
OTHERS	280	997
GENERAL	1316	1993
SC & ST	398	926
PG COURSES		
MCA	250	752
M.Tech CE	68	137
M.Tech CSE	60	145
M.Tech ECE	172	342
M.Tech EEE	151	379
M.TechEnv. Engg.	51	157
M.Tech ME	214	326
M.Tech VLSI	64	190
Tota	1 14740	51244

Branch wise details of journals:

Branch	National journals (Print)	International journals (Print)		IEEE	SPR	ASCE	ASME
CIVIL	18		33	6		33	
EEE	8		49	12	9		
MECH	15	9	77	15	11		31
ECE	7			55	29		
CSE	5		41	22	38		
CHEMICAL	7	4	13	3			
IT	4		27	23	38		
BS & H	11		11				·
GENERAL	20	2	24	9	9		
Total	95	15	275	145	134	33	31

## 2.3.14 How does the institution continuously monitor, evaluate and report on the quality of teaching, teaching methods used, classroom environments and the effect on student performance.

Complying with the academic regulations and the course structure, weekly time tables for each class are framed for both theory and lab courses. All the departments have Academic Monitoring Committees (AMC) constituted for each class comprising of its class teachers and student representatives. AMC monitors the student's performance and attendanceperiodically and suggests for remedial actions. In multi section courses, uniform course delivery and evaluation is ensured by the course coordinator in-line with the handout. Apart from theory classes for all the courses, tutorials are conducted to reinforce the concepts and encourage self learning of the student.

Continuous evaluation is ensured by conducting three sessional examinations and a comprehensive online quiz examination in a semester. To ensure the quality of teaching in lab courses 1:15/20 faculty—student ratio is maintained. Mid semester and end semester feedback from the students enables the faculty members to address the issues related to class room delivery on an ongoing basis to improve class room performance. Regular faculty development programmes and teaching workshops are conducted in all the departments to update the subject knowledge and teaching skills.

Parents are informed regarding the attendance and performance of the students regularly through web reporting, SMS and progress reports. The students are advised to meet their counselors to discuss their problems and seek guidance in solving them.

All the class rooms are provided with teaching aids like Interactive projectors, LCD projectors and Smart boards to support class room teaching. Maximum strength in the class is limited to 70.Session wise lecture notes is made available on LAN to supplement the class room teaching.

### 2.4 Teacher Quality

## 2.4.1 What is the faculty strength of the College? How many positions are filled against the sanctioned strength? How many of them are from outside the state?

- \* Total Faculty 202
- Total Required 225 and recruited 202
- Out Side State: 13

#### 2.4.2 How are the members of the faculty selected?

- HR Department plans for recruitment of faculty and staff based on Annual Operating Plan.
- Profiles for the required positions are sourced through various sources viz., advertisements (newspapers, portals...), consultants, internal reference etc.
- Screening and short listing of the profiles depending on their suitability for the position is done by the respective departments.
- Well constituted selection committee shall conduct the interviews and screen the candidates giving the selected panel list.
- Need based recruitment of faculty through campus interviews at Premier Institutes.

#### 2.4.3 Furnish details of the faculty

Highest qualificatio	Profes	sor	Associ Profes		Assista Profes	Total			
n	Male	Female	Male	Female	Male	Female			
Permanent teachers									
D.Sc./D.Litt									
•									
Ph.D.	20 0		14	03	08	0	45		
M.Phil.					12	01	13		

PG	0	0	14	03	106	21	144				
Temporary teach	ers		Nil								
Ph.D.											
M.Phil.											
PG											
Part-time teacher	'S			Nil							
Ph.D.											
M.Phil.											
PG											

2.4.4 What percentage of the teachers has completed UGC-CSIR-NET, UGC-NET, and SLET exams? In that what percentage of teachers are with PG as highest qualification?

All the faculty members have PG as minimum qualification.

2.4.5 Does the College encourage diversity in its faculty recruitment? Provide the following departments-wise details.

Depar-		•	% of faculty	% of
tment	faculty who	from other	from other	faculty
	are product		States	from
	of the same	within the		abroad
	College	State		
CHEM	NIL	84%	16%	NIL
CIVIL	1	10	NIL	NIL
CSE	10	63	27	Nil
ECE	7.89	68.42	2.63	2.63
EEE	3	40	55	NIL
IT	Nil	79%	21	Nil
ME	7.4	92.6	Nil	Nil

2.4.6 Does the College have the required number of qualified and competent teachers to handle all the courses for all departments? If not, how do you cope with the requirements? How many faculty members were appointed during the last four years?

Yes, Institute has required number of qualified and competent teachers to handle all the courses for all the departments.

2.4.7 How many visiting Professors are on the rolls of the College?

One.

2.4.8 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, nomination to national/international conferences/Seminars, in-service training, organizing national/international conferences etc.)

Institute has a well defined HR policy to encourage and support faculty members for quality improvement and research. Following are the details of the policies promoting quality and research.

- Cash incentives to faculty who publish their papers in peer reviewed journals and present their papers in reputed national and international conferences.
- Sponsorship to pursue Ph.D. under QIPat premier Institutes.
- Encouragement to organize/participate in seminars/ conferences/ workshops in the thrust areas.
- Motivation lectures for faculty to promote research.
- Cash incentives for faculty who acquires Ph.D. on part time.
- Financial support for purchase Laptop in the form of interest free loan.
- Academic leaves for faculty attending Ph.D. reviews/ thesis submission/seminars/conferences/workshops.
- Cash incentives for sponsored research projects
- International travel grant for conferences and workshops.

## 2.4.9 Give the number of faculty who received awards / recognitions for excellence in teaching at the state, national and international level during the last four years.

Nil

## 2.4.10 Provide the number of faculty who have undergone staff development programmes during the last four years. (Add any other programme if necessary)

2013-14

Faculty / Staff Development Programmes	Number of faculty
Refresher courses	1
UGC – Faculty Improvement Programme	2
HRD programmes	9
Orientation programmes	4
Staff training conducted by the university	17
Staff training conducted by other institutions	40
Summer / Winter schools, Workshops, etc.	105
Others	23

### 2012-13

Faculty / Staff Development Programmes	Number of faculty benefitted
HRD programmes	8
Orientation programmes	63
Staff training conducted by the university	17
Staff training conducted by other institutions	54
Summer / Winter schools, Workshops, etc.	116
Others	30

### 2011-12

Faculty / Staff Development	Number of faculty benefitted
Programmes	Total
Refresher courses	41
HRD programmes	15
Orientation programmes	47
Faculty exchange programme	28
Staff training conducted by the university	89
Staff training conducted by other institutions	32
Summer / Winter schools, Workshops, etc.	1
Others	1

### 2010-11

Faculty / Staff Development	Number of faculty benefitted
Programmes	Total
Refresher courses	34
UGC – Faculty Improvement	3
Programme	
HRD programmes	1
Orientation programmes	34
Faculty exchange programme	3
Staff training conducted by the university	45
Staff training conducted by other institutions	13
Summer / Winter schools, Workshops, etc.	07

### 2.4.11 What percentage of the faculty have

2013-14

	CF M	CHE M		V	CSE		EC	Έ	EEE	E	IT		ME H	EC	BS	<b>%</b> Н
	N O	%	N O	%	NO.	%	N O	%	N O.	%	N O.	%	N O	%	N O	%
been invited as resource persons in Workshop s / Seminars / Conferenc es organized by external profession al agencies	N il	0	0	0	2/3 0	6. 7	0	0	0	0	0	0	N il	N il	N il	Nil
participate d in external Workshop s / Seminars / Conferenc es recognized by national/ internation al profession al bodies	1 3	1 0 0	0	0	Nil		3	8 . 3 3	20	77	3/22	1 4	0 9	3 4	4	11.1
presented papers in Workshop s / Seminars / Conferenc es conducted	1 3	1 0 0	3 / 1 4	2 1. 4	13/30	43 .3 4	3	8 . 3 3	9	35	1/ 22	5	0 8	3 0	1 3	36.1

or recognized by profession al agencies															
teaching experience in other universitie s / national institutions and others	N il	0	0	0	Nil	0	0	15	57 .6 9	20 /2 2	9 0	N il	N il	N il	Nil
industrial engageme nt	N il	0	6	4 3	Nil	0	0	0	0	0	0	N il	N il	N il	Nil
internation al experience in teaching	N il	0	0	0	Nil	0	0	0	0	0	0	N il	N il	N il	Nil

### 2012-13

2012-13	CH M	Έ	CIV		CS E	S	E	CE	EF	EE	IT		MI H	EC	BS H	&
	N	%	N	%		%	N	%	N	%	N	%		%	N	%
	О		О		О		О		О		О		Ο		O	
been invited as resource	1	8	0	0	N		0	0	0	0	0	0	N	N	N	N
persons in Workshops /					i								il	il	il	il
Seminars / Conferences		3			1											
organized by external																
professional agencies																
participated in external	1	1	0	0	N		0	0	1	6	2/	9	1	5	9	2
Workshops / Seminars /	3	0			i				9	1.	2		4	2		3
Conferences recognized by		0			1					2	2					
national/ international										9						6
professional bodies																8
presented papers in	1	1	2	1	1	6	0	0	1	3	2/	9	1	4	1	4
Workshops / Seminars /	3	0	/	4	8	6			2	8.	2		2	5	7	4
Conferences conducted or		0	1		/					7	2					
recognized by professional			4		2	6				0						7
agencies					7	7										3
teaching experience in other	N	0	0	0	N		0	0	1	6	2	9	N	N	N	N
universities / national	il				i				9	1.	0/	0	il	il	il	il

institutions and others					1				2 9	2 2					
industrial engagement	N il	0	7	5 0	N i l	0	0	1	3. 2	0	0	N il	N il	N il	N il
international experience in teaching	N il	0	0	0	N i 1	0	0	0	0	0	0 %	N il	N il	N il	N il

### 2011 – 12

											1					
	CHI	Е	CI	V	CS	E	EC	Έ	EE	ΈE	IT		ME H	EC	BS H	&
	M															
	N	%	N	%	N	%	N	%	N	%	N	%		%	N	%
	O.		О		O		O		О		O.		Ο		О	
been invited as	Ni	0	0	0	N		1	3	0	0	0	0	N	N	N	N
resource persons in	1				il								il	il	il	il
Workshops / Seminars								7								
/ Conferences								,								
organized by external																
professional agencies																
participated in	12	1	0	0	N		9	3	1	3	5/	2	1	6	6	1
	12	_	U	U			9	3	1	_				5	O	_
external Workshops /		0			il			3	1	9.	26	0	1	)		5.
Seminars /		0								2						7
Conferences								3		8						8
recognized by																
national/ international																
professional bodies																
presented papers in	12	1	2	1	1	6	9	3	7	2	3/	1	1	7	1	2
Workshops / Seminars		0	/	2	9	7		3		5	26	3	2	1	0	6.
/ Conferences		0	1		/											3
conducted or			6	5	2	8		3								1
recognized by					8	6										
professional agencies																
teaching experience in	Ni	0	0	0	N		0	0	1	5	24	9	N	N	N	N
other universities /	1				il		O		6	7.	/2	2	il	il	il	il
national institutions	1				11				0	1	6	_	11	11	11	11
											U					
and others	NT.		0	_	N.T		0	0	1	4	0	0	N.T	N.T	N.T	N.T
industrial engagement	Ni	0	8	5	N		0	0	1	3.	0	0	N	N	N	N
	1			0	il					5 7			il	il	il	il
international	Ni	0	0	0	N		0	0	0	0	0	0	N	N	N	N
experience in teaching	1				il								il	il	il	il

2010 – 11

2010 – 11	CH M	ΙE	СГ	V	CS	Е	EC	Έ	EE	E	IT		MI H	EC	BS&F	H
	N O	%	N O	%	N O	%	N O	%	N O	%	N O	%	N O	%	NO.	%
been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies	N il	0			N il		0	0	0	0	0	0	N il	N il	Nil	N il
participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies	1 2	1 0 0			N il		3	1 2	1 5	62 .5	4 / 2 6	1 5	0 5	3 4	6	2 1
presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies	1 2	1 0 0	7 / 1 5	4 7	1 5 / 2 5	6 0	3	1 2	1 2	50	2 / 2 6	7	0 8	5 4	Nil	N il
teaching experience in other universities / national institutions and others	N il	0	0	0	N il		0	0	1 2	50	2 4 / 2 6	9 2	N il	N il	Nil	N il
industrial engagement	N il	0	8	5 3	N il		0	0	1	4. 16 7	0	0	N il	N il	Nil	N il
international experience in teaching	N il	0	0	0	N il		0	0	0	0	0	0	N il	N il	Nil	N il

## 2.4.12 How often does the College organize academic development programmes for its faculty, leading to enrichment of teaching-learning process?

- \* Curricular Development Once in a semester
- \* Teaching-learning methods Thrice in a semester
- \* Examination reforms Once in a semester
- \* Content / knowledge management Once in a month
- \* Any other (please specify)

### 2.4.13 What are the teaching innovations made during the last five years? How are innovations rewarded?

- Uniform course delivery for multi-section courses Enabled both students and faculty members to have a seamless instruction process in compliance with the course handout.
- Uniform evaluation for sessional and semester end examinations -Question wise evaluation of all the scripts by different faculty members minimizes the variation in the evaluation process.
- Self learning audit courses, term paper, mini project etc. Enabled the students to inculcate the culture of self learning and innovative thinking.
- Online comprehensive quiz examinations for all the courses at the end of semester Evaluates the student's overall performance in the course.
- Tracking system for slowlearners On regular basis after every semester end examination students with backlogs in every course are identified and given remedial classes maintaining a track sheet to ensure that they clear the course in the subsequent examinations.
- Hybrid grading system Unique grading system with a combination of earned and awarded grades which ensure minimum level of performance to qualify in a course apart from appreciating students with extraordinary performance.
- Audited summer internship and credited full semester internship

   Ensure the students to have hands on experience making them more industry ready.

#### 2.4.14 Does the College have a mechanism to encourage

\* Mobility of faculty between institutions for teaching?

No

\* Faculty exchange programmes with national and international bodies?

No

If yes, how have these schemes helped in enriching quality of the faculty?

#### 2.5 Evaluation Process and Reforms

## 2.5.1 How does the College ensure that all the stakeholders are aware of the evaluation processes that are operative?

- All the academic and examination regulations are available in the Institute website.
- Orientation about academic regulations is provided for all the first year students as a part of their induction programme.
- Releasing the circulars from time to time on need basis notifying the amendments.
- Sensitization programmes on academic and examination regulations for all the faculty members are also provided from time to time.

# 2.5.2 What are the major evaluation reforms initiated by the College and to what extent have they been implemented in the College? Cite a few examples which have positively impacted the evaluation management system?

- Uniform evaluation process where in question based evaluation for all the answer scripts by single evaluator.
- Online comprehensive quiz examinations for all the courses at the end of semester
- Uniform evaluation process is implemented in sessional and semester end examinations.
- Implementation of hybrid grading system.
- Challenge evaluation in the presence of the student and subject expert.

- Moderation of question papers invited from external subject experts ensuring the compliance with course content.
- Completion of evaluation and declaration of results within one week after the completion of examinations.

## 2.5.3 What measures have been taken by the institution for continuous evaluation of students and ensuring their progress and improved performance?

- Students are assessed continuously by means of three sessional examinations and one online comprehensive quiz examination spread across the semester.
- Results are analysed based on the mean and median of marks after the evaluation of any sessional examination.
- Monitoring the progress of each student through 'track sheets' aiming towards improving the student's performance with single and double back logs.
- Slow learners are given additional coachingfor the subsequent examinations.
- Progress reports and SMS alerts to the parents about their wards performance.

## 2.5.4 What percentage of marks is earmarked for continuous internal assessment? Indicate the mechanisms strategized to ensure rigour of the internal assessment process?

#### **Theory Course:**

Each theory course will be evaluated for a total of 100 marks, consisting of 30 marks for internal assessment and 70 marks for semester endexamination. Out of 30 marks allotted for internal assessment during the semester, 20 marks will be awarded by taking average marks scoredin best two sessional examinations out of three sessional examinations conducted in a semester. The balance 10 marks shall be awarded basedon conduct of ONE comprehensive quiz examination at the end of these mester.

#### **Laboratory Course:**

Each lab will be evaluated for a total of 75 marks consisting of 25marks for internal assessment and 50 marks for semester end labexamination. Out of 25 marks of internal assessment, continuous labassessment will be done for 15 marks for the day to day performanceand 10 marks for the final internal lab assessment. The semester endlab examination for 50 marks shall be conducted by two

Examiners, one of them being laboratory class Teacher as internal examiner andan external examiner nominated by the Principal from the panel of experts recommended by HOD.

All the drawing related courses are evaluated in line with lab courses. The distribution shall be 25 marks for internal evaluation (15 marksfor day – to –day work, and 10 marks for internal tests) and 50 marksfor semester end lab examination. There shall be two internal tests for 10 marks each in a semester and the average shall be considered.

### 2.5.5 Does the College adhere to the declared examination schedules? If not, what measures have been taken to address the delay?

Yes, the institute follows the examination calendar as prescribed.

# 2.5.6 What is the average time taken by the College for declaration of examination results? Indicate the mode / media adopted by the College for the publication of examination results e.g., website, SMS, email, etc.

- Institute declares results within one week after completion of semester end examinations.
- Notification of results through college website.
- Release of circular to the students regarding the declaration of results and notifying the availability of results in the college website.

## 2.5.7 Does the college have an integrated examination platform for the following processes?

Yes...

- \* **Pre-examination processes** Inviting question papers from external subject experts, scheduling of examinations, student list generation and issue of hall tickets, list of invigilators, members of squad, attendance sheet, procurement and printing of stationery etc.
- \* **Examination process** Question paper moderation, question paper printing, examination material management, logistics etc.
- \* **Post examination process** attendance capture, coding and decoding of answer scripts, evaluation of scripts, tabulation,

grading, processing and declaration of results, generation of grade memos.

## 2.5.8 Has the College introduced any reforms in its Ph.D. evaluation process?

N.A.

# 2.5.9 What efforts are made by the College to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved process and functioning of the examination division/section?

- Inviting the question papers from external subject experts three months prior to the commencement of examinations.
- Uniform evaluation process is implemented in sessional and semester end examinations where in question based evaluation for all the answer scripts by single evaluator.
- Display of key and scheme of evaluation of sessional examinations on LAN portal and notice boards.
- Challenge evaluation in the presence of the student and subject expert.
- Moderation of question papers invited from external subject experts ensuring the compliance with course content.
- Completion of evaluation and declaration of results within one week after the completion of examinations.
- Effective utilization of the question paper bank with proper maintenance of utilization reports.
- Stationery and inventory management for examinations.
- Building and maintenance of database of subject experts.
- Maintenance of student's academic progression database from first year onwards.

### 2.5.10 What is the mechanism for redressal of grievances with reference to evaluation?

- Institute is having the process of revaluation/challenge valuation where in students with grievances can have an option of upgrading their grades.
- Answer script reconciliation during sessional examinations.

### 2.6. Student Performance and Learning Outcomes

### 2.6.1 Does the College have clearly stated learning outcomes for its programmes? If yes, give details on how the students and staff

#### are made aware of these?

- Yes, Institute has clearly stated learning outcomes for all its courses.
- The learning outcomes for the programmes are identified while designing the course contents and made available on the LAN portal, course handouts and lab manuals.
- Articulation of main outcomes for a course and achievement of the outcomes by students, and then use the results to make necessary modifications for the course.

## 2.6.2 How does the institution monitor and ensure the achievement of learning outcomes?

- Uniform course delivery for multi section courses is monitored through weekly course review meetings.
- Regular AMC and course coordinators meetings are conducted to ensure uniform course delivery, evaluation, student performance etc.
- Compliance of course instruction in line with course handout in terms of teaching, learning and evaluation procedures.
- Mid semester and end semester feedback ensures effective teaching.
- Quality of the question papers is ensured balancing the cognitive levels
- Review and counseling on attendance and performance wherever needed.
- Course file containing handout, tutorials and assignments is prepared well in advance before the start of the course.
- Holistic development of the students is achieved by conducting various workshops, symposiums, project exhibitions and conferences.
- Participation of the students in all clubactivities is ensured with continuous motivation and by providing the required infrastructure.

### 2.6.3 How does the institution collect and analyse data on student learning outcomes and use it for overcoming barriers of learning?

Learning outcomes of the students are measured by analyzing the performance in academics, co-curricular and extra-curricular activities.

• Regular monitoring mechanism is in place to verify attainment levels of course outcomes and remedial measures are initiated.

- Midterm and continuous evaluation comprising of internal tests, assignments, term paper and seminar presentations.
- Slow learners are identified during continuous evaluation and additional coaching is given.
- Comprehensive quiz examination ensures student's overall performance in the course.
- Add on courses and guest lectures addresses the shortfalls observed in the course delivery.
- Industrial visits & tours and internship supplement the class room teaching.
- Audit courses, term paper, seminars etc. enables self learning environment.
- CRT classes are in place to enhance employability of students.

## 2.6.4 Give Programme-wise details of the pass percentage and completion rate of students.

Name of the Program: B.Tech

Maille of	me rrogram. D. rech		vame of the frogram. D. rech										
SI.No	Branch	2013-14	2012-13	2011-12	2010-11								
1	Chemical Engineering	68	84.2	69.01	75.38								
2	Civil Engineering	77.46	82.81	82.81	90.62								
3	Computer Science Engineering	79.81	86.71	88.2	89.29								
4	Electrical & Electronics Engineering	89.44	97.25	92.2	92.06								
5	Electronics & Communications Engineering	97.14	99.06	84.78	87.05								
6	Information Technology	95.45	90.74	82.14	90.53								
7	Mechanical Engineering	84.17	86.17	89.55	88.71								

Name of the Program: M.Tech

manic of	inc i rogram. Witten				
SI.No	Branch	2013-14	2012-13	2011-12	2010-11
1	Civil Engineering		50	83.33	
2	Electrical & Electronics Engineering	100	80	86.66	87.5
3	Electronics & Communications Engineering	77	75	85	75
4	Mechanical Engineering		71.43	100	57.14

#### D3. Criterion-III: Research, Consultancy and Extension

#### 3.1 Promotion of Research

3.1.1 Does the College have a research committee to monitor and address the issues of research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.

Yes, the institute has a research committee to monitor and address the issues of research. The composition of Research Council is as follows

### **Research Advisory Board committee members:**

Research Advisory Board (RAB) meets twice in an year and reviews various research activities in the institute and suggest plan of action to improve R&D activities. It guides on various ways and means to create research culture in the institute. In addition it identifies thrust areas, current research directions and research funding opportunities. The composition of RAB is as follows:

Dr. CLVRSV Prasad - Chairman (Principal) -Member(IIT,Bhubaneswar) Dr.G Panda Dr.B. Yegna narayana -Member (IIIT, Hyderabad) Dr.B.S Murty -Member(IIT,Chennai) Dr.C.M. Ganguly - Member (ESCI-Hyderabad) Dr.Shisir Behera -Member Dr.G.V Rao -Member -Special Invitee Dr.S.V Ramana -Special invitee Dr.M.V Nageswara Rao

To oversee the quality of research and publications of the faculty members a research committee is constituted comprising of Principal, Associate deans and all the Heads of the departments.

- Member Secretary

Key functions of the research committee are to:

Dr. Birendra Biswal

- Encourage the organization of more seminars/ conferences/ workshops in the thrust areas
- Increase the number of research publications in respected Journals

- Conduct motivational lectures by inviting experts from premier Institutions enabling faculty to write research proposals/quality research paper.
- Apply for research funding to different agencies.
- Subscribe additional journals upon request.
- Motivate faculty to register for Ph.D.in premier Institutes.
- Monitor the progress of the Ph.D. work by having periodic review
- Prepare way forward statement for the faculty having Ph.D.
- Identify department wise thrust areas and invite researchers from reputed institutes.
- Establish CoE in some of the thrust areas by upgrading the existing lab with financial aid to inculcate the research environment.
- Motivate students to design projects for outside participation.
- Incentivize the publications of faculty who publish their papers in respected journals and present their papers in reputed national and international conferences.
- Encourage faculty for pursuing Ph.D under QIP at premier Institutes.
- Establish research center recognized by the affiliating university in each department.

#### **Impacts:**

- Quality publications of 20-25% have been increased and an ecosystem is gradually building up in the direction of research.
- Motivational talks, consultation with experts from R&D organizations & various other premier institutes has resulted in applying some proposals to various funding agencies and receiving funds.
- 111 faculty members are registered for Ph.D enrolment, whichhas been on the upswing direction and has created a research ambience in the campus. Periodic review enables the submission of thesis to greater height.

### 3.1.2 What is the policy of the College to promote research culture in the College?

Institute always attempts to maintain a right mix of faculty with senior researchers from various disciplines and the active researchers at middle level and research enthusiasts at the entry level. This gives an opportunity to the faculty to develop their skills of scholarly enquiry and hence disseminate their knowledge to peers as well as students.

The research policy at institute is intended in a way that faculty can carry out research effectively as they are guaranteed certain freedom and are required to accept corresponding responsibilities. Research policy at institute presents broad guide lines to monitor the research endeavour and assure the integrity of scholarly inquiry at the institute. The following policies are in place to achieve excellence in the fore front of research.

- Faculty is encouraged and motivated to bring sponsored projects and consultancy from external funding agencies.
- To augment the research, faculty is provided with advanced lab in some thrust areas, excellent computational facilities to carry out simulation study.
- The students are motivated and mentored to participate in project competition, paper presentation at the National level.
- Students are motivated to write review paper on the area of their interest as part of term paper to instill research culture in them.
- Financial assistance is provided to the faculty towards TA, DA, incentives and registration fees for attending workshops and conferences.
- Faculty members are sponsored with financial assistance to pursue Ph.D. at premier institutes.
- Motivational talks and consultation with experts from R&D organizations & various other premier institutes.
- Publications in respected journals are rewarded with attractive cash incentives to motivate the faculty.
- Establish CoE in some of the thrust areas by upgrading the existing lab with financial aid to inculcate the research environment.
- Way forward statement for the faculty having Ph.D.

## 3.1.3 List details of prioritised research areas and the areas of expertise available with the College.

The whole research activities at the institute rely upon the following five competent research groups. They are

- a) Modelling &Simulation
- b) Nano Technology
- c) Intelligent Signal Processing
- d) Renewable Energy Sources & Management
- e) Environmental Science & Engineering

Name of the Department	Prioritized research area	Name of the Faculty involved				
CIVIL	Water resources Engineering	Dr G.Venkata Rao				
EEE	Power system reliability	Dr T.suresh kumar				
MECH	Renewable Energy Sources	Dr.V. Rambabu				
MECH	1)Metal cutting & Machining 2) Nano Materials 3)Modeling and Simulation	Dr.S.V.Ramana				
MECH	1)Reliability Modeling & Analysis & systems 2) optimization Quality Control	Dr.M.Srinivasa Rao				
MECH	Nano Materials	Dr.V.Chitti Babu				
MECH	Nano Materials	Dr.R.Umamaheswara Rao				
MECH	Materials processing characterization and applications	Dr.D.Ravi kumar				
ECE	Intelligent Signal Processing	Dr.B .Biswal				
ECE	Radar signal Processing	Dr. MV Nageswara Rao				
ECE	Radar signal Processing	Dr G.manmadha rao				
CSE	Frequent pattern mining	Dr shasikumar G.Totad				
CSE	Rough sets, list Theory Fuzzy sets	Dr.Sasanko Sekhar				
CSE	& systems	Gantayat				
CSE	Modeling and Simulation	Dr.V.Sreerama Murthy				
CSE	(Elliptic curve cryptography) Information security	Dr Tarun Narayan shankar				
СНЕМ	Renewable Energy Sources & Management	Dr.Shishir Kumar Behera				
СНЕМ	Environmental Science & Engineering	Dr.M.Krishna Prasad				
CHEM	waste water Treatment using Activated Carbon	Dr.Surya Narayan Dash				
СНЕМ	1)Optimization of Bio fuel production 2)Process Intensification 3)Alternate Energy resources	Dr M.Gangadhar				
IT	Bio-Informatics	Dr.P.Kanchanamala				
BS&H	Nano Materials	Dr.D.Krishna Rao				
BS&H	Mathematical Modeling	Dr.V.S.S.R.Gupta				
BS&H	Environmental studies in Particular Water	Dr.K.Gouru Naidu				
BS&H	Boundary Value Problems linear & Nonlinear Differential Equations	Dr.R.Suryanarayana				
BS&H	Superconducting Electronics	Dr.K.Srinivas				
BS&H	Relativity & Cosmology	Dr.R.Lakshun Naidu				
BS&H Optical Fiber geometry and Photonics		Dr.M.P.Srinivasa Rao				
BS&H	1)Water analysis (Environmental					

	Science)	Dr.M.V.Subba Rao		
	2)kinetics (Physical Chemistry)			
BS&H	Marketing	Dr.D.Srinivasa Kumar		
	Eco system Modeling			
BS&H	(Application of Differential	Dr.P.Sarada Varma		
DS&II	Equations)	Di.i .Sarada varma		
BS&H	Solid state Chemistry	Dr.K.Koteswara Rao		
DSCII	(solid electrolytes & Borates)	Di.K.Koteswara Rao		
BS&H	Marketing	Dr.K.V.S.Prasad		
BS&H	General Relativity and	Dr.B.Satyanarayana		
DSXII	Cosmology	Di.B.Satyanarayana		
BS&H	Amorphous Materials &Ferro	Dr.Ch.V. Koti Reddy		
DSXII	electric materials characterization	Dr.Cii. V. Koti Reddy		
	Medicinal Chemistry &			
BS&H	Development of new	Dr.D.Tejeswara Rao		
	methodologies	DI.D. Tejeswara Rao		
	User information literacy in Engg			
BS&H	colleges KRC affiliated to	Dr.T.Venkata Rao		
	JNTUK: A survey			

## 3.1.4 What are the proactive mechanisms adopted by the College to facilitate smooth implementation of research schemes/projects?

#### • Advancing funds for sanctioned projects

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

#### • Providing seed money

Institute provides seed money for procuring R&D equipments.

## • Autonomy to the principal investigator/coordinator for utilizing overhead charges

Principal Investigator is given the complete freedom and authority to execute project and utilize the funds associated with it. The R&D division also monitors and reviews the progress of the approved proposal periodically for timely submission of the funded project.

#### • Timely release of grants

The Principal Investigator can make use of the funds as and when needed. Institute is having a mechanism for the timely release of project funds based upon the regular reviews.

### • Timely auditing

Utilization of the funds is thoroughly audited by a certified auditor and a utilization certificate is submitted to the respective funding agencies.

#### • Submission of utilization certificate to the funding authorities

Utilization Certificates are submitted in time to the funding agencies after the entire expenditure and other financial aspect related to the proposal are properly audited by the external auditor.

## 3.1.5 How is interdisciplinary research promoted? between/ among different departments of the College and Collaboration with national/international institutes / industries.

- The institute is putting efforts and encouraging formation of research groups across disciplines to promote interdisciplinary research by involving faculty and students in the sponsored projects from different funding agencies.
- Scientists and renowned researchers are invited to help in promoting interdisciplinary research in the institute.
- Some of the research works that are interdisciplinary are in the areas of
  - a) Intelligent Signal Processing group of Electrical, Electronics and Computer Science Engineering departments provides a 'systematic approach' to design and develop the signal processing algorithms for real-world problems.
  - b) Environmental engineering group of Civil and Chemical Engineering departments is looking at environmental issues in the coastal region of A.P. The group is primarily delivering innovative strategies and sustainable technological solutions pertaining to emerging environmental problems.
  - c) Nano Technology in Mechanical Sciences & BSH Departments. This research group is involved in synthesizing and characterizing the behaviour of the Nano crystalline materials and also blends of Nano coatings in the real time applications.
  - d) Renewable Energy Sources & Management inter disciplinary research greatly deals with anaerobic digestion, fermentation, trans- esterification, pyrolysis, gasification and combustion.
  - Faculty members are encouraged to attend the National/International conferences of inter desciplinary nature

in the country and also in the overseas by providing T.A, D.A, incentives and registration fee along with academic leave. Over and above institute also encourage all the departments across the institute to conduct workshops and conferences in some of the thrust areas viz. green fuel technologies, renewable energy sources, nano materials, data mining, cloud computing by inviting experts from Industry and academia.

#### Collaboration with institutes/industries:

- The institute is striving hard to promote collaborations through MoU with foreign Universities. Institute has a MoU with IC-IMPACTS (India-Canada Centre for Innovative Multidisciplinary Partnerships to Accelerate Community Transformation and Sustainability). IC-IMPACTS and GMRIT will use this partnership to explore collaborations in sustainable infrastructure, construction design, waste water reclamation and other areas.
- MoU has also been signed between GMRIT-Rajam and the"
   Environmental Research Institute" (ERI) of University of Highlands and Islands (UHI), Thurso, Scotland to Establish CoE in "Environmental Science and Energy Engg".
- Institute has an association with University of Petroleum and Energy Studies (UPES), Dehradun.

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

The institute conducts regular guest /motivational lectures by inviting researchers across the country and also from abroad from time to time. The institute hosts National/International conferences and workshops on thrust areas of relevance to expose the faculty to the outside world and provide a platform for the outside researchers to visit the Institute. Some of the visits organized are listed below.

S.No	Name of the Researcher/Scientist	Organization
1	Dr. P. N.Rao	Northern Lowa University, USA

2 D CKUDM 11 D D III I III	California state University, Fullerton, USA					
3 Prof.K V R Mananujachari Rowan University, USA						
4 Prof. V. Shiva Kumar University of Maryland,	USA					
5 Dr.Thomas Moore Perth College, Universit Highlands and Islands, S						
6 Dr Phani Kidambi Wright State University, Dayton, OH, USA						
Carbondale, USA	Southern Illinois University, Carbondale, USA					
8 Dr.B.S Murty IIT,Chennai						
9 Prof. K. Krishnaiah IIT, Chennai						
10 Prof. N.J. Rao IISC, Bangalore						
11 Prof. G. Panda IIT, Bhubaneswar						
12 Prof. C.P. Vyasarayani IIT, Hyderabad						
13 Prof.Rajeeb Mall IIT Kharagpur						
14 Dr. Krishna Mohan IIT, Hyerabad						
15 Dr. C.N. Bhende IIT Bhubaneswar						
16 Dr. C. Chandra Sekhar IIT, Madras						
17 Dr.B.Ravi IIT ,Bombay						
18 Dr Aurobinda Routray IIT Kharagpur						
19 Dr.B.Yegna narayana IIIT, Hyderabad						
20 Dr. K. R. V. Subramanian, IIIT, Bangalore						
21 Dr. P. Krishna Reddy IIIT, Hyderabad						
22 Dr. K.R.V. Subramanian IIIT, Bangalore						
23 Dr. K. Siva Kumar IIT, Hyderabad						
24 Dr.C.Krishna Mohan IIT, Hyderabad						
25 Dr.C.M. Ganguly ESCI-Hyderabad						
26 Prof. IIT, Chennai Dr. KamatamKrishnaiah						
27 Dr. P. Nageswara Rao NIT, Warangal						
28 Mr.K. Bhaskara Rao GE, Bangalore						
29 Prof.R.Nageswara Rao IICT, Hyderabad						
30 Prof.P.Nageswara Rao NIT, Warangal						
31 Prof. RitanjaliMajhi NIT, Warangal						
32 Dr. DLN Somayajulu NIT, Warangal						
33 Dr.P.SrihariHari Rao NIT, Warangal						
34 Dr. K. Ravindranath IICT, Hyderabad						
35 DR.N.S.Murthy NIT, Warangal						
36 Dr. P. V. Sri Lakshmi NIT, Warangal						
37 Dr. D.V.L.N.Somayajulu NIT, Warangal						
38 Prof. A. Sarat Babu NIT, Warangal						
39 Prof. P. Rajendra Prasad Andhra University, Viza	g					
40 Dr. S. V. Naidu Andhra University, Viza	•					
41 Prof. K.RajaRajeswari AUCE, Visakhapatnam	-					

42	Dr.SashiBhushan Rao	AUCE, Visakhapatnam
43	Dr.P. Mallikarjuna Rao,	AU, Visakhapatnam
44	Dr. KG Murali Krishna	JNTU, Kakinada
45	Prof.Rajagopal	EFLU,Hyderabad
46	Dr.P.K.Jain,Scientist F	ARCI,Hyderabad
47	Dr.UmaMudiengudi	BVBCET, Hubili
48	Mr. M.J.R.K. Raju	SAP, Canada
49	Mr.G.V.Krishna Kumar	NSTL, Visakhapatnam
50	Mr. K. Srirammurthy	NTPC Simhadri, Visakhapatnam
51	Mr. N. MaheswaraRao	CPRI, Bangalore
52	Mr. Navraj Singh	GMR Energy, Rajahmundry
53	Shri. Hanumanth Reddy	Energy Development Centre GMR, Rajahmundry
54	Shri. B. Srinivas, ADE	AP TRANSCO, Srikakulam
55	Mr. N. Srinivasa Rao	GHAIL, Hyderabad
56	Mr. K. Sridhara Babu,	Arbutus Consultants Pvt. Ltd, Pune
57	Mr.K.Amar Narayana Choudary	Infosys, Bangalore
58	Sri. N.S. Murthy	GMR Family Business, GMR Group
59	Mrs. Bhavani	Team lead TCS, Hyd.,
60	Sri A.S.Viswanathan	Global Head – Mobility, Siemens IT Solutions & Services
61	Sri G.V.Ramesh	AGM(IT), Visakhapatnam Steel Plant
62	Mr.JitendraGokhale	Business Head, Persistent Systems Ltd.
63	M.Srikanth	Advanced Micro Devices (AMD)
64	Mr. DebasishBiswas	Vice President & National Head- Institutional Alliance, Star TV
65	Sri. MayankJha	Regional Manager (North & East) Career Education IBM India Pvt. Ltd. IBM Towers, NOIDA
66	Sri. Madhu Murthy Rolanki	Talent Sprint, Hyderabad
67	Mr. Yuktesh Ch.	IT-Specialist, IBM Academic Initiative - IndiaFrom IBM, Hyderabad
68	Mr. RajavelSekaran	Director – IBM Kenexa – IndiaFrom IBM, Vishakapatnam
69	Mr. PremalVasavada	AVP & Head - GMR Shared Services Center
70	S Lt J Darshan Kumar	Ins Valsura, Jamnagar, Gujarat
71	Sri P.H.RamaPrabhu	CTO, Micro Nova Impex Private Limited, Bangalore

## 3.1.7 What percentage of faculty have utilized sabbatical leave for research activities? How has the provision contributed to the research quality and culture of the College?

Nil

Institute has a scheme of deputing faculty to premier institutes viz. IITs, and NITs with full salary and leave to pursue research leading to Ph.D.

## 3.1.8 Provide details of national and international conferences organized by the College highlighting the names of eminent scientists/scholars who participated in these events.

Donostro	Title of the	Duratio	National/	Eminent scientists/scholars
Departm				
ent	conference	n	International	who participated
ECE,EE		7 <sup>th</sup> to 9 <sup>th</sup>	International	1. Dr. Ganapathi Panda,
E,CSE,		April	Conference	Deputy Director (IIT,
IT		2011		Bhubaneswar)
				2. Dr.GaganRath,
				INRIA, Senior Research
				Scientist(INRIA, FRANCE)
				3. Dr.Sukumar Mishra,
				Distinguished Professor(IIT,
				Delhi)
				4. Dr. S.R.Samantray,
				Associate Professor(NIT,
				Rourkela)
	MIPSCCON-			5. Dr.V.U.Reddy,
	2011			Distinguished Professor(CR
	2011			Rao AIMSCS, Hyderabad)
				6. Dr.K.Venkata Rao,
				Director, PG(Chaitanya
				College of Engineering,
				Visakhapatnam)
				7. Dr.S.P.Setty, Dept of
				CS&SE, Professor(Andhra
				University, Visakhapatnam)
				8. Dr.B.Prabhakar Rao,
				Director of
				Evaluation(JNTUK,Kakinad
				a)

Departme	Title of the	Duratio	National /	Eminent scientists/scholars
nt	conference	n	International	who participated
Chamical	Urban Waste Management – Current Challenges & Mitigation	10 <sup>th</sup> – 11 <sup>th</sup> Decem ber 2010	National  National	Mr. P. Bala Chandra Rao, Visakha Steel Plant Mr. P. Srinivasa Rao, APPCB Dr. K. K. Kumar, Warangal Prof. S. Rama Krishna Rao, AU, Vizag Dr. G. Nageswara Rao, AU,
Chemical Engineeri ng	Analytical Techniques for Industry and Environment	March 2012	rutional	Vizag Dr. P. Nageswara Rao, NIT, Warangal Dr. R. Nageswara Rao, IICT, Hyderabad Dr. V. Balaram, NGRI, Hyderabad

## 3.1.9 Details on the College initiative in transferring/advocating the relative findings of research of the College and elsewhere to the students and the community (lab to land).

- Institute has SAC encourages students to do projects which are of industrial and social relevance and they are normally directed to refer to journals in identifying the projects of their interest.
- Innovative product design through student participation sponsored by MSME/EDC.
- Wall magazines, where the articles related to latest advances in technology also help in creating awareness about the latest findings.
- Live models are exhibited in various events conducted by other institutes.
- External experts are regularly invited by the institute to give lectures to the students on advanced research topics.
- The students are given exposure through seminars/conference/workshop.

## 3.1.10 Give details on the faculty actively involved in research (Guiding student research, leading research projects, engaged in individual or collaborative research activity etc.)

#### • Proposals Accepted

SL. No.	Title	P.I/ CI	Funding agency	Budgetin Lakhs	Status
01	Ground water modeling for hydro geological characterization of Hazardous substance release sites- A case study of Pydibhimavaram Industrial area, Srikakulam, A.P	Dr.G.V Rao	DST	Rs.20.44	Approved June 2013 (On Going)
02	Hydro geological characterization and Ground Water Modeling in Kovvada region	Dr.G.V Rao Mr.R. Srinivasa rao	BRNS	Rs.34.78	Approved July 2014 (Amount yet tobe received)
03	Demographic and Health Status Survey in Kovvada Region		BRNS	Rs.32.81	DOS 03-05- 2014 SMS confirmation is received
04	Quality Management in Technical Education -A case Study of selected Engineering Colleges in Srikakulam&Vizianagaram Districts of Andhra Pradesh.	ad	UGC (Minor)	Rs 2.80	Provisionally accepted (Aug 2014)
05	Diversity and oriented synthesis of Imidizo pyridine analogues for anti cancer and anti candida studies		UGC (minor)	Rs 3.10	Provisionally accepted (Aug 2014)

#### • Proposals submitted

SL. No	Title	P.I/ CI	Funding agency	Budget in Lakhs
1	Expression of Interest (EOI) to RINL-Vizag steel plant for "collaborative research work" with R&D Institutions.	GMRIT	RINL-Vizag Steel plant	Rs18.00
2	Water quality assessment of freshwater sources of Srikakulam (India) with special reference to phytoplankton indicators	Principal Investigator Dr. M. Krishna Prasad Co-Investigators P. SatyaSagar&G.Govinda m	Ministry of Forest & Environment	Rs.13.96
3	Biochar Amendment in the Soil matrix for Simultaneous Remediation of Pesticide Contaminated Aquatic Ecosystems and Enhancement of Crop Yield	Principal Investigator Dr. S.K. Behera Ms.G.Kalyani& Dr. S.N.Dash	Ministry of Forest & Environment	Rs.17.00
4	"Growing Urbanization Influenceand Impact or Water Cycle – ACase study in the regions underGVMC (Greater VisakhapatnamMunicipal corporation), AndhraPradesh, India".	P.Kalpana	Ministry of Forest & Environment	Rs.20.67

5	Development of lead free Nano composite Dielectric for high energy storage application		Nano Mission (DST)	Rs.18.00
6	Rainfall- Runoff modeling using Artificial Neural Network Technique and study of increased inflows due to developments - A Case Study of Godavari River basin".		Ministry of Forest & Environment	Rs. 30.44
7	Optimization of performance of novel turbulent promoters in an electrolytic fluid flowing across circular conduits	Prof.V. Nageswara Rao,	UGC	Rs 20.00
8	A DSP Based Novel Instrumentation Scheme for Power Quality Assessment and Classification.	Dr.B.Biswal	UGC (Major)	Rs 14.43
9	Experimental studies on the performance of the composite tipped WC-Co tools	Co-PIs: DR.CLVRSV	EMR Scheme of DST-SERB	Rs 26.20
10	Optimal Design and Vibration Analysis of Switched Reluctance Motor for Electric Vehicles via 3D FEM	Dr. T. Suresh Kumar	DST(young Scientist Scheme)	Rs.25.37
11	Electro-deposition of Nitrogen doped TiO2 nanoparticles blended conducting polymers as anti-corrosion coatings.	Dr Kola Koteswara Rao	UGC-MRP (Major Research Project)	Rs. 16.50

13	Development of Low Carbon and Green Industrial Zones in India  Studies on spectroscopic	<ol> <li>Dr. Sunil Kumar (CSIR-NEERI)</li> <li>Prof. Hung Suck Park (University of Ulsan, Korea)</li> <li>Co-PI:</li> <li>Prof. Shishir Kumar Behera (GMRIT, Rajam)</li> <li>Dr. A. N. Vaidya (CSIR-NEERI)</li> <li>Prof. M. Srinivasa Reddy (University of Ulsan, Korea)</li> </ol>	l Collaboratio	Rs 52.60
13	properties of Er3+- Tm3+-Yb3+ co doped oxide glasses for broad band infrared emission	Dr.w. P. Srimvasa Rao	(Minor)	KS 4.93
14	Systematic study on the distribution of physical or chemical parameters and heavy metals in ground of Rajam madal, Srikakulam-Dt		UGC	Rs4.96
15	An Embedded Scheme for Real Time Assessment of Power Quality Monitoring and Classification System in an Electrical Network	Dr B.Biswal	CSIR	Rs 10.65

#### 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 for last four years.
  - Institute has made provision in the annual budget which is being used for creating research facilities in different departments

- Research Associates have been employed for successful execution of the sponsored research projects.
- Laboratories equipped with special equipment to pursue Research.

## 3.2.2 What are the financial provisions made in the College budget for supporting student research projects?

Institute encourages students for participating in research by funding the technical projects under Students Activity Centre (SAC). To support and promote student research projects Rs.50,000/- is allocated for each department pooling up to an amount of Rs 4.0 lakhs approximately. Further, institute extends financial support beyond allocation based on merit of the project. The students are supported with necessary research facilities, faculty guidance and financial support to publish papers in Seminars / Conferences. As a result of this, students actively contribute to research by presenting papers in the conferences/seminars. Cash prize up to Rs.500/- is given to those students whose papers are accepted for presentation.

	(Rs in Lakhs)							
Major	AOP	2010-11	AOP 201	1-12	AOP 2012	-13	AOP 201	13-14
Head	Budget	Actuals	Budget	Actuals	Budget	Actuals	Budget	Actuals
Equipm ent	80.67	58.13	77.68	35.38	119.87	103.58	95	72.38
KRC	12.40	3.90	11.50	6.30	10.00	9.63	15.00	10.15

## 3.2.3 Is there a provision in the institution to provide seed money to faculty for research? If so, what percentage of the faculty has received seed money in the last four years?

Yes.Institute has well defined policy to encourage faculty in research. All faculty members are provided with financial support, laboratory facilities and monitory benefits. The policy is subjected to revival on time to time to suit the requirements. Some of the points in the research policy of the institute are as follows:

- Faculty members are enabled to take up research activities by purchasing facilities required from seed money to initiate research.
- For attending conferences and workshops academic leaves are sanctioned besides CLs and ELs with financial support.
- .Cash incentives are given to publish papers in International /National journals and conferences.
- Interest free loans to purchase Laptops.

- 3.2.4 Are there any special efforts made by the College to encourage faculty to file for patents? If so, provide details of patents filed and enumerate the sanctioned patents.
  - Faculty members are encouraged to file patents.
  - Cash incentive is given to faculty for patents.

#### 3.2.5 Provide the following details of ongoing research projects:

Other	Year wise	Num	Name of the project	Name of	Total
agencies-		ber		the	grant
national and				funding	received
internationa				agency/In	in Lakhs
l (specify)				dustry	
National agencies	2013-2016	01	Ground water modeling for hydro geological characterization of Hazardous substance release sites- A case study of Pydibhimavaram Industrial area, Srikakulam, A.P	DST	Rs.20.44

3.2.6 How many departments of the College have been recognized for their research activities by national / international agencies (UGC-SAP, CAS, DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthrough due to such recognition.

None of the departments are accredited by national and International funding agencies. However, received total grants worth of Rs 2,06,84,370/- from DST, AICTE, UGC, BRNS etc.. Two departments Mechanical Engineering and Electrical and Electronics Engineering are recognized as research centres by Jawaharlal Nehru Technological University, Kakinada.

3.2.7 List details of completed research projects undertaken by the College faculty in the last four years and mention the details of grants received for such projects (funded by Industry/National/International agencies).

SL.	Title	P.I/ CI	Funding	Budget in
No			agency	Lakhs
01	Ground water modeling for an effective management of coastal aquifers-A case study of srikakulam coastal belt A.P	Dr.G.V Rao	DST	Rs.18.36
02	Investigation on Cutting Tools With An Array of Nano Films and their Performance Evaluation	Dr.CLVRSV.Prasad	DST	Rs. 18.30

#### 3.3 Research Facilities

## 3.3.1 What efforts are made by the College to keep pace with the infrastructure requirements to facilitate Research? How and what strategies are evolved to meet the needs of researchers?

- Provision is made in the budget for providing Infrastructure facilities for the researchers.
- Institute has provided good infrastructural facilities to all departments where modern computers with internet and Wi-Fi and recent updated software's have been installed.
- Two Departments are recognized as the Research Centre by the JNTUK and are equipped with research facilities.
- Three CoEs are established by spending an amount of Rs 50 lakhs.
- The KRC provides access to e-journals, printed journals, reference material and thus supports the research work of students and faculty.

## 3.3.2 Does the College have an information resource centre to cater to the needs of researchers? If yes, provide details on the facility.

Yes, the KRC along with eight departmental libraries collectively supports the teaching, research and extension programmes of the Institute. The institute has subscription to online journals of IEEE (ASPP), ASME, ASCE, SPRINGER, ELSEVIER (Science Direct), MC GRAW HILL (Access Engineering Library), ASTM DIGITAL LIBRARY, J- GATE(Engineering and Technology) etc. The online journals are accessed through DELTA R5 Server.

#### FACILITIES AT A GLANCE

Total Area	2000 m <sup>2</sup>
Seating Capacity	500 Nos
No. of Volumes	58055
No. of Titles	15757
Journals : National (Print)	90
Journals : International (Print)	15
Journals : Online	618
Magazines	08

Online Memberships: ASCE -ASME -IEEE- ELSEVIER - SPRINGER - ASTM DIGITAL LIBRARY - MCGRAW HILL - J-GATE.

TIMINGS : 8.00 AM to 10.00 PM

BRANCH	TITLES	VOLUMES
CIVIL	880	4135
EEE	1301	5312
MECH	2377	8241
ECE	1799	7029
CSE	2344	9548
CHEMICAL	487	2607
IT	1325	5009
BS&H	1927	8524
CHEM	249	1108
ENG	461	1693
MATHS	709	3261
PHY	227	1321
OTHERS	281	1141
GENERAL	1316	1993
SC & ST	398	926
I	PG COURSES	
M.Tech CE	70	153
M.Tech CSE	64	196
M.Tech ECE	177	414
M.Tech EEE	153	402
M.TechEnv. Engg.	51	157

M.Tech ME	216	340
M.Tech VLSI	64	190
	14949	55176

#### **Library Computerization**

The Knoeledge Resource Centre (KRC) uses LIBSYS software Package, which is an integrated multi-user library management system that supports all in-house operations of the KRC. The LIBSYS consists of modules on Acquisition, Cataloguing, Circulation, Serials, Article Indexing and OPAC. Retrospective conversion of bibliographic records has been completed and more than 55176 bibliographic records of books available in the Knoeledge Resource Centre can now be accessed through the LIBSYS OPAC AND WEB OPAC. The database of books available in the KRC is being updated on day to day basis with details of recently acquired books records of all the library patrons have also been created in the LIBSYS Package. To strength our circulation counters for accuracy and speeding up of operations Barcode Technology is in place.

#### **Digital Library**

The Digital Library is having 50 computers connected on LAN and allows browsing the internet for both academic and research purpose. The online journals are accessed through DELTA R5 Server. Digital Library also has 1241 general educational CDs, DVDs and 475 SONET CDs, 4500 e-Books and also 553 e-books available from the Pearson Publishers.

## 3.3.3 Does the College provide residential facilities (with computer and internet facilities) for research scholars and faculty?

Yes, the institute provides residential facility for faculty with Wi-Fi connectivity. Hostels are provided with computers and internet facility to carry out research. Fifty percent of the students and faculty reside on campus hostels and faculty quarters.

### 3.3.4 Does the College have a specialized research centre/ workstation to address challenges of research programmes? If yes, give details.

No research programme is offered by the institute.

# 3.3.5 Does the College have research facilities (centre, etc.) of regional, national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.

Yes. Regional level: JNTU-K Research Centre for two departments. These facilities can be utilized by the researchers/ scholars of other institutes.

#### 3.4 Research Publications and Awards

## 3.4.1 Highlight the major research achievements of the College through the following:

\* Major papers presented in regional, national and international conferences

The institute encourages faculty to present papers in reputed national and international conferences by extending financial support from the institute.

Publications	Academic Year				
T ubileations	2013-14	2012-13	2011-12	2010-11	
Research papers published in Journals (National, International)	142	113	80	97	
Papers presented in the proceedings of Seminars (National, International)	94	84	145	108	

#### \* publication per faculty

Publications	Academic Year			
Publications	2013-14	2012-13	2011-12	2010-11
Total number of publications (journals + conferences) / total number of Faculty	236/220= 1.07	197/219=0 .89	225/213= 1.05	205/181= 1.13

\* Faculty serving on the editorial boards of national and international journals
Nil

\* Faculty members on the organisation committees of international conferences, recognized by reputed organizations / societies.

S.No	Faculty	Conference	Period
1	Dr.C.L.V.R.S.V.Prasad	AIMTDR, Andhra University	2010-11
2	Dr.C.L.V.R.S.V.Prasad	IE(I)	2010-11
3	Dr B.Biswal	MIPSCON-11,Rajam	2010-11
		Co-sponsored by IEEE.	

3.4.2 Does the College publish research journal(s)? If yes, indicate the composition of the editorial board, publication policies and whether it is listed in international database?

No

- 3.4.3 Give details of publications by the faculty:
  - \* number of papers published in peer reviewed journals (national / international)

	Academic Year			
Publications	2013-14	2012-13	2011-12	2010-11
Research papers published in Journals (National, International)	142	113	80	97

\* Monographs: Nil

\* Chapters in Books: 01

Sl.N o	Name of the Faculty	Design ation	Title of the paper/Books	Seminar/ Conferenc e/ Journal/B ooks	Publishe r	ISBN
1	Dr. SasankoS ekharGan tayat	Associa te Pofesso r	Chapter 15 Application of Functional Approach to Lists for Development of Relational Model Databases and Petri Net Analysis (pages 407-444)	Global Trends in Intelligent Computing Research and Developm ent	IGI Global, USA	ISBN13: 9 78146664 9361, ISBN10: 1 46664936 4, EISBN13: 97814666 49378

- \* Editing Books : Nil
- \* Books with ISBN numbers with details of publishers

S.N	Name of the	Author name	Publisher	ISBN
0	book			Number
1	Production Technology	Dr.S.V.Ramana	I.K.International Publishing House Pvt Ltd., New Delhi	978-93-80578-52-1
2	A Study on VCR Engine with Preheated Cottonseed Methyl Ester	Dr.V.Rambabu	Lambert Academic Publishers, Germany	978-3-659-27155-7
3	CI Engine Operation with Neat MahuaMethyle Ester along with EGR	Dr. Joshua Jaya Prasad	Lambert Academic Publishers, Germany	978-3-8484-9106-3
4	Pulse and Digital Circuits	G.Manmadha Rao	Pearson Edition, International Publication	978-81-317-2135-3
5	Pulse and Digital Circuits for JNTUK	G.Manmadha Rao	Pearson Edition, International Publication	978-81-317-6899-0
6	Electrical circuit analysis	Mr.P.Ramana	Reem Publications Private Limited, New Delhi	9788183511117
7	Basic Electrical Engineering	Mr.P.Ramana	Winger Publications, Hyderabad	9788192158075
8	Neural Networks (2008)	Dr. T. N. Shankar	LaxmiPublicationsP vt. Ltd, New Delhi	978-81-318-0466-7
9	Network Security and Cryptography (2005)	Ms. R. Sivaranjani	The Hi-tech Publishers, Hyderabad	81-298-0027-6
10	Web Technology (2010)	Ms. R. Sivaranjani	ReemPublictaions, New Delhi	9788183511124
11	Information Security (2007)	Ms. R. Sivaranjani	The Hi-tech Publishers, Hyderabad	
12	Advanced Data Structures and Algorithms (2005)	Ms. R. Sivaranjani	The Hi-tech Publishers, Hyderabad	

13	Introduction to	M.Ramakrishna	University Science	978-93-838-2840-1
	Data Mining	Murthy	Press	
	And		(LaxmiPublicationsP	
	Softcomputing		vt. Ltd, New Delhi)	
	Techniques			
	(January 2015)			
14	Engineering	R.Lakshun Naidu	Tata Mc Graw Hill	978-0-07-132995-8
	mathematics-I		Copy Right@2012	
15	Engineering	R.Lakshun Naidu	Tata Mc Graw Hill,	978-0-07-106865-9
	mathematics-III		Copy right @ 2011	

- \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database International Social Sciences Directory, EBSCO host, etc.): Nil
- \* Citation Index range / average \*
- \* SNIP \*
- \* SJR -\*
- \* Impact factor range / average -\*
- \* h-index \*

**Details** of citation index, SNIP, SJR, impact factor, h-index are shown in the evaluative reports of the departments in item No 14.

## 3.4.4 Indicate the average number of successful M.Phil. and Ph.D. scholars guided per faculty.

S.No	Faculty	Number of students awarded Ph.D
1	Dr R.L.Naidu	01

S.No	Faculty	Number of students awarded M.Phil
1	Dr K.Gowri naidu	01

S.No	Faculty	Number of students Pursuing Ph.D
1	Dr C.L.V.R.S.V.Prasad	03
2	Dr R.L.Naidu	03
3	Dr B.Biswal	02
4	Dr R.Surya narayana	02
5	Dr M.V.Subba rao	02
6	Dr. Srinivas Prasad	04
7	Dr. K.Koteswara Rao	01

### 3.4.5 What is the stated policy of the College to check malpractices and misconduct in research?

Code of conduct stipulated by affiliating University is followed.

# 3.4.6 Does the College promote interdisciplinary research? If yes, how many inter departmental / inter disciplinary research projects have been undertaken and mention the number of departments involved in such an endeavour.

Departments always conduct workshops, conferences and guest lectures in the common areas of interest. Faculty members of different departments are encouraged to undertake inter disciplinary research work by forming research groups from relevant disciplines. They are encouraged to apply for projects to funding agencies. Students are encouraged to participate in training programmes/paper presentation/model exhibition contests in the common areas of interest that are being organised by both industry and academia. Mechnical, civil, chemical and computer science engineering are involved in inter-disciplinary research.

#### Research Groups

- Environmental Science & Engineering
- Modeling and Simulation
- Nano Materials
- Renewable Energy Sources & Management
- Intelligent Signal Processing

Details of inter-disciplinary research project submitted by different departments are given in the following table.

Title	P.I/ CI	Funding	Amount
		agency	Received
			(lakhs)
Growing Urbanization	Dr.G.Venkata Rao	Ministry of	Rs.20.67
Influence and Impact	(Civil Engg.) (PI),	Forest &	
on Water Cycle - A	P.Kalpana	Environment	
Case study in the	(Chemical Engg.)		
regions under	(Co-PI)		
GVMC (Greater			
Visakhapatnam			
Municipal			
Corporation), Andhra			
Pradesh, India.			

Rainfall- Runoff	Dr.G.Venkata Rao	MoEn&F	Rs 30.44
modeling using	S.G.Totad		
Artificial Neural			
Network Technique			
and study of increased			
inflows due to			
developments - A Case			
Study of Godavari			
River basin".			

#### 3.4.7 Mention the research awards instituted by the College.

Incentives are being given to faculty who publish papers in peerreviewed journals. Faculty who obtain their doctoral degree are incentivized as per the institute policy. The institute also incentivize faculty who get funds for their projects from external agencies.

#### 3.4.8 Provide details of

- \* Research awards received by the faculty Nil
- \* Recognition received by the faculty from reputed professional bodies and agencies

Year	Recognition received byprofessional bodies and agencies
2013-14	Dr.S.V.Ramana – Resource Person(Workshop for Training Resource Persons on Outcome Based Accreditation-(Phase I&II) - NBA
2013-14	Dr.S.V.Ramana - Expert Committee member - NBA
2013-14	Faculty members in CSE and IT Infosys faculty excellence award
2013-14	A.V.Ramana,IT dept received (TGMC) "The great mind challenge"mentor award from IBM,Banglore
2010-11	GMRIT CSI student branch awarded best student branch in the region 5 Andhra Pradesh & karnataka
2009-10,	Institute received best performance award for
2010-11,	GMRIT CSI student branch at vizag chapter level
2011-12,	
2012-13	

## 3.4.9 State the incentives given to faculty for receiving state, national and international recognitions for research contributions.

Nil

#### 3.5 Consultancy

## 3.5.1 What is the stated policy of the College for structured consultancy? List a few important consultancy services undertaken by the College.

Institute has well documented and transparent consultancy policy. In this 80% of the revenue generated through consultancy is distributed among the staff involved and 20% of the revenue generated is utilized towards establishment expenses. At the institute level following are the consultancy projects successfully executed.

S.No	Department	Areas for consultancy
		Structural Engineering
1		Geo technical Engineering
1	Civil Engg	Environmental engineering
		Transportation Engineering
		Academicconsultancy–Content
2	Electrical and	development and delivery for a
2	Electronics Engg	virtual institute for GETs- GMR
		Energy
3	Machaniaal Enga	1. Academic consultancy - Manager Skills Training program-World wide
3	Mechanical Engg	Diamond Manufacturing PVt.Ltd.
		2. Fabrication of Nano Composites.
		1.Malla Reddy College of
4	Chemical Engg	Pharmacy, Secunderabad
		2.Andhra university

### 3.5.2 Does the College have College-industry cell? If yes, what is its scope and range of activities?

Yes, a separate cell for industry – institute interaction exists being overseen by the Head, CDC. The III cell facilitates the association of the institute with various academic initiatives of the industries in terms of training in latest technologies and providing internships bridging the gap between the industry and institute.

Some of the important activities of the cell are:

- Arranging guest lectures by experts from industry.
- Arranging internship for students.
- Showcasing the capabilities and quality of students and there by arranging campus recruitments.
- Facilitating faculty to visit industries to catch up with the emerging industrial requirements.
- Showcasing capabilities of faculty from different disciplines for possible consultancy activities.
- Facilitating the participation of people from industry in various academic bodies of the college like Board of Studies, Academic Council.
- Conducting add-on courses on latest technologies across all the departments beyond the curriculum.
- Establishing centers of excellence.

## 3.5.3 What is the mode of publicizing the expertise of the College for consultancy services? Mention the departments from whom consultancy was sought.

Consultancy services of the institute are promoted in general by liaison with industries, campaigning about the expertise and public relations with local agencies. Some of the initiatives of the institute for publicizing consultancy services:

- Maintaining a brochure containing information regarding available facilities & expertise of faculty.
- Circulation of the brochure to nearby industries/organizations.
- Conducting professional society activities regularly in association with Student chapters of ISTE, CSI and IE(I) and inviting the people from industry showcasing the facilities in the departments.
- Civil Engg, Mechanical Engg, Electrical and Electronics Engg. and Chemical Engg. offered consultancy services.

## 3.5.4 How does the College encourage the faculty to utilise the expertise for consultancy services?

The institute encourages faculty to involve and utilize their expertise for consultancy by:

- Providing suitable advertisement at various avenues.
- Providing 80% of the revenue generated through consultancy to the staff involved.

• Providing infrastructural facilities to organize and conduct consultancy services.

## 3.5.5 List the broad areas of consultancy services provided by the College and the revenue generated during the last four years.

Details of consultancy servicesprovided by the institute and the revenue generated during the last four years.

Academic Year	Department	Areas for consultancy	Amount in Rs
2010-11		Structural Engineering	18,800/-
		Geo technical Engineering	1,51,000/-
2011-12	Civil Engg	Structural Engineering	41,400/-
	CIVII Eligg	Geo technical Engineering	95,900/-
2012-13		Structural Engineering	1,01,200/-
		Geo technical Engineering	43,400/-
		Environmental engineering	2000/-
2013-14		Structural Engineering	76,050/-
		Geo technical Engineering	54,000/-
		Transportation Engineering	43,000/-
		Environmental Engineering	1000/-
	Electrical and		5,75,000/-
	Electronics	Content development and	
2011-12	Engg	delivery for a virtual	
		institute for GETs- GMR	
		Energy	
	Mechnical	Academic consultancy -	62,400/-
2012 12	Engg	Manager Skills Training	
2012-13		program-World wide Diamond Manufacturing	
		Diamond Manufacturing PVt.Ltd.	
	Mechnical	1. Academic consultancy -	1,10,500/-
	Engg	(World wide Diamond	1,10,500/
	00	Manufacturing PVt.Ltd	
2013-14		(Manager Skills Training	
		program)	
		2. Fabrication of Nano	
		Composites.	

#### 3.6 Extension Activities and Institutional Social Responsibility (ISR)

# 3.6.1 How does the College sensitize the faculty and students on Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience.

The community service wing of GMR Varalakshmi Foundation (GMRVF), A CSR arm of GMR group creates the awareness about various societal needs from time to time for both faculty and students. Covering the various aspects of the social responsibility instilling the philosophy of giving back to society, NSS unit of the institute organizes various programmes in the local community.

S.No.	Activity
1	Observation of World Environment Day
2	Plantation programme at adopted village
3	Observation of International Literacy Day
4	Blood donation camp in association with Indian Red Cross
	Society
5	Celebration of NSS day
6	Gamyam
7	World Aids Awareness Rally
8	Observation of Human Rights Day
9	Awareness talk on usage of Plastics
10	Swachh Bharat
11	Awareness programme on population and literacy
12	Clean & green programme in the campus
13	Awareness programme on energy conservation
14	Awareness programme on eye donation
15	Participated in Pulse Polio Immunization Programme
16	Awareness Rally in connection with World Cancer Day

## 3.6.2 How does the College promote College-neighborhood network and student engagement, contributing to holistic development of students and sustained community development?

GMRVF funds social voluntary projects under community services to the tune of Rs25,000/- per project. Four such projects have been completed by the faculty for sustained community development.

#### Details of Social volunteering projects (SVP) funded by GMRVF

Projects	Faculty
Cheyutha	Dr D.Tejaeswara rao
velugu	Dr D.Tejaeswara rao
Clean& green grounds	Dr D.Tejaeswara rao
Helping hands	Ch.R.Vinod kumar

The following community activities are organized under the six arms (Lakshya, Vikasa, Soochana, Avagahana, Shiksha, Vitarana) of GAMYAM.

- Prepared sample question papers for clerk's examination and submitted them to prathiba library.
- Personality development session for Nagavali Institute of Rural Entrepreneurship Development (NIRED) trainees on discipline, goal setting and self-confidence.
- Field visit to tuition centers in Rajam, interactive session held.
- Question papers prepared for class 3rd, 4th, 5th standard students on Hindi language and submitted to CSW officials.
- Tuitions conducted for children by GAMYAM team members, students grasping levels assessed.
- Career, educational and scholarship guidance for class 11<sup>th</sup> and 12th students at Rajam Govt. junior college.
- Personality development session for NIRED trainees or Entrepreneurship and discipline.
- Career, education and scholarship guidance, counselling for 10th class students at Govt. high schools.
- Personality development session for NIRED trainees on positive thinking and alcoholism and its abuse.

## 3.6.3 How does the College promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

Institute encourages faculty and students to involve in various community related activities by providing financial support and issuing letter of appreciation. The institute also conducts outbound get together programmes motivating the faculty members to participate in extension activities.

## 3.6.4 Give details on social surveys, research or extension work (if any) undertaken by the College to ensure social justice and empower the under-privileged and most vulnerable sections of society?

To ensure social justice and empowerment of the under privileged sections of the society, the institute organizes different programmes involving the staff and students.

- Prepared sample question papers for clerk's examination and submitted them to prathiba library.
- Personality development session for NIRED trainees on discipline, goal setting and self-confidence.
- Field visit to tuition centers in Rajam, interactive session held.
- Question papers prepared for class 3rd, 4th, 5th standard students on Hindi language and submitted to CSW officials.
- Career, educational and scholarship guidance for the students of Government schools and colleges at Rajam.
- Personality development session for NIRED trainees on Entrepreneurship and discipline.
- Personality development session for NIRED trainees on positive thinking and alcoholism and its abuse.
- Seminar on health and hygiene for women at NIRED.

## 3.6.5 Give details of awards / recognition received by the College for extension activities / community development work.

- Dr. K. Gouru Naidu,Bh. Arun Kumar,Dr. KVS Prasad received Commendation certificates for Motivating largest number of blood donors in one camp for 2013-14, issued by Indian Red Cross society, Andhra Pradesh Branch.
- Dr D.Tejaeswara Rao recieved Best society services appreciation certificate from district collector on 15th Aug 2013
- Dr. K. Gouru Naidu,Bh. Arun Kumar received Commendation certificates for Motivating largest number of blood donors in one camp for 2012-13, issued by Indian Red Cross society, Andhra Pradesh Branch.
- Institute received certificates of appreciation from the Dist. Collector for organizing blood donation camps 2012-13
- Institutereceived Silver medal from Indian Red cross, AP for motivating blood donors for the year 2011-12 from the governor of AP

- Institute received Gold medal announced by Indian red cross from his Excellency Governor of AP for the blood donation camps conducted as part of NSS activities in 2010-11
- Institute received Republic day honor from the Dist. collector of Srikakulam for conducting more no. of blood donation camps in association with redcross 2010-11
- Institute received Silver medal from Indian Red cross, AP for motivating blood donors for the year 2009-10 from the governor of AP
- Institute has been rewarded with a Gold medal by Red Cross Society of India for conducting and motivating more number of blood donation camps on campus in 2008-09.
- Institutereceived Certificate of recognition for Blood donation camp on 2-4-09 issued by Indian Red Cross society, Andhra Pradesh Branch.
- Institutereceived Award for motivating largest number of member registrations in 2007-08 issued by Indian Red Cross society.
- Institutereceived Award for Motivating largest number of blood donors in one camp for 2006-07, issued by Indian Red Cross society, Andhra Pradesh Branch.

# 3.6.6 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?

To complement and supplement the learning outcomes beyond the class room and to create awareness among the young citizens of the future these extension activities are useful. The impediments and dynamics of the society which the students face in their lives and to create a sense of worldly wisdom, these extension activities play a predominant role. Apart from this, self learning, learning by doing and learning through group activities are some of the outcomes.

These activities are aimed at inculcating values like

- Social responsibility
- Ethics and values
- Societal behavior
- Communication with community
- Team work
- Leadership

# 3.6.7 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 institute involves the various local bodies and NGOs viz. Gram Panchayats, Municipality, Anganwadi centres, Indian Red cross society in the region for conducting and organizing different extension activities. In association with the local bodies faculty and students organize following programmes:

- Blood donation camps.
- Awareness about their health and hygiene conditions
- Swachh Bharat
- Awareness about AIDS and practices for curbing.
- An opportunity to know the resources of water in their village and water quality tests.
- Awareness to curb "Child Labour and minimize school drop outs"

## 3.6.8 Does the College have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?

The institute has a mechanism to facilitate the organization of such activities. Associate Dean, Staff &Student affairs will co-ordinate such activities with various student groups. Apart from this NSS coordinator of the institute will monitor and lead the activities under the scheme.

## 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 institute has association with Indian Red-cross society of India, Srikakulam to conduct Blood donation camps every year.
- The institution has NSS unit funded by the state Government through JNTUK-Kakinada which conducts various welfare programs as per the guidelines received from time to time.
- In association with CSW of GMRVF the institute organizes programmes viz. health awareness programs, tuitions to under privileged students etc.

#### 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.

S.No	Activity	Year
1	Dr. K. Gouru Naidu, Bh. Arun Kumar, Dr. KVS	2013-14
	Prasad received Commendation certificates for	
	Motivating largest number of blood donors in	
	one camp, issued by Indian Red Cross society,	
	Andhra Pradesh Branch	
2	Dr D.Tejaeswara Rao recieved Best society	15th Aug 2013
	services appreciation certificate from district	
	collector	
3	Institute is identified as a training center for	2013-14
	NBA evaluators for Outcome based	
	evaluation system	
4	Institute Received certificates of appreciation	2012-13
	from the Dist. Collector for organizing blood	
	donation camps	2012.12
5	Dr. K. Gouru Naidu,Bh. Arun Kumar received	2012-13
	Commendation certificates for Motivating	
	largest number of blood donors in one camp,	
	issued by Indian Red Cross society, Andhra Pradesh Branch.	
6	Institute Received Silver medal from Indian	2011-12
0		2011-12
	Red cross, AP for motivating blood donors from the governor of AP.	
7	Institute received Gold medal announced by	2010-11
/	Indian red cross from his Excellency Governor	2010-11
	of AP for the blood donation camps conducted	
	as part of NSS activities	
8	Institute received "CSI Best Performance	2010-11
	Award" from CSI Vizag Chapter.	2010 11
9	Institute received Republic day honor from the	2010-11
	Dist. collector of Srikakulam for conducting	
	more no. of blood donation camps in	
	association with Indian red cross society	

#### 3.7 Collaboration

- 3.7.1 How has the College's collaboration with other agencies impacted the visibility, identity and diversity of activities on the campus? To what extent has the College benefitted academically and financially because of collaborations?
  - The collaboration with Industries and R&D organizations has resulted in course and curriculum development through participation in Board of studies and academic Council.

- To get sponsored research projects from different National agencies
- Association with institutions like NITTTR, Chennai for Teacher TrainingPrograms
- Collaboration with IBM, Micro Soft, WIPRO, TCS, INFOSYS and other industries helped in conducting placement training programmes, personality development and other soft skills development.
- Guest lectures organized in the institution by industry experts on latest technologies.
- Collaboration with industries and external research laboratories results in student industrial visits, summer internships and student projects.
- MoU with IC-IMPACTS (India-Canada Centre for Innovative Multidisciplinary Partnerships to Accelerate Community Transformation and Sustainability) for research collaboration.
- MoU with "Environmental Research Institute" (ERI) of University of Highlands and Islands (UHI) to Establish CoE in "Environmental Science and Energy Engg".
- Institute has an association with University of Petroleum and Energy Studies (UPES), Dehradun for research and development.
- Industry-Institute Interaction resulted in internship for 863 students of UG and 130 students of PG in more than 150 industries spread across the country.

#### 3.7.2 Mention specific examples of, how these linkages promote

#### \* Curriculum development

BOS of each department has members both from Industry and Reputed Institute. The BOS meets twice in an year and suggests the modifications and up-gradation in the syllabus keeping in view the needs of Industry and ongoing changes in relevant disciplines.

#### \* Internship, On-the-job training

Collaboration with various industries provides an opportunity to the students for acquiring training skills for placements. Further Industry-Institute Interaction resulted in internship for 863 students of UG and 130 students of PG in more than 150 industries spread across the country. These Collaborations help the students to undergo short-term training programmes and tours during summer vacation and semester break.

#### \* Faculty exchange and development

Workshops, seminars and conferences that are conducted in association with the industry enables the inter-disciplinary research activities. Institute sponsors faculty to exchange their research expertise at workshops, conferences and training programs arranged at other colleges/organizations.

#### \* Research, Publication

Institute encourages the faculty to take up research projects funded by AICTE, DST, MHRD and other State and Central Government organizations. Institute has an incentive policy encouraging the faculty to take up research projects and to publish research articles.

#### \* Consultancy, Extension

Institute encourages consultancy by providing 80% of the revenue generated to the staff involved. The community service wing of GMR Varalakshmi Foundation (GMRVF) creates the awareness about various societal needs from time to time for both faculty and students. Covering the various aspects of the social responsibility instilling the philosophy of giving back to society, NSS unit of the institute organizes various programmes in the local community. The students and staff participate in training needy people in the local community by conducting tuitions in the social welfare hostels, imparting vocational training for the self employment of the youth. The need of the hour is identified by physical inspection of nearby villages, enquiring the welfare and supporting for village development.

#### \* Student placements

The institute continuously works on improving the placements year on year with a dedicated team working under Training and Placement Cell. Every year 60 to 70 % of the eligible students are being placed in reputed organizations. Some of the valued recruiters are viz. TCS, INFOSYS, CAPGEMINI, L&T, GMR Group, Nagarjuna Construction Company, Tech Mahindra etc.

3.7.3 Does the College have MoUs nationally / internationally and with institutions of national importance/other universities/ industries/corporate houses etc.? If yes, explain how the MoUs have contributed in enhancing the quality and output of teaching-learning, research and development activities of the College?

Yes, the Institute has MoUs nationally / internationally and with universities/ industries. The quality and output of teaching learning process has improved considerably due to the following activities:

- Collaboration with industries and external research laboratories results in student industrial visits, summer internships and student projects.
- MoU with IC-IMPACTS (India-Canada Centre for Innovative Multidisciplinary Partnerships to Accelerate Community Transformation and Sustainability) for research collaboration.
- MoU with "Environmental Research Institute" (ERI) of University of Highlands and Islands (UHI) to Establish CoE in "Environmental Science and Energy Engg".
- Association with University of Petroleum and Energy Studies (UPES), Dehradun for research and development.
- Industry-Institute Interaction resulted in internship for 863 students of UG and 130 students of PG in more than 150 industries spread across the country.
- Guest lectures/seminars/workshops conducted by eminent resource persons invited from industries and premier institutions like IITs, NITs etc.
- Industrial training programs organized to fill the gap between the industry and academia.

## 3.7.4 Have the College industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?

Yes, the Institute industry interactions resulted in the establishment / creation of labs equipped with special equipment to pursue research.

- In association with IBM, Computer Science and Engineering department has established a centre of excellence for training the students on IBM tools like DB2, RAD, LOTUS etc.
- In collaboration with Microsoft as a part of Microsoft Edvantage programme cloud competency centre has been established to train the students on all the cloud based applications.

With the financial grant from AICTE, advanced laboratories are established in all the departments enabling the faculty and students to pursue research. Besides this, special purpose machines have been procured in Mechanical Engineering department as a part of DST sponsored research projects. Mechanical and Electrical engineering departments being identified as research centres, Institute funded research laboratories have been established in both the departments to encourage research.

#### **D4.** Criterion-IV: Infrastructure and Learning Resources

#### 1.1 Physical Facilities

## 1.1.1 How does the College plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

The institute is located in a lush green campus with a serene atmosphere in Rajam, Srikakulam District, Andhra Pradesh. The total extent of land available to the institute is 157 acres with a built up area of over 55,464sq.m. Management interacts frequently with various stake holders about the changing trends and requirements for creation and enhancement of the infrastructure.

#### Plan and optimal utilization of the available infrastructure:

- All the activities of the institute are brought under ISO quality system. Infrastructure is optimally utilized by assessing requirements and availability periodically through reviews.
- Common facilities viz. Knoeledge Resource Centre, Workshop, Seminar halls, Auditorium, Canteen, Drawing halls and Gymare utilized by all departments.
- KRC facility beyond working hours.

## 4.1.2 Does the College have a policy for creation and enhancement of infrastructure in order to promote a good teaching-learning environment? Ifyes, mention a few recent initiatives.

Yes, apart from the adequate availability of physical infrastructure, the institute has planned for future expansions o radditional requirements that may be needed with the passage of time to promote a good teaching-learning environment. Creation and enhancement of infrastructure is undertaken. One such initiative is tocreate centres of excellence for Research & Development and Consultancy activities. Another initiative is all the class rooms are equipped with LCDs to promote good teaching and learning environment. In addition class rooms are also provided with interactive projector and digital boards. Further, internet bandwidth is enhanced to 100 Mbps to encourage elearning and self learning. Student Activity Centre is created to carry out Extra Curricular and Co-Curricular (ECCC) activities. Additional seminar halls and tutorial rooms are created. KRC and Hostels space is enhanced. Canteen facility with all amenities is created.

#### 4.1.3 Does the College provide all departments with facilities like office

### room, common room, and separate rest rooms for women students and staff?

Yes, restrooms for boys and girls are provided apart from office room and faculty cubicles.

## **4.1.4** How does the College ensure that the infrastructure facilities meet the requirements of students/staff with disabilities?

The infrastructure facilities meet the requirements of students/staff with disabilities with a provision of well-maintained roads, ramps & lifts, connecting bridges between various academic blocks and electrically operated buggies.

### **4.1.5** How does the College cater to the residential requirements of students?

#### Mention

- Capacityofthehostelsandoccupancy(tobegivenseparatelyforme n and women)
- Recreational facilities in hostel/s like gymnasium, yoga center, etc.
- Broadband connectivity / Wi-Fi facility in hostel/s

#### **Hostel Facility:**

Institute has separate hostels for boys and girls with facilities such as recreation hall provided with newspaper, magazines and 56 projection TV & computer center with internet facility and sports & games facility etc. Further, hostellers are provided with English news paper per room. The hostel capacity and other details are given below.

SNo	Description	Boys	Girls
01.	Location	Institute premises	Institute premises
02.	No. of Buildings	5	2
03.	No. of Floors	15	6
04.	Total floor area in sq.m.	14838	5688
05.	Capacity for	488 Rooms	148 Rooms
	accommodation	1083 Capacity	444 Capacity
06.	Internet/ Wi-Fi facilty	Available	Available

#### **Recreational facilities:**

Institute is having a modern, well equipped air conditioned auditorium with a seating capacity of 300 and seminar halls for organizing cultural activities, personality development programs, film screening etc. and also a well-equipped gymnasium with air conditioned Aerobic Centre for Boys and Girls.

#### **Broadband connectivity / Wi-Fi facility:**

Internet with band width 100Mbps and Wi-Fi facilities.

## 4.1.6 How does the College cope with the health related support services for its students, faculty and non-teaching staff on the campus and beyond?

Health care is provided by 135 bed multi-specialty GMR Varalakshmi Foundation CARE Hospital located adjacent to the institute. All the staff and students of the institute can avail the facility at concessional rates. Institute also maintains a dispensary with qualified full time health assistant in addition to an ambulance.

## **4.1.7** What special facilities aremade availableonthe campustopromote interest in sports and cultural events?

Institute has full time qualified Physical Directors (Male and Female) and one Gym coach to train the students and to promote interest in sports and cultural events. Movies are screened in the institute auditorium to recharge faculty and students. Instituteteams bagged several prizes at inter-collegiate, zonal anduniversitysports meets. In addition, institute also has various cultural clubs to organize music concerts, drama shows, dance competitions etc. tofacilitate all thecultural/extra-curricular activitiesofthe institute.Seminar halls& auditorium are availablefor performing such events.

Toencourage the students to accomplish their sports goals in stitute has provided the following facilities.

<b>Facilities</b>	Number available		
racinues	Boys	Girls	
Indoor Games			
Gym	Common for Boys and Girls		
Aerobics with AC	Common for Boys and Girls		
Table Tennis	1 1		
Carom Boards	4 2		

Chess Boards	6	3
<b>Outdoor Games</b>		
Cricket Grounds		3
Football Ground		1
Kho-Kho Ground		1
Volley Ball Courts	4	1
Tennicoit Court		1
Shuttle Badminton Court	3	1
Basketball courts	1	1
Throw Ball Court		1
Ball Badminton Courts	1	1
Long Jump Pill		1
Cricket nets	2	
Bowling Machine with auto feeder	2	

#### 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?

Yes, Institute has KRC advisory committee. Composition of the committee is Principal (Chairman), Librarian (Convener) and HODs (Members) to look after KRC developmental activities. The significant initiatives implemented by the committee to render the KRC user friendly are:

- Users are updated with information regarding check in, check out, renewal, overdue reminders through Circulars and notice boards.
- Users can view their account through WEB OPAC of **Libsys** Library Management System.
- Students who require books for the entire semester are provided the facility of barrowing 4books per semester.
- KRC working hours has been extended to 11.00PM during the examinations.
- Digital Library has been setup with 50high-end systems connected with high- speed network connectivity to access all e-resources, video and e- learning programs.
- Reading rooms are provided to facilitate students to bring and read their own material.

#### 4.2.2. Provide details of the following;

• Total area of the KRC (in Sq.mts): 1618 sq.mts

• Total seating capacity: 500

Working hours

On working days: 8.00 AM to 10.00PM

On Holidays: 9.00 AM to 5.00 PM

During Examinations: 8.00 AM to 11.00P.M

During Vacation: 9.00 AM to 5.00PM

Layout of the KRC (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing-resources)

LEFT WING	RIGHT WING		
<b>Ground Floor</b> : Stock Area, Binding	Boys & Girls Reading		
sections	Rooms(Personal Books)		
First Floor: Lending Section,	Text book section & Digital		
	Library		
	Second Floor: Reference		
	Section & Periodical Sections		

KRC staff personally assists the differently abled people in accessing and using library resources.

#### 4.2.3 Give details on the library holdings

**Total No** 

a) Print (Books, back volumes and thesis) 58055
b) Non Print (Microfiche, AV)(CD/DVD) : 700
c) Electronic (e-books, e-journals) databases 2253/618
d)Special collection 10000

(E.g. Textbook, Reference books, standards, patents)

### **4.2.4** What tools does the library deploy to provide access to the collection? **OPAC**

An OPAC (Online Public Access Catalogue) has been created and terminals at various locations are provided to facilitate its access. It is also made available via LAN in the campus.

#### **Electronic Resource Management package for e- Journals**

Institute subscribes to online journals like IEEE, SPRINGER, ASME, ASCE, ELSEVIER, J-GATE Engg, Mc Graw-Hill and ASTM Digital Library.

#### Federated searching tools to search articles in multiple data bases

Institute has an automated web based library information retrieval system to search articles in multiple databases.

#### **Library Website**

Library information is available on institute website i.e www.gmrit.org.

#### In-house/remote access to e-publications

Faculty and students have access to E-resources like E-journals, E-books and Video lectures through LAN or Wi-Fi connectivity.

#### 4.2.5 To what extent is the ICT deployed in the library?

#### **Library Automation**

All KRC Operations are computerized using Libsys Software. All books are barcoded.

#### Total number of printers for public access

Photocopiers and two printers are available for public access in KRC.

#### Internet bandwidth/speed

Internet band width in the library is 100 Mbps

#### **Institutional Repository:** Yes

#### **Content management system for e-Learning**

E-Journals like IEEE, SPRINGER, ASME, ASCE, ELSEVIER, J-GATE Engg, Mc Graw-Hill, Pearson education and ASTM Digital Library and NPTEL Web/video Courses, MIT, Stanford, Harvard and Learning Materials for Engineering Programmes.

#### Participation in Resourcesharing networks/consortia (GIST):

The KRC subscribes to DELNET which enables to participate in resource sharing networks/consortia and also facilitate interlibrary loan and downloading texts of e-Journals.

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

Average number of walk-ins : 500 per day Average number of books issued/returned :500 per day

Ratio of library books to students enrolled : 1:6

Average number of books added during last three years : 7000

Average number of log in to opac (OPAC) :100 per day

Average number of log in to e-resources :100 per day

Number of information literacy trainings organized :4

#### 4.2.7 Give details of the specialized services provided by the library

Reference : YES,8000
 Reprography : YES
 ILL(Inter Library Loan Service) : DELNET

• Information deployment and notification: KRC deploy information in the form of video courses, web courses, question banks, department exercises, notes, project reports, case studies and university question papers.

Download : YES

(E-Journals & E-books)

Reading list/Bibliography compilation : YES
 In-house/remote access to e-resources : YES

 User Orientation and awareness: orientation and awareness seminars are organized for KRC staff, students and faculty members

Assistance in searching Databases : YESINFLIBNET/IUC facilities : DELNET

## 4.2.8 Provide details on the annual library budget and the amount (in Laks) spent for purchasing new books and journals.

T :1		2013-20	)14	2012-2013		
Library holdings	Budget	Number	TotalCost	Budget	Number	TotalCo st
Textbooks and	6.00	1597	5.50	10.00	2240	7.65
Reference books						
Journals/Peri		618/95	15.79		95	14.12
odicals	16.40			20.00		

## 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.

- Yes, KRC collects the feedback from eminent visitors and KRC development committee.
- Exit feedback is collected from outgoing students regarding the KRC facilities in the institute.
- Feedback is analyzed and utilized for further improvement.

## 4.2.10 List the infrastructural development of the library over the last four years.

Academic Year	Infrastructure
2013-2014	Book Racks-6, Book Add-ons – 60, News Paper Stand -1, Periodical Display Racks -3, Property Counters 10, Tables - 20, Chairs – 99, Bar code Scanners – 2, Staff Chairs – 4 and added Two floors
2012-2013	Photo Scanner-1, Book Rack Add-ons – 12, Book Racks – 4, printer – 1,
2011-2012	Book Racks -2, Add- ons – 6, Spiral Binding Machines -2, Delta R- 5 Server
2010-2011	Reading Tables – 21, Plastic Chairs - 80

## **4.2.11** Did the library organize workshops for students, teachers, non-teaching staff of the college to facilitate better Library usage?

Yes, Institute organizes workshops/awareness programs for utilization of KRC resources in a better way. A National workshop was organized in 2008.

#### 4.3 IT Infrastructure

# 4.3.1 Does the College have comprehensive ITpolicy addressing standards on ITService Management, Information Security, Network Security, Risk Management and Software Asset Management?

Yes, Information and network security is provided through firewalls to handle misuse of ITservices provided. Antivirus Symantec Endpoint Protection is installed in all computers to handle malware risks.

## 4.3.2 Give details of the College's computing facilities (hardware and software).

### 1. Number of computers with Configuration (provide actual number with exact configuration of each available system)

Sl. No.	Configuration	No.of systems
1	Systems with Intel i3/ i5 processor	413
2	Systems with Intel Core2DUOprocessor	331
3	Systems with Intel Dual Coreprocessor	41
4	Systems with Intel P–IV processor	516
	TotalNumberofSystems	1301

#### 2. Computer-student ratio

UG- 1:3 PG- 1:1

#### 3. Stand-alone facility:

10 systems are provided with stand-alone facility

#### 4. LAN facility

1301 systems are connected with LAN

#### 5. Wi-Fi facility:

Wi-Fi facility is available in the institute with 100Mbps speed

#### Specifications:

#### i) OUTDOOR ACCESS POINT RADIOS-24No.'s

802.11b/g/n CISCO wireless devices are using in the campus which operates at 300Mbps speed with 13 dBi MIMO omni antennas.

#### ii) INDOORACCESSPOINTRADIOS-20No.'s

802.11b/g/n CISCO wireless access points operates at 300Mbps speed with up to 13 dBi antennas

#### iii) BACKBONE RADIO LINKS-8no's

Connected with Backhaul connectivity through 5GHz

#### iv) POWERBACK-UP MODULE-8 No.'s

Provided power backups with 600 kVA UPS at OFC terminations points with generator facility

#### v) SECURITY SERVER MODULE-3No.

Security provided by using CISCO 2100 and 2500 series controllers with MAC filtering and proxy authentication. VLAN implementation provided for L2 security.

#### **6. Licensedsoftware:** Licensed Software available in different departments:

Sl.N	Department	Details ofSoftware	No. of users
		Application Software	
		MS Visual Studio 6.0.	Unlimited
		Borland C++ Suite.	Unlimited
1	Information	Turbo Pascal for DOS.	Unlimited
	Technology	Turbo Pascal for Windows.	Unlimited
		Softtek COBOL for DOS.	Unlimited
		Oracle work group Server 8.0.3.	Unlimited
		Borland j builder Enterprise 4.0	Unlimited
		Oracle 8i Stand Server.	5
		J2EE-Pramati Studio	25
		UML IBM Rational Software	10
		Visual Studio .NET	Unlimited
		M.S. Office 2003 Professional	Unlimited
		Omni page 15 Software	Unlimited
		Symantec Endpoint protection.Ver	100
		Hi-Class Interactive Software	75
		IBM SPSS Modeller server 14.1	25
		Adobe Flash Pro CS5&6	30
		Aneka software for cloud	50
		SYSTEM SOFTWARE	
		MS Windows NT Server + client	35
		MS Windows 98	Unlimited
		Sco Unix enterprise 10 User,	10
		MS Windows2000 professional	Unlimited
		SUSE Linux 7.2 Professional	Unlimited
		Windows XP Professional with	Unlimited
		AIX 5L V5.3(Unix) with IBM p5	Unlimited
		Microsoft campus agreement	Unlimited

2	Computer	Microsoft Campus Agreement	Unlimited
	Science	IBM-Rational Rose	30
	Engineering	J2EE Pramati Server	Unlimited
		Borland J Builder Enterprise	Unlimited
		Oracle Workgroup Server 8.0.3	5
		Oracle 8i Standard Server	5
		MS Windows NT4 Server	Server(15)+Cli
		SCO Unix Enterprise 4.04	10
		AIX Unix Server	Unlimited
		Oracle 10G	100
		Auto Desk Maya 2010	1
		Adobe CS4 Design Premium Box	1
		Toon Boom Story Board	1
3	Electrical and	MULTISIM(PSPICE simulation)	Allusers
	Electronics	MATLAB -13	MATLAB ( 5
	Engineering	PSCAD4.2.1(MANITOBA -	5
		PSPICE – 16.0	5
4	Mechanical	ANSYS 15.0 (CFD)	20
	Engineering	AutoCAD 2013 (ARC)	125
		AutoCAD	3
		Autodesk Inventor	1
		CATIA	2
		Iron CAD	500
		Pro E	05
		ANSYS	05
		Multi physics	99
		FMS	01
		Mechanical Desktop	01
		EDGE CAM	10
		VR Turn software	01
		VR Mill	01
	~: ··	Aristo Robot software	01
5	Civil	STAADPRO-07	4
	Engineering	MAP-INFO	10
		STRUDS software	5
		QEPRO	1
		ESR/GSR	1
		LS drafter	1
		ArcGIS	31
	77	Bently Software Products	1
6	Electronics	ALTERA	Web edition
	and	XILINX 13.1 version	50
	Communicati	ALDEC - active HDL	5

	on	MULTISIM	25
	Engineering	CC studio-3.0	Education
		Mentor Graphics	25
		MATLAB 7.5	30
		Signal processing tool box	1
		Filter design tool box	1
7	Basic-Science	Rennet	70
	and	HI Class Interactive software	
	Humanities		
8	Chemical	Aspen Tech	199
	Engineering	Gams	1

#### 7. Number of nodes/computers with Internet facility

All the systems are provided with internet connectivity

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

Keeping in mind the importance of technological changes and the role of ICT in transfer of such knowledge to the student community, the institute plans to develop the IT infrastructure in many ways such as

- To increase the bandwidth of internet facility
- Upgrading the computers as per the requirements of the various departments
- All classrooms to be made smart and hi-tech classrooms.
- To develop e-learning facilities utilizing the resources of the faculty
- To procure and install industry specific software and to train students on these platforms to enable them to become industry ready
- All the computer systems are regularly monitored by the system administrator and maintenance staff.
- All the servers are under AMC with respective service providers and are maintained regularly.

### 4.3.4 Give details on access to online teaching and learning resources and other knowledge and information provided to the staff and students for quality teaching, learning and research.

Internet and Wi-Fi is accessible to all in the campus. The members of the faculty optimally utilize Electronic Resource Management facilities to enhance their knowledge base in teaching learning process.

Faculty encourages students to access video lectures and LAN based courses.

### 4.3.5 Give details on the ICT enabled classrooms/learning spaces available within the College and how they are utilized for enhancing the quality of teaching and learning.

- The use of modern multi-media teaching aids like LCD projectors, Internet enabled computer systems are usually employed in class roominstructions.
- Institute has a video conferencing facility in the auditorium facilitating the addressing of the students and faculty by eminent personalities who cannot physically visit the campus.
- E-class room with interactive board and projector, AC auditorium, seminar halls with audio visual systems are in place to organize academic and ECCC activities viz. seminars, conferences, workshops, cultural programs.
- Digital library facility enables students to collect extra learning material like NPTEL lectures, videos etc.
- Lecture notes of each course are uploaded on LAN portal.
- The students are also encouraged to use computer software packages for analyses and experimental work of their projects.
- The Institute encourages teachers to enhance their subject knowledge and research in their respective fields using KRC resources and software.
- OPAC for KRC activities
- ELCS lab is established to improve the verbal skills of the students
- The Institute is a Wi-Fi enabled campus covering a radius of 0.5 km. It enables faculty and students to use internet facility in class rooms, labs and hostels.
- The online journals are also made available to all the faculty and students through intranet in order to promote quality in teaching-learning process and research.

### 4.3.6 How are the faculty facilitated to prepare computer aided teaching learning materials? What are the facilities available in the College or affiliating University for such initiatives?

Faculty members are provided with laptops/desktops with internet facilities which facilitate them to prepare/access to computer aided teaching-learning materials. Further, each department is provided with a seminar hall and each class room is provided with LCD projector for effective use of computer aided teaching-learning materials.

#### 4.3.7 How are the computers and their accessories maintained?

The computers and accessories are maintained by IT support team comprising of trained hardware/software professionals. AMC is available for most of the servers and software wherever required.

4.3.8 Does the College avail of the National Knowledge Network connectivity directly or through the affiliating University? Ifso, what are the services availed of?

No.

- 4.3.9 Provide details on the provision made in the annual budget for update, deployment and maintenance of the computers in the College?
  - The systems are upgraded when the situation demands like change in the syllabus, when hardware gets obsolete. Generally systems with 3 years warranty are purchased. As soon as warranty expires the systems are maintained by our own qualified technical staff.
  - Updating, deployment and maintenance of systems is met from the budget allocated to each department depending upon the necessity.
- 4.4 Maintenance of Campus Facilities
- 4.4.1 Does the College have an Estate Office/ designated officer for overseeing maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

Yes. The Institute has an Estate office to look after the maintenance of buildings/ classrooms/ workshops/ laboratories etc. Periodic measures are taken to maintain the physical ambiance of the campus.

4.4.2 Does the College appoint staff for maintenance and repair? If not, how are the infrastructure facilities, services and equipment maintained? Give details.

**Yes.** There are 22regular and 15 outsourced employees working for the maintenance and repair services. Further, the housekeeping and security is outsourced.

#### **D5. Criterion-V: Student Support and Progression**

#### **5.1 Student Mentoring and Support**

### 5.1.1 Does the college have an independent system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes. The Institute has "Proctorial system" for student mentoring and support. Group of 10-15 students are attached to each faculty member to follow up their progression in studies as well as support in case of slow learners or those having difficulty in adjusting to the new environment. The faculty member will be in touch with the students throughout their course of study for guidance and advice in building up their career. Students are supported by their respective faculty mentors in selecting elective subjects, project work, preparation for interviews etc. Academic progress of the students is continuously monitored before and after every examination and the needy students are timely supported with extra inputs.

Career Development Cell (CDC) regularly organizes guest lectures and motivation lectures for career guidance by inviting guests from industry and academia. Institute also has psychologist on campus to look after psycho-socio problems of the students.

### **5.1.2.** What provisions exist for academic mentoring apart from class room work?

- Monitoring and analyzing the student academic performance and counseling the students accordingly and interact with the parents as and when required.
- Remedial classes for slow learners
- Encourage the students to participate the activities organized by Student chapters of professional societies
- Encouragement to participate in conferences/ workshops/ symposia/ model exhibition contest etc Paper presentations organized by technical institutions.
- Encourage the students to publish articles in technical magazines.
- Use of LAN courses, e-books and video lessons (NPTEL) for better understanding of topics by the students outside the classroom.
- Training in GATE exams, competitive exams, Mock interviews,

Group discussions and preparation of resumes to increase the chances of recruitment of the students.

## 5.1.3 Does the College provide personal enhancement and development schemes for students? If yes, describe techniques employed e.g., career counseling, soft skill development, etc.

Yes. The institute provides personal enhancement and development schemes for students.

Career counseling: CDC provide career guidance to the students. The cell organizes special lectures and technical talks to students to enhance career development. It also makes arrangements for preparing the students for job market by making them more employable. The faculty members provide orientation to the students of their respective departments.

**Soft skill Development:**To cater to the needs of the engineering students, Institute has set up an advanced Language Lab which is equipped with Enhanced Language Learning Centre (ELICE), designed by Teleste Educational Ltd., Finland, facilitates the students with effective and motivating language lessons in the areas of: listening comprehension, model imitation, reading practice, group discussions, telephonic conversations, pair discussions, recorded response, GRE, G-MAT, CAT, TOEFL, MAT training, vocabulary building etc to develop soft skills.

**Self-learning skills**: Institute has introduced audit courses, term paper, internship and mini project in the curriculum to enhance the self-learning skills.

Life skills: The institution regularly organizes programs viz. Art of Living, Yoga training, Vedic mathematics, personality development programs etc. by trained professionals for the overall development of the student. The Institute is run by GMRVF which is a CSR arm of Infrastructure major GMR group. Keeping in view the success of the corporate as an entrepreneur, the Institute always encourages the entrepreneurship in younger generation. In compliance with the idea the institution has established Entrepreneurship Development Cell (EDC) and is supported by AICTE with a financial grant about 15 lacs. Further, Institute is also recognized as incubation centre by MSME, Goyt, of India.

#### **Activities envisaged**

- Invited talks by successful entrepreneurs and financing institutions.
- Training consultancy & testing firms / agencies
- Training on fiscal management
- Organizing competitions, solving case studies etc.
- Guest lectures by the consultants for resource management & project report preparation
- Identification, incubation and development of techno-commercially viable products.

#### **Social Activities:**

The NSS Unit of the institute organizes regular and special camps related to health and hygiene, literacy, environment, personality development, etc to generate a sense of voluntary service towards societal needs among the student community.

Students Activity Centre (SAC) having various clubs viz. hobby club, literary club, creative club, dance club, music club, quizzing clubs etc conducts various activities like cultural competitions, project exhibitions, quizzes, debates, Hardware design contests etc. Every department has professional body chapters viz. ISTE/IEEE/ASME/IETE/IE(I)/CSI/IIChE conducting various events like seminars, paper presentations, quizzes, circuit design contests etc.

# 5.1.4 Does the College publish its updated prospectus and handbook? If yes, what are the activities / information included / provided to students through these documents? Is there a provision for online access?

Yes, the institute publishes its updated prospectus every year which contains information regarding courses offered, academic and examination regulations and other useful information. The institute also publishes newsletter on quarterly basis which contains details about latest happenings. There is provision for online access. Information is updated regularly and is made available in the institution web site. In addition, institute publishes alumni e-news letter half yearly.

The information disseminated with the students is:

- Vision, mission statements, founders message, governing council.
- Courses Offered at UG and PG Level.
- Fee concession and merit scholarships.

- On-campus hostel facilities for boys and girls.
- Outdoor and indoor games and sports facilities.
- On campus general amenities such as ATM, post office, STD/ISD booths & stores for stationary & confectionaries.
- Wi-Fi enabled campus having LAN based courses and Web based student information system with 100 MBPS internet connectivity.
- State-of-the-art laboratories along with language lab and Digital Library.
- A/C auditorium with video Conferencing facility.
- On campus dispensary.
- On campus gymnasium and aerobic centre.
- Soft Skills training and personality development programs beyond the academics
- Bus facilities from Vizianagaram and Srikakulam.
- Details of placements and counseling.
- Incentives and encouragement to the students to participate in seminars and workshops for widening their horizons.

# 5.1.5 Specify the type and number of scholarships / free ships given to students (UG/PG/M.Phil/Ph.D./Diploma/others in tabular form) by the College Management during the last four years. Indicate whether the financial aid was available on time.

The institute provides financial aid to students as Merit Scholarship. Scholarships/financial assistance given to students are as follows:

S. No	A-Y	Type of Scholarship	No of students	Amount disbursed in Rs. (lakhs)
1	2013-14	Merit / EAMCET Rank	84	14.92
		Scholarships		
2	2012-13	Merit / EAMCET Rank	456	66.95
		Scholarships		
3	2011-12	Merit Scholarships	55	5.76
4	2010-11	Merit Scholarships	55	5.36

### 5.1.6. What percentage of students receives financial assistance from state government, central government and other national

### agencies? (e.g., Kishore Vaigyanik Protsahan Yojana (KVPY SN Bose Fellow, etc.)

About 43% of the students receive financial assistance from various agencies as listed below,

S.No	Name of the Scholarship
1	Fee reimbursement SC category
2	Fee reimbursement ST category
3	Fee reimbursement BC category
4	Fee reimbursement EBC category
5	Fee reimbursement DW category
6	Fee reimbursement Minority
7	TTD Scholarships
8	Coffee Board Scholarship
9	National Handicapped Finance Corporation
10	Murali Mohan Charitable Trust (Merit cum Means)

### 5.1.7 Does the College have an International Student Cell to cater to the needs of foreign students? If so, what measures have been taken to attract foreign students?

No. the institute does not have international student cell.

#### 5.1.8 What types of support services are available for

#### \*Overseas students

N.A.

#### \*Physically challenged / differently abled students

Institute provides

- Connectivity between academic blocks for physically challenged students.
- Lifts, ramps, wheel chairs, battery operated buggies, special toilets etc.
- Scribes for writing examinations.
- Fee reimbursement that is leveraged through disabled welfare department

#### \* SC/ST, OBC and economically weaker sections

- Reservation in admission as per Government of A.P. norms.
- Financial assistance for SC, ST, OBC and other weaker section

students through respective welfare department.

### \* Students to participate in various competitions/ conferences in India and abroad

- Students are encouraged to participate in regional and National level competitions.
- Reimbursement of travel expenses, registration fees for encouraging the students to present their papers in conferences.
   Further institute also rewards them with cash incentive of Rs.500/-.
- Students are encouraged to develop live projects for participating in outside competitions with financial support.

#### \* Health centre, health insurance etc.

- An exclusive dispensary equipped with all necessary amenities is available in the campus to meet the first aid requirements.
- In case of emergency, students are referred to multi specialty GMRV CARE hospital adjacent to the institute campus at concessional rates.
- All the students are insured with health and accidental insurance scheme.

#### \*Skill development (spoken English, computer literacy, etc.,)

- CDC organizes communication skills, soft skills and personality development sessions on regular basis.
- CDC also organizes Campus Recruitment Training (CRT) classes to enhance employability skills.
- Enhanced Language Learning Centre (ELICE) facilitates the students with effective and motivating language lessons in the areas of: listening comprehension, model imitation, reading practice, group discussions, telephonic conversations, pair discussions, recorded response, GRE, G-MAT, CAT, TOEFL, MAT training, vocabulary building etc. to develop soft skills.
- Literary club organizes events in each department to enhance oral and written communication.
- Various cultural clubs viz. Music, Dance, Hobby, Drama, Arts clubs helps in enhancing their latent talent and team work.
- Technical hobby clubs viz. Web designing, robotics clubs helps in enhancing their creativity and technical competency.
- Foundation courses in computer science and programming

- laboratories facilitates the students to improve computer literacy.
- Students are encouraged with financial assistance to present models, posters, designs etc.
- Add-on courses are conducted in various thrust areas to enhance the employability.
- Institute facilitates internship to enable the students to have hands on experience.

### \* Performance enhancement for slow learners / students who are at risk of failure and dropouts

- Slow learners are identified by the faculty based on learning and grasping levels and remedial classes are conducted to enhance their performance.
- Students with backlog subjects are identified and additional inputs are given in the form of remedial classes to improve their performance in subsequent examinations.
- Remedial classes are conducted as per schedule without disturbing regular time table of students.
- Individual counseling is taken care of by heads of the departments, class teachers and mentors to minimize the failure and dropout rate.

#### \*Exposure of students to other institutions of higher learning/ corporates/business houses, etc.

- The students are encouraged to attend national and international seminars, workshops and symposia conducted at various universities and research institutes.
- Guest lectures by eminent speakers are invited to bridge the gap between industry and academia.
- Industrial visits are organized to provide practical exposure.
- Industrial exposure is facilitated through internship.
- Conducting special classes for competitive exams viz. GATE, GRE, CAT for higher studies.

Institute hosts different academic initiatives as part of industry institute interactions in collaboration with major corporate companies. A few of these are:

• Infosys Campus Connect Program

- HCL training Programme for CCNA certification
- Microsoft academic initiative-MS IT academy
- TCS academic initiative.
- IBM software CoE- Training Programme on RAD and DB2
- Oracle University for Work Force Development
- National Institute of Amateur Radio (NIAR) established Amateur FM Radio Client Station

Career Development Cell (CDC) organizes interaction with various Corporate Heads, who visit the campus as guest speakers. Interactions are also conducted through Video Conference (VC) with distinguished speakers. As a part of the industry-institution interaction, institute has been accredited by:

- TCS for Academic Initiatives
- Infosys for Campus Connect Program
- HCL Info Systems for HCL Education
- Wipro for Mission 10X
- IBM -Centre of Excellence
- L&T

#### \* Publication of student magazines

Institute publishes annual magazine titled "Tech-Mag". The students are involved in the editorial board as members and also participate in publishing articles. Apart from this the institute brings out a news letter every four months in soft copies and is hosted on institute web-site.

5.1.9 Does the College provide guidance / coaching classes for Civil Services, Defense Services, NET/SLET and any other competitive examinations? If yes, what is the outcome?

No

5.1.10 Mention the policies of the College for enhancing student participation in sports and extracurricular activities through strategies such as

#### \* Additional academic support, flexibility in examinations

- Attendance exemption is given to the participants of games & sports as per norms.
- Institute encourages the students to participate in intercollegiate competitions by providing financial support.

#### \* Special dietary requirements, sports uniform and materials

Sports uniforms and materials are provided by the institute.

#### \* Any other

- Institute has two qualified physical directors for men and women apart from well trained Gym & Aerobics coach to guide the students to excel in games & sports.
- Institute organizes annual sports meet every year with rolling shields and good number of prizes.
- Motivation by inviting eminent sports personalities every year.
- Regular Yoga classes are conducted to improve mental ability.

# 5.1.11 Does the College have an institutionalized mechanism for placement of its students? What services are provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?

Yes, Institute has a CDC which renders guidance to the students in formal and informal ways. Right from first year for all the four year students motivation lectures, personality development programs and recruitment training programs are being organized to enhance the employability skills. The cell organizes guest lectures by inviting the experts from industry and academia creating awareness about their career opportunities.

CDC invites companies for campus recruitment and sometimes students are sent to off campus interviews. Besides campus interview, CDC conducts aptitude tests, Personality development and inter personal communication workshops with external experts to improve communication, presentation skills and employability. Students are also trained in written test skills, Resume Writing, Mock interviews, Group Discussions to make them competent for placements. CDC recommends and announces opportunities available for placements, higher studies and competitive exams.

Entrepreneur Development Cell (EDC) organizes business skill development programs to enhance the entrepreneur skills. Awareness programs are conducted by inviting the successful entrepreneurs in the region and experts from the banking and financial organizations.

Institute is identified as Business Incubation Centre by MSME, Govt. of India.

5.1.12 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus annually for the last four years).

Details are given in Annexure-I

## 5.1.13 Does the College have a registered Alumni association? If yes, what are its activities and contributions to the development of the College?

Yes. The institute has an alumni association. Institute Alumni Association, called *Beacon* involves its Alumni to provide current students access to a network of well-employed graduates. Alumni have an option of updating their profiles in the alumni portal time to time and intimate the CDC Head about the placement opportunities in their organizations.

Alumni are invited to visit the Institute to deliver special/guest lectures. This interaction helps the students to increase their knowledge beyond curriculum. An Alumni Portal linked with Institute's website ensures the seamless connectivity. In order to enable the Alumni to meet regularly, regional chapters and annual alumni meets are organized. The Institute organizes Alumni meet regularly at different cities to apprise them of developmental activities at the institute and also seeks their co-operation for taking the Institute to the next level.

## 5.1.14 Does the College have a student grievance redressal cell? Give details of the nature of grievances reported and how they were redressed.

Yes, Institute has well defined student redressal system in place. Every dept. has complaints/suggestions/grievances box in place where in every student can submit his complaint/suggestion/grievance. The box is opened every fort night in the presence of faculty in charge along with student representatives. The complaint is recorded in the respective register and brought to the notice of HOD. Depending upon the requirement the complaint is forwarded to the higher officials for necessary action.

Apart from the suggestion boxes, the institute website has a feedback providing opportunity for all the stake holders to compliment/complain/suggest with or without affiliation. Further, all students have also an opportunity send to complaint/suggestion/grievance through E-mail (mentor@gmrit.org).

Based on the student's feedback institute has taken actions in the following areas:

- Reading rooms are provided for day scholars.
- Spacious Canteen was provided with all amenities.
- New clubs are initiated under SAC enabling the students to participate in various extra- curricular activities.
- Separate floor space for SAC with required equipment/instruments is provided.
- Internet bandwidth enhanced.
- Quality of food and menu in the hostels/canteen is taken care from time to time.
- KRC and canteen timings are revised.
- Hostel outing timings are revised.

### 5.1.15 Does the College have a cell and mechanism to resolve issues of sexual harassment?

Yes. There is a separate Women Empowerment Cell and security oversight committee (SOC) consisting of the following members:

- Chairman- Principal of the institute
- Two senior faculty members
- One non-teaching staff representative
- Security officer
- Vigilance Volunteers
- Administrative officer of the institute
- Hostel warden
- HR Manager

Women Empowerment Cell is working for the gender sensitization by organizing invited lectures. Main function of this cell is to sensitize and empower the women by involving them in various programmes. The women empowerment cell also looks after the issues related to grievances.

## 5.1.16 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. Institute has anti ranging committee which takes preventive actions to avoid ragging. The Committee gives wide publicity to related acts, statutes and punishments. Disciplinary and Anti-ragging committees were constituted which function effectively at the specified locations viz. on-campus, Hostels & outside Campus. Selected members from students, faculty as well as parents are made involved in as anti-ragging committee members.

Three faculty (Male) for boys hostel and three faculty (Female) for ladies hostel from all departments are appointed as Hostel Squad on daily basis from Sunday through Saturday for the whole week. During Sundays/Holidays especially HoDs visit the hostels. In boys & Girls hostels log book is maintained by the Hostel staff and the faculty members who visit for inspection as per the schedule shall enter intime and out-time without fail. Disciplinary action is initiated in case any student is found involved in ragging.

Separate block for first years is allotted in the academic space and hostels. Besides, separate dress code is there for the first year students to identify them easily and to safeguard them. Separate mess timings are also maintained for the sake of freshers in both Hostels.

Committees outside the campus are also constituted to ensure students safety while they travel in buses and during their stay outside the campus. In the last four years, no significant incident is reported. Associate Dean for Faculty and students Affairs shall oversee all the committees in different places operate with synergy maintaining the discipline inside and outside the campus.

# 5.1.17 How does the College elicit the cooperation from all stakeholders to ensure overall development of the students considering the curricular and co - curricular activities, research, community orientation, etc.?

All the governance committees at the institute level have representatives of the stake holders whose suggestions are solicited from time to time for the overall development. Recruiters, alumni representing the stakeholders play a vital role in the academic council and BoS for the development of curricular and co-curricular activities.

Research Advisory Board (RAB) having representation from the stake holders will motivate and promote the research activities.

## 5.1.18 What special schemes/mechanisms are in place to motivate students for participation in extracurricular activities such as sports, cultural events, etc?

To enhance the participation in extracurricular activities championship of the institute has been initiated. Every year, institute organizes a national level student's fest creating a platform for the students to exhibit and excel in their hidden talents.

The institute conducts annual sports meet regularly and all the winners are rewarded during the annual day celebrations. The institution has full time Physical Directors (Male & Female) and Gym Coach encouraging and training the students in various sports and games. Students are encouraged to participate in inter-collegiate and inter-university competitions leading them to represent state and national level with financial assistance. Students Activity Centre (SAC) having various clubs viz. hobby club, literary club, creative club, dance club, music club, quizzing clubs etc conducts various activities like cultural events, project exhibitions, quizzes, debates, Hardware design contests etc.

Inter department competitions, friendly matches, GMRIT premier leagues etc. are organized regularly enabling the students to improve their cross-culture interactions. Illuminated grounds, bowling machines, Gym and Aerobic centre are the rare facilities which motivate and enhance student's participation.

### 5.1.19 How does the College ensure participation of women in 'intra' and 'inter' institutional sports competitions and cultural activities? Provides details of sports and cultural activities in which such efforts were made?

Institute encourages women to participate in all intra and inter institutional sports competition and cultural events. The women participation is treated totally in equality with men participation. Women physical director enhances the women participation in sports & games. Institute has exclusive women teams in all the events like basketball, Volleyball, Table tennis etc. Women take active participation in NSS activities, debate competitions, and cultural events. Women are encouraged to participate in sports competitions and cultural activities in the institute annual day celebrations. They also participate in all India inter-university sports competitions.

Besides, they participate in cultural events organized on campus and at other colleges.

Details are given in **Annexure – II.** 

#### **5.2 Student Progression**

# 5.2.1 Provide details of programme-wise success rate of the College for the last four years. How does the college compare itself with the performance of other autonomous Colleges / universities (if available)

Name of the programme/ A-Y	2010-11	2011-12	2012-13	2013-14
CE	87.30	82.81	87.93	79.41
EEE	88.52	87.88	84.26	89.44
ME	83.87	85.07	86.99	89.13
ECE	88.57	92.59	89.72	94.89
CSE	91.79	92.13	88.78	86.43
CHE	79.03	74.60	82.46	70.00
IT	88.66	91.15	84.91	86.15

## 5.2.2 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the observed trends.

Student	Percentage against enrolled			Departme	
progression	2010-11	2011-12	2012-13	2013-14	nt
UG to PG					Computer
PG to M.Phil.					Science
PG to Ph.D.					Engineeri
Ph.D. to Post-					ng
Doctoral					
Campus	85	74	37	50	
selection	83	/4	37	30	
Other than					
campus					
recruitment					
UG to PG	10%	8%	15%	10%	Electronic
PG to M.Phil.	Nil	Nil	Nil	Nil	s and
PG to Ph.D.	Nil	Nil	Nil	01	Communi
Ph.D. to Post-	Nil	Nil	Nil	Nil	cation
Doctoral					Engineeri
Campus	91.57	80.90	29.47	29.82	ng

selection					
Other than					+
campus	Nil	3.64	2.10	11.40	
recruitment	1411	3.04	2.10	11.40	
UG to PG	Nil	Nil	Nil	Nil	Electrical
PG to M.Phil.	Nil	Nil	Nil	Nil	and
PG to Ph.D.	Nil	Nil	Nil	Nil	Electronic
Ph.D. to Post-	Nil	Nil	Nil	Nil	s
Doctoral	1111	1111	1 111	1,111	Engineeri
Campus					¬ ng
selection	74	100	32	34	
Other than	Nil	Nil	Nil	Nil	1
campus	1111	1111	1 111	1,111	
recruitment					
UG to PG	Nil	Nil	Nil	Nil	Civil
PG to M.Phil.	Nil	Nil	Nil	Nil	Engineeri
PG to Ph.D.	Nil	Nil	Nil	Nil	ng
Ph.D. to Post-	Nil	Nil	Nil	Nil	1 ~
Doctoral	1 111	1,11	1,11	1 111	
Campus					1
selection	29	45	29	31	
Other than	Nil	Nil	Nil	Nil	7
campus	1 111	1,11	1,11	1 111	
recruitment					
UG to PG	21.8	5	5.66	5.54	Mechanic
PG to M.Phil.	Nil	Nil	Nil	Nil	al
PG to Ph.D.	Nil	Nil	Nil	Nil	Engineeri
Ph.D. to Post-	Nil	Nil	Nil	Nil	ng
Doctoral					
Campus	(2.22	(2.22	20.24	17.00	7
selection	63.33	63.33	29.24	17.09	
Other than	Nil	Nil	Nil	Nil	7
campus					
recruitment					
UG to PG	3.8	1.8	3.8	1.5	
PG to M.Phil.	Nil	Nil	Nil	Nil	
PG to Ph.D.	Nil	Nil	Nil	Nil	
Ph.D. to Post-	Nil	Nil	Nil	Nil	Informatio
Doctoral					n
Campus	57	42.5	26.42	49.23	Technolog
selection	31	42.3	20.42	47.43	у
Other than	Nil	Nil	Nil	Nil	
campus					
recruitment					
UG to PG	22.45	23.4	10.63	14.28	Chemical
PG to M.Phil.					Engineeri
PG to Ph.D.	Nil	Nil	Nil	Nil	ng
Ph.D. to Post-	Nil	Nil	Nil	Nil	

Doctoral					
Campus		22.44	17.02	21.05	14.28
selection		22.44	17.02	21.03	14.20
Other	than	51.02	44.68	28.07	35.71
campus					
recruitme	nt				

5.2.3 What is the Programme-wise completion rate/dropout rate within the time span as stipulated by the College/University?

The programme wise completion rate/ dropout rate is about 1% at the institute level.

5.2.4 What is the number and percentage of students who appeared/qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.

S.No	Year	Type of examination	No of students appeared	No of qualified students
1	2010-11	GATE/CAT/TOFEL	320	76
-	2010 11	01112/0111/10122	(51.6%)	(23.75%)
2	2011-12	CATE/CAT/TOEEL	353	68
	2011-12	GATE/CAT/TOFEL	(52.8%)	(19.25%)
3	2012-13	GATE/CAT/TOFEL	432	107
3	2012-13	GATE/CAT/TOFEL	(71.5)	(24.76%)
4	2013-14	GATE/CAT/TOFEL	445	96
4	2013-14	UATE/CAT/TUFEL	(59.3%)	(21.57%)

5.2.5 Provide details regarding the number of Ph.D/D.Sc./D.Litt. theses submitted, accepted, resubmitted and rejected in the last four years.

NA

- 5.3 Student Participation and Activities
- 5.3.1 List the range of sports and games, cultural and extracurricular activities available to students. Provide details of participation and program calendar.

Every year a good number of students participate in games, sports and extracurricular activities conducted at state and national level. Details of games & sports are given in **Annexure-III** and cultural and other extracurricular activities are given in **Annexure-IV**.

5.3.2 Provide details of the previous four years regarding the achievements of students in co-curricular, extracurricular activities and cultural activities at different levels: University / State / Zonal / National / International, etc.

Details are given in Annexures - V and VI.

5.3.3 How often does the College collect feedback from students for improving the support services? How is the feedback used?

The feedback is taken from all the outgoing students once in an year seeking their opinion on the instructions and delivery, infrastructural facilities, KRC facilities, computing facilities, games & sports facilities, training facilities, support to placement activity, etc. The feedback of the students is compiled and all the suggestions made by the students are taken into consideration for further improvement.

5.3.4 Does the College have a mechanism to seek and use data and feedback from its graduates and employers, to improve the growth and development of the College?

Yes, the institute collects feedback from its graduates and employers in the prescribed format. The feedback is collected from alumni during the alumni association meetings and whenever they visit the institute. The employers of the organizations are requested to give their feedback on the performance of the Alumni employed in their organizations, which is utilized to modify the methodology of teaching to suit specific industrial needs.

The CDC collects feedback from senior executives (who visit the campus for campus interviews) on the performance of the students in the campus interviews. This feedback is passed on to the department to take remedial measures.

5.3.5 How does the College involve and encourage students to publish materials like catalogues, wall magazines, College magazine, and other material? List the major publications/ materials brought out by the students during the previous academic session.

The Institute publishes students' articles, both technical and general in college annual magazine (Tech Mag). In addition, the students also publish their papers in various conferences, seminars and other events.

5.3.6 Does the College have a Student Council or any similar body? Give

#### details on its constitution, major activities and funding.

Yes, the institute has a student council and also has a dedicated policy constituted to look after all the major activities which include funding. The selected members of the council actively involves in suggesting best practices to the management for enriching the institutional processes. Even the selection process for these council members is very lucrative enough for sure shot success. Excellence in academics, a minimum of 90% attendance, vision oriented and having good communication skills with administrative capabilities are amongst very few qualities that are focused in selection process of the council members. These members will expand their teams based on the requirements and workload to maximum 3 to 4 persons which includes CR as second person. Associate Dean of student affairs shall oversee all the activities and periodically reports to the Principal to exchange the views of the council members either singly in person or along with the members.

## 5.3.7 Give details of various academic and administrative bodies that have student representatives on them. Provide details of their activities.

Students represent in:

- Academic Monitoring Committee Meetings
- ISTE Students' Chapter AP-51 (Professional Society Activities)
- CSI Institutional Membership No: I00882 (Professional Society Activities)
- IE(I) Students' Chapter 532 (Professional Society Activities)
- Student Suggestion, Grievance and Redressal Cell of each department.
- Anti ragging committee
- Safety and security for women staff and students committee.
- Student council

The ISTE Chapter is governed by following office bearers (Executive Council):

- President Principal
- Faculty adviser A senior Faculty member
- A student member as chairman
- A student member as secretary

• One Student member of each department as Member coordinator.

#### Annexure-I

S.NO.	NAME OF THE COMPANY	TOTAL STUDENTS
1	Ladion Norm	PLACED
2	Indian Navy TCS	0 69
3		
4	CAPGEMINI	30
	Magna Quest	18
5	NTT Data	9
6	Virtusa	7
7	Softeon India Pvt. Ltd.,	1
8	Raremile Tech	0
9	Globaledge Soft	0
10	IBM	6
11	GMR (GHAIL)	10
12	L & T Construction	9
13	L & T Ltd	7
14	Efftronics	1
15	Ramky Enviro	4
16	Tech Mahindra	22
17	Infosys	23
18	Nisum Technologies	0
19	Hyundai	2
20	Sobha Developers	0
21	Toshiba	1
22	AMI	0
23	MEIL	0
24	Citrix	1
25	HCL BServ	1
26	Open Text	0
27	Cellcomm Solutions	6
28	RISE Corpn	0
29	Syntel	0
30	Telibrahma	0
31	RISE Corpn (PG)	0
32	Sonus Networks	1
33	Hospira	0
34	Axis Bank	4
35	HCL Technologies	2
	Total	234

#### 2012-13

S.NO	NAME OF THE COMPANY	TOTAL STUDENTS PLACED
1	Indian Navy	0
2	TCS	53
3	Webspiders	22
4	L & T	7
5	Medha	2
6	Genpact	26
7	Manikaran Power	3
8	Collabor	0
9	Efftronics	0
10	Huyndai	1
11	Vasista Construction	7
12	Trimex	4
13	NFCL	7
14	Ramky	9
15	FMC Technologies	1
16	State Bank of India (internship)	4
17	Asha Banu	5
18	WDM	9
19	Cellcomm Solutions	0
20	Globalitechnologies	32
21	IBM	0
22	Tracks & Towers	5
23	Global e Reasoning	2
24	Cistron Infotek	9
25	Smart Chem Tech	3
26	AMI	1
27	Amdocs	0
28	Nisum Tech	1
29	KVB	0
30	Tech Mahindra	3
31	Biological E. Limited	1
	Tota	1 217

S.NO.	NAME OF THE COMPANY	TOTAL STUDENTS
5.110.		PLACED
1	INDIAN NAVY (SSB)	0
2	TCS	102
3	GMR (Energy)	41
4	INDIAN Army (SSB)	0
5	iGATEpatni	79

6	Syntelinc	0
7	GMR HIAL	3
8	Soma	1
9	12 1	3
10	TNQ Books & Journals L & T	8
11	Astra Microwave	0
12	BSCPL (Dip & B.Tech)	1
13	ITC	0
14	Mahindra Satyam (Dip)	0
15	Ramky Enviro Engg Ltd	8
16	GMR Group	4
17	Cistron Infotek	9
18	GKC Projects	2
19	HCL comnet	1
20	Efftronics	1
21	Hartex Rubber	0
22	KMV Projects	3
23	CMC Ltd.,	1
24	J K Paper	1
25	Design Tribe	2
26	SVEC	2
27	GMR Highways	5
28	Nujiveedu	4
29	CVR Constructions	0
30	Seeds Appearls	0
31	JAYSREE CHEMICALS	0
32	Tecumse Products	0
33	Amdocs	2
34	Suzalkem	1
35	Gaian Solutions	0
36	Parry Sugars	3
	Total	287
	10tal	201

S.NO.	NAME OF THE COMPANY	TOTAL STUDENTS PLACED
1	SSC (INDIAN NAVY)	1
2	TCS	131
3	HCL	19
4	BSCPL	4
5	Mahindra Satyam	17
6	PERSISTENT	3
7	LnT	10
8	GMR (NPTI)	40
9	Honeywell	4
10	Water Health	4

11	Virtusa	16
12	SYNTEL	2
13	SOMA	1
14	GMR Group	15
15	SUJANA	5
16	MphasiS	15
17	NCC	7
18	Wipro BPO	2
19	MEDHA	0
20	Convergys	0
21	Unisys	11
22	Cummins	0
23	KMC	1
24	GENPACT	6
25	Honeywell Tech	3
26	MphasiS(Non-IT)	0
27	SYNTEL	4
28	CSC	0
29	Trimex	2
30	Zuti Eng.Sol	0
31	Navayuga	3
32	MEIL	0
33	SSB (India Navy)	1
34	Seeds India	4
35	GMR Group	2
36	Karur Vysya Bank	13
37	Charoen Pokphand (I) Pvt Ltd.,	0
38	Anu's Lab	2
39	Nujiveedu Seeds	2
	Total	350

Annexure-II
The following women students participated in various events

	2013-14			
S.NO	NAME OF THE EVENT	STUDENT NAME		
1.	Badminton	G.kaavya		
		Sanchita		
2.	Tennis	D.Jyotsna reddy		
3.	Table Tennis	G.kaavya		
		D.Jyotsna reddy		
4.	Rifle Shooting	P.Sri harsha devi		
5.	Ball Badminton	R.Keerthi National		
6.	Volly Ball,Throwball	G. kaavya		
		Lavanya		
		Bhavya		
		Roopa		

Kumari
Lakshmi
Sandhya
Alekya
Mounika
Poorvi

#### 2012-13

2012-13 JNTUK Selections			
S.NO	NAME OF THE EVENT	STUDENT NAME	
1	Basket ball	Poojitha	
		Sujitha	
		Sanchiha	
		G.kavya	
		Jyotsana	
2.	Tennis	D.jyotsana	
3.	Kabaddi	Neelima	
4.	Table tennis	G.kaavya	
		Jyotsna	
5.	Athlelic	D. jyotsna	
		G.kaavya	
		Lalitha	
		Sushma	
6.	Volley ball	G.kaavya	
		Kumari	
		Laxmi	
		Roopa	
	JNTUK CENTRAL ZONE		
7.	Ball Badminton	Keerthi	
		Aishwarya	
		Lalitha	
		Kavitha	
		Bharathi	
		Amruthavalli	
		Kumari	

S.NO	NAME OF THE EVENT	STUDENT NAME
1	JNTUk Central Zone Ball Badminton	K. barathi
		K. saroja laxmi
		Nurjahan
		Mutya lamma
		K. Durga bhavani

	JNTU selection	
1.	Table tennis	R. Sangamitra
2.	Volley ball	G. bindu priyanka
		D. saritha
		A. sailaja
		K. saroja laxmi
		B. durga bhavani
	JNTUK CENTRAL ZONE	-
1.	Throw ball	S. Amrutha
		D.Saritha
		N.Pravallika
		Durga bhavani
		Saroja laxmi
		B. amritha
		K. Krishna hiranmayi
2.	Shuttle	G. mutyalamma
		P. pradha pallavi
		B. nagamani
		T. INDUMATHI
3.	Volley ball	A. saritha
		CH. Madhuri
		S. supriya
		a. sailaja
		V. neelima
		B. durga bhavani
		G. mutyalamma
		K. Saroja laxmi
		S. Deepthi
		G. Bindu priyanka
4.	Table –Tennis	R. Sanga mitra
		P.Aruna
		R. Neelima
		S. Kavya

#### **Annexure-III**

#### Dept of Physical Education 2010-2011

S.No	Game/Sports	Reprsented/Prizes Won	Name of the Tornment
1	Foot Ball	Reprsented JNTU-K in the All India / South Zone inter	VIT, vellore

2	Hocky	University Tournment	Combatore	
3	swimming		Calcutta	
4	kho kho		AU visakhapatnam	
5	handball		Nanded	
6	table tennls		VTU, Belgum	
7	Ball Badminton		SRM university	
8	Athletic		ANU Guntur	
9	Table Tennis(w)	Winners		
10	Badminton(W)	Runners	JNTU-K Central Zone, Inter Collegiate Tornment (women)at Sri vishnu college bheemavaram	
11	Volleyball(w)	RUNNERS	- Conege oncemavaram	
12	100 mts	Second	JNTU-K, Kakinada	
13	Javelin throw	Second	Central Zone Inter Collegiate Athletic Tornment at JNTUK Kakinada	
14	Tripple jump	Second		

15	200 mts	Second	
16	Javellin throw	Second	

#### **Dept of Physical Education 2011-2012**

S.No	Game/Sports	Reprsented/Prizes Won	Name of the Tornment		
1	Foot Ball				University of Kerala
2	Hockey		Tirunalvalli,Tamilnadu		
3	Swimming		University of Culcutta		
4	Kabaddi(women)	Reprsented JNTU-K in the All India / South Zone inter University Tournment	Madras University		
5	Volley Ball (women)		University of Kottayam		
6	Table Tennis(Women)		Coimbattora		
7	Ball Badminton		Mangalore University		
8	Athletic (100mts)		Bangalore University		
9	Teak wondo		Manipur University		
10	100 mts	Second	JNTU-K, Kakinada Central Zone Inter Collegiate Athletic		

11	Discus throw & 400 mts	Third	Tornment at JNTUK Kakinada
12	Long Jump & High Jump	Second	
21	Body Billding	Second (60 to 65 Kgs)	
22	Body Billding	Second & Third( 65 to 70 Kgs)	
23	Body Billding	First & Second (70 to 75 Kgs)	JNTUK Centeral Zone Inater Collegiate
24	Body Billding	Second & Third (75 to 80 Kgs )	Competition at AITAM, Tekkali
25	Body Billding	First ( + 90 Kgs)	
25	Body Billding	Third (55 to 60 Kgs)	

#### **Dept of Physical Education. 2012-13**

S.No	Game/Sports	Reprsented/Prizes Won	Name of the Tornment
1	Foot Ball	Reprsented JNTU-K in the All India / South Zone inter University Tournment	Annamalai University Chidambaram
2	Hocky		Bharthidasan University, Tamilnaidu
3	Volley Ball (W)		ANU Gunturu

4	Basketball(W)		Annamalai University Chidambaram
5	Tennis(W)		NIT Warangal
6	Basketball		Dr.NTR University, Vijayawada
7	Ball Badminton		NIT Warangal
8	Ball Badminton(W)		NIT Warangal
9	Badminton		JNTU, Kakinada
10	Kabaddi		M.S.University, Tamilnaidu
11	Teakwondo		Panjab University, Panjab
12	Athletic		University of Kalyani, Calcutta
13	Basketball & KhoKho	Winners	JNTUK Zone-A Inter Collegiate Tornment at GIET, Rajamandri
14	Football & Basketball	Runners	JNTUK Central Zone, Inter Collegiate Tornment at JNTU-Kakinada
15	Ballbadminton(W	Winners	JNTU-K Central Zone, Inter Collegiate Tornment at JNTU-Kakinada
	Cricket	Winners	JNTU-K, Zone-A Inter Collegiate Tornment at JNTUKUCE, Vizianagara m

	Cricket	Runners	JNTUK Central Zone Inter Collegiate Tornment at JNTUKUCE, Vizianagara m
16	Tripple Jump	First	JNTU-K Central Zone, Inter Collegiate Tornment at Aditya Engineering College
17	4x100 Relay	Third	JNTU-K Central Zone, Inter Collegiate Tornment at Aditya Engineering College
18	High jump	Second	JNTU-K Central Zone, Inter Collegaite Tornment at Aditya Engineering College
19	Long Jump	Second	JNTU-K Central Zone, Inter Collegaite Tornment at Aditya Engineering College
20	Javellin(W)	First	JNTU-K Central Zone, Inter Collegiate Tornment at Aditya Engineering College
21	Body Billding	Third(75 to 80 Kgs)	Mr.Andhra Body Billding Competition at DNR College, Bhimavaram
22	Body Billding	Third & Fourth( 70 to 75 Kgs)	Mr.Andhra Body Billding Competition at DNR College, Bhimavaram
23	Body Billding	Fourth (50 to 55Kgs)	Mr.Andhra Body Billding Competition at DNR College, Bhimavaram
24	Body Billding	Second(65,75 Kgs & 80 Kgs)	
25	Body Billding	Third( 60 to 65 Kgs &70 to 75 Kgs)	JNTUK Centeral Zone Inater Collegiate Competition at Lakireddy Balireddy Engineering College, Vijayawada

Dept of Physical Education 2013-2014

S.No		Reprsented/Prizes	Name of the
3.110	Game/Sports	Won	Tornment
1	Cricket	Nil	Inter University
2	Volley Ball	Nil	Inter University
3	Ball Badminton (men)	2	Inter University
4	Hockey	1	Inter University
5	Kho-Kho	1	Inter University
6	Body Building	Nil	Inter University
7	Taekwondo	1	Inter University
8	Badminnton (Men)	1	Inter University
9	Tennis(Women)	1	Inter University
10	Table Tennis(Women)	Nil	Inter University
11	Badminnton(Women)	1	Inter University
12	Basket Ball(Men)	Nil	Inter University
13	Basket Ball(WoMen)	Nil	Inter University
14	Foot Ball	3	Inter University
15	Handball	1	Inter University
16	Rifle Shooting ( Women)	1	Inter University
17	Ball Badminton	1	NATIONALS ( Represented Andhra
18	Cricket	Runners	Eenadu District Inter Collegiate Tournament
19	Kho-Kho	Winners	JNTUK Zone-A Inter collegiate Tournament
20	Badminton	Runners	JNTUK Zone-A Inter collegiate Tournament
21	Volley Ball	Nil	JNTUK Zone-A Inter collegiate Tournament
22	BasketBall	Nil	JNTUK Zone-A Inter collegiate Tournament

23	Table Tennis(men)	Nil	JNTUK Zone-A Inter collegiate Tournament
24	Ball Badminton (men)	Winners	JNTUK Central Zone Inter collegiate Tournament
25	Ball Badminton (Women)	Winners	JNTUK Central Zone Inter collegiate Tournament
26	Badminton	Third Place	JNTUK Central Zone Inter collegiate Tournament
27	Foot Ball	Nil	JNTUK Central Zone Inter collegiate Tournament
28	Kho-Kho	Fourth Place	JNTUK Central Zone Inter collegiate Tournament
29	Chess	Sixth Place	JNTUK Central Zone Inter collegiate Tournament
30	Body Building	3	JNTUK Central Zone Inter collegiate Body Building Competition
31	Throw Ball	Fourth Place	GVP Inter collegiate Tournament(Wome n)
32	Volley Ball	Fourth Place	GVP Inter collegiate Tournament (Women)
33	Badminton	Runners	GVP Inter collegiate Tournament (Women)
34	Basket Ball	Nil	Sankethika Inter collegiate Tournament

35	Basket Ball & Volley Ball	Nil	Raghu Inter collegiate Tournament	
----	------------------------------	-----	-----------------------------------	--

## Annexure-IV

NSS Activities during the year 2010-11

S.No.	Date	Activity
		·
1	05-06-2010	Observation of World Environment Day
2	19-06-2010	Plantation programme at adopted village
3	17-07-2010	Orientation programme to NSS Volunteers
4	15-08-2010	Observation of Independence Day
5	05-09-2010	Observation of Teachers Day
6	08-09-2010	Observation of International Literacy Day
7	22-09-2010	Blood donation camp
8	24-09-2010	Celebration of NSS day
9	16-10-2010	Lecture on Health Awareness to NSS Volunteers
10	13-11-2010	Blood grouping for students (1 <sup>st</sup> year)
11	01-12-2010	World Aids Awareness Rally
12	10-12-2010	Observation of Human Rights Day
13	26-01-2011	Republic Day Celebrations
14	19-02-2011	Awareness talk on Anti Plastics
15	08-03-2011	Observation of International Women's Day
16	15-03-2011	Participation in the local festival

NSS Activities during the year 2011-12

S.No.	Date	Activity
1	05-06-2011	Plantation programme at Rajam school
2	19-06-2011	Sramadhan programme at adopted village
3	01-07-2011	Awareness programme on population and literacy
4	15-08-2011	Observation of Independence Day
5	05-09-2011	Observation of Teachers Day
6	07-09-2011	Orientation programme to NSS Volunteers
7	22-09-2011	Blood grouping for 1 <sup>st</sup> year students
8	24-09-2011	Celebration of NSS day
9	02-10-2011	Blood grouping for students
10	16-10-2011	Lecture on Health Awareness to NSS Volunteers
11	19-11-2011	Clean & green programme in the campus
12	01-12-2011	World Aids Awareness Rally
13	10-12-2011	Observation of Human Rights Day
14	17-12-2011	Awareness programme on energy conservation
15	26-01-2012	Republic Day Celebrations
16	22-02-2012	Blood donation camp
17	08-03-2012	Observation of International Women's Day

NSS Activities during the year 2012-13

	NSS Activities during the year 2012-13				
S.No.	Date	Activity			
1	05-06-2012	Observation of World Environment Day			
2	19-06-2012	Clean & Green programme in the campus			
3	07-07-2012	Orientation programme to NSS Volunteers			
4	15-08-2012	Observation of Independence Day			
5	05-09-2012	Observation of Teachers Day			
6	06-09-2012	Awareness programme on eye donation			
7	24-09-2012	Celebration of NSS day			
8	02-10-2012	Observation of Gandhi Jayanthi			
9	23-11-2012	Observance of the Communal Harmony Campaign			
		Week and Flag Day			
10	01-12-2012	World Aids Awareness Rally			
11	15-12-2012	Clean and green programme in the campus			
12	26-01-2013	Observance of Republic Day Celebrations			
13	08-01-2013	Blood Grouping for Ist year students			
	to 09-01-				
	2013				
14	21-03-2013	Organized Blood Donation camp			
15	20-04-2013	Sramadhan programme in the campus			

NSS Activities during the year 2013-14

C Ma	CN D			
S.No.	Date	Activity		
1	05-06-2013	Observation of World Environment Day		
2	22-06-2013	Clean & Green programme in the campus		
3	06-07-2013	Orientation programme to NSS Volunteers		
4	15-08-2013	Observation of Independence Day		
5	05-09-2013	Observation of Teachers Day		
6	24-09-2013	Celebration of NSS day		
7	02-10-2013	Observation of Gandhi Jayanthi		
8	01-12-2013	World Aids Awareness Rally		
9	10-01-2014	Plantation in campus		
10	19-01-2014	Participated in Pulse Polio Immunization Programme		
11	26-01-2014	Observance of Republic Day Celebrations		
12	04-02-2014	Awareness Rally inconnection with World Cancer Day		
13	14-03-2014	Organized Blood Donation camp		
14	05-04-2014	Our NSS Unit organized a "Voters Awareness Rally"		
		in Rajam town		
15	03-05-2014	NSS Volunteers participated in a Mega Rangoli for		
		awareness of the electoral on Voting and Ethical Voting		
		at Municipal Grounds, Srikakulam, conducted by		
		District Election Authorities.		

16	13-06-2014	Our NSS Unit organized an awareness programme on
		"Blood Donation" in connection with "World Blood
		Donor Day (June14)
17	30-06-2014	Our NSS Unit organized a 7 days NSS Special Camp
	То	Programme at Kothavalasa Villege, Rajam Mandal.
	06-07-2014	
18	15-08-2014	Volunteers participated in March-past in connection
		with Independence Day Celebrations in the GMRIT
		Campus.
19	24-08-2014	Volunteers participated in Vanamahostav Programme at
		Palakonda road to GMR CARE Hospital.

## Annexure-V

## 2013-14

S.N	Name of the Student	Workshop/Seminar/Exhi	Venue	Prize
О		bition		
1	Gundroju Brahmaji	International Exhibition	ELECRAM	2nd
	Avugadda Venkatesh	conducted by IEEMA at	A-2014	(worth
	Thokala Krishna	Bangalore for the	BIEC,	Rs.
	Kumar	project titled	Bangalore	1,00,000
	Ronanki Pavan Kumar	"HUMON" (Monkey		Lakh)
	Vavilapalli Harikrishna	with Intelligence)		
2	M.Sai Teja	'Electonic Champs'	Electonic	1st
	A.Ganesh	National Level Techno	Champs	
	M.C.C.BhagyaDev	Fest titled "ELAN-	IIT,	
	A.Bhavani shankar	2014"	Hyderabad	
	&K.MadhuSudhan Rao			
3	MadhuSudhan Rao	"WALL-E" National	IIT,	2 <sup>nd</sup>
	G.Manasa	Level Techno Fest titled	Hyderabad	
	V.Lavanya	"ELAN-2014"		
4	B. Amritha	Seminar	CHEMCON	
			-2013	
			ICT,	1 <sup>st</sup>
			Mumbai	1
			27-30,	
			Dec,2013	
5	G. Mounika	Seminar	Stepcone	
			2014	
			GMRIT,	3 <sup>rd</sup>
			Rajam	3
			7-8,Feb,	
			2014	
6	Ms. B.Amrutha	Seminar	SOVDHA	
	Lakshmi and Mr.		2K14	
	T.Satwik		20 <sup>th</sup> -21 <sup>st</sup>	
			March,	

			2014, JNTU,	$2^{\text{nd}}$
			Kakinada	
7	T.N.K.Govind	Seminar	SOVDHA	
'		<del>12</del>	2K14	
			20 <sup>th</sup> -21 <sup>st</sup>	ard
			March,	3 <sup>rd</sup>
			2014, JNTU,	
			Kakinada	
8	P. Ramesh kumar, L.	Seminar	Technozion	3rd
	Akhila, R. Aishwarya	201111111	13	010
	rani		NIT	
			WARANGA	
			L (Dec	
			27 <sup>th</sup> -29 <sup>th</sup> 2013	
9	V. Amulya Devi, V.	Seminar	Stepcone	3 <sup>rd</sup>
	Kishan Kumar		2014	
			GMRIT,	
			Rajam	
			7-8,Feb,	
			2014	
10	D. Prudhvi Raj,	Workshop	Technophili	1 <sup>st</sup>
	Y.V.Viswanath, K.	•	a, SNIST	
	Ravi Teja, R.S.Nanda		(Feb 21 <sup>st</sup> -	
	Kishore		22 <sup>nd</sup> , 2014)	
11	Y.V. Viswanadh, N.	Seminar	GUSAC	1 <sup>st</sup>
	Aishwarya		CARNIVAL	
	,		3, GITAM	
			UNIVERSI	
			TY (Mar 6 <sup>th</sup> -	
			8 <sup>th</sup> , 2014)	
12	M Amarendra Prasad,	Workshop		1 <sup>st</sup>
	TekiNaresh,		Roboversity	
	UppuAnwesh,		JNTU	
	MaheshwaramBhanuch		Kakinada	
	andar,		(Mar 29 <sup>th</sup> -	
	U AdityaSai		30 <sup>th</sup> , 2014	
13	A Harish Reddy	Workshop	Roboversity,	
	G.Bhavya,		JNTU	Best
	I.Varunkumar		Kakinada	Fabricati
	A.Mohan Krishna		(Mar 29 <sup>th</sup> -	on
			30 <sup>th</sup> , 2014)	
14	T.Manikanta, T.Sai	Seminar	ASPIRE	
	Jahnavi, K.Sujana		2K14	
			AITAM,	
			Tekkali	$1^{st}$
			during 28 &	
			29 <sup>th</sup> March	
			2014	1
15	V.Ravi Kumar, V.Sai	Seminar	Samyukta	2 <sup>nd</sup>

	Kiran & Y.Vinay		2K14	
	Kumar		Viswanath	
			Institute of	
			Technology	
			Management	
			, Vizag	
			during 28 &	
			29 <sup>th</sup> March	
			2014	
16	S.CHINNI ACHARI,	Workshop	SYNAPSE <sup>14</sup>	
	M.BHASKARA RAO,		, CBIT,	
	M.SUDHIR KUMAR		HYDERAB	1 st
	& JEEVAN		AD during	1
			March 7 <sup>th</sup> &	
			8 <sup>th</sup> 2014	
17	S.VENKATSH,	Workshop	STEPCONE	
	M.Bhaskara Rao &		-14 GMRIT,	
	P.JAGADESH		during 07-	2 <sup>nd</sup>
			02-14 to 08-	
			02-14	
18	S.CHINNI ACHARI,	Workshop	KSHITIJ	
	M.BHASKARA RAO,		2014 IIT	
	M.SUDHIR KUMAR		KHARAGP	Appreciat
	&		UR, during	ed
	P.JAGADEESH		31-01-14 to	
			03-02-14	
19	BSMV. Sai Ram, M.	Workshop	Torque,	
	Tagore Vara Prasad		14JNTUK,	_
			Kakinada	$2^{\text{nd}}$
			29 & 30	
			March, 14	

## 2012-13

S.No	Name of the Student	Title	Venue	Prize
	M. Lakshmi Narayana,	Seminar	Seminar AU, VSKP	$1^{st}$
1	CH. Sandeep &		$5^{\text{th}} - 8^{\text{th}}$ Sept., 2012	
	R. Bharath Sankar			
2	G. Krishna Kranthi &	Seminar	Seminar AU, VSKP	$1^{st}$
	S. Sravya		$5^{\text{th}} - 8^{\text{th}}$ Sept., 2012	
3	NV. Padma Priya &	Seminar	Seminar AU, VSKP	$1^{st}$
3	M. Swapna		$5^{\text{th}} - 8^{\text{th}}$ Sept., 2012	
	B. Geeta Sahithi	Seminar	Paper Presentation	2 <sup>nd</sup>
4			JNTUK, Kakinada	
	Y. Jaswanthi		9 <sup>th</sup> - 10 <sup>th</sup> Mar, 2013	
	V. Covithamy Pharacyi	Seminar	Paper Presentation	1 <sup>st</sup>
5	V. Gowthamy Bhargavi		JNTUK, Kakinada	
	A. Kalpana		9 <sup>th</sup> - 10 <sup>th</sup> Mar, 2013	

6	K.S. Pradyumna	Seminar	Paper Presentation JNTUK, Kakinada	3 <sup>rd</sup>
0	V.L. Manohar Reddy		9 <sup>th</sup> - 10 <sup>th</sup> Mar, 2013	
7	T.Anusha Devi T.Parimala	Seminar	WIENC – 12 DIET, Anakapalli	3 <sup>rd</sup>
8	K.Harish Hanumantha Rao	Seminar	EESTITHA – 12 PYDAH, Visakhapatnam	2 <sup>nd</sup>
9	M.Bhargav	Seminar	SPECTRA 2K12 Sri Vaishnavi College of Engineering, Srikakulam	2 <sup>nd</sup>
10	G.Venkatesh	Seminar	Aspire 2k12 AITAM, Tekkali	1 <sup>st</sup>
11	V Satya Praveena P.Sameera	Seminar	E-FREQZZ-2K13 SVCET, SKLM	2 <sup>nd</sup>
12	K. Damodhara Rao	Seminar	INSPIRUS 2K13 SVCET, SKLM	1 <sup>st</sup>
13	B. Narayana	Seminar	EKATHRA 2K13 GVPCE, VSKPM	2 <sup>nd</sup>
14	I Ravi Teje Kumar T Manikanta	Seminar	CURIOS-2k13 ANITS, Visakhaptnam during 21st & 22nd Feb 2013.	1 <sup>st</sup>
15	M.Praveen M.V.S.Prasanth M.A.L.Vaidehi L.Ramalaxmi	Seminar	Aspire 2K12 AITAM Tekkali, Srikakulam(Dt) During 21 <sup>st</sup> & 22 <sup>nd</sup> SEP 2012	1 <sup>st</sup>
16	B.Divya Vani	Seminar	WIENC-12 Dadi Institute of Engineering & Technology IEEE Women in Engineering Affinity Anakapalli, Visakhapatnam During 21st 22nd SEP 2012	2 <sup>nd</sup>
17	V.Niveditha P.Bhanuchandar T.Manikanta	Seminar	Aspire 2K12 AITAM ,Tekkali.Srikakulam(Dt) During 21 <sup>st</sup> & 22 <sup>nd</sup> SEP 2012	3 <sup>rd</sup>
18	V.Niveditha P.Bhanuchandar K.Manoj Kumar	Seminar	i-genesis Andhra University college of Engineering(A) Visakhapatnam During 5 <sup>th</sup> to 8 <sup>th</sup> , SEP, 2012	3 <sup>rd</sup>
19	J.Shankar rao G.Aswani K.Tejaswi K.Somi Reddy	Seminar	i-genesis Andhra University college of Engineering(A) Visakhapatnam During 5 <sup>th</sup> to 8 <sup>th</sup> ,SEP, 2012	3 <sup>rd</sup>

20	L.V.N. Chandra Mohan M.Deepthi G.Sravani Kumari	Seminar	Seminar Gayatri Vidya Parishad, Visakhapatnam/ EKATHRA'13	3 <sup>rd</sup>
21	Korravi Vinay Kurmana Krishna Rao Gudla Satish	Seminar	Seminar, ANITS, Visakhapatnam/21 <sup>st</sup> & 22 <sup>nd</sup> Feb-2013, Curious 2K13	2 <sup>nd</sup>
22	Vishnu Sai Juttada B.Gopikrishna , IS Royal	Seminar	JNTU Vizianagaram/09 <sup>th</sup> &10 <sup>th</sup> March 2013, Torque-13	2 <sup>nd</sup>
23	G.Sujitha, K.Saranya	Seminar	STEPCONE-14 GMRIT, during 07-02-14 to 08-02- 14	2 <sup>nd</sup>
24	Chintha Hari Chandhana, Korada Saranya, Gali Sujitha,	Seminar	i-GENESIS – 2012Andhra University College of Engineering, Visakhapatnam, held on 5 <sup>th</sup> to 8 <sup>th</sup> September, 2012	1 <sup>st</sup>

## 2011-12

S.No	Name of the Student	Title	Venue	Prize
1	B.Lalitha	Seminar	STEPCONE-2012 6 <sup>th</sup> -7 <sup>th</sup> Jan,2012, GMRIT, Rajam	2 <sup>nd</sup>
2	Ragavendran Tata	Seminar	SPARTANAS-2011 MVGR College of Engineering, VZM, held on 11 <sup>th</sup> &12 <sup>th</sup> Aug 2011	1 <sup>st</sup>
3	Sowjanya & Shravana Kumar & Sasidhar	Seminar	NSC 2011GIET, Chaitanya Knowledge City, NH-16, Rajahmundry, held on 23 <sup>rd</sup> to 24 <sup>th</sup> September 2011	3 <sup>rd</sup>
4	Sriteja, Santhosh & Venkata Ratnam	Seminar	Stepcone-2012GMRIT, Rajam held on 6 <sup>th</sup> to 7 <sup>th</sup> January, 2012	3 <sup>rd</sup>
5	G.Lahar &P.Sainadh	Seminar	Seminar-STEPCONE-12 GMRIT,Rajam 6 <sup>th</sup> -7 <sup>th</sup> Jan-2012	2 <sup>nd</sup>
6	PLV NarsingaRao, G Dhreej G.Sneha Likhitha	Seminar	Seminar VIGNAN 16 <sup>th</sup> & 17 <sup>th</sup> Sep11	Session winner
7	Renuka Chowdary K Srujana	Seminar	Seminar GIET 23 <sup>rd</sup> & 24 <sup>th</sup> Sep	2 <sup>nd</sup>
8	I.Spandana P.Vineela Ch.Sreedhar	Seminar	Waves 2012 KIET,KAKINADA	2 <sup>nd</sup>
9	H.Prajapathi	Seminar	ARC'11 ANITS	1 <sup>st</sup>
10	R.Swathi	Seminar	Sambhava JNTUK-VZM	2 <sup>nd</sup>

11	P.G.S.V Arun Kumar	Seminar	AADHRITA MVGR-VZM	$2^{\text{nd}}$
12	B.Sriram (09- 420),B.Rajasekhar (09-417) & KJV Sudhakar Reddy (09- 444)	Seminar	ANOKHA 2012 AMRITA UNIVERSITY, COIMBATORE during 16 <sup>th</sup> , 17 <sup>th</sup> & 18 <sup>TH Feb2012</sup>	1 <sup>st</sup>

## 2010-11

S.No	Name of the Student	Title	Venue	Prize
1	Mr. D.P.K.Chaitanya	Seminar	SCHEMCON 2010Dept.	
			of Chemical Eng. R.V.R	2 <sup>nd</sup>
			&J.C. College of	2
			Engineering Guntur	
2	K.Swetha	Seminar	NIRMANN	$3^{\rm rd}$
	&B.P.Sindhura		Seminar	
			AUDHISANKARA	
			C.O.E.T	
			19 <sup>th</sup> Feb-2011	
3	N. Naresh	Seminar	Ekathra-2011 GVPCOE,	1 st
			Vizag	1
4	B.Kumar Raja	Seminar	Inertia'11 AITAM	1 <sup>st</sup>

## **Annexure -VI**

## **Dept of Physical Education 2010-2011**

S.No	Game/Sports	Reprsented/Prizes Won	Name of the Tornment
1	Table Tennis(w)	Winners	JNTU-K Central Zone, Inter Collegiate
2	Badminton(W)	Runners	Tornment (women)at
3	Volleyball(w)	RUNNERS	Sri vishnu college bheemavaram

## **Dept of Physical Education 2011-2012**

S.No		Reprsented/Prizes	Name of the
9.110	Game/Sports	Won	Tornment
1	Kabaddi(women)	Reprsented JNTU-K in	Madras University
2	Volley Ball	the All India / South	University of
4	(women)	Zone inter University	Kottayam
3	Table	Tournment	Coimbattora
3	Tennis(Women)		Compatiora

## Dept of Physical Education. 2012-13

S.No	Game/Sports	Reprsented/Prizes Won	Name of the Tornment
1	Volley Ball (W)	Reprsented JNTU-K in	ANU Gunturu
2	Basketball(W)	the All India / South Zone inter University	Annamalai University Chidambaram
3	Tennis(W)	Tournment	NIT Warangal
4	Ball Badminton(W)		NIT Warangal
5	Ballbadminton(W)	Winners	JNTU-K Central Zone, Inter Collegiate Tornment at JNTU- Kakinada
6	Javellin(W)	First	JNTU-K Central Zone, Inter Collegiate Tornment at Aditya Engineering College

## **Dept of Physical Education 2013-2014**

S.No	Game/Sports	Reprsented/Prizes Won	Name of the Tornment
1	Table Tennis(Women)	Nil	Inter University
2	Badminnton(Women )	1	Inter University
3	Basket Ball(WoMen)	Nil	Inter University
4	Rifle Shooting ( Women)	1	Inter University
5	Ball Badminton (Women)	Winners	JNTUK Central Zone Inter collegiate Tournament

### D6. Criterion-VI: Governance, Leadership and Management

#### **6.1 Institutional Vision and Leadership**

## 6.1.1 State the vision and mission of the College.

#### Vision

To be among the most preferred institutions for engineering and technological education in the country.....An institution that will bring out the best from its students, faculty and staff – to learn, to achieve, to compete and to grow-among the very best....An institution where ethics, excellence and excitement will be the work religion, while research, innovation and impact, the work culture"

#### Mission

- To turnout disciplined and competent engineers with sound work and life ethics.
- To implement outcome based education in an IT-enabled environment.
- To encourage all-round rigor and instill a spirit of enquiry and critical thinking among students, faculty and staff.
- To develop teaching, research and consulting environment in collaboration with industry and other institutions.

# 6.1.2 Does the mission statement define the College's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, College's traditions and value orientations, vision for the future, etc.?

Yes, mission statement of the institute addresses needs of society in terms of disciplined and competent engineers; social awareness in terms of life ethics by enabling the graduates to work for the society in their chosen area. The mission statement further expands the scope for research and development.

## 6.1.3 How is the leadership involved in ensuring the organization's management system development, implementation and continuous improvement?

The well structured organizational chart with defined roles and responsibilities ensure the smooth and effective implementation to attain the mission and vision of the Institute. Further, the ISO practice ensures efficient process implementation which enables continuous improvement.

#### > Interaction with stakeholders

Institute takes feedback about its functioning through a number of ways.

- Organizes parent meets and obtains the views and suggestions of parents.
- Suggestions from alumni through alumni meet & visit of alumni to institute.
- Suggestions of the eminent people visiting the institute.
- Programme- end feedback from the students.
- Feedback from recruiters during campus placements.
- Guidance from industry& academic expertsduring their visit to institute.

The feedback received from various stakeholdersis analyzed and remedial actions are initiated. Institute encourages the participation of the staff in the process of decision-making for continuous improvement.

## **Reinforcing culture of excellence:**

The institute completed Seventeen—glorious years. Over the years it has evolved through continual redesigning and refinements in its policies and procedures for catering to demands of the stakeholders. Providing excellent infrastructure, good laboratory facilities, merit based recruitment policy, implementation of revised pay scales, encouraging faculty for research ensure commitment to excellence. The institute has Quality Management System under ISO 9001:2008, Proctorial system, Student Information System. Student ActivityCentre facilitates various club activities, professional society activities further ensure continuous improvement. Add on courses, CRT programs, internship, term paper, hobby projects and mini projects enhance the employability.

## ➤ Identifying needs and championing Organizational Development (OD):

Requirements arising at any hierarchy in the institute are systematically conveyed with its justifications to the competent authority and decisions are taken towards its fulfilment/implementation. Institute provides excellent infrastructure and good

laboratory facilities and its up gradation from time to time for uncompromised quality of teaching and learning processes. Quality management system under ISO 9001:2008 ensures a periodic review of all procedures and achieving the quality objectives.

## 6.1.4 Were any of the senior leadership positions of the College vacant for more than a year? If so, indicate the reasons.

No

## 6.1.5 Does the College ensure that all positions in its various statutory bodies are filled and conduct of meetings at the stipulated intervals?

Yes, the institute ensures that all positions in various statutory bodies such as Governing council, Academic council, Board of Studies are filled as per the guidelines and conducts meetings at the stipulated intervals.

## 6.1.6 Does the College promote a culture of participative management? If yes, indicate the levels of participative management.

Yes, the institute promotes a culture of participative management. Faculty members are nominated for managerial bodies such as Governing council, Academic Council, Board of Studiesetc. Meeting between faculty and management is organized at least once in a semester where suggestions for improvements are discussed.

## 6.1.7 Give details of the academic and administrative leadership provided by the University to the College?

University nominates members as well as its representatives in various statutory bodies of the institute viz., Governing council, Academic Council andBoS to support and guide the administrative and academic mechanisms. Affiliating university ensures well composed course structure and other academic and examination regulations. Affiliating university conferred permanent affiliation status to the institute and makes duerecommendations to governmental agencies like state council for highereducation, AICTE and UGC for getting autonomous/deemed university status. The University also approves and awards degrees for the students of theinstitute in its UG and PG programs.

## 6.1.8 How does the College groom the leadership at various levels?

Institute organizes training programs ondevelopment of leadership skills and management capacity building. One such initiative is Enhanced Leadership in Technical Education (ELITE) to train various levels of staff to develop leadership skills. The Institute has several committees which provide opportunity to the faculty members to improve their leadership skills. The committees are formed at institute level, departmental level and also at student level. Institute level committees such as academic council, finance, purchase, malpractice committee, grade review committee, KRC committee, discipline, cultural, sports, alumni, grievance redressal, Anti ragging etc. exists. Departmental level committees for academic monitoring, curriculum development, discipline, event management etc. are formed. Students committees are also formed for various clubs for student activities. These committees promote leadership skills in faculty and students.

## 6.1.9 Has the College evolved any strategy for knowledge management? If yes, give details.

Yes, Knowledge management at the institute is done through hard copy and soft copy documentation.

- Monthly Information System (MIS) for all the institutional activities such as finance, administration, purchases, inventory etc. are maintained and communicated.
- Theinstitutehas agood numberofonlinejournals and madethem available to facultyand students through intranet
- A digital library caters to the needs of the students
- The library is also a member of INDEST/INFLIBNET and is headed by qualified staff in library science.
- Faculty members are encouraged to participate in workshops/seminars/conferences at national and international levels to up-grade their knowledge with current topics of interest.
- Distinguished senior academicians from within and outside the country, industry experts are invited to associate with or work in the college to provide academic leadership in research.

## **6.1.10** How are the following values reflected in various functions of the College?

## \*Contributing to national development

- Training quality graduates and post graduates through concurrent curriculum help the student to take any responsibility and discharge with ethical standards
- Encouragement to research and innovation leading to practical solutions to societal and strategic needs of the country.
- NSS camps are conducted to create the responsibility on social awareness. NSS unit has a strong base in the Institute. Activities are being carried out within and beyond the campus. Activities on campus are conducted in the leisure time after the scheduled classes.
- Off campus, activities like special camps in adopted villages are conducted during vacation. Blood Donation in association with Indian Red Cross Society is one of the major activities. The NSS unit has received Gold Medal and Silver Medals of excellence from the Governor of Andhra Pradesh.
- Various service activities like Swachh Bharat, Health camps, Veterinary camps, Relief camps for natural calamities, Awareness programs on HIV/AIDS, Plastic usage, Voting, Plantation, Anti-tobacco and Liquor, Nutrition, Public Health, Pulse Polio Immunization etc are organized under this unit.

#### \*Fostering global competencies among students

Institute invites experts from industry and academia with international exposure to deliver in technical talks, training programmes, workshops, guest lectures etc. Encouraging creativity through hobby projects, paper presentations, term paper etc. lead to global competency. Institute facilitates internship to make the students industry ready.

### \*Inculcating a value system among students

- Arranging motivational talks by leading personalities.
- Contributions through NSS activities in bringing awareness in matters of societal concern like environment, corruption, voting rights, rural activities, literacy etc.
- Co-curricular and Extra-curricular activities like seminars, workshops, technical quizzes, guest lectures, sports, soft skills development programmes, personality development programmes are conducted to improve the professional skills and employability. Moreover, institute provides soft skills training

and psychological counseling to the needy through a dedicated soft skill trainer.

## \* Promoting use of technology

- Institute has a video conferencing facility in the auditorium facilitating the addressing of the students and faculty by eminent personalities who cannot physically visit the campus.
- E-class room with interactive board and projector.
- Institute has lushgreen campus well maintained by a separate Horticulture department using modern equipment like sprinklers, drip irrigation, lawn movers, weed cutters etc.
- Student attendance through Ezschool and staff attendance through biometric system.
- OPAC for library activities
- CC cameras for surveillance
- Sewage treatment plant, solar LED lamps, battery operated buggies for eco system

#### \* Quest for excellence

In pursuit of excellence in quality, the institute was certified by ISO9001-2008 and accredited by NBA and NAAC. Re-accreditation by NBA for various programmes exposes the quest of the institution for quality sustenance.

## 

NA

## **6.2.1** Strategy Development and Deployment

## 6.2.1 Does the College has a Perspective Plan for development? If so, give the aspects considered in development of policy and strategy.

## \* Teaching and learning

- More laboratory courses to be introduced to enhance practical exposure.
- Credited full semester internship to make the student industry ready.
- Enhancement of self-learning skills through audit courses, term paper and mini project.
- Each course is to be designed by SMART objectives and outcomes.

- Faculty continually adapting to the new teaching techniques as amenable to the students based on stake holders feedback.
- Faculty quality improvement through workshops and training programs to meet OBE.
- To associate and sign MoUs with institutions of repute and industry for academic initiatives.

### \*Research and development

- Allocation of budget for in house R & D
- Conducting sensitization programs on research methodologies.
- Faculty incentives to promote research.
- Encouragement to carry out live projects with financial support.
- Students incentives to promote research culture.
- Appending/Upgrading infrastructural facilities for research and development to augment postgraduate and doctoral level studies.
- Formation of Research groups to take up research projects in emerging and thrust areas.
- To associate and sign MoUs with institutions of repute and industry to promote collaborative research.
- To organize National/International conferences and Workshops in thrust areas
- Strengthening of Research Advisory Board (RAB) to improve R&D activities.
- To get all Departments identified as research centres by various funding agencies.

#### \* Community engagement

The instituteis providing various platforms to involve the community and students to exhibit their organizational, leadership and creative skills

- NSS activities
- Blood Donation Camps
- Free medical camps
- Environment friendly activities
- Community projects viz. Velugu, Cheyutha, Green areas etc.
- Activities of GAMYAM

#### \*Human resource planning and development

- Transparent policies and procedures for welfare of the employees.
- Well-structured annual appraisal system for all employees.

- Maintaining faculty-student ratio and cadre ratio as per the norms.
- Well defined internal promotion policy for career advancement.
- Robust selection and recruitment process with well constituted selection board.
- Training programs forskill development and personality development of employees.
- Well defined organogram and resource management through SAP.
- Well defined gratuity policy for welfare of employees.

#### \*Industry interaction

Industry Institute Interaction Board (IIIB) is formed to oversee the activities of industry-institute interaction. Institutealso hosts different academic initiatives as part of industry institute interactions in collaboration with major corporate companies. A few of these are:

- Infosys Campus Connect Program
- Microsoft academic initiative-MS Edvantage-Platinum level.
- TCS academic initiative.
- Internship for students in industries.
- IBM software CoE- Training Programme on RAD and DB2.
- Wipro-Mission 10X Programme for faculty enablement and training.
- National Institute of Amateur Radio (NIAR) established Amateur FM Radio Client Station.
- HCL training Programme for CCNA certification.
- Oracle University for Work Force Development.

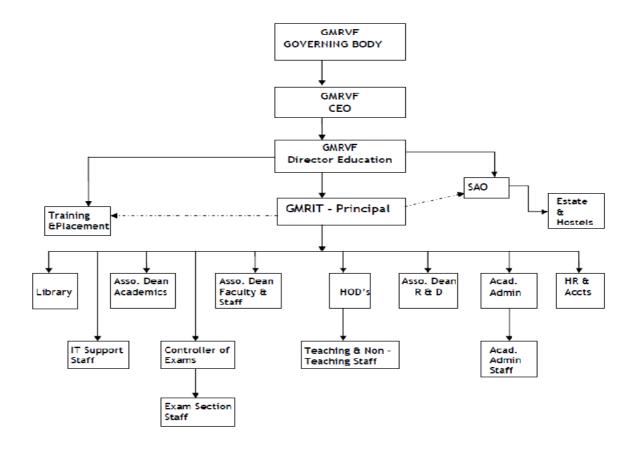
CDC organizes interaction with various Corporate Heads, who visit the campus as guest speakers. Interactions are also conducted through Video Conference (VC) with distinguished speakers. As a part of the industry-institution interaction, institute has been accredited by:

- TCS for Academic Initiatives
- Infosys for Campus Connect Program
- HCL Info Systems for HCL Education
- IBM –Centre of Excellence
- L&T

#### \*Internationalization

- Faculty from abroad are invited on short term basis for short term courses / guest lectures.
- Periodical organization of international conferences/workshops.
- Internships for students from abroad.
- Research publications through collaborative research.
- MOUs with foreign universities.

## **6.2.2** Enunciate the internal organizational structure of the College for decision making processes and their effectiveness.



- 6.2.3 Specify how many planned proposals were initiated/ implemented, during the last four years. Give details.
  - Effective implementation of outcome based education
  - Permanent affiliation
  - Conferment of Autonomy

- Research centres were started in Mechanical and Electrical and Electronics Engineering Departments.
- NBA Re-accreditation.
- Initiated NAAC re-accreditation.
- Introduction of additional UG and PG programmes.
- National conferences, workshops, faculty development programs were organized.
- MOUs with leading MNCs viz. TCS, IBMand Microsoft who offer various certification programmes to students and faculty.
- MoUs with L&T, WDM, Reddy Labs etc
- MoUs with IC-IMPACTS and association with UPES etc.
- Add-on courses

## 6.2.4 Does the College have a formally stated quality policy? How is it designed, driven, deployed and reviewed?

Yes, The quality policy is designed keeping in view the vision and mission statements with the inputs and expectations of various stake holders in order to contribute to the growth of knowledge, national development and addressing societal concerns. It is designed to serve the society through technical competence, learning transfer in extension activities and research.

It is driven by the active support of the management, faculty and student community. The deployment is carried out through a comprehensive curriculum design in consultations with industry and experienced academia with contemporary practical methodologies acceptable to regulating authorities. The review is made at different levels of organizational structure time to time and the results are put to discussion in the meetings of the statutory bodies of the institute for approval and guidance.

# 6.2.5 How does the College 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 established and communicated various options for the students to escalate their grievances to various levels. The following are the available options

- **Suggestion Box:** The Suggestion box placed in every department is opened on a monthly basis in the presence of faculty and student representative. The suggestions /grievances are recorded in a register and addressed accordingly.
- <u>mentor@gmrit.org</u> email: The email id <u>mentor@gmrit.org</u> is managed by Dr.MV Nageswara Rao Associate Dean F&SA.The email id is regularly tracked and the grievances and suggestions are taken up for necessary action.
- Website link for online complaints: There is an online provision in the institute website for students and faculty members to lodge their complaints, compliments and ask a question. The response is directly sent to the Principal.
- Escalation to Counselors, Head of the Department and Principal.

## 6.2.6 Does the College have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

Yes, student feedback is taken in the middle of the semester and at the end of the semester. Further, feedback on institutional performance is taken from the students after course completion.

- Consolidated feedback report is generated for all the courses in a semester on a 6 point scale.
- Faculty performance is considered as below normal if the feedback is less than 3.0.
- Faculty members with feedback below 3 are advised to undergo orientation courses with special inputs by HoD.
- Faculty identifies the weak areas of content delivery and gets a chance to rectify.
- HoDs track the record of the faculty member through the feedback.
- Feedback taken from the students after course completion is processed and is sent along with the necessary recommendations for improvement.
- Suggestions from stake holders are collected through suggestion boxes/institute web site/ E-mails etc. for better performance.

## 6.2.7 In what way the affiliating University helped the College to identify the developmental needs of the College?

Affiliating University conducts academic audit to review the performance of the institute and suggest improvements in weak areas for better functioning of the institute. University nominates its representatives on various statutory bodies to serve as a link between the university and the institute in carrying forward the university policies without affecting the autonomy of the institute in its developmental needs.

## 6.2.8 Does the affiliating university have a functional College Development Council (CDC) or Board of college and University Development (BCUD)? If yes, in what way college is benefitted.

No, the affiliating university does not have functional College Development Council or Board of College and University Development.

## 6.2.9 How does the College get feedback from non-teaching, teaching, parents and alumni on its functioning and how it is utilized?

The institute solicits feedback from various stake holders to measure its performance from time-to-time. The feedback is collected from the staff, parents and alumni and is analyzed for further recommendations. The feedback of the alumni is collected through regular alumni meets, alumni visits to institute, alumni portal. The parents have access to faculty, head of the department and other administrators wherein they do express their views which help in serving the students better. Principal conducts meeting with all the faculty members at the beginning of the semester to appraise them about the goals of the institute and solicit views for the accomplishment of the goals. CEO conducts unplugged sessions at least once in a year with students, teaching & non-teaching staff to seek views for the institutional growth.

## **6.2.10** Does the College encourage autonomy to its academic departments and how does it ensure accountability?

Yes, Institute encourages autonomy to academic departments with regard to functional, financial planning and curriculum design. Heads of departments convene their Board of Studies meetings on a yearly basis. They take inputs from the stakeholders and have the freedom to modify syllabi and various other aspects in the curriculum as per

statutory norms. The modifications are presented for the approval of the Academic Council for further scrutiny and accountability.

## **6.2.11** Does the College conduct performance auditing of its various departments?

Yes, the institute periodically audits its various departments for monitoring their overall performance. Each department works towards satisfying a set of quality objectives that have been quantified. The quality objectives are monitored regularly. Further, parameters that are regularlyscrutinized are student performance in terms of final examination, placements and feedback.

### **6.3** Faculty Empowerment Strategies

## 6.3.1 What efforts are made by the College to enhance the professional development of teaching and non teaching staff?

#### **Teaching staff:**

- Institute encourages faculty to pursue higher studiesto improve their technical competencies and capabilities.
- Conducts Faculty development programs, seminars, workshops and conferences regularly in thrust areas.
- Faculty members are sanctioned academic leave for upgrading their qualification
- Encourages faculty to participate in FDPs, seminars, workshops and conferences conducted by premierinstitutes with financial assistance.
- Incentives for research paper publications, Research grants and consultancy grants.
- Financial assistance to go abroad for presenting papers at conferences.
- Institute has signed MOUs with various Organizations with an objective of collaborative learning between Industry and Academia.
- Institute encourages procuring latest equipment/ software in laboratories to enhance professional skills.

#### Non Teaching staff:

- Institute encourages pursuing higher studies to improve their technical skills and capabilities.
- Encouraged to participate in training programs/workshops with

financial assistance.

## 6.3.2 What is the outcome of the review of the Performance Appraisal Reports? List the major decisions

Performance appraisal reports of all the teaching and non teaching staff are collected from the Heads of the departments annually by the Principal and are reviewed. Based on the review report, promotions and increments are considered. Under special circumstances staff are counselled, guided and motivated for their personal, academic and administrative improvement.

## 6.3.3 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?

Teaching	PF, Gratuity, Group Life Insurance, Health
	Insurance, GPA and GTA, Tuition Fee Concession at
	GMRIT, medical facility at concessional rates at
	GMRV Care Hospital ,Campus Accommodation,
	Cooperative Credit Society,
Non teaching	PF, Gratuity, Group Life Insurance, Health
	Insurance, GPA and GTA, ESI, medical facility at
	concessional rates at GMRV Care Hospital, School
	fee Concession, Cooperative Credit Society.

Percentages of staff availing welfare schemes of the institute for the last four years are as follows:

- 76 staff quarters are provided in the campus
   PF for the staff members
   ESI for non- teaching
   100%
- Insurance linked Gratuity facility for staff 100%
- Group Medical insurance provision for all the staff members and their family members with coverage of Rs. 1.5 lakh per annum, in addition Group Accidental coverage for all the staff members.

- 100%

- On campus Dispensary facility with health assistant round the clock with Ambulance 100%
- On campus ATM, Post Office, Bank facility 100%
- School fee concession for some categories of employees & 25% Tuition Fee concession for children of staff at GMRIT 100%
- Co-operative credit society for the supply of house hold groceries -100%
- Hospital fee concession for Staff @ 20% at GMRV Care Hospital
   100%

## 6.3.4 What are the measures taken by the College for attracting and retaining eminent faculty?

Institute is providing a wide range of facilities for development of the staff and implementing various schemes for staff development and retention.

- 6<sup>th</sup> pay AICTE scales as per norms
- Loyalty bonus upto 3 months salary (basic salary + DA) for the faculty who stay for 3 years from July 2011 to June 2014 with B.Tech, M.Tech&Ph.D..
- QIP Study leave policy with full pay for pursuing Ph.D.
- Incentive policy for Paper Presentations / workshops / Publications / Books.
- Interest free loan facility for laptop purchase.
- Referral bonus up to one month salary for the staff members who encourages new recruitment with B.Tech, M.Tech& Ph.D.
- Wi-Fi connectivity for the entire campus.
- Air conditioned cubicles for the staff members.
- Internal promotion policy.
- 50% Airfare reimbursement for Paper Presentations abroad.

## 6.3.5 Has the College conducted a gender audit during the last four years? If yes, mention a few salient findings.

## **6.3.6** Does the College conduct any gender sensitization programs for its staff?

Yes

## 6.3.7 What is the impact of the University's UGC-Academic Staff College Programmes in enhancing competencies of the College faculty?

- Upgrading teaching, learning processes.
- Exposed to latest trends and technologies

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

## 6.4.1 What is the institutional mechanism to monitor effective and efficient use of financial resources?

Institute has AOP (Annual Operating Plan) in place for Income, Expenditure and Purchase of Assets. Each section of the institute spendsthe sanctioned amount as per AOP. Details of expenditure on

major equipment are enlisted in Management Information System (MIS) to monitor and effective use of financial resources.

## 6.4.2 Does the College have a mechanism for internal and external audit? Give details.

Yes, Institute has a mechanism for internal and external Audit; Management has appointed M/s Management Assurance Group, Bangalore, as internal auditing team. M/s B.V.Rao& Co, Chartered Accountants, Visakhapatnam has been appointed as external auditors.

## 6.4.3 Provide audited income and expenditure statement of academic and administrative activities of the previous four years.

The audited income and expenditure statements of the previous four years are egiven in **Annexure-VII**.

## 6.4.4 Have the accounts been audited regularly? What are the major audit objections and how are they complied with?

Yes, the accounts have been audited regularly. Institute does not have any audit objections. The major objection is fee due received from Government of Andhra Pradesh. Institute made necessary arrangements for the sanction from Government of Andhra Pradesh.

#### 6.4.5 Narrate the efforts taken by the College for resource mobilization.

Institute has a SOD A/c with Andhra Bank, Rajam. Wheneverthere is a need, funds are mobilized from Bank.

## 6.4.6 Is there any provision for the College to maintain the 'corpus fund'? If yes, give details.

No, Institute gets funds from GMR Varalakshmi foundation on need basis.

#### **6.5 Internal Quality Assurance System**

## 6.5.1 Does the College conduct an academic audit of its departments? If yes, give details.

The academic audit of all departments is conducted as per the Quality Management System (QMS) under ISO 9001:2008 for every six months. An audit schedule is prepared by the Management

Representative (MR) and all the processes of QMS including records and documents are audited. Methodology comprises of checking, inspection, and verification of records, work area observation and interviewing persons concerned. A team of faculty trained in conducting internal audit is entrusted with the responsibility for conducting the audit objectively and impartially. Any non-conformity has to be conformed immediately and MR reports the audit results to management for review.

## 6.5.2 Based on the recommendations of academic audit what specific measures have been taken by the College to improve teaching, learning and evaluation?

Internal Academic audit is carried out regularly every month and any short falls identified are addressed from time to time. Some of the measures include submission of course handouts, monitoring of course delivery and assessment, remedial actions for slow learners, timely conduct of project reviews, compliance with academic calendar & regulations and Uniform course delivery and evaluation system for multi section courses.

## 6.5.3 Is there a central body within the College to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

#### Academic council and BoS

Associate Dean (Academics) along with HoDs of individual departments oversees the teaching learning processes. Further, student feedback on faculty is taken at the middle of the semester and at the end of the semester.

- A consolidated feedback report is generated for all the courses of a semester. A comprehensive score on a scale of 0-6 is arrived for each course based on the student feedback.
- Based on the comprehensive score, in general if the score is above 5 then the teacher's performance is considered excellent and if the score is less than 3 then the teacher's performance is below normal.
- Faculty members with feedback below 3 are given orientation lectures and special inputs by the head of the department.
- Faculty members who get average feedback of above 5are considered for letter of appreciation to be given during annual day celebrations of the institute.
- Teachers can identify the weak areas of content delivery and gets a

- chance to rectify.
- HoDs can track the record of the faculty member through the feedback.
- Necessary counseling to the teachers is done in abnormal cases.
- Feedback taken from the students after course completion is processed and it is sent along with the necessary recommendations for improvement to all the sections of the institute.

## **6.5.4** How has IQAC contributed to institutionalizing quality assurance strategies and processes?

- IQAC plays major role to achieve the quality assurance by regular internal audits
- Benchmarking and internal quality checks by introducing the Academic
- Audit systemforallacademicdepartments.
- Providing autonomy to faculty for framing the syllabus
- Periodic reviews on quality assurance
- Collect the data from all the departments as per the prescribed format by the NAAC
- Student feedback as per the format
- Grievance redress system
- Analyze the data
- Corrective actions are suggested to the respective departments

## 6.5.5 Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.

No

## 6.5.6 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?

Yes. IQAC has been conducting study on the incremental academic growth of students from disadvantaged sections of society.

## 6.5.7 What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres etc.?

Quality maintenance is an integral part of the institution. In this regard quality management systems under ISO9001:2008 are

meticulously followed by the institution. Periodic review of administrative, academic departments is conducted as per the norms of ISO 9001:2008.

**Annexure-VII** 

Particulars	Note	GMRIT			
Particulars	No.	March 31,2013	March 31,2012		
I Revenue from operations (gross)	15	205,672,864	169,820,059		
II Other Income	16	12,666,897	9,741,182		
III Total Revenue (I + II)		218,339,761	179,561,241		
IV Expenses					
Employee benefits expenses	17	155,074,269	125,415,201		
Finance costs	18	5,730,740	2,152,456		
Depreciation and amortization expenses		17,398,179	16,162,089		
Other expenses	19	57,102,026	45,205,160		
Total Expenses (IV)		235,305,214	188,934,906		
V Profit before exceptional items and tax (IIII-IV)		(16,965,453)	(9,373,665)		
VI Exceptional items					
Prior Period Expenses		· · · · · · · · ·	-		
Profit/(Loss) for the year - (V-VI)	1	(16,965,453)	(9,373,665)		

The notes form an integral part of these financial statements

As per our Report of even date For B.V.Rao & Co.,

		Note	GMR	RIT	
	Particulars	No.	March 31,2013	March 31,2012	
I	EQUITY AND LIABILITIES				
	1) Corpus Fund	1 1			
	(a) Corpus fund	1 1	-		
	(b) Reserves & Surplus	2	48,248,374	65,213,82	
	2) Non-current Liabilities				
	(a) Long-term borrowings	3	47,737,074	15,777,68	
	(b) Other Long-term liabilities	4	17,144,962	19,446,20	
	(c) Long Term Provisions	5	17,394,537	12,494,87	
	3) Current Liabilities				
	(a) Other current liabilities	6	107,488,275	53,393,97	
	(b) Short-term provisions	7	492,774	158,43	
	Total		238,505,996	166,485,003	
$\mathbf{I}$ I	ASSETS	1 1			
	Non-current assets				
	1) (a) Fixed assets	8			
	(i) Tangible assets	1 1	160,182,348	160,182,59	
	(ii) Intangible assets		2,784,394	1,145,15	
	(iii) Capital work-in-progress	1.1	4,269,235	84,35	
	(b) Long-term loans and advances	9	548,879	1,475,27	
	(c) Other non-current assets	10	1,084,075	1,126,64	
	2) Current assets				
	(a) Inventories	11	1,630,812	1,869,47	
	(b) Cash and Bank balances	12	29,708,268	11.504,96	
	(c) Short-term loans and advances	13	-		
	(d) Other Current assets	14	72.114,375	46,939,39	
	Total		272,322,387	224,327,87	

The notes form an integral part of these financial statements

As per our Report of even date For B.V.Rao & Co.,

#### Note 8 - Ried Assets - GMRIT

		Gross Bi	ock			Depreciation/Amortisation				(Amount in Rupees)	
Particulars				Balance as at 31st		Depreciation/A	norusación	Net Block			
	2012	Additions	Disposals	March, 2013	Upto 1st April, 2012	For the year	Disposals	Upto 31st March,	Balance as at 31st	Balance as at 31st	
() Tangible Assets				14argn_2013				2013	March, 20:3	March, 2012	
Freehold Land											
Buildings-On Free Hold Land	136,907,333	389,711		137,297,044	37,868,805	4,959,914		42,828,720	94,468,324	99,038,527	
Buildings- On Lease Hold Land	-			20.120.10.11	37,000,000	7,232,247		40,020,720	74,400,324	99,036,527	
Lab Equipment	91,817,355	4,787,679	1,147,965	95,457,069	60,893,916	4,700,901	424,319	65,170,498	30,286,571	30,923,439	
Office Equipment	11,056,465	1,882,380	7350	12,931,495	5,712,110	908,705		5,620,815	6,310,680		
Electrical Equipment	10,927,446	1,592,873	17 264	12,503,060	3,302,392	1,337,241		4,639,633		5,344,355	
Computer Equipment	12,095,721	7,725,585	1,682,706	13,138,600	1,922,006	1,779,545		3,701,551	7,863,427	7,525,054	
Fumiture and Fixtures	26,033,192	2,140,440	2002740	28,173,632	1,322,000	2,300,418			14,437,049	10,173,715	
Library Books	485,664	745,414	127	L,232,951	486,660			21,647,147	6,526,485	5,586,463	
Vehicles	1,347,458		127			746,280		(,232,940		- 4	
Total		28 BCE 888	A 488 144	L,347,468	956,428	101,239		1,057,667	289,801	391,040	
	290,671,644	19,265,087	2,855,412	307,081,319	130,489,047	15,834,243	424,319	146,898,971	160,182,348	160,182,597	
# Intangible Assets	1										
Computer Software	4,496,923	2,203,175		5,700,038	3,351,768	563,986		3,915,704	2,784,394	1,145,155	
Total	4,496,923	2,203,175		6,700.098	3,351,768	563,936		3,915,704	2,784,394	1,145,155	
間 Capital work in Progress									47.03,401	2,2-5,205	
Capital work in Progress	94,359	7,449,010	3,264,134	4,269,235					4,269,235	84,359	
Total	84,359	7,449,010	3,264,134	4,269.235	-	- 1			4,269,235	34,359	
Grand Total	295,252,926	28,917,272	6,119,546	318,050,652	133,840,815	17,398,179	424,319	150,814,675	167,235,977	161,412,111	

GMR INSTITUTE OF T STATE OF INCOME & EXPENDITURE FOR TE			CH, 2012 Amount in Rupe
Particulary	Note	GHR	ET
s on troubator	No.	March 31,2012	March 31,2011
I Revenue from cocrations (gross)	15	169,820,059	148,925,12
II Other Income	1€	9,741,182	7,094,15
III Total Revenue (I + II)		179,561,241	155,020,276
TV Expenses			
Employee benefits expenses	17	125,415,201	38,465,46
Finance costs	18	2,152,456	1,042,83
Depreciation and amortization expenses		16,162,089	15,919,39
Other expenses	19	45,205,160	33,420,06
Total Expenses (IV)		188,934,906	148,848,654
V Profit before exceptional items and tax (III)-IV)		(9,370,665)	7,171,622
VI Exceptional items			
Total and final Loss on Account of Sales of Shares Tr. To Corpus Fund			,
Profit/(Loss) for the year - (V-VI)	-	(9,373,665)	7,171,622





	Particulars	No.	March 31,2012	March 31,2011
ī	EQUITY AND LIABILITIES	<del> </del>		
	1) Corpus Fund		A	
	(a) Corpus fund	1	_	
	(b) Reserves & Surplus	2	65,213,827	74,587,492
	2) Non-current Liabilities			•
	(a) Long-term borrowings	3	15,777,688	
	(b) Other Long-term liabilities	4	19,446,202	18,863,285
	(c) Long Term Provisions	5	12,494,878	11,673,033
	3) Current Liabilities			
	(a) Other current liabilities	6	53,393,971	46,804,690
	(b) Short-term provisions	7	158,437	283,743
	© GMR Varalakshmi Foundation		57,842,869	64,134,894
	Total		224,327,872	216,347,137
· II	ASSETS		^ _	
	Non-current assets			
	<ol> <li>(a) Fixed assets</li> </ol>	8	1	
	(i) Tangible assets		160,182,597	143,137,708
	(ii) Intangible assets		1,145,155	869,724
	(iii) Capital work-in-progress		84,359	1,073,102
	(b) Long-term loans and advances	9	1,475,278	432,414
	(c) Other non-current assets	10	1,126,642	1,367,304
	2) Current assets		THE STATE OF THE S	
	(a) Inventories	11	1,869,479	2,400,590
	(b) Cash and Bank balances	12	11,504,963	29,819.372
	(c) Short-term loans and advances	13	-	· · · · · ·
	(d) Other Current assets	14	46,939,399	37,246,923
	Total	1	224,327,872	216,347,137





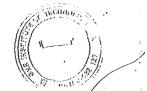
## GMR INSTITUTE OF TECHNOLOGY INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR LINDED 31-03-2010

TLAN UND	ED 31-02-501		
Particulars	Schedule	GMRIT	
Particulars	No.	March 31, 2010	March 31, 2009
A. INCOME:			
Fee Collections	nja	131,600,063	99,572,067
Other Income	. "j"	4,152,905	2,781,973
Interest on Deposits with Banks		1,795,116	1,104,032
rotal (A)		137,548,084	103,458,072
B. EXPENDITURE :		,	
9alaries & Welfare	, "K"	87,696,202	59,718,775
Administrative and Other Expenses	"L"·	27,316,490	22,598,296
Donations & Charities	"M"	. 582,700	348,850
Deminition value of Investments			-
Interest & Financial Charges	ייאיי	1,333,325	2,225,498
Depreciation		44,483,859	15,346,299
Total (B)	•	131,41.2,576	100,237,718
C. lixcess of Expenditure over Income		6,135,509	3,220,354
D. Not Surplus/(Deficit) transferred		6,135,509	3,220,354
to Capital Reserve			
•			
Accounting Policies and Notes on Accounts	, "O"		٠



### GMR INSTITUTE OF TECHNOLOGY BALANCE SHEET AS AT 31-03-2010

,	Schedule	GMRTT	
Particulars	No.	March 31, 2010	March 31, 2009
I. Sources of Funds :			
1100011042 51 1 44104			
1. Corpus Fund	"A" .	•	
2. Capital Grants	¦В"	9,311,445	1,820,000
3. Income over Expenditure	"С"	67,415,871	61,280,362
4.' Loan Funds			
a) Secured Loans	. "D"	-	" .
b) Unsecured Loans	"E"	-	-
Total Source of Funds	,	76,727,315	63,100,362
II. APPLICATION OF PUNDS :			
,		i i	
1. Fixed Assets	. "F"		227 726/061
a) Gross Block		243,060,575	237,726;961
b) Less: Depreciation	ŕ	101,767,980	88,820,337
c) Net Block		141,292,595	148,906,624
d) Capital Works-in-Progress		3,416,198	
		144,708,793	148,906,624
•		•	Ì
2. Investments			
• a) Quoated Shares	•	"	
- b) Provision Investment Dimunition			
3. Guinet Assala Lanua P. Advancas	"G"	·	
3. Current Assets, Loans & Advances a) Cash & Bank Balances		24,985,743	16,964,743
b) Loans & Advances		390,142	224,356
c) Other Current Assets		34,004,165	13,454,120
c) Other Current Assets	1	59,380,050	30,643,219
Less: Current Liabilities & Provisions	} : <sub>''- ''</sub>	35/300,030	30/010/223
a) Liabilities	l ''	52,588,079	53,509,746
b) Provisions		11,901,763	562,835
n) Lloamous		64,489,842	54,072,581
		0 17 15575 121	
Net Current Assets	•	(5,109,791)	(23,429,362)
Total Application of Funds		139,599,002	125,477,262
Notes to the second state of the second state	,,O,,		
Accounting Policies and Notes on Accounts	J		L



#### **D7. Criterion-VII: Innovations and Best Practices**

#### 7.1 Environment Consciousness

Institute is located at Rajam, Srikakulam district of Andhra Pradesh. A tranquil world in itself, the campus stands unique with its lush green expanse, paved pathways, colorful plants, breeze and a serene, soothing environment. The institute in its practices has always been environment friendly and during the last five years, the campus has been highly sensitive to issues like Green Campus, climate change and environmental degeneration. It mainly concentrates on 'Clean Campus - Green Campus' and it is committed to promote an ambience of creativity and is concerned with quality achieved through innovation.

### 7.1.1 Does the Institute conduct a Green Audit of its campus?

Though Green Audit has not been done, importance is given for development of eco - friendly atmosphere in the campus since inception. Thus the institute has adopted various measures to maintain the greeneries of the campus and it has been observed that it creates a positive impact and helps in developing an environment-friendly attitude in one and all.

Sufficient care has been taken to keep the campus clean and green. The avenue plantation is given top most priority in the campus and hygienic practices are followed in the maintenance of various amenities like gardens, roads, and toilets facilities of students and the staff. All the class rooms and laboratories are kept clean and tidy.

## 7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

### **Energy conservation**

- An eco-friendly generator has been set up in the campus to minimize the atmospheric pollution.
- All the equipment in the laboratories is serviced periodically to reduce excessive consumption of power.
- All floors are checked if lights, fans, and ACs are unnecessarily on.
- All the street lights are fitted with LED lamps.
- Awareness among the students and staff on energy conservation is created by displays on digital boards at appropriate places and through conduct of workshops and seminars.

- Buildings are constructed so as to have proper ventilation.
- Battery operated buggies for local commuting in the campus.
- Every Thursday is observed as a pollution free day.

### Use of renewable energy

Institute is examining the proposal of utilizing the solar power, a nonconventional source of energy, in a phased manner as an alternate source of power. Solar heaters are in use in the hostels. Solar street lights for illumination.

#### Water harvesting

Institute is having bore wells inside the campus. Sewage Treatment Plant treats all the waste water collected from hostels, quarters and academic blocks and then uses for the gardens.

#### **Check dam construction**

NA

## **Efforts for Carbon neutrality**

Institute has taken certain measures to prevent the emission of carbon dioxide in the campus. The motor vehicles are kept at a distance from the classrooms and Laboratories in the ear marked parking sheds. Furthermore Thursday is observed as "Pollution Free Day"; use of motor vehicles is not allowed in the institute campus. The dead leaves of the plants and the waste paper are disposed off in the pits dug in the earth and not by burning and thus reducing atmospheric pollution. They are also used as manure for the plants. Battery operated buggies for local commuting in the campus.

#### **Plantation**

The Institute has a serene green campus comprising of a variety of trees, plants and lawns. These are maintained properly and watered by drip irrigation. The dead leaves from roads and garden are cleaned everyday to maintain the neatness. Moreover, the institute has a separate horticulture department to look after the services of plantations.

#### Hazardous waste management

Use of polythene covers is banned in the campus. The waste from academic areas, canteen, hostels, and staff quarter areas are collected at waste-basins and disposed off every day.

#### e-waste management

Some of the e-waste generated is used for technical education purpose by making use of hardware in laboratories for display and study. The remaining material is disposed off in an appropriate manner.

#### 7.2 Innovations

## 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.

In its quest for excellence, the institution seeks continuous innovation in academic programmes & administration. They are as detailed below.

### a) IT enabled teaching and learning practices

The Institute encourages collaborative learning between industry and academia as a means of reinforcing its curriculum with practical and real world experiences. It is this emphasis, on a well-rounded education with Technology-enabled environment that makes this institute a reputed and preferred institute among engineering institutions in India. The teaching methodologies are improvised continuously on ongoing basis by adopting several best practices, enabling the learning to happen by evolution rather by enforcement. Following are the technology enabled practices which makes teaching learning process more self learning:

- The Institute has 100 MBPS connectivity with Wi-Fi facility and more than 1100 systems (Desktops) are available in the different departments on LAN.
- Institute offers LAN-based courses for 250 distinct subjects which are available on LAN and can be browsed at any time to supplement classroom teaching and self learning.
- Digital library with 5900 eBooks and access to online national and international journals
- NPTEL video courses on LAN
- Recorded EDUSAT programs through MANA TV
- Academic ERP in place for web based parent login for dynamic reporting
- System generated progress reports and other general reports
- All class rooms are equipped with LCD projectors.
- GMRIT is the first engineering college in AP that has started English language lab in the year 2001, to enhance the communication skills among the students much earlier to JNTU included in its curriculum. In order to improve the Communication skills, students are motivated to learn by themselves by giving access to language Lab.

#### b) Outcome based assessment and evaluation

- Curriculum and course structure design balancing the cognitive learning levels.
- Hybrid grading system with the combination of earned and awarded grades.
- Enhancement of self learning skills through audit courses.
- More number of lab/practical courses for hands on experience.
- Industry exposure through full semester internship during 7th/8th semesters on swapping mode.
- Uniform course delivery and evaluation system for multisection courses.
- Continuous evaluation system emphasizing on outcome based education.

## c) Continuous faculty and student development programmes

#### i) Student development programmes

Students are trained to groom themselves and improve their softskills by providing regular training programs by academicians and professional trainers of the industry there by making them employable and industry ready.

- Mathematics club to instill the importance of Mathematics
- Financial assistance to Innovative projects
- Personality development & Motivational programs.
- Language and Soft skill programs
- CRT Programs by TIME, Vizag & Placesmart, Hyd.
- Guest lecture by eminent personalities from industry and academia
- Participation of students in professional society activities-ISTE/IETE/CSI/IE(I)
- Encouraging participation of students in model exhibitions, paper presentations & seminars
- Remedial classes for slow learners
- Technology enabled resources- LAN-based courses/NPTEL video courses
- Technical Training and refreshing programs for placement
- Student Activity Centre to encourage Projects, Literary and creative skills
- Silent hours in the hostels
- Yoga Classes in the Hostels
- Proctor System and Student Counseling
- Coaching for higher studies and competitive exams.

#### ii) Faculty development programmes

- Faculty are Sponsored for QIP/Non-QIP to pursue Ph.D. with financial support.
- Laptops for faculty with Subsidy/Interest free loan.
- Group Mediclaim policy and ESI facility for all staff as per eligibility
- Incentives for paper publications in seminars/Conferences/journals
- Cash incentive for faculty obtaining Ph.D on part-time
- Cooperative credit society membership for monthly groceries.
- Faculty awards to enhance quality of Teaching and research
- On campus faculty quarters with all amenities & medical assistance
- Faculty referral scheme with incentive and Loyalty bonus
- Transparent internal promotion policy and appraisals for faculty
- Tuition fee concessions for the wards of all the staff at GMRIT

#### iii) Expert talks by distinguished guests

- Seshagiri Rao, Associate Director SHAR, Srihari Kota, as chief guest addressed the students on the occasion of STEPCONE-2014
- Mr. Rob chell, International Director, City of Glasgow College, UK visited the campus to explore the collaborative option on 25th April 2012
- Dr. V. Bhujanga Rao, Distinguished Scientist and Director of NSTL, AP as the Chief guest addressed the students in 2011
- Prof. P. Jayaprakash Rao (Chairman), AP State Council of Higher Education, visited the campus as a Chief guest for MIPSCON-2011 Inaugural function
- Dr.KC Reddy, Vice chairman of Rajiv Yuvakiranau, Govt of AP, visited campus as a chief guest for STEPCONE-2012 during the inaugural function
- His-Excellency Dr. APJ Abdul Kalam, Former-President of India visited the campus and addressed the students and staff on 12th March 2009.
- Former President of NASSCOM Mr Kiran Karnik interacted with students and faculty through Video Conferencing
- Padmasri Dr. Sivathanupillai visited our campus and addressed the faculty and students on 26th February,08
- Dr. JJ Irani Director TATA Sons visited the campus and addressed the students and faculty on 20th August, 07
- Dr. A.L.Rao, COO of M/s Wipro, delivered a guest lecture on "Emerging Technologies in Software" on 22nd Dec, 07

- Mr.A.M.Naik CMD. L&T. visited the campus and addressed the students and faculty on 05th August,07
- Mr. Nandan Nilekani, CEO of Infosys and Mr. Subrato Bagchi, COO of Mind Tree Consultant addressed the students through Video Conference

#### iv) Professional Society Activities

- Institutional Member of Indian Society for Technical Education, New Delhi;
- Institutional Member of The Institution of Engineers (India), Kolkata
- Institutional Member of Computer society of India
- Institutional Member of IETE
- ISTE Faculty Chapter
- ISTE Students Chapter
- IE (I) Students Chapters
- Regular events conducted weekly/fortnightly under these professional societies.
- Some of the activities are Quiz contest, debate, C programming contest etc.
- Annual event STEPCONE is conducted every year for networking and exposure to multi-dimensional activities to enrich and widen their horizons. Various activities are-paper presentation, model exhibition, project exhibition, games etc.

#### v) Supporting Activities

- EDC programs in collaboration with MSME to encourage the entrepreneur skills.
- "The Hindu" E-Plus club activities and articles
- Institute Tech-Mag an Annual Technical Magazine of the institute
- NSS activities
- Blood donation camps in association with Red-Cross Society of India
- Member in the SPICMACY circuit in AP since 2006
- Student Activity Centre
- Institute Community Radio 90.4 FM

#### d) Research and development initiatives

Institute has well qualified, experienced and dedicated faculty, who are involved in consultancy and research works besides teaching.

## i) Following are some of the measures to enhance the quantum of research and it's quality:

- Formation of research groups
- Faculty are Sponsored for QIP/Non-QIP to pursue Ph.D. with financial support.
- Incentives for paper publications in seminars/Conferences/journals
- Cash incentive for faculty obtaining Ph.D. on part-time
- JNTUK recognized Research centres (Mechanical & EEE).
- Establishment of Centres of Excellence
- Consultancy policy with 80% of the earning to staff involved

#### ii) Industry- Institute interaction

- Member of Campus connect program from Infosys
- CCNA training program from HCL
- Partner of Microsoft academic initiative-MS IT academy
- Member of TCS academic initiative.
- IBM University campus -Webex based training program on web 2.0
- Wipro-Mission 10X program for faculty enablement and training
- Training and Academics projects from ARC
- Training and Academics projects from NSTL and Steel plant.
- Training and Academics projects from GMR Energy
- Collaboration with M/S Delmet coatings Vizag for DST project
- Collaboration with A.U Vizag for DST project in Mech & Civil Dept
- Collaboration with M/S Nanomindz Technologies Pvt Ltd Vizag for DST project Civil Dept
- HAM Radio centre supported by Amateur Radio, Department of IT, Govt. of India

#### 7.3 Best Practices

## 7.3.1 Give details of any two best practices which have contributed to better academic and administrative functioning of the College.

#### **Best Practice-1:**

#### 1. Title of the Practice

Remedial Classes, Academic Merit Scholarships and Uniform Evaluation

#### 2. Objectives of the Practice

To give additional inputs to slow learners and students with backlogs to improve performance in regular and supplementary examinations. The slow learners are identified based on the performance of the first sessional examination and separate time table is prepared for slow learners to give additional inputs so that they can perform better in the examinations.

To encourage the meritorious students, merit scholarships are provided to students with excellent academic performance.

To ensure that all the answer scripts of the same course are evaluated uniformly, a uniform evaluation policy is adopted.

#### 3. The Context

To design and implement this practice, there are some contextual issues and are addressed. Identification of slow learners is done as per the performance in the semester end examinations. Time table is prepared to conduct remedial classes separately in the afternoon slots without disturbing the regular class work. The biggest challenge is to make sure that all the needy students attend the classes.

The institute is located at Rajam, far away from city. To attract the better students it offers scholarships to meritorious students. To implement the scholarship mechanism for meritorious students, the management has taken initiatives and the system is in place for the last 10 years.

To ensure that all the scripts in a course are evaluated properly and accurately, a uniform evaluation system is in place. It increases the student satisfaction and transparency in the evaluation.

#### 4. The Practice

This practice has been carried in the institute since last several years. We do not have any difficulty in its implementation. Faculty members are required to conduct remedial classes as per the schedule. Further to make this practice more useful to needy students, it is resolved that when a student need to appear in supplementary examinations, He/She should attend 85% of the remedial classes conducted. To ensure the students having backlogs clear the exams, performance track sheets are maintained.

The practice of merit scholarship has been continued in the institute for the last 10 years.

To ensure the uniform evaluation, a particular question for all the scripts are evaluated by only one faculty member to reduce the variation in evaluation. During semester end evaluation, the identity of the student is removed from front paper of the answer booklet by using a coding mechanism.

#### 5. Evidence of Success

The results of supplementary examinations are improved.

Meritorious students are taking admission.

Result is published within a week of completion of the exams, and students are more satisfied.

#### 6. Problems Encountered and Resources Required

Problem encountered in this practice is making all the needy students attend remedial classes regularly. The resources required are faculty to handle the classes and separate class room. We have good faculty strength across all the departments, so faculty allocation is also not a problem.

For implementing the scholarship schemes there is no problem, because the management is very assertive.

For uniform evaluation internal faculty and external invited faculty do the evaluation task in time.

#### 7. Notes

-NIL. -

#### **Best Practice-2:**

#### 1. Title of the Practice

Faculty Incentives for Research Promotion and Quality Improvement, Faculty Awards.

#### 2. Objectives of the Practice

All the above practices are aimed at keeping the faculty abreast of the latest developments in their areas of research and to encourage them to bring out the best possible results. It is also aimed to improve their teaching skills and explore the possibilities of innovations in the methods of teaching and research. The above practices are further aimed to attract talent and inculcate competitive spirit among the faculty members which will contribute to the growth of the institution. All the above practices are aimed in general to keep the institution on a high pedestal in the academic arena.

#### 3. The Context

The above practices are introduced in the context of globalization. The importance of research along with the teaching is the need of the hour. The faculty upgrades his / her knowledge levels through research and then he/she will be able to transfer such knowledge to the stake holder i.e., the student. In order to motivate the faculty the cash incentive system was introduced. For the transfer of knowledge to the student, the faculty should be a good teacher and to become a good teacher he has to hone up his teaching skills through some training. This helps him not only to identify his deficiencies but also to use latest methods of teaching to make the teaching-learning process more student centric. Regular faculty development programmes will help them to hone up their skills for the benefit of students and thus FDP programmes are scheduled every year and scrupulously followed. Faculty are encouraged to do their PhD degrees, academic leaves are granted for PhD examinations. Further, Certificates of appreciation for best performing faculty.

#### 4. The Practice

Faculty who publishes a research paper in a peer reviewed journal will be given a cash award of Rs. 20000/- and Rs. 10000/- for international and national journals respectively. The list of journals available with each department are taken into consideration, otherwise a committee decision on the quality of publication is final.

Faculty who presents a paper in an International Conference/Seminar at an institute of repute outside India, cash award of Rs. 2000/- is given. If it is in India, cash award of Rs.1000/- is given. In addition to the cash award full registration fee and travelling expenses along with academic leave are granted.

Faculty who publishes a text book by an international publisher, cash award of Rs. 75,000/- is given. If it is national publisher the award is Rs. 30,000/- and for regional/local publisher the award is Rs. 15,000/-.

Faculty members are encouraged to participate in FDP/workshops/training programmes organized by reputed institutions with full registration fees and academic leave.

Faculty who completes his/her PhD while in service at the institute is awarded a cash prize of Rs. 75,000 for engineering branches and Rs.50,000 for Basic Sciences, provided he/she serves for a minimum of two years in the institute.

Faculty members will be eligible for travel outside India (50% of travel expenses or a maximum of Rs. 50,000) and registration fee (100%), for paper presentation, provided the conference/seminar is hosted by a reputed institution. Preferably, such expenses should have been factored into the project/research grant.

Certificates of appreciation for best performing faculty. The rating is done based on a six point scale, by evaluating the contributions of the faculty in teaching, research, academic administration, and co-curricular/extra-curricular activities.

#### 5. Evidence of Success

There is a remarkable change in the attitude and these healthy practices resulted in developing a sense of confidence among the faculty members.

6. Problems Encountered and Resources Required Institute encourages such good practices which create an academic ambience blended with research. Financial resources were liberally provided for such good practices. No problems were encountered in implementing such practices.
7. Notes (Optional) NIL
187

#### E. EVALUATIVE REPORTS OF DEPARTMENTS

### E1. Evaluative Report of Chemical Engineering

1. Name of the Department & its year of establishment

### Chemical Engineering& Established in the year 1997

2. Names of Program's / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D etc.)

**UG- Chemical Engineering PG- Environmental Engineering** 

3. Interdisciplinary courses and departments involved

S. No	Interdisciplinary courses	Departments involved
1	Elements of Mechanical Engineering	MECH
2	Fundamentals of Computer Programming	CSE, IT
3	Cloud computing (Open elective)	CSE,IT
4	Disaster management(Open elective)	СЕ
5	Fundamentals of Global Positioning Systems (Open elective)	ECE
6	Operation Research(Open elective)	MECH
7	Soft computing (Open elective)	CSE, IT
8	Advanced optimization techniques	Mech
9	Engineering Economics and Project Management	BSH
10	Renewable Energy Sources	EEE
11	Open source soft ware	CSE
12	Biomedical Engineering	ECE

**4.** Annual/ semester/choice based credit system

Semester based credit system

## 5. Participation of the department in the courses offered by other departments

Title(s) of the course(s)	To which department Programme	Programme UG/PG	Semester
Elements of Mechanical Engineering	Civil, MECH, ECE, CSE, IT, CHEM, PE	UG	I & II
Environmental studies	Civil, MECH, ECE, CSE, IT, CHEM, PE	UG	I & II
Industrial Pollution Control Engineering	Civil, MECH, ECE, CSE, IT, CHEM, PE	UG	IV-I
Industrial water and wastewater management	Civil, MECH, ECE, CSE, IT, CHEM, PE	UG	IV-I
Industrial safety and Hazard management	Civil, MECH, ECE, CSE, IT, CHEM, PE	UG	III & V

## 6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Designation	Sanctioned	Filled
Professors	2	2
Associate Professors	4	4
Asst. Professors	7	7

# 7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of	No. of Ph.D. Students guided for the last 4 years
Dr. S. K. Behera	M. Tech, PhD, PDF	Professor & Head	Environmental Engg.	12 Years	Nil
Dr. M. Krishna Prasad	M. Tech, PhD	Professor	Mineral Processing, Mass transfer	14 Years	Nil
Mr. V. Srinivasa Rao	M. Tech	Assoc. Prof	Mineral Engineering	18 Years	Nil
Dr. R. Srikanth	M. Tech	Assoc. Prof	Chemical Engineering	18 Years	Nil

Dr. P. Kalpana	M. Tech	Assoc. Prof	Petrochemical Engineering	9 Years	Nil
Dr. Surya Narayan Dash	M. Tech, PhD	Assoc. Prof	Chemical Engineering	12 Years	Nil
Mrs. G. Kalyani	M. Tech	Asst. Prof	Chemical Engineering	8½ Years	Nil
Mr. P. Satya Sagar	M. Tech	Asst. Prof	Plant Design	10 Years	Nil
Mr. G. Babu Rao	M. Tech	Asst. Prof	Chemical Engineering	7 year	Nil
Mr. H. Joga Rao	M. Tech	Asst. Prof	Chemical Engineering	7 year	Nil
Mr.B. Niranjana Rao	M. Tech	Asst. Prof	Chemical Engineering	8 Years	Nil
Dr. M. Gangadhar	M. Tech, PhD	Asst. Prof	Chemical Engineering	9 Years	Nil
Ms. P. Mythili	M. Tech	Asst. Prof	Chemical Engineering	3 Years	Nil

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

UG: 15:1

PG: 12:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	filled
Lab Instructors	2	2
Assistants	2	2

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

Name of the Faculty	Funding agency	Project Name	Grant Received in Rs. Lakhs
P.Kalpana (Co-PI)	DST	Ground water modeling for hydro geological characterization of Hazardous substance release sites- A case study of Pydibhimavaram Industrial area, Srikakulam, A.P.	20.44

# 12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Academic Year	Funding agency	Project Name	Grant Received in Rs. Lakhs
2014-15	DST	Seminar Industrial Ecology – Interdisciplinary Perspectives and Opportunities (IEIPO-15)	0.75
2013-14	AICTE	SDP on "Pinch Technology"	3.5
2013-14	DST	Travel Grant to Dr S K Behera to present technical paper in an International Conference on Modeling of Machining Opeerations-2013(14th CIRP CMMO) held during 13 -14 June 2013 at Turin, Italy.	1.5
2012-13	AICTE	Modernization of Simulation Laboratory	6.5
2011-12	AICTE	Simulation Laboratory	10.94
2011-12	AICTE	SDP on "Clean Process Technology"	3.5
2010-11	APPCB	Workshop on "Urban Waste Management and – Current Challenges & Mitigation"	1.0
2009-10	AICTE	SDP on "Evolving Challenges in Energy and Environment"	3.5
2009-10	APPCB	Workshop on "Sustainable Development and Environmental	0.5

		Challenges"	
2009-10	AICTE	Development of Analysis oriented Chemistry laboratory	6.2
		<b>Total Grant</b>	37.89

### 13. Research facility / centre with

State recognition - Nil
 National recognition - Nil
 International recognition - Nil

#### 14. Publications:

• Number of papers published in peer reviewed journals (national / international):

S.	- 100	No. of Papers				
No	Journal/Conference	2014-15	2013-14	2012-13	2011-12	2010-11
1	National Conference	6	07	08	14	04
2	National Journal	4	01	00	00	01
3	International Conference	10	09	09	05	24
4	International Journal	15	05	06	17	03
	Total Papers		22	23	36	32

Monographs :NilChapter(s) in Books:NilEditing Books :Nil

• Books with ISBN numbers with details of publishers: Nil

 Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database -International Social Sciences Directory, EBSCO host, etc.):

	2014-15	2013-14	2012-13	2011-12	2010-11
Citation Index – range / average	2-509	1	1-2	2-343	2-390
SNIP	-	0	0	0	0
SJR		0	0	0	0
Impact factor – range / average	0.2-2.5	0.18	0	0.614-3.78	0.57-5.17
h-index	11	1	2	3	10

15. Details of patents and income generated : -Nil-

16. Areas of consultancy and income generated : -Nil-

#### 17. Faculty recharging strategies

• workshops/seminars/conferences/FDP attended by faculty during the academic year's:

2014- 2015 : 11 2013-2014 : 11 2012- 2013 : 08 2011- 2012 : 14 2010- 2011 : 04

#### 18. Student projects

- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

		Students who have done projects				
Academic year	Programme	In-house projects including inter-departmental	In collaboration with industries / institutes			
2014-15	B.Tech. (Chem)	100%	-Nil-			
2013-14	B.Tech. (Chem)	100%	-Nil-			
2012-13	B.Tech. (Chem)	100%	-Nil-			
2011-12	B.Tech. (Chem)	100%	-Nil-			
2010-11	B.Tech. (Chem)	100%	-Nil-			

- 19. Awards / recognitions received at the national and international level by
  - Faculty : Dr S K Behera received
  - Conference Scholarship award by International Society for Industrial Ecology in 2010 and 2013.
    - Brain Korea-21 programme Excellence in research award, 2008 and 2010.
    - Brain Korea-21 programme (a.k.a BK-21) Fellowship awarded to full bright post-doctoral researchers, Ministry of Education, Science and Technology, South Korea, Mar 2010 – Aug 2011.
    - International Society for Industrial Ecology, Conference Scholarship award, 2010 and 2013.

• Doctoral / post doctoral fellows: Nil

#### • Students:

Academic Year	Awards / recognitions received at the			
Academic Teal	National level	International level		
2014-15	03	Nil		
2013-14	02	Nil		
2012-13	00	Nil		
2011-12	01	Nil		
2010-11	05	Nil		

- 20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.
  - Seminars/ Conferences/Workshops organized during the academic years are as follows

Academic Year	Seminars/ Conferences/Workshops organized (national / international)	Source Funding	of
2014-15	01	Institute	
	01	DST	
2013-14	01	AICTE	
2012-13	Nil		
2011-12	01	Institute	
2011-12	01	AICTE	
2010-11	01	APPCB	

## 21. Student profile course-wise:

### Name of the Course: UG (B.Tech. in Chemical Engineering)

Academic	Applicat ions	Selected		Pass percentage	
year	received	Male	Female	Male	Female
2011-15	NA	45	12	80.00%	83.33%
2010-14	NA	49	13	63.26%	84.61%
2009-13	NA	46	16	76.08%	81.25%
2008-12	NA	54	14	83.33%	100%
2007-11	NA	47	17	48.93%	58.82%

## 22. Diversity of Students

Prog ram me	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
	2014-15	60	97	3	0
	2013-14	60	99.17	0.83	0
UG	2012-13	60	100	0	0
	2011-12	60	99.17	0.83	0
	2010-11	60	99.17	0.83	0

	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
PG	2014-15	18	100	0	0
rG	2013-14	18	100	0	0

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

A.Y	2014-15	2013-14	2012-13	2011-12	2010-11
GATE	01	04	03	05	05

## 24. Student progression

Student	Percentage against enrolled				
progression		T			1
UG to PG	2014-15	2013-14	2012- 13	2011- 12	2010-11
	22.45	14.28	10.63	23.4	22.45
PG to M.Phil.					
PG to Ph.D.					
Ph.D. to Post- Doctoral					

Employed	2014-15	2013-14	2012- 13	2011- 12	2010-11
Campus selection	21.74	14.28	21.05	17.02	22.44
Other than campus recruitment	25.78	35.71	28.07	44.68	51.02
Entrepreneurs		-	-	-	-

#### 25. Diversity of staff

Percentage of faculty who are graduates

of the same parent university	Nil
from other universities within the State	96.3%
from other universities from other States	3.7%

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Four faculty members (Dr. M.Gangadhar, Dr. S.N.Das, Dr.R.Srikanth and Dr. P. Kalpana)

#### 27. Present details about infrastructural facilities

a) Library

Journals//Magazines/Pe Books riodicals		CDs, VCDs and	Others		
	National	International	Multimedia		
321	0	0	0	106 Projects +	

b) Internet facilities for staff and students : **100 MBPS** (BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c) Total number of class rooms
d) Class rooms with ICT facility
e) Students' laboratories
f) Research laboratories
:03
:08
:01

28. Number of students of the department getting financial assistance from College.

Nil

- 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
  - Getting Feedback from all stakeholders viz. industry, parents, students and faculty
  - Assessing the availability of job opportunities in industry, research and academia
  - Collecting information about emerging areas of engineering growth and development
- 30. Does the department obtain feedback from
  - a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BOS meetings.

### b. Students on staff, curriculum as well as teaching-learningevaluation and what is the response of the department to the same?

Feedback will be collected from students twice in a semester i.e during mid semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.

## c. Alumni and employers on the programmes and what is the response of the department to the same?

#### Alumni Feed-back/Alumni Survey:

Institute conducts Alumni meets regularly (at least once in a year) at various places in the country. Few of our alumni are successful in

establishing and running consultancy firms, software companies, Power plants, service and manufacturing industries. The alumni survey is conducted to obtain feedback regarding their employment, higher studies, suggestions for improvement of institution etc. The inputs from the alumni are used in curriculum design, best practices, programme objectives etc. Alumni survey is conducted during alumni meets, visits to institution, stake holders meeting etc. Institute has separate alumni portal to facilitate the alumni interaction and updation of alumni database. Board of Studies of each department has an alumni nominee.

#### **Employer feedback/Employer Survey:**

Eminent Persons from the industry having keen interest in academics are inducted in the academic Council (AC) and in the IQAC of the institution. Valuable suggestions are taken for the betterment of the institution from time to time.

A survey questionnaire is prepared for the employer to assess the performance of the graduates recruited in different industries. This questionnaire is circulated among the employers through emails and social networking sites and responses are received. These responses are analyzed to assess the technical knowledge and leadership skills of the graduates of this institution. The results from the above feedbacks are analyzed and discussed in the department meetings. The feedback taken is used to make necessary improvements in the curriculum, teaching-learning process, up gradation of the facilities etc. Institute encourages Industry-Institute Interaction which will in turn useful in curriculum design and development.

#### 31. List the distinguished alumni of the department

S.No.	Name of the Alumni	Designation	Organization	Batch
01	P. V. Suresh	Asst. Prof	NIT, Warangal	1997-01
02.	P. Dhananjaya Kumar	ONGC	Asst. Executive Engineer(prod uction)	1997-01
03	A.Meenakshi	Asst. Prof	JNTU, Ananthapur	1998-02
04	G.Sreenivasa Kuamr	Scientific Officer	NFC, Hyderabad	2000-04
05	M.Sudhakar	AGM	Kochi Refinery Ltd	2000-04
06	V.Madhav	Process	HPCL,visakha	1997-01

		engineer	patnam		
07	K.Prakash	Deputy	JK Tyres and	2002-06	
07	K.Flakasii	Manager	Industries Ltd	2002-06	
		Coromandel			
08	M.Ramanayya	fertilizers	Asst. Manager	2003-07	
		Ltd.,			
09	Srinivas Pavan Kumar	Researcher	Crompton	2004-08	
09	Sillivas Favali Kulliai	Researcher	greaves Ltd	2004-08	
10	V Muethy	Design	UOP	2004.08	
10	K.Murthy	Engineer	Honeywell	2004-08	

## 32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

## **Student Enrichment Programmes:**

S.No	Special Lectures	Date	Participant s	No. of participan ts
Acade	emic Year 2014-15			
1	Process Dynamics &Control- Its Industrial Applications by Prof. R.Padma Sree, AUCEC, Visakhapatnam.	09.09.14	III BTech, II & IV B.Tech	35
2	Role of Chemical Engineers-Industry Expectations by Dr. Y. Manohar, Former director of Vizag Steel Plant, Visakhapatnam.	30.09.14	II&III BTech	38
3	Chemical Engineering & Biotechnology: A Production units meet for new challenges by Dr. Khannan Pakshirajan, Department of Biotechnology, IIT, Guwahati.	12.12.14	II, III & IVBTech	50
4	Scope of CRE in Chemical Process Industries by Prof. K.Krishnaiah, IIT Chennai.	28.12.14	III & IV BTech	53
5	Hobby Projects Exbhititon ( 15 Models)	23.02.15	II & III BTech	90
Acade	emic Year 2013-14			
1	Guest lecture on "Applications for process simulators in chemical Engineering" by Mr. A. Sarath Babu, Associate Professor, NIT – Warangal.	27-07-	III & IV CHEM	133
2	Guest lecture on "Chemical	17-12-	II CHEM	35

	Engineering opportunities in Energy	2013		
	Sector" by Mr B.Ravikumar, Manager operations IOC Delhi.			
3	Guest lecture on "What is your scale in Chemical Engineering? Covering the past and future of Chemical Engineering" by Prof.K.Krishnaiah, Emeritus Professor, IIT-Chennai.	22-03- 2014	III & IV CHEM	130
Acade	emic Year 2012-13			
1	Guest lecture on "Automation in process industries: Why? What for?" by Dr.K.Ravindranath, Sr.Principal Scientist, IICT,Hyd.	13-07- 2012	III & IV CHEM	94
2	Guest lecture on "Power generation in process industries" by Dr.R.Natarajan, Sr.Professor, VIT, Vellore.	17-08- 2012	IV CHEM	22
3	Guest lecture on "Water foot print in day to day life" by Dr.P.Rajendra Prasad, Sr.Professor, AUCE.	18-08- 2012	IV CHEM	40
4	Guest lecture on "Advanced drug delivery" by P.V.Srilakshmi, Assoc.Prof, NIT – Warangal.	06-02- 2012	III & IV CHEM	86
Acade	emic Year 2011-12			
1	Guest lecture on "Thermal Coatings of Aluminum Alloys" by Dr. P.Sridhar, QC Engineer, VTC Surface Technology, Anandapuram.		II & III CHEM	107
2	Guest lecture on "Water and Waste Water Treatment" by Mr.N.Srinivasa Rao, GHAIL, Hyderabad.	01-10-11	IV CHEM	28
3	Guest lecture on "Bio Technology Re engs Technology" by Dr. B.Sarva Rao, Assoc. Prof., MVGR College of Engg.	10-02-12	III CHEM	62
4	Guest lecture on "Importance Analytical Chemistry in Chemical Engg" by Dr. P.Nageswara Rao, Prof, NIT – Warangal.	03.03.12	II CHEM	62
Acade	emic Year 2010-11			
1	Guest lecture on "Azeotrope Distillation and Selection Of Entrainer" by Dr. B. Srinivas, Professor, G.V.P. College of Engineering, vsp.	06.08.201	IV CHEM	60

2	Guest lecture on "Computational Fluid Dynamics" by Dr. B. Srinivas, Professor, G.V.P. College of Engineering, vsp.		III & IV CHEM	123
3	Guest lecture on "Chemical Engineering Mathematics" Dr. S. V. Naidu, Sr.Professor, AUCE.	25-09-10	IV CHEM	62
4	Guest lecture on "Distribution Coefficient in Mass Transfer", by Mr. R. Sadanandam , Scientist-G BARC, Mumbai.		III & IV CHEM	86
5	Guest lecture on "Solvent Extraction by Hydrometallurgy", by Mr. R. Sadanandam , Scientist-G BARC, Mumbai.		II, III & IV CHEM	177

## **Student Workshops:**

S.No	Student Seminars	Date	Participants	No. of participant s
Acade	mic year 2014-15			
1	STEPCONE-15	30 <sup>th</sup> and 31 <sup>st</sup> January, 2015	Other College Students & Internal students	50
Acade	mic year 2013-14			
1	STEPCONE-14	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	50
Acade	mic year 2012-13			
1	STEPCONE-13	4 <sup>th</sup> & 5 <sup>th</sup> January, 2013	Other College Students & Internal students	36
Acade	mic year 2011-12			
1	STEPCONE-12	6 <sup>th</sup> & 7 <sup>th</sup> January, 2012	Other College Students & Internal students	84
Acade	mic year 2010-11			
1	STEPCONE-11	7 <sup>th</sup> & 8 <sup>th</sup> January, 2011	Other College Students & Internal students	110
2	Urban Waste Management- Current Challenges and Mitigation	10 <sup>th</sup> - 11 <sup>th</sup> December,10	Other College Students & Internal students	132

## 33. List the teaching methods adopted by the faculty for different programmes.

Some of the teaching methods adopted by the faculty are:

- Tutorial is followed apart from the curriculum for the benefit of the Students
- Lecturing, Working models, Demonstration, Animation, Industrial visit, Seminars, Project etc
- Teaching aids: Black Board, LCD Projector etc.
- Group discussions
- LAN Based Courses
- Remedial Classes for Slow learners and backlog students

## 34. How the department does ensures that the programme objectives are constantly met and learning outcomes monitored.

Achievement of the POs mechanisms consists of following processes

#### **Internal assessment tools:**

- Assignments
- Mid examinations
- Quiz examinations
- Daily assessment of Laboratory performance
- Internal & External laboratory exams
- End-semester theory examinations

#### **External assessment tools:**

- Feedback from the stake holders.
- Feedback is collected from the employers through placement cell.
- Through governing council constituted at institutional level.
- Through publications/presentations in conferences.

#### Achievement of the Learning outcomes consists of following processes

- The process recommended in NBA's OBE is being followed to attain this objective
- 35. Highlight the participation of students and faculty in extension activities.
  - NSS activities
  - Participating in community services through GMR Varalakshmi Foundation, Rajam

• Creating Awareness on various issues and job opportunities for rural people through GMR Community Radio (FM 90.4 MHz)

Some of recent extension activities by students and faculty

S.No	Name of Extension activity	Date
1	Pulse Polio Immunization Programme	19-01-2014
2	Republic Day Celebrations	26-01-2014
3	World Cancer Day	04-02-2014
4	Blood Donation Camp	14-03-2014
5	Voters Awareness Rally	05-04-2014
6	Mega Rangoli for awareness of the electoral Voting.	03-05-2014

Some of recent Community services through GMR Varalashmi Foundation, Rajam,

S. No.	Name of the Activity	Date
1	Joy of Giving	Every Monday
2	Book Donation	24-07-2013
3	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, Dolapeta (V), Rajam	27-12-2013
4	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, A.V. Puram (V), Rajam	28-12-2013

### 36. Give details of "beyond syllabus scholarly activities" of the department.

S.No	Activity	Date	Participant s	No. of particip ants
Acaden	nic year 2014-15			
1	Just click it	09.07.2014	III BTech	40
2	Debate	18.07.2014	III BTech	49
3	Group Discussion	24.07.2014	II BTech	30

4	Technical Quiz	11.08.2014	III BTech	25
5	Matralogics	21.08.2014	II BTech	28
6	Technical Quiz	08.09.2014	III BTech	15
7	Matralogics	13.09.2014	II BTech	17
8	Elocution	20.10.2014	II BTech	18
9	Paper presentations	22.10.2014	II BTech	22
10	Guess it Out	08.12.2014	II BTech	22
11	Group Discussion	22.12.2014	II BTech	26
12	CHEMICHUNT	24.01.2015	II BTech	25
13	Seminar on Internship Experience	07.02.2015	II BTech	15
14	Challenging Quiz	12.02.2015	II BTech	31
15	Spot acting	17.03.2015	II BTech	23
16	Beg, Borrow, Steal	23.04.2015	II BTech	29
Acade	mic year 2013-14		l	
1	My Reasoning"	20-07-2013	CHEM	20
2	Elocution"	29-07- 2013	CHEM	62
3	"Essay Writing"	01-11- 2013	CHEM	27
4	"Group Discussion"	16-11- 2013	CHEM	50
5	Mock press	22-03-2014	CHEM	38
6	Mock uno	11-2-2014	CHEM	47
7	Quiz	6-2-2014	CHEM	32
8	Logos Identification	11-3-2014	CHEM	27
9	Name the picture	29-04-2014	CHEM	25
Acade	mic year 2012-13			
1	"Grand Event"	04-08 2012	CHEM	57
2	"Story Making"	25 -08-2012	CHEM	64

3	"Group Discussion"	28-08- 2012	CHEM	30
4	"Teacher's Day"	05-09 2012	CHEM	111
5	"Engineer's Day"	15-09- 2012	CHEM	46
6	"My College! My Festival!!"	22-09- 2012	СНЕМ	47
7	"Ghajini"	29-092012	CHEM	59
8	"Shock Laga Kya"	06-10-2012	CHEM	50
9	Technical valentine	16.02.2013	CHEM	35
10	Ten tech tasks	23.03.2013	CHEM	42
11	No caption Only action	1.03.2013	CHEM	38

Academic year 2011-12					
1	"Group Discussion"	18-06- 2011	CHEM	36	
2	"Documentaries"	02-07- 2011	CHEM	50	
3	"Add making"	16-07-2011	CHEM	39	
4	"Quiz"	27-08- 2011	CHEM	42	
5	"Cricket match"	03-09-2011	CHEM	48	
6	"Brain Twisters"	03-12-2011	CHEM	45	
7	"Collage"	21-01-2012	CHEM	53	
8	"Poster presentation"	25-06- 2011	CHEM	43	
9	"Debate"	20-08- 2011	CHEM	54	
10	"Interact"	17-09- 2011	CHEM	37	
11	"Logo presentation"	24-09- 2011	CHEM	46	
12	"Kissa"	17-12- 2011	CHEM	31	
Acaden	nic year 2010-11				
1	"Reporters and Readers"	26-06- 2010	CHEM	30	
2	"Debate"	03-07- 2010	CHEM	41	
3	"Add making"	17-07- 2010	CHEM	56	
4	"Cricket match"	24-07- 2010	CHEM	32	
5	"Debate"	21-08- 2010	CHEM	52	
9	"Cricket match"	24-08- 2010	СНЕМ	32	

10	"Debate"	21-08- 2010	CHEM	52	
----	----------	-------------	------	----	--

## 37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

- All the programmes are recognized by AICTE
- First Accreditation by National Board of Accreditation for 3 Years F.No. NBA/ACCR-836/2006 Dt. 29.03.2007.
- Latest Accreditation by National Board of Accreditation for 2 Years File. No.11- 46/2010/NBA, Dt: 14.08.2013
- Institute is accredited by NAAC from 2010, Dt.28.03.2010 with A Grade

## 38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

#### **Strengths**

- 1. All the faculty members are ratified by JNTU K, Kakinada.
- 2. Faculty having good number of Publications & consultancy projects
- 3. Add on Courses offered to students to improve employability
- 4. Availability of chemical engineering application related softwares such as Aspen, GAMs, MAT LAB etc.
- 5. University ranks bagged by students.

#### Weaknesses

- 1. Linkage with Industry
- 2. Laboratory facilities for advanced R&D
- 3. Number of externally-funded projects
- 4. Mathematical modeling and software skills of faculty
- 5. Average English communication skills of the students

### **Opportunities**

- 1. Attracting new funded projects may be possible as faculty involved in active research
- 2. Pursuing master's and doctoral research with available infrastructure
- 3. Collaboration with industry locating around the institute

- 4. Training of industry personal
- 5. Availability of latest software can stimulate the continuous learning process of faculty/ students & hence can cater to the requirements of industry.

#### **Challenges**

- 1. Filling up the sanctioned strength of students
- 2. Attracting meritorious students
- 3. Ensuring on-campus placement opportunity
- 4. Meeting the latest industrial development requirements.
- 5. Molding of students/ faculty to the emerging technological changes

### 39. Future plans of the department.

- To develop the department as a Center of Excellence.
- To promote quality research and consultancy
- To organize a two day national level conference
- To organize FDP on Sustainable environmental engineering practices.

### **E2.** Evaluative Report of Civil Engineering

## 1. Name of the Department & its year of establishment

Civil Engineering &Established in the year 2002

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

**UG:** Civil Engineering

**PG: Transportation Engineering** 

## 3. Interdisciplinary courses and departments involved

S. No	Interdisciplinary courses	Departments involved
1	Elements of Mechanical Engineering	MECH
2	Elements of Electrical Engineering	EEE
3	Fundamentals of Computer Programming	CSE, IT
4	Electronic Devices and Circuits	ECE
5	Basic Prime Movers and Pumps	МЕСН
6	Complex analysis	BS&H
7	Digital Electronics and Microprocessor	ECE
8	Digital Signal Processing	ECE
9	Embedded Systems (Elective)	ECE
10	Cloud computing(Open elective)	CSE,IT
11	Fundamentals of Global Positioning Systems (Open elective)	ECE
12	Industrial safety and Hazard management(Open elective)	СНЕМ
13	Operation Research(Open elective)	MECH
14	Soft computing (Open elective)	CSE, IT
15	Environmental studies	СНЕМ
16	Managerial Economics and Financial Analysis	BS&H
17	Fluid mechanics and hydraulics	MECH

18	Switching theory and logic design	ECE
19	Pulse and digital circuits	ECE
20	Complex variables and Statistical methods	BS&H
21	Linear and digital IC applications	ECE
22	Microprocessor and Micro controllers	ECE
23	Management science	MECH
24	Computer organization	CSE,IT
25	Optimization Techniques	MECH
26	AI Techniques	CSE,IT

## 4. Annual/ semester/choice based credit system

Semester based credit system

## 5. Participation of the department in the courses offered by other departments

Title(s) of the course(s)	To which department Programme	Programme UG/PG	Semester
Engineering Drawing	Civil, ECE, EEE, CSE, IT, CHEM, PE	UG	I
Engineering Mechanics	ME Dept.	UG	III

## 6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

	Sanctioned	Filled
Professor	1	2
Associate Professors	4	2
Asst. Professors	7	9

## 7. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Name	Qualifica tion	Designat ion	Specialization	No. of Years of Experi ence	No. of Ph.D. students guided in the last 4 years
Dr.G.VenkataRao	Ph.D	Professor	Water Resource	16	
			Engineering	, and the second	

Name	Qualifica tion	Designat ion	Specialization	No. of Years of Experi ence	No. of Ph.D. students guided in the last 4 years
Dr. R.Subramanyam	Ph.D	Professor	Environmental	20	v
			Engineering		
Mr.V.K.Chakravarthi	M.Tech	Assoc.Pr of	Geo-technical Engg.	19	
Mr.J.VenkateswaraRao	M.Tech	Assoc.Pr of	Structural Engg.	10	
Mr. K.S.B.Prasad	M.Tech	Asst.Prof	Transportation Engg.	6	
Mr. K.Gopisankar	M.E	Asst.Prof	Structural Engg.	6	
Mr. S.S.G.prasad	M.Tech	Asst.Prof	Geo-technical Engg.	5	
Mr. R.SrinivasaRao	M.Tech	Asst.Prof	Engineering Geology	5	
Mr. Harish M	M.Tech	Asst.Prof	Hydraulics	5	
B. SomeswaraRao	M.Tech	Asst.Prof	Transportation Engg.	1	
T.Lakshmayya	M.Tech	Asst.Prof	Construction	0	
A. SatyaSunitha	M.Tech	Asst.Prof	Water Resources Engineering	0	
T. JnananandaRao	M.Tech	Asst.Prof	Geotechnical Engineering	2	
Mr.Batchu PRVS Priyatham	M.Tech	Asst.Prof	Construction	1.2	

## 8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

### 9. Programme-wise Student Teacher Ratio

UG: 15:1 PG: 12:1

## 10. Number of academic support staff (technical) and administrative

#### staff: sanctioned and filled

	Sanctioned	Filled
Lab instructors	6	5
Assistants	2	2

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

Nil

## 12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Academic Year	Agency	Project Name	Grant Received in Rs. Lakhs
	BRNS,	Hydro geological characterization	34.48
2014-15	Mumbai	and Ground Water Modeling for	
		Kovvada region.	
2013-14	DST	Ground water Modeling for hydro geological characterization of Hazardous substance release sites –A case study of PydibhimavaramIndustrial area, Srikakulam, A.P	20.44
2012-13	AICTE	Advanced Surveying Lab( MODROBS)	14.90
2010-11	AICTE	Condition assessment and retrofitting of Concrete Structures(SDP)	6.29
2009-10	AICTE	Coastal zone problems and their remedies	6.60
2009-10	DST	Modeling of saltwater intrusion for an effective management of coastal aquifers: A case study of Srikakulam Coastal belt in A.P.	18.36
		Total Grant received	101.07

## 13. Research facility / centre with

• State recognition Nil

• National recognition Nil

• International recognition Nil

#### 14. Publications:

\* Number of papers published in peer reviewed journals (national / international)

Publications	Academic Year					
Publications	2014-15	2013-14	2012-13	2011-12	2010-11	
Research papers published in Journals (National, International)	15	11	6	4	11	
Papers presented in the proceedings of Seminars (National, International)	4	3	2	2	7	

\* Monographs
\* Chapter(s) in Books
\* Editing Books
: Nil

\* Books with ISBN numbers with details of publishers: Nil

\* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

	2010-11	2011-12	2012-13	2013-14	2014-15
Citation Index – range / average	-	-	-	0-1	0-2
SNIP range / average	0.042- 0.538	0	0	0-0.4010	0-0.284
SJR range / average	0.11- 0.391	0	0	0-0.157	0-0.16
Impact factor – range / average	0.89-1.2	0	1.287-1.69	0.346-2.375	0.38-2.8
h-index range / average	-	-	-	-	-

- 15. Details of patents and income generated:-Nil-
- 16. Areas of consultancy and income generated:-

Academic Year	Areas for consultancy	Amount
2010-2011	Structural Engineering	18,800/-
2010-2011	Geo technical Engineering,	1,51,000/-
2011 2012	Structural Engineering	41,400/-
2011-2012	Geo technical Engineering,	95,900/-
	Structural Engineering	1,01200/-
2012-2013	Geo technical Engineering,	43,400/-
	Environmental engineering	2000/-
	Structural Engineering	76,050/-
2013-2014	Geo technical Engineering	54,000/-
2013-2014	Transportation Engineering	43,000/-
	Environmental Engineering	1000/-
	Total amount earned in the last four years	6,27,750/-

#### 17. Faculty recharging strategies

Workshops/seminars/conferences/FDP attended by faculty during the academic years:

2014- 2015 : 2 2013-2014 : 2 2012- 2013 : 2 2011- 2012 : 1 2010- 2011 : 9

#### 18. Student projects

- Percentage of students who have done in-house projects including inter-departmental
- Percentage of students doing projects in collaboration with industries / institutes

		Students who have done projects			
Academic year	Programme	In-house projects including interdepartmental	In collaboration with industries or institutes		
2010-11	B.Tech (CE)	100%	-Nil-		
2010-11	M.Tech (TE)	80%	20%		
2011-12	B.Tech (CE)	100%	-Nil-		

	M.Tech (TE)	100%	-Nil-
2012-13	B.Tech (CE)	100%	-Nil-
	M.Tech (TE)	100%	-Nil-
2013-14	B.Tech (CE)	100%	-Nil-
2014-15	B.Tech (CE)	100%	-Nil-

### 19. Awards / recognitions received at the national and international level by

- Faculty: Nil
- Doctoral / post-doctoral fellows:Nil
- Students:

Academic Year	Awards / recognitions received at the			
readenie rea	National level	International level		
2014-15	01			

# 20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

• Seminars/ Conferences/Workshops organized during the academic years are as follows

Academic Year	Seminars/ Conferences/Workshops organized (national / international)		
2014-15	01		
2013-14	00		
2012-13	00		
2011-12	01		
2010-11	01		

### 21. Student profile course-wise:

UG:

Name of the	Applications received	Selected		Pass percentage	
Course		Male	Female	Male	Female
2011-15	NA	56	15	92.8%	100%
2010-14	NA	51	20	68.62%	100%
2009-13	NA	41	17	70.7%	100%
2008-12	NA	46	18	93.5%	100%

Name of the	Applications	Selected		Pass percentage	
Course	received	Male	Female	_	Female
2011-15	NA	56	15	92.8%	100%
2007-11	NA	51	17	94%	100%

### PG:

Name of the	Applications	Sele	cted	Pass per	centage
Course	received	Male	Female	Male	Female
2012-14	NA	9	2	89	100
2011-13	NA	4	3	75	33
2010-12	NA	3	2	100	100

### 22. Diversity of students

	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
HG	2014-15	60	100	0	0
UG	2013-14	60	98.6	1.4	0
	2012-13	60	100	0	0
	2011-12	60	98.4	1.6	0
	2010-11	60	98.5	1.5	0

	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
	2014-15	11	91	9	0
PG	2013-14	15	100	0.00	0
	2012-13	12	83.33	16.67	0
	2011-12	7	83.33	16.67	0
	2010-11	6	83.33	16.67	0

# 23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

A.Y	2014-15	2013-2014	2012-2013	2011-2012	2010-11
GATE	6	12	12	4	2

### 24. Student progression

		Percenta	ge against	enrolled	
Student progression	2014- 15	2013- 14	2012- 13	2011- 12	2010- 11
UG to PG	3	6	17	15	7
PG to M.Phil.					
PG to Ph.D.					
Ph.D. to Post-Doctoral		-			
Employed	2014- 15	2013- 14	2012- 13	2011- 12	2010- 11
Campus selection	30	31	29	45	29
Other than campus recruitment					
Entrepreneurs					

### 25. Diversity of staff

Percentage of faculty who are graduates		
of the same parent university	8%	
from other universities within the State	50%	
from other universities from other States	42%	

## 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Number of Ph.D awards during the assessment period: 01

Dr. D. Ravi Prasad obtained Ph.D. from NIT WARANGAL in the A.Y 2012-13

#### 27. Present details about infrastructural facilities

a) Library (Department Library)

Books	Journals/Magazines/Perio dicals		CDs, VCDs and	Others
Doors	National	International	Multimedia	
250	1	0	39	90 Projects

b) Internet facilities for staff and students

Internet facilities : 100 MBPS

(BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c) Total number of class rooms :03
d) Class rooms with ICT facility : 02
e) Students' laboratories :07
f) Research laboratories :01

# 28. Number of students of the department getting financial assistance from College.

Nil

# 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

Yes, there is a periodical exercise undertaken before the development of new program. Methodology is summarized below.

- Getting Feedback from all stakeholders viz.industry, parents, students and faculty
- Assessing the availability of job opportunities in industry, research and academia

• Collecting information about emerging areas of engineering growth and development

#### 30. Does the departments obtain feedback from

## a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BOS meetings. Faculty plans for the industrial tours for giving practical insight for some of topics of course, which will be approved by HoD. Faculty also has freedom to propose new evaluation procedure particular subjects, where HoD is bringing the proposal to the Academic council and get it approved.

### b. Students on staff, curriculum as well as teaching-learningevaluation and what is the response of the department to the same?

Feedback will be collected from students twice in a semester i.e during mid-semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.

## c. Alumni and employers on the programmes and what is the response of the departments to the same?

#### Alumni Feed-back/Alumni Survey:

Institute conducts Alumni meets regularly (at least once in a year) at various places in the country. Few of our alumni are successful in establishing and running consultancy firms, software companies, Power plants, service and manufacturing industries. The alumni survey is conducted to obtain feedback regarding their employment, higher studies, suggestions for improvement of institution etc. The inputs

from the alumni are used in curriculum design, best practices, programme objectives etc. Alumni survey is conducted during alumni meets, visits to institution, stake holders meeting etc. Institute has separate alumni portal to facilitate the alumni interaction and updation of alumni database. Board of Studies of each department has an alumni nominee.

#### **Employer feedback/Employer Survey:**

Eminent Persons from the industry having keen interest in academics are inducted in the academic Council (AC) and in the IQAC of the institution. Valuable suggestions are taken for the betterment of the institution from time to time.

A survey questionnaire is prepared for the employer to assess the performance of the graduates recruited in different industries. This questionnaire is circulated among the employers through emails and social networking sites and responses are received. These responses are analyzed to assess the technical knowledge and leadership skills of the graduates of this institution. The results from the above feedbacks are analyzed and discussed in the department meetings. The feedback taken is used to make necessary improvements in the curriculum, teaching-learning process, up gradation of the facilities etc. Institute encourages Industry-Institute Interaction which will in turn useful in curriculum design and development.

#### 31. List the distinguished alumni of the department (maximum 10)

Sl. No.	Name of organization	Name of Student	Batch
1	Sr Quantity surveyor, Abu Hatim Company LLC	Suresh Chitti	2002-06
2	Tender Manager,Becsa general Contracting LLC, OMAN	U.V Suresh	2002-06
3	Faculty, Wolo University, Ethiopia	P.Satish	2003-07
4	Assistant Manager(Civil), SBI, Hyderabad	K.SrinivasaRao	2003-07
5	AEE, Irrigation Department, Govt of A.P	B.Durgaprasad	2005-09
6	AEE, Irrigation Department Govt of A P	S.Aruna	2006-10

7	Assistant Professor, GayatriVidyaParishad, VSP: A.P	D. VinayAnand	2006-10
8	PG student, West Virginia university University,USA	K.Venkatesh	2009-13
9	Graduate engineer trainee L & T	P.Santhosh Kumar	2010-14
10	Graduate engineer trainee GMR Airport	T.Sindhusha	2010-14

# 32. Give details of student enrichmentprogrammes (special lectures / workshops / seminar) with external experts.

A.Y.	Торіс	Name of Resource Person	Affiliation	Duration
	Ground water and Management & Hydro- Chemical Analysis	Sri D.N.Raju	Depity Director (Retd.), Stat Ground Water Dept., A.P	20.09.14
	Project Management and high performance Concrete Mix design & Environment Planning for Projects	Mr. NagarjunaTadury	Vice President GMR Group	23.12.14
2014- 15	Fiber Reinforced Concret – Recron Experience in developing New India	Mr. K.R.S.Narayana	M.Tech –Lead Univ. (U.K), Head of Business Development- Recron Business RelinaceIndustriesLtd.	29.12.14
	Airports and Automated People Movers	Dr. Murthy V.A.Bondada	Vice Oresident, Transportation, EPIC Engineering and Consulting Group, LLC, Winter Springs, FL, USA	07.02.15
	Project Management	Mr. VenkataGirish	Vice President GMR Group	18.02.15
2012	How to read News Paper & Importance	Mr. K. Ravi Chandra Rao	Indian Express	01.02.14
2013- 14	Motivational talk	Dr. B.V. Pattabhi Ram	PrasanthiCounselling& HRD Center	10.03.14
	Structural Engineering	Dr. D. Ramaseshu	NITW	26.04.14
2012- 13	Rain Water Harvesting and Artificial Recharging	Dr. T.V.Praveen	A.U.College of Engineering, Visakhapatnam	13.07.12

	Experiences in Civil Engineering Projects	B.Suresh Kumar	Chief Construction Engineer, DRDO, Secunderabad.	15.09.12
	Structures in soft  Marine clays –  Problems and  Solutions	Dr. D. KoteswaraRao	Professor, Department of Civil Engineering, JNTUK, Kakinada	03.12.12
	Indian Road Net Work Opportunities in Highways Sector Expectations of Industry	Mr. MLNB. Prasad	Vive – President, GMRVF	15.03.13
	Management Planning and Control Systems (This will be helpful to give an insight into managing Large projects with less time and economy).	Mr. NagarjunaTadury	VP, Project management	22.03.13
	Pavement Evaluation and Strengthing	Prof. S.K.Rao	GMR Infra, Hyderabad	30.06.11
	Pavement Design	Prof. S.K.Rao	GMR Infra, Hyderabad	30.06.11
	GIS, Remote Sensing and AutoCad	Sri. K. Srinivas	Techno Soft, Vizag	13.09.11
	Motivation Skills	Sri. YandamooriVeere ndranath	Freelancer, Hyderabad	26.12.11
2011-	Motivation Skills	Dr. Pattabhiram	Freelancer, Hyderabad	27.12.11
12	Recent Developments in Civil Engineering	Dr. Prasad Rao	Associate Professor& Chair, CSU Fullerton, USA	25.01.12
	Design of Reservoir and Canal System of Polavaram Project	Er. D.K. visvesvaraRao	Executive Engineer(Irrigation & CAD), Visakhapatnam	22.03.12
	Application of Civil Engineering Principles to the solution of community problems	Sri M.Balaji	General Manager, GMRVF CSW	22.03.12
2010- 11	Industrial Waste Disposal Options	Dr.R.S. Sasidhar	Adjunct Professor, GMRIT	04.01.10

Ground Improvement	Dr. G.V. Rao	Distinguished	05.01.10
/ Geosynthetics		Professor, GMRIT	00.01.10
Landfills – An	Dr. G.V. Rao	Distinguished	05.01.10
Overview		Professor, GMRIT	03.01.10
Carrer Prospects for			
Engineers in	Sri. K.S.G.Raman	COD, GMR Group	15.07.10
Infrastructure Sector		_	
Applications of	Sri. Mallikarjuna	Soft Tech Engineers	00 12 10
STRUDS Software	Reddy	Pvt Ltd	09.12.10
CIC Amainstians in	Duof D Mollograph	AU College of Engg,	
GIS Applications in	Prof.P.Malleswara	Andhra University,	30.12.10
Civil Engineering	Rao	Visakhapatnam	
	Prof.P.Malleswara	AU College of Engg,	
Ocean Structures	Rao	Andhra University,	30.12.10
	Rao	Visakhapatnam	
Advanced			
Transportation	Dr. M.Amarnath	Professor, IIT,	04.03.11
Engineering and	Reddy	Kharaghpur	(FN)
Career Opportunities			, ,
Introduction to			
Transportation	Dr. M.Amarnath	Professor, IIT,	04.03.11
Engineering and	Reddy	Kharaghpur	(AN)
Career Opportunities			
Total Station	Mr. M. Harish	Assitant Manager,	05.03.11
Applications	Babu	AIMIL, Hyderabad	03.03.11

# 33. List the teaching methods adopted by the faculty for different programmes.

- Lecturing
- Demonstration
- Working models
- Industrial visits
- Seminars
- Project
- Tutorial classes where in the application of the concepts will be highlighted.
- Presentation of case studies using LCD.

# 34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

## Achievement of the POs mechanisms consists of following processes Direct assessment tools:

- Sessional examinations
- Comprehensive Quiz exam
- Daily assessment of Laboratory performance
- Internal & External laboratory exams
- End –semester theory examinations

#### **Indirect assessment tools:**

- Feedback from the stake holders.
- Feedback is collected from the employers through placement cell.
- Through governing counsel constituted at institutional level.
- Through publications/presentations in conferences.
- Each course coordinator is reviewing his objectives and outcomes through the performance of students after each sessional examinations.
   Based on this he may be making modifications for the next time course delivery.

## 35. Highlight the participation of students and faculty in extension activities.

#### **NSS** activities

- Participating in community services through GMR Varalakshmi Foundation, Rajam
- Creating Awareness on various issues and job opportunities for rural people through GMR Community Radio (FM 90.4 MHz)
- Some of recent extension activities by students and faculty

S.No	Name of Extension activity	Date
1	Pulse Polio Immunization Programme	19-01-2014
2	Republic Day Celebrations	26-01-2014
3	World Cancer Day	04-02-2014
4	BloodDonationCamp	14-03-2014
5	Voters Awareness Rally	05-04-2014
6	Mega Rangoli for awareness of the electoral Voting.	03-05-2014

Some of recent Community services through GMR VaralashmiFoundation, Rajam,

S. No	Name of the Activity	Date
1	Joy of Giving	Every Monday
2	Book Donation	24-07-2013
3	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, Dolapeta (V), Rajam	27-12-2013
4	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, A.V. Puram (V), Rajam	28-12-2013

## 36. Give details of "beyond syllabus scholarly activities" of the department.

- Add on Courses
- Industrial Visits

## 37. State whether the programme/ departments is accredited/ graded by other agencies. Give details.

- All the programmes are recognized by AICTE
- First Accreditation by National Board of Accreditation for 3 Years
- F.No.NBA/ACCR-836/2006 dt. 29.03.2007.
- Latest Accreditation by National Board of Accreditation for 2 Years
- File. No.11- 46/2010/NBA,dt: 01.02.2013

## 38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

#### **Strengths:**

- Consistent good academic performance of students.
- Consistent placement for the students every year.
- Good encouragement and support for the students aspiring for higher studies in their preparation for GATE, GRE, TOFEL.
- Qualified faculty from premium institutes.
- LAN Based Courses for all subjects available to students
- Add on Courses on advanced courses as per the industry need base
- Wi-Fi facility with e-learning resources on campus LAN and round the clock web connectivity

#### Weaknesses:

- Less number of senior faculty
- Low number of Consultancy projects
- Linkage with Industry needs to be strengthened
- Laboratory facilities need to be augmented for R&D, consultancy

services.

• High Attrition of faculty

#### **Opportunities:**

- Linkage with Industries in R&D, Consultancies
- Training of Industry personal
- Engaging more Internship Programs
- Contribution of Alumni towards Employability, sponsorship

#### **Challenges:**

- Quality intake of students
- Mushrooming of Civil Engnieering branch in surrounding colleges.
- Employability of all students

#### 39. Future plans of the department.

- To establish new research laboratory
- To introduce new PG Programme
- To increase intake in UG(Civil) Programme
- To conduct one International Conference
- Recognition from JNTU for R&D Centre.

#### E3. Evaluative Report of Computer Science and Engineering

Name of the Department & its year of establishment :
 Computer Science & Engineering and Established in the year 1997

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):

**UG: B.Tech. Computer Science and Engineering PG: M.Tech, Computer Science and Engineering** 

3. Interdisciplinary courses and departments involved:

Title(s) of the course(s)	Other department involved
Mathematical Methods	BS&H
Data Communication Systems	ECE
Microprocessors And Interface	ECE
Electronic Devices and Circuits	ECE
Digital Logic Design	ECE
Managerial Economics and Financial Analysis	BS&H
Micro Processors and Multicore Systems	ECE
Cloud computing(Open elective)	IT
Disaster management(Open elective)	СЕ
Fundamentals of Global Positioning Systems (Open elective)	ECE
Industrial safety and Hazard management(Open elective)	CHEM
Operation Research(Open elective)	MECH
Renewable energy sources(Open elective)	EEE

4. Annual/ semester/choice based credit system :

Semester based credit system

5. Participation of the department in the courses offered by other departments

Title(s) of the Courses (s)	To which Departments	Programme UG/PG
Object Oriented Programming	ECE, MECH	UG

Computer Programming	EEE, ECE,	CIVIL,	UG
	CHEM.		
Neural Networks& Fuzzy Logic	EEE		UG
Database Management	ECE		UG
Computer Networks	ECE		UG
Operating Systems	ECE		UG
Computer Organization	ECE, EEE		UG

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Designation	Sanctioned	Filled
Professors	02	01
Associate Professors	10	07
Asst. Professors	18	19

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil. etc.,)

Name	Qualifi cation	Designatio n	Speciali zation	No. of Years of Experience	No. of Ph.D., Studentsguided/gui ding for thelast 4 years
Dr.Srinivasa Prasad	Ph.D	Professor	CSE	22	04
Dr.SasankoSekharGa ntayat	Ph.D	Associate Professor	CSE	21	01
Dr. V.Sreerama Murthy	Ph.D	Associate Professor	CSE	14	
Mr. A. VenkataRamana	M.Tech	Associate Professor	CSE	15	
Mrs. R.Sivaranjani	M.Tech	Associate Professor	CSE	12	
Sri M.RamakrishnaMurt y	M.Tech	Associate Professor	CSE	15	
Mrs. G. Anuradha	M.Tech	Associate Professor	CSE	9	
Sri D.K.Bebarta	M.Tech	Associate Professor	CSE	15	
Sri Ch. SreenuBabu	M.Tech	Associate Professor	CSE	16	
Sri SrinivasanNagaraj	M.Tech	Assistant Professor	CSE	11	
Dr.Tarun Narayan Shankar	Ph.D	Assistant Professor	CSE	10	
Sri K. KoteswaraRao	M.Tech	Assistant Professor	CSE	9	

Mrs.S.VaniKumari	M.Tech	Assistant Professor	CSE	9	
Sri V.Srinadh	M.Tech	Assistant Professor	CSE	9	
Sri M. Balajee	M.Tech	Assistant Professor	CSE	8	
Mrs. I. Srilakshmi	M.Tech	Assistant Professor	CSE	11	
Mrs.M.VijayaBharat hi	M.Tech	Assistant Professor	CSE	10	
Mrs. K.Srividya	M.Tech	Assistant Professor	CSE	9	
Sri G. NarasingaRao	M.Tech	Assistant Professor	CSE	7	
Mr. G. Veerraju	M.Tech	Assistant Professor	CSE	8	
Mrs. K. Kanaka Vardhini	M.Tech	Assistant Professor	CSE	7	
Sri. K. LakshmanaRao	M.Tech	Assistant Professor	CSE	11	
Sri M. Rama Chandra	M.Tech	Assistant Professor	CSE	6	
Ms. G. Neelima	M.Tech	Assistant Professor	CSE	5	
Mr. P. Naga Raju	M.Tech	Assistant Professor	CSE	5	
Sri Ch.ChakradharaRao	M.Tech	Assistant Professor	CSE	3	
Mrs. K. Jayasri	M.Tech	Assistant Professor	CSE	5	
Mr.P.Muralidhara Rao	M.Tech	Assistant Professor	CSE	0.1	

8. Percentage of classes taken by temporary faculty – programme-wise information: **Nil** 

9. Programme-wise Student Teacher Ratio:

UG: 15:1 PG: 12:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	Filled
Technical	06	06
Non – Technical	03	03

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.:

Nil

**12.** Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received:

Nil

**13.** Research facility / centre with:

state recognition: Nil
 national recognition: Nil
 international recognition: Nil

#### 14. Publications:

\* number of papers published in peer reviewed journals (National / International)

Publications	Academic Year					
	2014-15	2013-14	2012-13	2011-12	2010-11	
Research papers published in Journals (National, International)	32	19	17	6	13	
Papers presented in the proceedings of Seminars (National, International)	13	16	8	34	11	

\* Monographs : Nil

\* Chapter(s) in Books:

Sl. N o	Name of the Faculty	Designati on	Title of the paper/Books	Seminar/C onference/ Journal/Bo oks	Publish er	ISBN
1	Dr. SasankoS ekharGan tayat	Associate Professor	Chapter 15 Application of Functional Approach to Lists for Development of Relational	Global Trends in Intelligent Computing Research and Developme	IGI Global, USA	ISBN13: 9 781466649 361, ISBN10: 1 466649364, EISBN13: 978146664

Model	nt	9378
Databases and		
Petri Net		
Analysis (pages		
407-444)		

Editing Books : Nil
Books with ISBN numbers with details of publishers

Sl.N o	Name of the Faculty	Design ation	Title of the paper/Books	Semin ar/Co nferen ce/ Journ al/Boo ks	Publisher	ISBN		
1	Dr. T. N. Shankar	Asst. Profes sor	Neural Networks (2008)	Book	LaxmiPub licationsP vt. Ltd, New Delhi	978-81-318- 0466-7		
2			Network Security and Cryptography (2005)		The Hi- tech Publishers , Hyderabad	81-298- 0027-6		
3	Ms. R.	Associ		Associ ate	Web Technology (2010)		ReemPubl ications, New Delhi	ISBN: 9788183511 124
2	Sivaranjani	Profes sor	Information Security (2007)	Book	The Hi- tech Publisher, Hyderabad			
3			Advanced Data Structures and Algorithms (2005)		The Hitech Publishers ,Hyderaba d			
4	Mr. M.Ramakris hna Murthy	Associ ate Profes sor	Introduction to Data Mining And Softcomputing Techniques (January 2015)	Book	University Science Press (LaxmiPu blications Pvt. Ltd, New Delhi)	978-93-838- 2840-1		

\* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) –  $\mathbf{0}$ 

	2010- 11	2011- 12	2012- 13	2013-14	2014-15
Citation Index – range / average	1-3	1-3	1-5	1-6	1-5
SNIP	0	0	0	0	0
SJR	0	0	0	0	0
Impact factor – range / average	0.796	0.93	1.45	1.889	3.85
h-index	-	-	-	22	11

- 15. Details of patents and income generated : Nil
- 16. Areas of consultancy and income generated : Nil
- 17. Faculty recharging strategies
  - workshops/seminars/conferences/FDP attended by faculty during the academic year's:

2014- 2015 :18 2013-2014 :19 2012- 2013 : 40 2011- 2012 : 56 2010- 2011 : 26

#### 18. Student projects

- o Percentage of students who have done in-house projects including inter-departmental:
- Percentage of students doing projects in collaboration with industries / institutes:

		Students who ha		
Academic year	Programme	In-house projects including inter- departmental	In collaboration with industries / institutes	
2014-15	B.Tech. (CSE)	100%	-Nil-	
2014-13	M.Tech. (CSE)	100%	-Nil-	
2013-14	B.Tech. (CSE)	100%	-Nil-	
2015-14	M.Tech. (CSE)	100%	-Nil-	
2012-13	B.Tech. (CSE)	100%	-Nil-	

	M.Tech. (CSE)	100%	-Nil-
2011-12	B.Tech. (CSE)	100%	-Nil-
2011-12	M.Tech. (CSE)	100%	-Nil-
2010-11	B.Tech. (CSE)	100%	-Nil-
2010-11	M.Tech. (CSE)	100%	-Nil-

- 19. Awards / recognitions received at the national and international level by
  - o Faculty: 01(Infosys Campus Connect-Hyderabad)
  - o Doctoral / post doctoral fellows : 02

## O Students: TATA Crucible Quiz – Runner up,CSI Best Performance

Academic Year	Awards / recogni	tions received at the		
Academic Tear	National level	International level		
2014-15	08	Nil		
2013-14	13	Nil		
2012-13	07	Nil		
2011-12	05	Nil		
2010-11	07	Nil		

20. Seminars/ Conferences/Workshops organized and the source of funding (National /International) with details of outstanding participants, if any.

Academic Year	Seminars/ Conferences/Workshops	Source of
	organized (National /	Funding
	International)	
2010-11	02	Institute
2011-12	02	Institute
2012-13	02	Institute
2013-14	01	Institute
2014-15	01	Institute

### 21. Student profile course-wise:

Name of the Course: B.Tech. Computer Science & Engineering

Academic year	Applications received	Selected		Pass p	ercentage
year		Male	Female	Male	Female
2011-15	NA	73	64	72.6	93.75
2010-14	NA	88	52	88.10 %	90.38 %
2009-13	NA	59	39	86.44 %	92.31 %
2008-12	NA	79	48	91.13 %	93.75 %
2007-11	NA	88	46	90.91 %	93.48 %

Name of the Course: M.Tech. Computer science & Engineering

Academic	Applications received	Selected		Pass p	percentage
year		Male	Female	Male	Female
2012-14	NA	9	7	88.89	100
2011-13	NA	10	5	90	100
2010-12	NA	4	3	100	100
2009-11	NA	13	4	100	100

### 22. Diversity of Students

	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
	2014-15	180	95.63	4.4	0
UG	2013-14	166	96.38	3.62	0
	2012-13	130	94.61	5.39	0
	2011-12	133	97.81	2.19	0
	2010-11	140	97.50	2.50	0

	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
_ ~	2014-15	18	100	0	0
PG	2013-14	18	100	0	0
	2012-13	18	100	0	0
	2011-12	18	100	0	0
	2010-11	18	100	0	0

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Academic Year	No. of the students	No. of the students
Academic Tear	Qualified in GATE	Qualified in GRE
2014-15	02	05
2013-14	07	-
2012-13	05	01
2011-12	18	02
2010-11	17	-

### 24. Student progression

Student progression	Percentage against enrolled					
UG to PG						
PG to M.Phil.			•			
PG to Ph.D.						
Ph.D. to Post- Doctoral						
Employed	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
Campus selection	64	50	37	74	85	45
Other than campus recruitment						
Entrepreneurs	-		-	-	-	-

### 25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	Nil
from other universities within the State	76.93 %
from other universities from other States	23.07

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period. 01

#### 27. Present details about infrastructural facilities

a. Library

Books	Journals//Magazines/Periodicals		CDs, VCDs and	Others
DOOKS	National	International	Multimedia	Others
693	13	0	254	200 Project Books

b. Internet facilities for staff and students: 100 MBPS

(BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c. Total number of class rooms :10

d. Class rooms with ICT facility :08

e. Students' laboratories :05
Programming Lab, Networks Lab, Project Lab, CA Lab, CSDT Lab.

f. Research laboratories :CSDT

- 28. Number of students of the department getting financial assistance from College. –Nil-
- 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
  - Getting Feedback from all stakeholders viz. industry, parents, students and faculty
  - Assessing the availability of job opportunities in industry, research and academia
  - Collecting information about emerging areas of engineering growth and development
- 30. Does the department obtain feedback from
  - a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BOS meetings.

b. Students on staff, curriculum as well as teaching-learningevaluation and what is the response of the department to the same?

Feedback will be collected from students twice in a semester i.e during mid semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.

c. Alumni and employers on the programmes and what is the response of the department to the same?

#### Alumni Feed-back/Alumni Survey:

Institute conducts Alumni meets regularly (at least once in a year) at various places in the country. Few of our alumni are successful in establishing and running consultancy firms, software companies, Power plants, service and manufacturing industries. The alumni survey is conducted to obtain feedback regarding their employment, higher studies, suggestions for improvement of institution etc. The inputs from the alumni are used in curriculum design, best practices, programme objectives etc. Alumni survey is conducted during alumni meets, visits to institution, stake holders meeting etc. Institute has separate alumni portal to facilitate the alumni interaction and updation of alumni database. Board of Studies of each department has an alumni nominee.

#### Employer feedback/Employer Survey:

Eminent Persons from the industry having keen interest in academics are inducted in the academic Council (AC) and in the IQAC of the institution. Valuable suggestions are taken for the betterment of the institution from time to time.

A survey questionnaire is prepared for the employer to assess the performance of the graduates recruited in different industries. This questionnaire is circulated among the employers through emails and social networking sites and responses are received. These responses

are analyzed to assess the technical knowledge and leadership skills of the graduates of this institution. The results from the above feedbacks are analyzed and discussed in the department meetings. The feedback taken is used to make necessary improvements in the curriculum, teaching-learning process, up gradation of the facilities etc. Institute encourages Industry-Institute Interaction which will in turn useful in curriculum design and development.

#### 31. List the distinguished alumni of the department

S.No	Name of the student	Designation	Organization
1	MdFazlorRehman	Sr.Manager& BD	HCL Technologies Ltd.
2	HariKushnaKotni	Scientist	DRDO-Bangalore
3	M SangaMithra	Sr. Project Manager	Dell International Services, Hyderabad
4	S.Gopala Krishna	Project Director	Honeywell Technology &Solution Pvt Ltd., Bangalore
5	Murty VR Challa	Consultant	US Consultancy
6	S Varun	Project manager	Infosys
7	Satyaramya	AIX System administrator	IBM India pvt.ltd, Bangalore
8	SrikanthBaratam	Project Head	Flextronics
9	S Rahul Kumar	Sr. Manager	Convergys
10	Anantakumar Mishra	Sr. Project Leader	HCL

## 32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

A.Y.	Topic	Name of Resource Person	Affiliation	Duration
2014- 15	Research trends in machine learning	Sri Rao Vemuri	Professor, University of California, Davis, CA, USA.	5th July, 2014

	IBM Blue Mix	Mr. YUKTESH Ch.	IT-Specialist, IBM Academic Initiative - India From IBM, Hyderabad	9th & 10th Sept, 2014
	Introduction to Scripting Languages & HTML5	Mr. Sriharsha.V	Sr.Software Engineer, IBM – Visakhapatnam.	1st Nov. 2014
	Introduction to HTML5 and CSS3	Mr. G. Srikanth	Technical Project Manager, GE India Exports Ltd., Hyderabad	20th Dec. 2014
	Trends in Security and Digital Forensics	Dr. A.S.N.Chakravar thy	Associate Professor, JNTU CE, Vizianagaram	12th July, 2013
	Games Theory - Games Indians Play	Sri. N.S. Murthy	GMR Family Business, GMR Group	17th July, 2013
	Awareness on IBM and the Software Technologies Used By IBM	Sri. MayankJha	Regional Manager (North & East) Career Education IBM India Pvt. Ltd. IBM Towers, NOIDA	23rd July, 2013
2013-	Talent Spirit on First Job Pointers to Students	Sri. Madhu Murthy Rolanki	Talent Sprint, Hyderabad	31st July, 2013
14	Mobility and its Applications	Mr. YUKTESH Ch.	IT-Specialist, IBM Academic Initiative - IndiaFrom IBM, Hyderabad	28th Nov. 2013
	Skills needed to excel in IT/ITES industry	Mr. RajavelSekaran,	Director – IBM Kenexa – IndiaFrom IBM, Vishakapatnam	23rd Dec. 2013
	Overview of SAP	Mr. M.J.R.K. Raju	SAP, Canada	22nd Jan. 2014
	BIG DATA ANALYTICS	Mr. PREMAL VASAVADA	AVP & Head - GMR Shared Services Center	18th Feb. 2014
	Kernel Methods Based Approach To Image	Dr. C. Chandra Sekhar	Professor, Dept of CSE, IIT - Madras	29th March 2014

	Classification And Retrievl			
	.Net Tech with MVC	Mrs. Bhavani	Team lead TCS, Hyd.,	9 <sup>th</sup> August, 2012
2012- 13	'Succeed' – a step by step approach	Mr. DebasishBiswas	Vice President & National Head- Institutional Alliance, Star TV	6 <sup>th</sup> October, 2012
	Pattern Software Architecture	Dr. K. R. V. Subramanian,	Adjunct Professor. IIIT, Bangalore	02 <sup>nd</sup> February, 2013
	Wireless Communications  Prof.S.Venkates warlu  Pattern Recognition  Dr.C.Krishna Mohan		Professor, KL University, Vijayawada	29.07.11
			Asst.Professor&Ho D-CSE, IIT, Hyderabad	01.10.11
2011- 12	Industry Expectations	Mr.JitendraGokh ale	Business Head, Persistent Systems Ltd.	14.10.11
	Image &Vedio Processing	Dr.UmaMudieng udi	Profesor In ECE Dept, BVBCET, Hubili	04.01.2012 &05.01.201 2
	Intruduction to Embedded Systems	Dr. Rajib Mall	Professer, IIT, Khargpur	17 <sup>th</sup> Feb, 2012
	Technology & Trends in Airports	Sri A.S.Viswanatha n	Global Head – Mobility, Siemens IT Solutions & Services	20/07/10
2010	Satellite Communications and Internetworking	Sri G.TirumalaRao	Assoc. Professor, Dept.of ECE, GVP College of Engg., Visakhapatnam	10/08/10
2010-	Overview of Embedded Systems	Prof.Rajeeb Mall	Professor – CSE, IIT Kharagpur	29/09/10
	User Interface Design	Dr. C.S.Reddy	Sr.Asst.Professor, Dept. of CSE, AU College of Engg., Visakhapatnam	05/10/10
	Data Warehousing – Challenges &	Sri G.V.Ramesh	AGM(IT), Visakhapatnam Steel Plant	04/12/10

Solution	ons			
Overvi Data Wareh	ew of ousing	Dr. D.V.L.N.Somay ajulu	Professor – CSE, NIT, Warangal	24/12/10

- 33. List the teaching methods adopted by the faculty for different programmes.
  - Tutorial is followed apart from the curriculum for the benefit of the Students
  - Lecturing, Working models, Demonstration, Animation, Industrial visit, Seminars, Project etc
  - Teaching aids: Black Board, LCD Projector etc.
  - Group discussions
  - LAN Based Courses
  - Remedial Classes for Slow learners and backlog students
- 34 How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Achievement of the POs mechanisms consists of following processes

#### **Internal assessment tools:**

- Assignments
- Mid examinations
- Quiz examinations
- Daily assessment of Laboratory performance
- Internal & External laboratory exams
- End-semester theory examinations

#### **External assessment tools:**

- Feedback from the stake holders.
- Feedback is collected from the employers through placement cell.
- Through governing council constituted at institutional level.
- Through publications/presentations in conferences.

#### Achievement of the Learning outcomes consists of following processes

- The process recommended in NBA's OBE is being followed to attain this objective
- 35 Highlight the participation of students and faculty in extension activities.
  - Blood Donation awareness Programme
  - Participating in community services through GMR Varalakshmi Foundation, Rajam
  - NSS activities

- Every Thursday is observed as a Pollution Free day.
- 36 Give details of "beyond syllabus scholarly activities" of the department.

### Organization of paper contests, design contests

S.No	Activity	Date	Participants	No. of participa nts
	Acader	nic Year 2014-1	15	
1	Mock TCS	14th July,14	CSE Students	113
2	Conspiracy	11th Oct, 14	CSE Students	75
3	Technical Seminar	06th Mar, 15	CSE Students	50
4	Debate	19th July,14	CSE Students	19
5	The Hunt	21st Aug, 14	CSE Students	24
6	Faculty Seminar	11th Sep, 14	CSE Students	30
7	Faculty Seminar	20th Sep, 14	CSE Students	30
8	Technico	25th Oct, 14	CSE Students	42
9	Guest Lecture	01st Nov, 14	CSE Students	30
10	Faculty Seminar	01st Nov, 14	CSE Students	30
11	Guest Lecture	20th Dec, 14	CSE Students	130
12	Faculty Seminar	22nd Dec, 14	CSE Students	30
13	Faculty Seminar	22nd Dec, 14	CSE Students	30
14	Logo Geek	27th Dec, 14	CSE Students	21
15	Logic Bite	24th Jan, 15	CSE Students	80
16	Mock Placement	19th Feb, 15	CSE Students	98
17	Seminar "Oracle and Industry outlook" by Mr Prakash Chandra Tiwari, Oracle India Ltd.,	18th March, 15	CSE Students	125

	Hyderabad.			
18	The Hunt	18th April, 2015	CSE Students	28
19	ZEN	23-08-2014	CSE Students	73
20	TAALASH	12.09.2014	CSE Students	61
21	EL INDIVIDUO	26-09-14	CSE Students	13
22	PUZZLE CRACKERS	31.10.14	CSE Students	50
23	NEUVO INICIO	7-03-15	CSE Students	36
24	CHASE IT OUT	04-04-2015	CSE Students	40
25	GROUP DISCUSSION	24-07-2014	CSE Students	32
26	IMPREVISTO	23-02-2015	CSE Students	28
27	JUNKYARD WARS	28-2-15	CSE Students	28
	Acade	mic Year 2013-	14	
1	LIVING LEGENDS	3/7/2013	CSE Students	79
2	SIMS	6/7/2013	CSE Students	48
3	INNOVOLO SPARKS	27/7/2013	CSE Students	48
4	Essay Competition	5/11/2013	CSE Students	27
5	СОМРЕТЕСН	15/11/2013	CSE Students	91
6	CREAMS	29/11/2013	CSE Students	51
7	MUSKETEERS	18/02/2014	CSE Students	18
8	MIME THE BEST	20/03/2014	CSE Students	40
9	ENCONTRAR	01/04/2014	CSE Students	60
10	PASION	28/04/2014	CSE Students	30
11	SIMS	13/07/2013	CSE Students	46
12	Elocution	05/11/2013	CSE Students	13
13	Master Minds	10/11/2013	CSE Students	61

14	Gemsters	22/11/2013	CSE Students	52
15	Programming Contest	18/03/2014	CSE Students	21
16	Technical Treasure Hunt	22/03/2014	CSE Students	90
17	Techno-Fun	22/04/2014	CSE Students	21
18	El-Principo(The Beginning)	26/04/2014	CSE Students	42
19	Poster Design	04/07/2013	CSE Students	17
20	Website Design	10/07/2013	CSE Students	10
21	Paper PresentationContest	06/03/2014	CSE Students	30
22	CSI Students Techno-Fest 2K14	7&8/3/2014	CSE Students	90
	Acaden	nic Year 2012-1	13	
1	GENERAL QUIZ(Group)	30/6/2012	CSE Students	84
2	CLICK,(Group)	30/07/2012	CSE Students	84
3	CROSSWORD(Individual	25/08/2012	CSE Students	84
4	ARIA & LORANDS,(GroupEvent)	21/09/2012	CSE Students	79
5	CRACKIT(Group Event)	29/10/2012	CSE Students	115
6	BEG BORROW STEAL(Group Event)	22/12/2012	CSE Students	84
7	SCAVENGER HUNT(Individual)	19/01/2013	CSE Students	84
8	IDEA CONTEST	7/03/2013	CSE Students	55
9	PAPER PRESENTATION	14/03/2013	CSE Students	45
10	TECHNOZONE	16/03/2013	CSE Students	55
11	Collage (Innovative Poster Making)	07 <sup>th</sup> July,12	CSE Students	25
12	National Workshop on "Application Development using .Net"	14 <sup>th</sup> & 15 <sup>th</sup> July, 12	CSE Students	30
13	Tech-Mania	15 <sup>th</sup> Dec, 12	CSE Students	72
	1		1	

14	Mock TCS	06 <sup>th</sup> Mar, 13	CSE Students	150
15	Knowledge Quest	15 <sup>th</sup> Sep, 12	CSE Students	51
16	Interaction with TCS selected students	22 <sup>nd</sup> Nov, 12	CSE Students	90
17	Interaction Session to Discuss about GMRIT – SLIMS Project	12 <sup>th</sup> Dec, 12	CSE Students	60
18	Poster Design	23 <sup>rd</sup> Feb, 13	CSE Students	15
19	Logic Hunt	16 <sup>th</sup> March,	CSE Students	69
	Acader	nic Year 2011-1	12	
1	CROSS WORD PUZZLE	16/7/2011	CSE Students	50
2	POSTER DESIGN	23/07/2011	CSE Students	15
3	WORD QUEST	20/08/2011	CSE Students	84
4	MATRICKS	30/9/2011	CSE Students	120
5	GMRIT PHOTO EXPO	3/10/2011	CSE Students	45
6	ONLINE FUNDA ( GAMING)	10/12/2011	CSE Students	42
7	TREASURE HUNT	25/02/2012	CSE Students	80
8	QUIZZING ZONE	26 <sup>th</sup> July,11	CSE Students	120
9	INTERACTION WITH TCS SELECTED STUDENTS	17 <sup>th</sup> Sep, 11	CSE Students	50
10	MOCK PRESS	29 <sup>th</sup> Sep, 11	CSE Students	40
11	TEST YOUR APTITUDE	30 <sup>th</sup> Dec, 11	CSE Students	34
12	IDEAS CLUB	18 <sup>th</sup> Feb, 12	CSE Students	14
13	LOGIC HUNT	17 <sup>th</sup> Dec, 11		110
14	DESIGN YOUR ADD	03 <sup>th</sup> Mar, 12		22
15	TECHNICAL SEMINAR	06 <sup>th</sup> Mar, 12		27

Academic Year 2010-11					
1	Poster design contest	26/07/2010	CSE Students	42	
2	Treasure hunt	21/08/2010	CSE Students	86	
3	Just a minute	25/09/2010	CSE Students	54	
4	Debate competition	05/02/2011	CSE Students	38	
5	Technical quiz	09/08/2010	CSE Students	30	
6	Brain crust	04/12/2010	CSE Students	48	
7	Creative story writing	26/02/2011	CSE Students	52	

37 State whether the programme/ department is accredited/ graded by other agencies. Give details.

All the programmes are Approved by AICTE

- First Accreditation by National Board of Accreditation for 3 Years F.No.NBA/ACCR-836/2006dt. 19.07.2008.
- Latest Accreditation by National Board of Accreditation for 2
   Years File. No.11- 46/2010/NBA,dt: 01.02.2013
- Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

#### **Strengths:**

- > Caring, dedicated, and expert faculty and staff members
- ➤ Adequate laboratories with latest computing facilities
- Academic Alliance with organizations like Microsoft, Infosys, IBM.
- ➤ Lectures by invited expertsfrom academia and industry.
- > Department is integrated with OBE

#### Weaknesses:

- > To get International students
- > Publish more robust publications.
- ➤ Prerequisite to involve more graduate students in research.
- ➤ Getting Consultancy

Global Recognition through research

#### **Opportunities:**

- Openings to find research grants from industry and government agencies
- > Opening more interaction with industry to minimize the gap strength course curriculum
- Progress inter discipline research/projects
- Maintaining and utilizing better contact to our alumni
- Acceleration engagement/external funding through new center of excellence

#### **Challenges:**

- ➤ Balancing teaching quality with research
- Marinating department OBE quality in line with reputed National and International Institute.
- ➤ Minimizing gap between departmental academics with current industrial need.
- Frequent new technology changing demand in Industry and getting faculty with experience.
- Inviting more engineering students into out Department
- 39 Future plans of the department.
  - ➤ Quality Research Work and consultancy
  - > Establish State-of-art Research Center
  - To get more rank holders at University Level
  - > To increase number of Ph.D. holders
  - > Students motivated global higher studies.

#### E4. Evaluative Report of Electronics & Communications Engineering

1. Name of the Department & its year of establishment

## Electronics and Communication Engineering & Established in the year 1999

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

**UG: Electronics and Communication Engineering** 

PG: 1) Digital Electronics and Communication systems

2) VLSI and Embedded System Design (Second shift)

3. Interdisciplinary courses and departments involved

S.No	Interdisciplinary courses	Department involved	
1	Complex analysis	BSH	
2	Network Analysis	EEE	
3	Networks& Simulation lab	EEE	
4	Database Management Systems	IT	
5	Object oriented Programming through JAVA	IT	
6	Cloud Computing	IT	
7	Disaster Management	CIVIL	
8	Industrial Safety and Hazards Management	CHEMICAL	
9	Operations Research	MECHANICAL	
10	Renewable Energy sources	EEE	
11	Soft Computing	CSE	
12	Engineering Economics and Project management	BSH	
13	Computer networks	IT	
14	Information Security & Cryptography	CSE	
15	Object oriented programming	CSE	
16	Network security and cryptography	CSE	
17	Digital control systems	EEE	
18	Operating systems	CSE	

4. Annual/ semester/choice based credit system Semester based credit system

# 5. Participation of the department in the courses offered by other departments

Title(s) of the course(s)	To which department Programme	Programme UG/PG	Semester
Microprocessor and Microcontrollers	EEE	UG	II
Digital electronics and Microprocessors	EEE	UG	II
Electronic Devices and circuits	EEE	UG	I
Linear and Digital IC'S	EEE	UG	I
Data communication systems	CSE	UG	II
Microprocessor and Multicore systems	CSE	UG	I
Pulse and Digital circuits	EEE	UG	II
Switching theory and logic design	EEE	UG	II
Embedded Systems	IT	UG	I
Digital Signal Processing and applications	EEE	PG	II
Digital signal processing	EEE	UG	II
VLSI	EEE	UG	II
Microprocessor and interfacing	CSE	UG	I
Microcontrollers and applications	EEE	PG	I

# 6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

Designation	Sanctioned	Filled
Professor	4	3
Associate Professors	7	4
Asst. Professors	21	31

# 7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. studen ts guided in the last 4 years
Dr.	Ph.D	Prof &	Antenna	25(T)+4.5(I	
B.I.Neelgar		HOD	Arrays	)	
Dr.Birendra Biswal	Ph.D	Assoc. Dean (R&D)	Signal Processing, Soft computing, forecasting	17(T)	3
Dr.M V Nageswararao	Ph.D	Assoc. Dean (F&S)	Radar Signal Processing, VLSI & ES	24	
Dr. K. Partha Sarathi Khuntia	Ph.D.	Professor	Intelligent Control Strategies	25	
Mr. D.Tirumala Rao	M.E (Ph.D)	Assoc Prof	Radars	14	
Mr. P.M.K.Prasad	M.E (Ph.D)	Assoc Prof	Signal and Image Processing	20.5	
Dr. V.Jagan Naveen	M.E., Ph.D	Assoc Prof	MIMO OFDM Systems for wireless communication	14	
Dr. G.Manmadha Rao	M.E.,Ph.D.	Assoc Prof	Radars	12(T)+9(I)	
Mr. G.B.S.R.Naidu	M.Tech	SrAsst Prof	Digital Systems & Computer Electronics	14	
Smt.T.Geetam ma	M.Tech (Ph.D)	SrAsst Prof	Digital Image Processing	14	

	M.Tech		Bio Medical	14	
Mr.	(Ph.D)	SrAsst Prof	Image		
T.Prabhakar	(1112)		Processing		
Mr. D.V.	M.Tech		VLSI System	11	
Ramana	(Ph.D)	Asst Prof	Design		
	M.Tech		Digital	7	
MrK.Krishna	11212011		Electronics &	,	
Kishore		Asst Prof	Communicatio		
			n System		
a . a a :	M.Tech		Digital	7	
Smt S Sri			Electronics &		
DurgaKamesw		Asst Prof	Communicatio		
ari			n System		
Mr.L.Govinda	M.Tech	Asst Prof	VLSI	10.8	
Rao	(Ph.D)				
N. I. I	M.Tech		VLSI System	9	
MrJ.VenkataS	(Ph.D),	Asst Prof	Design		
uman	MBA(DM)				
MrB.Anil	M.Tech	Asst Prof	Embedded	7	
Kumar			Systems		
Mr.D.Srinivasa	M.Tech	A . D . C	Communicatio	6.5	
Rao		Asst Prof	n systems		
MrP.Devi	M.Tech	Asst Prof	VLSI System	9	
Pradeep	(Ph.D)		Design		
MrK.	M.Tech	Asst Prof	Image	11	
Chiranjeevi	(Ph.D)		Processing		
MaD Danes	M.Tech	Asst Prof	Radar &	6.5	
MrP.Ravi	(Ph.D)		Microwave		
Kumar			Engineering		
M D C 1	M.Tech	Asst Prof	Signal	6	
Mr.D Suresh	(Ph.D)		Processing		
M. Cl. D. L.	M.Tech	Asst Prof	System and	5	
Mr.Ch.Babji			Signal		
Prasad			Processing		
Mr. C. Cymaela	M.Tech	Asst Prof	Image	9	
Mr.G.Suresh	(Ph.D)		Processing		
	M.Tech	Asst Prof	Digital	8	
SmtN.V.	(Ph.D)		Electronics &		
Lalitha			Communicatio		
			n Systems		
Sri DYV	M.Tech	Asst Prof	Communicatio	4	
Prasad	(Ph.D)		n Systems		

Sri O.Kishore	M.Tech	Asst Prof	System & Signal	4	
Sri.B.M.S.Srin ivas Rao	M.Tech	Asst.prof	Processing Radar and Microwave Engineering	4	
Mr.P.Kalyan Chakravarthi	M.Tech	Asst.prof	Telematics and Signal Processing	5.5	
Mr.T.Govinda Rao	M.Tech	Asst.prof	VLSI System Design	4	
Mr.K.Vijay Kumar	M.Tech	Asst.prof	Communicatio n Systems	4.8	
Mr.S.Ramakris hna	M.Tech	Asst.prof	VLSI	4	
Mr.Ch.Kalyan chakravarthi	M.Tech	Asst.prof	VLSI	3	
MrD.Arun Kumar	M.Tech	Asst.prof	Radar and Microwaves	6	
Mr.M.Bala Krishna	M.Tech	Asst.prof	Digital Communicatio ns	1	
Mr.P.V.Murali Krishna	M.Tech	Asst.prof	VLSI	1	
Mr.G.Sahu	M.Tech (Ph.D)	Asst.prof	Signal Processing	9	
Mr.A. Sudhakar	M.E.	SrAsst.prof	Communicatio n Control& Networking	4.6	
Mr.N.Sudhir Kumar	M.E.	Asst.prof	Avionics	2.10	

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

UG: 15:1 PG: 12:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	Filled
Lab Instructors	09	09
Assistants	03	03

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

#### Nil

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Department has got a grant of Rs. 11, 00,000/- under MODROBS from AICTE, New Delhi, for Modernization of Microwave Laboratory during the academic year 2010-11

13. Research facility / centre with

State recognition : Nil
 National recognition : Nil
 International recognition : Nil

#### 14. Publications:

\* number of papers published in peer reviewed journals (national / international)

			No. of Papers				
S. No	Journal/Conference	2014-15	2013-14	2012-13	2011-12	2010-11	
1	National Conference	20	6	5	5	11	
2	National Journal	08					
3	International Conference	46	4	7	21	16	
4	International Journal	18	27	12	11	19	
	Total Papers		37	24	37	46	

\* Monographs :Nil \* Chapter(s) in Books :Nil \* Editing Books :Nil

\* Books with ISBN numbers with details of publishers:

S.No	Name of the book	Author name	Publisher	ISBN Number
1	Pulse and Digital Circuits	G.Manmadha Rao	Pearson Edition, International Publication	978-81-317-2135-3

			Pearson	
2	Pulse and Digital	G.Manmadha	Edition,	978-81-317-6899-0
2	Circuits for JNTUK	Rao	International	978-81-317-0899-0
			Publication	

\* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): **Nil** 

	2014-15	2013-14	2012-13	2011-12	2010-11
Citation Index -	1-65	1-41	1-63	1-40	1-22
range / average					
SNIP	0	0	0	0	0
SJR	0	0	0	0	0
Impact factor -	0.11-	1.414-	1.811-3.36	0	0.57-2.254
range / average	0.16	3.38			
h-index	14	11	4	3	2

15. Details of patents and income generated

#### Nil

16. Areas of consultancy and income generated

#### Nil

17. Faculty recharging strategies

2010-2011 : 37 2011-2012 : 31

2012-2013 : 34

2013-2014 : 26 2014-2015 : 36

- 18. Student projects
  - Percentage of students who have done in-house projects including inter-departmental
  - Percentage of students doing projects in collaboration with industries / institutes

		Students who have done projects		
Academic year	Programme	In-house projects including interdepartmental	In collaboration with industries / institutes	
	B.Tech. (ECE)	100%	-Nil-	
2014-15	M.Tech. (DECS)	75%	25%	
	M.Tech (VLSI&ES)	66%	34%	

	B.Tech. (ECE)	100%	Nil
2013-14	M.Tech. (DECS)	84.62%	15.38%
	M.Tech (VLSI&ES)	77.78%	22.22%
	B.Tech. (ECE)	100%	-Nil-
2012-13	M.Tech. (DECS)	100%	-Nil-
	M.Tech (VLSI&ES)	100%	-Nil-
2011-12	B.Tech. (ECE)	100%	-Nil-
2011-12	M.Tech. (DECS)	100%	-Nil-
2010-11	B.Tech. (ECE)	100%	-Nil-
2010-11	M.Tech. (DECS)	100%	-Nil-

19. Awards / recognitions received at the national and international level by

• Faculty : Nil

• Doctoral / post doctoral fellows : **Nil** 

• Students

Academic Year	Awards / recognitions received at the			
Academic Teal	National level	International level		
2014-15	05	Nil		
2013-14	25	Nil		
2012-13	08	Nil		
2011-12		Nil		
2010-11	01	Nil		

20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Academic Year	Seminars/ Conferences/Workshops organized (national / international)	Source of Funding
2010-11	01 National workshop	Institute
	01 International conference	DST ,CSIR, Institute
2011-12	01 National workshop	Institute
2012-13	02 National workshops	Institute
2013-14	01 National workshop	Institute
2014-15	01 National workshop	Institute

21. Student profile course-wise:

Name of the Course: B.Tech. Electronics and communication Engineering

Academic year	Applications received	Selected		Pass per	centage
year		Male	Female	Male	Female
2014-15	NA	96	45	87.5%	100%
2013-14	NA	122	55	79.5%	96.36%
2012-13	NA	139	67	88.48%	88.05%
2011-12	NA	82	36	86.5%	94.4%
2010-11	NA	82	41	82.92%	87.8%

Name of the Course: PG (M.Tech. DECS)

Academic vear	Applications received	Selected		Pass percenta	age
year		Male	Female	Male	Female
2014-15	NA	08	05	100%	100%
2013-14	NA	09	04	88.88%	100%
2012-13	NA	07	06	100%	83.33%
2011-12	NA	10	02	100%	100%
2010-11	NA	10	04	90%	100%

Name of the Course: PG (M.Tech.VLSIES)

Academic year	Applications received	Selected		Pass percentage		
year		Male	Female	Male	Female	
2014-15	NA	14	4	100%	100%	
2013-14	NA	11	04	100%	100%	
2012-13	NA	13	05	100%	100%	
2011-12	NA	11	01	90.9%	100%	

22. Diversity of students

	Year	Yearly Intake	students from the State	students from other States	students from other countries
	2014-15	181	179	02	0
	2013-14	180	173	06	0
UG	2012-13	180	177	03	0
	2011-12	120	108	12	0
	2010-11	120	118	02	0

	Year	Yearly Intake	students from the State	students from other States	students from other countries
	2014-15	13	13	0	0
DC	2013-14	18	18	0	0
PG (DECS)	2012-13	18	17	1	0
(DECS)	2011-12	18	18	0	0
	2010-11	18	18	0	0

	Year	Yearly Intake	students from the State	students from other States	students from other countries
	2014-15	18	18	0	0
DC.	2013-14	18	18	0	0
PG (VLSI)	2012-13	18	18	0	0
(VLSI)	2011-12	-	-	-	-
	2010-11	-	-	1	-

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Number of students qualified in GATE

A.Y	2014-15	2013-14	2012-13	2011-12	2010-11
GATE	07	35	31	16	23

Number of students qualified in GRE/TOFEL/CAT

Year	GRE		TOFEL		CAT	
	Appeared	Qualifi	Appeared	Qualifi	Appeared	Qualifi
		ed		ed		ed
2014-15	3	2	2	1	3	1
2013-14	5	2	5	2	9	3
2012-13					3	2
2011-12					3	1
2010-11	4	1				

## 24. Student progression

Student		Percentage against enrolled						
progression	2010-11	2011-12	2012-13	2013-14	2014-15			
UG to PG	10%	8%	15%	10%	Nil			
PG to	Nil	Nil	Nil	Nil	Nil			
M.Phil.								
PG to Ph.D.	Nil	Nil	Nil	01	Nil			
Ph.D. to	Nil	Nil	Nil	Nil	Nil			
Post-								
Doctoral								
Campus	91.57%	80.90%	29.47%					
selection	91.37%	00.90%	29.47%	29.82%	53%			
Other than					Nil			
campus	Nil	3.64%	2.10%	11.40%				
recruitment								
Entrepreneur	Nil	Nil	Nil	Nil	Nil			
S	1111	1811	INII	INII				

# 25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	18.42%
from other universities within the State	57.89%
from other universities from other States	23.68%

- 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.
  - Number of Ph.D. awards during the assessment period: 05

Dr M.V Nageswara Rao, Dr. Ranjan.S, Dr. G.Manmadha Rao, Dr. V. Jagan Naveen and Dr. B. I. Neelgar.

## 27. Present details about infrastructural facilities

## a) Library (Department)

Books		Magazines/Perio dicals	CDs, VCDs	Others	
	National	International	Multimedia		
	1	-		NPTEL	
621			80	courses: 14	
021			00	LAN courses	
				: 144	

b) Internet facilities for staff and students

Internet facilities : 100 MBPS

(BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c) Total number of class rooms : 11
d) Class rooms with ICT facility : 07
e) Students' laboratories : 08
f) Research laboratories : 01

28. Number of students of the department getting financial assistance from College.

	Statement of GMRVF supported B.Tech ECE candidates who have completed the course in 2011							
S. No	Name of the Student	Course	Reg No/ Admn No	Date of Loan sanctio ned	Amount Disburse d (Rs)			
1		B.Tech,	07341A0		102,00			
1	Pratapkumar.Gara	ECE	426	Jan-08	0			
2		B.Tech,	07341A0		60,000			
	Haritha.Pathivada	ECE	473	Nov-08	00,000			
3	Sudheerkumar.Sanap	B.Tech,	07341A0		34,500			
3	athi	ECE	4B3	Nov-08	34,300			
					196,500			

	ment of GMRVF supple in 2014  Name of the Student	ported B.Tech  Course	Reg No/ Admn No	Date of Loan sanction	Amount Disburs ed (Rs)
1	Varaprasad	B.Tech,	10341A04	ed Jun-12	65,000
2	Jami Shankara Rao	ECE B.Tech,	37 10341A04	Dec-10	40,000
	Jagana Tarun Kumar	ECE B.Tech,	34 10341A04		
3	Pandiri	ECE B.Tech,	79 10341A04	Oct-10	30,000
4	BalasriYalakala	ECE	B8	Mar-11	20,000
5	MuraliKonapala	B.Tech, ECE	10341A04 48	Sep-13	15,000
					170,000

	Statement of GMRVF supported B.Tech ECE candidates who have completed the course in 2011							
S.N o	Name of the Student	Cours e	Reg No/ Admn No	Date of Loan sanction ed	Amount Disburs ed (Rs)			
1	Pratapkumar.Gara	B.Tec h, ECE	07341A04 26	Jan-08	102,000			
2	Haritha.Pathivada	B.Tec h, ECE	07341A04 73	Nov-08	60,000			
3	Sudheerkumar.Sanap athi	B.Tec h, ECE	07341A04 B3	Nov-08	34,500			
					196,500			

- 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
  - Getting Feedback from all stakeholders viz. industry, parents, students and faculty
  - Assessing the availability of job opportunities in industry, research and academia
  - Collecting information about emerging areas of engineering growth and development
- 30. Does the department obtain feedback from
  - a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
    - Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BOS meetings.
  - b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
    - Feedback will be collected from students twice in a semester i.e during mid semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are

evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.

c. Alumni and employers on the programmes and what is the response of the department to the same?

#### Alumni Feed-back/Alumni Survey:

Institute conducts Alumni meets regularly (at least once in a year) at various places in the country. Few of our alumni are successful in establishing and running consultancy firms, software companies, Power plants, service and manufacturing industries. The alumni survey is conducted to obtain feedback regarding their employment, higher studies, suggestions for improvement of institution etc. The inputs from the alumni are used in curriculum design, best practices, programme objectives etc. Alumni survey is conducted during alumni meets, visits to institution, stake holders meeting etc. Institute has separate alumni portal to facilitate the alumni interaction and updation of alumni database. Board of Studies of each department has an alumni nominee.

#### **Employer feedback/Employer Survey:**

Eminent Persons from the industry having keen interest in academics are inducted in the academic Council (AC) and in the IQAC of the institution. Valuable suggestions are taken for the betterment of the institution from time to time.

A survey questionnaire is prepared for the employer to assess the performance of the graduates recruited in different industries. This questionnaire is circulated among the employers through emails and social networking sites and responses are received. These responses are analyzed to assess the technical knowledge and leadership skills of the graduates of this institution. The results from the above feedbacks are analyzed and discussed in the department meetings. The feedback taken is used to make necessary improvements in the curriculum, teaching-learning process, up gradation of the facilities etc. Institute encourages Industry-Institute Interaction which will in turn useful in curriculum design and development.

# 31. List the distinguished alumni of the department

S.No	Name of the Alumni	Designation	Organization	Year
1	S. Narayana Rao	Staff R&D Engineer- Semiconductors	IBM India Ltd. Bengaluru Area, India	2003
2	Ravi Kiran Chinag andham	Technical Lead and Manager	Quinnox and Integ ration, USA	2004
3	ViswanadhKedaris etti	Senior Consultant	Oracle India Pvt Ltd, Hyderabad, India	2006
4	Pavani G	PeoplesoftConsultantt	AT&T Global Services, Hyderabad, India	2006
5	Naveen Kumar S	Design engineer	HAL, Hyderabad	2006
6	SravanNaramsetti	Business Intelligence Associate	PayPal, Chennai Area, India	2006
7	D.V.S.Sreekar	Senior Software Consultant	United Overseas Bank, Singapore	2007
8	B.G.C.Kumari	Design engineer	HAL, Hyderabad	2007
9	K Naresh	Deputy. Manager	Hindustan Aeronautics limited, Balnagar,Hyderab ad	2007
10	K Manikanta Reddy	Consultant	Oracle India Pvt. Ltd, Bangalore	2008

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

# **Student Enrichment Programmes:**

S.No	Special Lectures	Date	Participants	No. of participa nts
Acade	mic Year 2014-15			
	Wireless Communication 1G	20 <sup>th</sup>	III B.Tech	89
1.	TO 5G by Dr. Sarath Kumar	September,		
	Patra, Professor NIT, Rourkela	2014		
	Fundamentals of Antenna	25 <sup>th</sup> June,	IV B.Tech &	103
2.	Design by Mr. Jose Jacob, Asst.	2014	III B.Tech	
	Director, NIAR, Hyderabad			

Acade	mic Year 2013-14			
1	A Guest Lecture on "Acoustic Signal Processing" by Mr.G.V.Krishna Kumar, Scientist-E, HOD(Noise Section), NSTL, Visakhapatnam	02-04-2014	IV ECE-A III ECE-A&B	192
2	A Guest Lecture on "Advance in Communications" by Dr.Srihari Rao, Associate Professor, NIT Warangal	01-03-2014	III ECE-A&B	50
3	A Guest Lecture on "FPGA Implementation of Direct Digital Sythesizer" by Dr.N.Balaji, Professor, JNTUK, UCEV, Vizianagaram	01-03-2014	IV ECE-A&B	40
4	A Guest Lecture on "Mixed Signal Chip IC Design" by Dr.Srihari Rao, Associate Professor, NIT Warangal	26-07-2013	IV ECE-A&B	137
5	A Guest Lecture on "Advance in Communications" by Dr.Srihari Rao, Associate Professor, NIT Warangal	26-07-2013	III ECE-A&B	125
Acade	mic Year 2012-13			
1	A Guest Lecture on "Career opportunities in Engineering" by Dr. N J Rao, Former Professor, IISC, Bangalore	15.02.2013	IV ECE-A&B	99
2	A Guest Lecture on "Space Technology and RF Engineering" by Dr. K Sarat Kumar, Dean (Research), Professor & Research Group Head (SP), Dept of ECE, School of Electrical Sciences, K L University, Green Fields, Vaddeswaram.	29.12.2013	III ECE-A&B	132
3	A Guest Lecture on "Recent Trends in Chip Design" by Dr.P.Srihari, Asso. Professor ECE Dept., NIT Marangal Rao	22-09-2012	III ECE-A&B	140
4	A Guest Lecture on	30-07-2012	IV ECE-A&B	99

	"Elctromagnetic Wave		Students	
	Propagation Modes and its			
	effects in Microwave and RF			
	circuits" by Dr.SasiBhushana			
	Rao, Professor & HOD,ECE			
	dept.,AUCE,Visakhapatnam			
Acada	mic Year 2011-12			
Acade	T			~ -
	A Guest Lecture on	6-2-2012	III B.Tech	95
	'Telecommunication impact and		ECE students	
1	significance" by CTO, Micro			
	Nova ImpexPvt Ltd., Bangalore			
	by Sri P.H.RamaPrabhu			
	A Guest Lecture on 'Pulse	2 -12-2011	III & IV	37+60
	Compression codes for range		B.Tech ECE	
2	resolution radar by		Students	
2	Prof.K.RajaRajeswari, BOS			
	Chairman, Dept of ECE, AUCE,			
	Visakhapatnam			
	A Guest Lecture on 'Overview	19-07-2011	II, III B.Tech	119+107
	of Amateur FM Radio Client		ECE students	
3	station" by National Institute of			
3	Amateur Radio, Department of			
	Information technology, Govt of			
	India, Hyderabad.			
	A Guest Lecture on 'Career	14-07-	III A & IV	48+123
4	Opportunities in Indian Navy'	2011	B.Tech ECE	
4	by S.Lt.J.Darshan Kumar, INS,		students	
	Valsura, JamNagar, Gujarat			
Acade	mic Year 2010-11			
	A Guest Lecture on 'Career	26-03-	II B.Tech	79
	Opportunities in IT	2011	ECE students	1)
1	Industry', Mr.K. Amaranarayana	2011	LCL students	
	Chowdary, Infosys, Bangalore.  A Guest Lecture on 'Basic	10-12-	IV B.Tech	129
	Digital VLSI Design & Digital	2010	ECE students	147
2	Signal Processing',	2010	LCE students	
	Dr.N.S.Murthy, Dept ECE, NIT, Warangal			
		10-12-2010	III B.Tech	129
	A Guest Lecture on 'Digital Signal Processing',	10-12-2010	ECE students	129
3			ECE students	
	Dr.N.S.Murthy, Dept ECE, NIT,			
1	Warangal A Guest Lecture on 'Design of	15-09-2010	III B.Tech	131
4	A Guest Lecture on Design of	13-09-2010	m B. Iech	131

	assistive Human machine		ECE students	
	interface control signal			
	classifier', Dr. Srinivaskota,			
	Dept of Electrical and Computer			
	Engg, Southern Illinois			
	University, Carbondale, USA.			
	A Guest Lecture on 'System on	8-09-2010	IV B.Tech	72
5	Chip(SOC) & VLSI',		ECE students	
	M.Srikanth, AMD, Hyderabad			
	A Guest Lecture on 'Design	12-08-2010	IV B.Tech	139
	Methodologies of array		ECE students	
6	antennas', Dr. R.Ramana			
	Reddy, Dept of ECE, MVGR			
	Engg college, Vizianagaram			

**Student Workshops:** 

S.No	Student Seminars	Date	Participants	No. of participa nts
Acade	mic Year 2014-15			
1	STEPCONE-15 (Paper presentation)	30th& 31th January, 2015	Other College Students & Internal students	100
2	STEPCONE-15 (Matlab workshop)	30th& 31th January, 2015	Other College Students & Internal students	64
3	STEPCONE- 15(Model Exhibition)	30th& 31th January, 2015	Other College Students & Internal students	21(Models
4	Research Day	21st February,2015	Internal students	34
Acade	mic year 2013-14			
1	STEPCONE-14	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	176
2	STEPCONE- 14(Mechatracke r)	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	18
3	STEPCONE- 14(Model Exhibition)	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	21
4	ESPOSIZIONE Model Exhibition	05-04-2014	Other College Students & Internal students	18

Acade	mic year 2012-13			
1	STEPCONE-13	4 <sup>th</sup> & 5 <sup>th</sup> January, 2013	Other College Students & Internal students	173
2	MATLAB	20 <sup>th</sup> & 21 <sup>st</sup> July 2012	Internal students	33
3	HAM Radio Design	20 <sup>th</sup> & 21 <sup>st</sup> July 2012	Internal students	38
4	Regulated Power supply and PCB Design	31 <sup>st</sup> July 2012	Internal students	127
Acade	mic year 2011-12			
1	STEPCONE-12	6 <sup>th</sup> & 7 <sup>th</sup> January, 2012	Other College Students & Internal students	231
2	HAM Radio Receiver Design Workshop	4 <sup>th</sup> Feb to 6 <sup>th</sup> Feb 2012	Internal students	29
Acade	Academic year 2010-11			
1	STEPCONE-11	7 <sup>th</sup> & 8 <sup>th</sup> January, 2011	Other College Students & Internal students	269

33. List the teaching methods adopted by the faculty for different programmes.

### **UG and PG Programs:**

Some of the teaching methods adopted by the faculty are:

- Tutorial is followed apart from the curriculum for the benefit of the Students
- Lecturing, Working models, Demonstration, Animation, Industrial visit, Seminars, Project etc
- Teaching aids: Black Board, LCD Projector etc.
- Group discussions
- LAN Based Courses
- Remedial Classes for Slow learners and backlog students
- 34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Achievement of the POs mechanisms consists of following processes

#### **Internal assessment tools:**

- Assignments
- Mid examinations
- Ouiz examinations
- Daily assessment of Laboratory performance

- Internal & External laboratory exams
- End-semester theory examinations

#### **External assessment tools:**

- Feedback from the stake holders.
- Feedback is collected from the employers through placement cell.
- Through governing council constituted at institutional level.
- Through publications/presentations in conferences.

#### **Achievement of the Learning outcomes consists of following processes**

- The process recommended in NBA's OBE is being followed to attain this objective
- 35. Highlight the participation of students and faculty in extension activities.
  - Blood Donation awareness Programme
  - Voluntary Blood Donation Camp
  - Observance of NSS day
  - Clean Campus(5S practicing Institute)
  - Promoting Hygiene and Cleanliness in canteen
  - Every Thursday is observed as a Pollution Free day.
  - Observance of Sports day.

The following social activities are organized under the six arms(Lakshya, Vikasa, Suchana, Avagahana, Shiksha, Vitarana) of GAMYAM, Academic year 2013-14

Prepared sample question papers for clerk's examination and submitted them to prathiba library.

Personality development session for NIRED trainees on discipline, goal setting and self-confidence.

Field visit to tuition centers in Rajam, interactive session held.

Question papers prepared for class 3rd, 4th, 5th standard students on Hindi language and submitted to CSW officials.

Tuitions conducted for children by GAMYAM team members, students grasping levels assessed.

Career, educational and scholarship guidance for class 11<sup>th</sup> and 12th students at Rajam Govt. junior college.

Personality development session for NIRED trainees on Entrepreneurship and discipline.

Career, education and scholarship guidance, counselling for 10th class students at Govt. high schools .

Personality development session for NIRED trainees on positive thinking and alcoholism and its abuse.

## 36. Give details of "beyond syllabus scholarly activities" of the department.

Apart from regular class work Students are encouraged to participate in various events like Paper presentation , Technical quiz contest, Circuit design contest, Seminars presentation, Poster presentation etc conducted by Professional Bodies under the students' chapters of ISTE, IE (I), IETE. Students are also encouraged to participate in various club activities under Students' Activity Center (SAC) like Literary Club, Photography club, Music club, ROBOTICS, Cultural Club etc.

S.No	Activity	Date	Participants	No. of participants	
Acade	emic year 2013-14	ļ			
1	Paper presentation	23/11/13	II&III B.Tech	42	
2	Poster presentation	24/2/12	III B.Tech	24	
3	Technical quiz	15/2/14	III B.Tech	45	
4	Group discussion	12/3/14	III B.Tech	13	
5	Trace the logic	26/3/14	III B.Tech	30	
Acade	emic year 2012-13	}			
1	Paper presentation	23/2/13	II&III B.Tech	70	
2	Mathematical resoning	24/7/12	II&III B.Tech	228	
3	Poster presentation	29/12/12	II&III B.Tech	50	
4	Shackle race rover	13/10/12	III B.Tech	70	
5	Circuit design contest	22/12/12	II&III B.Tech	95	
6	Discover your scientist	22/2/13	III B.Tech	30	
Acade	Academic year 2011-12				
1	Seminars presentation	24/9/11	III B.Tech	40	

2	Group discussion	17/9/11	III B.Tech	78
3	Circuit design contest	24/12/11	III B.Tech	80
4	Reveille Quiz contest	5/8/11	II&III B.Tech	300
Acade	emic year 2010-11			
1	Group discussion	3/7/10	II&III B.Tech	41
2	Technical JAM	17/7/10	II&III B.Tech	21
3	Paper presentation	21/7/10	II&III B.Tech	11
4	Elocution Competition	13/12/11	II&III B.Tech	200
5	Open house	26/2/11	II&III B.Tech	174
6	Circuit design	26/2/11	II&III B.Tech	74

- 37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
  - All the programmes are recognized by AICTE
  - First Accreditation by National Board of Accreditation for 3 Years F.No.NBA/ACCR-836/2006 Dt. 29.03.2007.
  - Latest Accreditation by National Board of Accreditation for 2 Years File. No.11- 46/2010/NBA, Dt: 01.02.2013
  - Institute is accredited by NAAC from 2010 ,Dt.28.03.2010 with A Grade

Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

## **Strengths:**

- Best preferred department
- Good infrastructure
- Well-equipped Laboratories
- Accreditation in 2006 for three years.
- Re-accredited in 2012
- Qualified motivated and hardworking faculty

- Regular student professional society activates including conducting National level symposiums
- Good placements for eligible students.
- Emphasis given to overall personality development and communication skills of student through co-curricular and extracurricular activities.
- Expert lectures by eminent academicians and industrialists.
- Wi-Fi facility with e-learning resources on campus LAN and round the clock web connectivity
- LAN Based Courses for all courses
- Participation of students in Hardware design/ROBOTICS design contests

#### Weakness

- Average faculty experience is low
- Research activities to be enhanced.
- Research laboratories to be improved.

#### **Opportunities:**

- Enhancement of industry institute interaction.
- To catch up with the latest trends in technology by establishing advanced laboratories beyond curriculum.
- To start inter disciplinary research works.
- To start programs for up gradation of technical skills.

#### **Challenges:**

- Decline in input quality of student due to fluctuations in market demand.
- Difficulty to recruit more qualified faculty.

## 38. Future plans of the department.

The ECE department has following plans to produce the self sustainable quality engineers to help in building the nation.

- Establishment of Research center by JNTUK
- Create the research environment in the department, each faculty to publish two international journal papers and one international conference paper per year
- Applying for research project proposals for funding support from funding agencies

- Increase the pass percentage of students in each subject to 90%
- 80% of eligible students to get placements
- Increase the number of good GATE ranks and GRE score to get admissions for higher education in premier institutes
- Getting the NBA and NAAC reaccreditation
- Conduction of national workshop for faculty at least once in a year
- Conduction of national level project model exhibition for students
- Encourage at least 70% of the students to present technical paper in paper presentation contests to have the idea on present research by interacting with other delegate and co-participants.
- Organizing add on courses to impart the knowledge beyond the curriculum
- Conduct National/International Conference to enhance research in emerging areas

## **E5.** Evaluative Report of Electrical & Electronics Engineering

- 1. Name of the Department & its year of establishment Electrical and Electronics Engineering&Established in the year 1997
- 2. Names of Program's / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters;Integrated Ph.D etc.)

# **UG- Electrical and Electronics Engineering PG- Power and Industrial Drives**

3. Interdisciplinary courses and departments involved

S. No	Interdisciplinary courses	Departments involved
1	Elements of Mechanical Engineering	MECH
2	Fundamentals of Computer Programming	CSE, IT
3	Electronic Devices and Circuits	ECE
4	Basic Prime Movers and Pumps	MECH
5	Complex analysis	BS&H
6	Digital Electronics and Microprocessor	ECE
7	Digital Signal Processing	ECE
8	Embedded Systems(Elective)	ECE
9	Cloud computing (Open elective)	CSE,IT
10	Disaster management(Open elective)	CE
11	Fundamentals of Global Positioning Systems (Open elective)	ECE
12	Industrial safety and Hazard management(Open elective)	СНЕМ
13	Operation Research(Open elective)	MECH
14	Soft computing (Open elective)	CSE, IT
15	Environmental studies	CHEM
16	Managerial Economics and Financial Analysis	BS&H
17	Fluid mechanics and hydraulics	MECH
18	Switching theory and logic design	ECE
19	Pulse and digital circuits	ECE
20	Complex variables and Statistical methods	BS&H
21	Linear and digital IC applications	ECE

22	Microprocessor and Micro controllers	ECE
23	Management science	MECH
24	Computer organization	CSE,IT
25	Optimization Techniques	MECH
26	AI Techniques	CSE,IT

4. Annual/ semester/choice based credit system

# Semester based credit system

5. Participation of the department in the courses offered by other departments

Title(s) of the course(s)	To which department Programme	Programme UG/PG	Semester
Elements of Electrical Engineering	Civil, MECH, ECE, CSE, IT, CHEM, PE	UG	I & II
Network Analysis	ECE	UG	III
Electrical Circuit and Field theory	PE	UG	III
DC machines and Transformers	PE	UG	III
Control systems	PE & ECE	UG	III & V
Renewable Energy Sources	Civil, MECH, ECE, CSE, IT, CHEM, PE	UG	VI

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors / Asst. Professors)

Designation	Sanctioned	Filled
Professors	3	3
Associate Professors	5	2
Asst. Professors	21	21

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./ M. Phil. etc.,)

Name	Qualificat ion	Designat ion	Specialization	No. of Years of Experien ce	No. of Ph.D. Students guided for the last 4 years
Dr.T.Suresh Kumar	Ph.D	Professor & HOD	Power Systems	12	
Dr.G. ChandarSekhar	Ph.D	Professor	Power Systems	16	
Dr. I.Satish Kumar	Ph.D	Professor	Power Systems	10	
Mr. P. Devendra	M.Tech	Associate Professor	* *	13.5	
Mr. P. Ramana	M.Tech	Associate Professor	Electrical Power Engineering	14	
Mr. J.S.V. Siva Kumar	M.Tech	Assistant Professor	Power Electronics	10	
Mr. T.S. Kishore	M.Tech	Assistant Professor	Power Systems	10	
Mr. G. Indira Kishore	M.Tech	Assistant Professor	Power System Control & Automation (Small Hydro Power Plants)	07 (Study Leave - QIP)	
Mr. M. Rambabu	M.Tech	Assistant Professor	Electrical Power Engineering	12	
Mr. T.S.L.V. AyyaRao	M.Tech	Assistant Professor	Power & Industrial Drives	10	
Mr. L.V. Suresh Kumar	M.Tech	Assistant Professor	Power & Energy Systems	05	
Mr. Ch. Hemanth	M.Tech	Assistant Professor	Power Systems	05 (Study	

Kumar				Leave)	
Mrs. S. LalithaKumari	M.Tech	Assistant Professor	Power System Control & Automation	05	
Mr. V. SrikanthBabu	M.E	Assistant Professor	Power Systems	06	
Mr. A. TirupatiRao	M.Tech	Assistant Professor	Power Systems	04	
Mr. M. Vinay Kumar	M.Tech	Assistant Professor	•	12	
Mr. I. Ravi Kiran	M.Tech	Assistant Professor		04	
Mr. M. Venkatesh	M.Tech	Assistant Professor	Power Electronics & Drives	04	
Mr. R. Ramakrishna	M.Tech	Assistant Professor	Power Systems	05	
Mr. P. Praveen Kumar	M.Tech	Assistant Professor	Power Electronic Drives & Control	04	
Mr.T.Satyanara yana	M.Tech	Assistant Professor	Power Electronics & Drives	02	
Mr.D.Rajesh Babu	M.Tech	Assistant Professor	Energy Systems	01	
Mr.V.BalajiVen kateswaran	M.Tech	Assistant Professor	Power Systems	01	
Mr.R.Vijaya Krishna	M.Tech	Assistant Professor	Power Electronics & Drives	03	
Mr.B.Harish	M.Tech	Assistant Professor	Control Systems	0.5	
Mr.P.Upendar Kumar	M.Tech	Assistant Professor	Power Systems	08	

Dr.K.V.S. Prasad	Ph I)	Assistant Professor	Management	20	
---------------------	-------	------------------------	------------	----	--

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

UG: 15:1 PG: 12:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	filled
Lab Instructors	6	6
Assistants	2	2

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

Nil

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

S.No	Name of the	Title of the Project	Funding	Grants
	faculty		Agency	received in
				Rupees
1	Dr.K.V.S.Prasad	Total Quality	UGC	2,80,000/-
	(Principal	Management in		(Sanctioned)
	Investigator)	Technical Education-		1,42,500/-
		A study of selected		(Released)
		engineering colleges		
		in Srikakulam and		
		Vizianagaram		
		Districts		
2	Dr.	Demographic and	BRNS	37,71,750/-
	K.V.S.Prasad	Health Status survey		(Sanctioned)
	(Co-Principal	in Kovvada region		
	Investigator)	-		

- 13. Research facility / centre with state recognition
  - Department of Electrical and Electronics Engineering Recognized as Research Centre for the academic years 2014-15 & 2015-16 by JNTUK, Kakinada
    - National recognition Nil
    - International recognition Nil

## 14. Publications:

Number of papers published in peer reviewed journals (national / international):

S.		No. of Papers				
No	Journal/Conference	2014- 15	2013- 14	2012- 13	2011- 12	2010- 11
1	National Conference	15	02	06	02	09
2	National Journal	-	00	01	01	01
3	International Conference	21	05	08	08	12
4	International Journal	22	21	16	12	09
Tota	l Papers	58	28	31	23	31

• Monographs :Nil

• Chapter(s) in Books :Nil

• Editing Books :Nil

• Books with ISBN numbers with details of publishers:

S. No	Name of the book	Author name	Publisher	ISBN Number
1	Electrical circuit analysis	Mr. P. Ramana	Reem Publications Private Limited, New Delhi	9788183511117
2	Basic Electrical Engineering	Mr. P. Ramana	Winger Publications, Hyderabad	9788192158075

• Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 08

	2014-15	2013-14	2012-13	2011-12	2010-11
Citation Index - range / average	1-10	2-4	0-2	0-1	0-1
SNIP	0	0	0	0	0
SJR	0	0	0	0	0
Impact factor – range / average	0.5 – 7.445	0.962- 5.098	0.41- 1.686	0.455- 1.76	0-3.358
h-index	5	2	2	2	2

15. Details of patents and income generated : -Nil-

## 16. Areas of consultancy and income generated

Academic Year	Area of consultancy	Income Generated (Lakhs)
2013-14	Academic consultancy - (Worldwide Diamond Manufacturing PVt.Ltd (Manager Skills Training program)	0.624
2012-13	Academic consultancy - Manager Skills Training program-Worldwide Diamond Manufacturing Pvt. Ltd.	0.624
2011-12	Academic consultancy –Content development and delivery for a virtual institute for GETs- GMR Energy	5.75

## 17. Faculty recharging strategies

• Workshops/seminars/conferences/FDP attended by faculty during the academic year's:

2014- 2015 : 2013-2014 : 2012- 2013 : 2011- 2012 : 2010- 2011 :

# 18. Student projects

Percentage of students who have done in-house projects including inter-departmental

• Percentage of students doing projects in collaboration with industries / institutes

		Students who have	e done proje	ects	
Academic year	Programme	In-house projects including inter- departmental	with indu	In collaboration with industries / institutes	
2014 15	B.Tech. (EEE)	100%	-]	Nil-	
2014-15	M.Tech. (PID)	100%	-]	Nil-	
2013-14	B.Tech. (EEE)	100%	-]	Nil-	
2013-14	M.Tech. (PID)	100%	-]	Nil-	
2012 12	B.Tech. (EEE)	100%	-]	Nil-	
2012-13	M.Tech. (PID)	100%	-]	Nil-	
2011 12	B.Tech. (EEE)	100%	-]	Nil-	
2011-12	M.Tech. (PID)	100%	-]	Nil-	
2010 11	B.Tech. (EEE)	100%	-]	Nil-	
2010-11	M.Tech. (PID)	100%	-]	Nil-	

19. Awards / recognitions received at the national and international level by

• Faculty : Nil

• Doctoral / post doctoral fellows : Nil

• Students:

Academic Year	Awards / recognitions received at the			
Academic Tear	National level	International level		
2014-15	04	Nil		
2013-14	26	Nil		
2012-13	17	Nil		
2011-12	10	Nil		
2010-11	Nil	Nil		

- 20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.
  - Seminars/ Conferences/Workshops organized during the academic years are as follows

Academic Year	Seminars/ Conferences/Workshops organized (national / international)	Source of Funding
2014-15	01 National workshop	Institute
2013-14	01 National workshop	Institute
2012-13	01 National workshop	Institute
2011-12	01 National workshop	Institute
2010-11	<ul><li>02 National workshop</li><li>01 International conference</li></ul>	Institute

# 21. Student profile course-wise:

# Name of the Course: UG (B.Tech. in Electrical and Electronics Engineering)

Academic year	Applications received	Selected  Male Female		Pass percentage		
year				Male	Female	
2011-15	NA	105	39	73.33 %	89.74 %	
2010-14	NA	104	38	89.42%	97.37%	
2009-13	NA	82	29	95.12%	96.55%	
2008-12	NA	79	24	89.87%	91.66%	
2007-11	NA	50	15	80.00%	53.33%	

# Name of the Course: PG (M.Tech. in Power and Industrial Drives)

Academic	Applications received	Selected		Pass percentage	
year	received	Male	Female	Male	Female
2012-14	NA	10	4	100%	100%
2011-13	NA	13	2	76.92%	100%
2010-12	NA	12	4	75.00%	100%
2009-11	NA	12	4	83.33%	100%

# 22. Diversity of Students

	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
	2014-15	120	95.83	4.17	0
	2013-14	120	99.17	0.83	0
UG	2012-13	120	98.33	1.67	0
	2011-12	120	97.5	2.5	0
	2010-11	120	98.33	1.67	0

	Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
	2014-15	18	61.11	0.00	0
	2013-14	18	83.33	0.00	0
PG	2012-13	18	77.78	0.00	0
	2011-12	18	83.33	0.00	0
	2010-11	18	83.33	5.56	0

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Acado yea		2014-15	2013-14	2012-13	2011-12	2010-11
GA	ГЕ	07	24	19	39	11

24. Student progression

Student progression	Percentage against enrolled				
UG to PG					
PG to M.Phil.					
PG to Ph.D.					
Ph.D. to Post-Doctoral	o Post-Doctoral				
Employed	2014-15	2013-14	2012-13	2011-12	2010-11
Campus selection	36	40	32	100	74
Other than campus recruitment	-	-	-	-	-
Entrepreneurs	-	-	-	-	-

## 25. Diversity of staff

## Percentage of faculty who are graduates

of the same parent university	4.76%
from other universities within the State	42.85%
from other universities from other States	52.38%

- 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period. 01
  - Dr. D.G. Padhan obtained Ph.d from IIT Guwathi in the A.Y 2013-14
- 27. Present details about infrastructural facilities

## a. Library

Books	. 1, ,				CDs, VCDs and	Others
	National	International	Multimedia			
558	1	2	78	151 Projects + 400 Soft Copy of Books		

b. Internet facilities for staff and students : **100 MBPS** (BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c) Total number of class rooms
d) Class rooms with ICT facility
e) Students' laboratories
f) Research laboratories
:06
:06

28. Number of students of the department getting financial assistance from College.

#### Nil

- 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
  - Getting Feedback from all stakeholders viz. industry, parents, students and faculty
  - Assessing the availability of job opportunities in industry, research and academia

- Collecting information about emerging areas of engineering growth and development
- 30. Does the department obtain feedback from
  - a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
    - Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BoS meetings.
  - b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

    Feedback will be collected from students twice in a semester i.e during mid semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.
  - c. Alumni and employers on the programmes and what is the response of the department to the same?

### Alumni Feed-back/Alumni Survey:

Institute conducts Alumni meets regularly (at least once in a year) at various places in the country. Few of our alumni are successful in establishing and running consultancy firms, software companies, Power plants, service and manufacturing industries. The alumni survey is conducted to obtain feedback regarding their employment, higher studies, suggestions for improvement of institution etc. The inputs from the alumni are used in curriculum design, best practices, programme objectives etc. Alumni survey is conducted during alumni meets, visits to institution, stake holders meeting etc. Institute has separate alumni portal to facilitate the alumni interaction and updation of alumni database. Board of Studies of each department has an alumni nominee.

## **Employer feedback/Employer Survey:**

Eminent Persons from the industry having keen interest in academics are inducted in the academic Council (AC) and in the IQAC of the

institution. Valuable suggestions are taken for the betterment of the institution from time to time.

A survey questionnaire is prepared for the employer to assess the performance of the graduates recruited in different industries. This questionnaire is circulated among the employers through emails and social networking sites and responses are received. These responses are analyzed to assess the technical knowledge and leadership skills of the graduates of this institution. The results from the above feedbacks are analyzed and discussed in the department meetings. The feedback taken is used to make necessary improvements in the curriculum, teaching-learning process, up gradation of the facilities etc. Institute encourages Industry-Institute Interaction which will in turn useful in curriculum design and development.

## 31. List the distinguished alumni of the department

S. No.	Name of the Alumni	Designation	Organization	Batch
01	Killu Siva Kumar Naidu	IAS	UKHRUL DIST , MANIPUR STATE	2002-06
02.	N. KasiVisweswara Rao	Scientist-D	BARC - Mumbai	1997-01
03	S.Samuel Praveen	Team Leader	CMC Ltd, Hyderabad	1997-01
04	N.B. Gowtam	Team Leader	Convergys, Bangalore	2000-04
05	B.Hari Prasad	ADE	AP GENCO, Vijayawada	1997-01
06	D. Naveen	Sr. Software Engineer	Infosys, Hyderabad	2002-06
07	K.Suresh Kumar	Sr. Software Engineer	CSC Ltd, Banglore	1998-02
08	B.Naveen Kumar	Sr. Engineer	BHEL, Hyderabad	2000-04
09	K.Krishna Prasad	Engineer	NTPC, Simhadri, VSKP	1997-01
10	V.Ananda Rao	Associate Manager	GMR Air ports, Hyd.	2000-04

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

# **Student Enrichment Programmes:**

S. No	Special Lectures	Date	Participan ts	No. of partici pants
Acade	emic Year 2014-15			
1	A guest lecture on Advanced Power Electronics by Dr. D. LeninProfessor, Dept. of EEE, RGMCET, Nandyal.	20-09- 2014	III EEE	210
2	A guest lecture on Power Plant Familiarization & Operation byShri. Navraj Singh Head, GMR EDC, Rajahmundry.	08-10- 2014	II & IV EEE	115
3	A guest lecture on Power Plant Functions & New Initiatives byShri. Ravi Shanker Vice President, GMR Energy.	10-10- 2014	III EEE	107
4	A guest lecture on Power Electronics byDr. A. Das Gupta Professor, Dept. of EEE, KIT University, Bhubaneswar.	18-10- 2014	III& IV EEE	265
5	A guest lecture on Introduction to Hydro Power byShri. Ajit Singh Genral Manager, Hydro Energy Business Hindustan Power Projects Private Limited.	22-12- 2014	III EEE	59
6	A guest lecture on Being Digital by Shri. SubbaRaoHegde ,Head, Chief Technical Officer & VP Business Integration and Automation, GMR Infrastructure Ltd, Bangalore.	29-12- 2014	III& IV EEE	353
7	A guest lecture on Project Management by Shri. K.V.V. RaoDirector, GMR Infrastructure Ltd, Bangalore.	05-01- 2015	IV EEE	112
8	A guest lecture on Maintenance and Reliability of Plant and Machinery byDr. AhamedMohideen Dy. Vice President, Plant and Equipment, Lodha group – Mumbai.	23-01- 2015	III EEE	84

9	A guest lecture on Power Business in India Capturing the Electricity Regulations byShri. Ravindranath Nair CEO, GMR Energy ,Kamalanga Power Plant,Kamalanga, Odissa.	09-02- 2015	III& IV EEE	245
10	A guest lecture on Commissioning of Thermal Power Plants byShri. SandeepPachpor Vice President, Projects, GMR Energy.	19-02- 2015	III EEE	128
11	A guest lecture on Power Plants – Industrial Scenario byShri, ArunenduSaha Vice President, GMR Energy, GMR Group.	21-02- 2015	II &III EEE	106
12	A guest lecture on Renewable Energy (Micro Grid) byDr. Ch Narayan Bhende Assoc. Professor, School of Electrical Sciences, IIT, Bhubaneswar.	25-04- 2015	II EEE	49
13	A guest lecture on Renewable Energy (Modified BF Optimization Techniques)by Dr. Ch Narayan Bhende Assoc. Professor, School of Electrical Sciences, IIT, Bhubaneswar.	25-04- 2015	II EEE	49
Acade	emic Year 2013-14			
1	Guest lecture on "Advances of Power Electronic Systems"by Dr. K. Siva Kumar, Assistant Professor, IIT - Hyderabad	20-07- 2013	III-EEE	100
2	Guest lecture on "Power Industries and Positive Approach for the Challenges"byShri. Hanumanth Reddy, Energy Development Centre GMR, Rajahmundry Energy Limited	01-08- 2013	III & IV - EEE	152
3	Guest lecture on "Power Scenario in India and Opportunity in Power Sector"byShri. Navraj Singh, Head Energy Development Centre GMR, Rajahmundry Energy Limited	01-08- 2013	III & IV - EEE	152
4	Guest lecture on "Practical Aspects in Designing of EHT Sub-stations & Protective Systems" by Shri. B.	01-02- 2014	III-EEE	88

	Srinivas, ADE, AP TRANSCO, Srikakulam			
Academic Year 2012-13				
1	Guest lecture on "Power System Optimization" Dr. C.N. Bhende, Assistant Professor, School of Electrical Sciences, IIT Bhubaneswar	21-07- 2012	IV-EEE	110
2	Guest lecture on "Thermal Power Plant Familiarization" Mr. K. Srirammurthy, Senior Engineer, NTPC Simhadri, Visakhapatnam	25-08- 2012	IV-EEE	135
3	Guest lecture on "Various Issues in Transformer Testing" Mr. N. MaheswaraRao, Engineering officer, CPRI, Bangaloore	18-01- 2013	IV-EEE	98
4	Guest lecture on "Opportunities and Challenges in Power Plants"byShri. Navraj Singh, Head Energy Development Centre GMR, Rajahmundry Energy Limited	06-02- 2013	III-EEE	125
5	Guest lecture on "Career Opportunities " Dr. N.J. Rao, Rtd. Professor, IISC,Bangaloore	15-02- 2013	IV-EEE	138
Academic Year 2011-12				
1	Guest lecture on "MATLAB applications" by Dr. Sarathkumar Sah u, Professor, Dept. of EEE, MVGR College of Engineering, Vizianagaram.	09-09 -11	IV EEE Students	100
2	Guest lecture on "Airfield Ground Lighting "by Associate General Manager-Technical Services, GMR Hyderabad International Airport Ltd	01-10-11	III&IV EEE Students	200
3	Guest lecture on" Overview of Different Types of Substations by S.Trinadh, Assistant Engineer, AP TRANSCO, Mothugudam.	21-01-12	IV EEE Students	100
4	Guest lecture on" Gas Based Power Plant Familiarization "by Mr. Navraj Singh, AGM, GMR Barge Mounted Power Plant, Kakinada.	24-02-12	IV EEE Students	100

Academic Year 2010-11						
1	Guest lecture on "Electrical Demand Management", by Prof. V.G. Patnaik, Chairman Placement, GITAM Institute of Management, GITAM University, Visakhapatnam	27-08-10	IV EEE Students	100		
2	Guest lecture on "Brushless DC Motors", by Prof. MallikarjunaRao, Professor, AU, Visakhapatnam.	27-09-10	IV EEE Students	100		
3	Guest lecture on "Megawatt Level Solar PV Power Plants" Mr. SridharaBabuKorukonda, Manager- Operations, Arbutus Consultants Pvt. Ltd, Pune	23-12-10	IV EEE Students	100		
4	Guest lecture on "Energy Conservation Opportunities", by Mr. S. Ganapati, Retired SE, AP TRANSCO.	10-03-10	IV EEE Students	100		

**Student Workshops:** 

S.No	Student Seminars	Date Participants		No. of particip ants			
		Academic year	r 2014-15				
1	STEPCONE-15	Jan 30 <sup>th</sup> , 31 <sup>st</sup> 2015	Other College Students & Internal students	20			
	Academic year 2013-14						
2	STEPCONE-14	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	50			
		Academic year	2012-13				
3	STEPCONE-13	4 <sup>th</sup> & 5 <sup>th</sup> January, 2013	Other College Students & Internal students	36			
		Academic year	2011-12				
4	STEPCONE-12		Other College Students & Internal students	84			
	Academic year 2010-11						
5	STEPCONE-11	7 <sup>th</sup> & 8 <sup>th</sup> January, 2011	Other College Students & Internal students	110			

- 33. List the teaching methods adopted by the faculty for different programmes. Some of the teaching methods adopted by the faculty are:
  - Tutorial is followed apart from the curriculum for the benefit of the Students
  - Lecturing, Working models, Demonstration, Animation, Industrial visit, Seminars, Project etc
  - Teaching aids: Black Board, LCD Projector etc.
  - Group discussions
  - LAN Based Courses
  - Remedial Classes for Slow learners and backlog students
- 34. How does the department ensures that the programme objectives are constantly met and learning outcomes monitored

  Achievement of the POs mechanisms consists of following processes

#### **Internal assessment tools:**

- Assignments
- Mid examinations
- Ouiz examinations
- Daily assessment of Laboratory performance
- Internal & External laboratory exams
- End-semester theory examinations

#### **External assessment tools:**

- Feedback from the stake holders.
- Feedback is collected from the employers through placement cell.
- Through governing council constituted at institutional level.
- Through publications/presentations in conferences.

#### **Achievement of the Learning outcomes consists of following processes**

- The process recommended in NBA's OBE is being followed to attain this objective
- 35. Highlight the participation of students and faculty in extension activities.
  - NSS activities
  - Participating in community services through GMR Varalakshmi Foundation, Rajam
  - Creating Awareness on various issues and job opportunities for rural people through GMR Community Radio (FM 90.4 MHz)

Some of recent extension activities by students and faculty

S. No	Name of Extension activity	Date
1	Pulse Polio Immunization Programme	19-01-2014
2	Republic Day Celebrations	26-01-2014
3	World Cancer Day	04-02-2014
4	Blood Donation Camp	14-03-2014
5	Voters Awareness Rally	05-04-2014
6	Mega Rangoli for awareness of the electoral Voting.	03-05-2014

Some of recent Community services through GMR Varalashmi Foundation, Rajam,

S. No.	Name of the Activity	Date
1	Joy of Giving	Every Monday
2	Book Donation	24-07-2013
3	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, Dolapeta (V), Rajam	27-12-2013
4	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, A.V. Puram (V), Rajam	28-12-2013

Community Radio programs given by students

S. No. Name of the Program		Name of the Program	Name of the Student and Branch
	1	Vantalu	Lahari (III-EEE)
	2	Chittipotti Kathalu	Jagadeeswari (III-EEE)

36. Give details of "beyond syllabus scholarly activities" of the department.

S.No	Activity	Date	Participants	No. of participa nts
Acade	mic year 2013-14			
1	Photography	27-04-14	All years	28
2	I for all	13-03-14	All years	17
3	Tiucric Hunt	01-03-14	All years	54
4	Electrica	21-11-13	All years	45

5	Re Fashion –Save	27 07 12	A 11	27				
5	nation	27-07-13	All years	21				
Academic year 2012-13								
1	TYK	18-03-13	II,III years	50				
2	Tech Hunt	23-02-13	III year	70				
3	Just stick it	15-12-13	III year	48				
4	Mathematica	22-12-12	III year	60				
5	Game over	15-09-12	III year	52				
6	Just Guess it	04-08-13	All years	90				
Acade	mic year 2011-12							
1	Power up Ideas	06-07-11	EEE students	120				
2	Treasure Hunt	30-07-11	EEE students	200				
3	Technical Role Play	06-08-11	EEE students	30				
4	Hoby Wizard	15-10-11	EEE students	12				
5	Crossword	17-10-11	EEE students	35				
6	Technical Quiz	17-12-11	EEE students	54				
7	Find me out	04-01-12	EEE students	52				
8	Just click it	03-03-12	EEE students	164				
Acade	mic year 2010-11							
1	Spontaneity	04-07-10	EEE students	51				
2	Treasure Hunt	17-07-10	EEE students	90				
3	Vocabulary	10-08-10	EEE students	66				
4	Technical Quiz	21-08-10	EEE students	45				
5	Sudoku	25.09.10	EEE students	24				
6	Paper Presentation	03.01.11	EEE students	52				
7	Picture Description	24.01.11	EEE students	45				
8	Group Debate	18.02.11	EEE students	40				
9	Flaunt Your Dexterity	26.02.11	EEE students	36				
10	Story writing	24.03.11	EEE students	30				

- 37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
  - All the programmes are recognized by AICTE
  - First Accreditation by National Board of Accreditation for 3 Years F.No. NBA/ACCR-836/2006 Dt. 29.03.2007.
  - Latest Accreditation by National Board of Accreditation for 2 Years File. No.11- 46/2010/NBA, Dt: 01.02.2013
  - Institute is accredited by NAAC from 2010, Dt.28.03.2010 with A Grade

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

#### **Strengths**

- Committed and dedicated faculty with minimum qualification of M.E/M.Tech
- Good retention of faculty
- Well-equipped laboratories with good infrastructure
- Good placement record and alumni relations
- More participation of students in Curricular and Extracurricular activities
- Brand name of group

#### Weaknesses

- Lack of R & D activities
- Lesser number of faculty with Ph.D. qualification
- Diversity in Student input
- Lesser number of senior faculty
- Lack of interest among students for higher studies.

#### **Opportunities**

- Scope for good number of placements
- Opportunity for more Research activities
- Attracting consultancy projects
- Exploring best teaching & learning practices
- Organize industry oriented Add-on courses

#### **Challenges**

- Sustainability of attracting good students
- Attracting senior faculty
- Achieve more than 90% placements
- Retention of competent faculty
- Upcoming deemed universities in and around the region.
- 39. Future plans of the department.
  - To facilitate faculty of the department to acquire highest academic qualification by establishing research laboratories
  - To forge close relationships with industry and research organizations
  - To enhance the student participation in competitive exams for placement and higher education
  - To start additional PG Program
  - To provide summer internships for students with Industries

#### **E6.** Evaluative Report of Information Technology

#### 1. Name of the Department & its year of establishment:

Information Technology & 1999

### 2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

**UG**: Information Technology

#### 3. Interdisciplinary courses and departments involved

S.No.	Title (s) of the Course(s)	Other department
		involved
1	Environmental studies	CHEM
2	Elements of Mechanical Engineering	MECH
3	Elements of Electrical Engineering	EEE
4	Managerial Economics & Financial Analysis	BS&H
5	Probability and Statistics	BS&H
6	Renewable Energy Resources(open elective)	EEE
7	Disaster management(Open elective)	CE
8	Fundamentals of Global Positioning Systems (Open elective)	ECE
9	Industrial safety and Hazard management(Open elective)	СНЕМ
10	Operation Research(Open elective)	MECH
11	Management Science	BS&H
12	Digital Image processing	ECE
13	Embedded and Real time systems	ECE

#### 4. Annual/semester/choice based credit system

Semester Based Credit System

### 5. Participation of the department in the courses offered by other departments

Title(s) of the course(s)	To which department Programme	Programme UG/PG	Semester
Fundamentals of	Civil, EEE, ME,	UG	I & II
Computer	ECE, CHEM & PE		Semesters
Programming			
Computer	EEE	UG	IV -I
organization			
Computer	ECE	UG	III - II
organization			
Object Oriented	ECE, EEE	UG	IV Year
Programming			
Artificial Intelligence	EEE	UG	IV-II
Interactive Computer	MECH	UG	IV-II
Graphics			

### 6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

	Sanctioned	Filled
Professor	1	0
Associate Professors	3	2
Asst. Professors	8	9

### 7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr. P.	Ph. D	Associate	Bio	12yrs	
Kanchana		Professor	Informatics		
Mala					
Mr. Ajit	M.Tech	Associate	Data Mining &	12 years	
Kumar Rout	(Ph.D)	Professor	Forecasting	6 months	
Mr. A. V.	ME	Assistant	CSE	13 years 9	
Ramana		Professor		months	
Mrs. M.	M.Tech	Assistant	Data Mining	8 Years10	

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Jyothi	(Ph.D)	Professor		months	
Mr. M.	M.Tech	Assistant	Text Mining	6 Years 5	
Satish	(Ph.D)	Professor		Months	
Mr. P.	M.Tech	Assistant	Data Mining	6 Years 4	
Srihari	(Ph.D)	Professor		months	
Mr. Ch. R.	M. Tech	Assistant	Multimedia	8 Years	
Vinod	(Ph.D)	Professor	Data Security		
Kumar					
Mr. G. Satya	M. Tech	Assistant	Data Mining	6 Years	
Keerthi	(Ph.D)	Professor	_		
Mrs. V.	M. Tech	Assistant	Big Data	10 Years 6	
Vasudha	(Ph.D)	Professor	Analytics	months	
Rani					
Mrs. M.	M. Tech	Assistant	Data Mining	7 years 7	
Suneetha	(Ph.D)	Professor		months	
Mrs. A.	M. Tech	Assistant	Big Data	6Years 3	
Anupama	(Ph.D)	Professor	Analytics	months	

8. Percentage of classes taken by temporary faculty – programme-wise information

NIL

9. Programme-wise Student Teacher Ratio

UG: 15:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Filled/Existing	Sanctioned
No. of academic support Staff	10	10
Administrative	2	2

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

NIL

### 12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Academic Year	Funding Agency	Project Name	Grant Received in Rs. Lakhs
2009-10	DST	MODROBS	5.00

#### 13. Research facility / centre with

State recognition : NIL
 National recognition : NIL
 International recognition : NIL

#### 14. Publications:

\* Number of papers published in peer reviewed journals (national / international):

S.		No. of Papers				
No	Journal/Conference	2014- 15	2013- 14	2012- 13	2011- 12	2010- 11
1	National Conference	01	02	03	02	02
2	National Journal	02	03	01	00	00
3	International Conference	06	00	04	06	09
4	International Journal	15	21	08	11	05
	Total Papers	24	26	16	19	16

\* Monographs : NIL

\* Chapter(s) in Books : NIL

\* Editing Books : NIL

\* Books with ISBN numbers with details of publishers : NIL

\* Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 10

	2014-15	2013-14	2012-13	2011-12	2010-11
Citation Index - range /	0-20	1-11	1-3	1-6	1-4
average					
SNIP	0-0.977	0	0	0	0
SJR	0-0.267	0	0	0	0
Impact factor –	0.419-	0.594-	0225-	0.103-	0.776
range / average	2.972	2.538	2.552	1.129	0.776
h-index	7	5	4	3	2

**15. Details of patents and income generated** : NIL

**16.** Areas of consultancy and income generated : NIL

#### 17. Faculty recharging strategies:

2014-2015 : 18 2013-2014 : 10 2012-2013 : 14 2011-2012 : 43 2010-2011 : 31

#### 18. Student projects

- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

		Students who have done projects		
Academic year	Programme	In-house projects including interdepartmental	In collaboration with industries or institutes	
2014-15	B. Tech	100%	Nil	
2013-14	B. Tech	100%	Nil	
2012-13	B. Tech	100%	Nil	
2011-12	B. Tech	100%	Nil	
2010-11	B. Tech	100%	Nil	

### 19. Awards / recognitions received at the national and international level by

#### • Faculty:

A 1 W	Awards / recognitions received at the		
Academic Year	National level	International level	
2014-15	01	Nil	
2013-14	03	Nil	
2012-13	Nil	Nil	
2011-12	Nil	Nil	
2010-11	Nil	Nil	

• Doctoral / post doctoral fellows: Nil

#### • Students:

A andomia Van	Awards / recognitions received at the		
Academic Year	National level	International level	
2014-15	02	Nil	
2013-14	06	Nil	
2012-13	Nil	Nil	
2011-12	05	Nil	
2010-11	Nil	Nil	

# 20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Academic	Seminars/ Conferences/Workshops	Source of
Year	organized (national / international)	Funding
2014-15	1 National workshop	Institute
2014-13	2 National seminar	mstitute
	4 National workshops	
2013-14	2 National conferences	Institute
	1 National seminar	
2012-13	2 National workshops	Institute
2012-13	1 National conference	mstitute
	3 National workshops	
2011-12	1 National conference	Institute
	1 National Seminar	
	2 National workshops	
2010-11	1 International conference	Institute
	1 National conference	

#### 21. Student profile course-wise:

Applicat ions		Selected		Pass percentage	
	received	Male	Female	Male	Female
2011-15	NA	42	24	88%	100%
2010-14	NA	30	35	73.3%	97.14%
2009-13	NA	28	25	75%	96%
2008-12	NA	72	41	87.5%	97.6%
2007-11	NA	67	30	83.6%	100%

#### 22. Diversity of students:

Academic year	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
2010-11	Nil	97.2%	2.8%	Nil
2011-12	Nil	100%	0%	Nil
2012-13	Nil	94.3%	5.7%	Nil
2013-14	Nil	98.5%	1.5%	Nil
2014-15	Nil	92.42	7.58	Nil

## 23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Academic Year	No. of the students Qualified in GATE	No. of the Students Qualified TOFEL
2014-15	2	1
2013-14	1	Nil
2012-13	2	Nil
2011-12	2	1
2010-11	4	Nil

#### 24. Student progression:

Academic Year	UG to PG	PG to Ph.D	Employed
	(Percentage	(Percentage	(Campus
	against	against	selection) UG
	enrolled)	enrolled).	(Percentage against
			enrolled)
2014-15	2%	Nil	57.14%
2013-14	1.5%	NIL	49.23%
2012-13	3.8%	NIL	26.42%
2011-12	1.8%	NIL	42.5%
2010-11	3.8%	NIL	57%

#### 25. Diversity of staff

Percentage of faculty who are graduates			
of the same parent university	45		
from other universities within the State	46		
from other universities from other States	9		

### 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Three (plus one Submitted)

#### 27. Present details about infrastructural facilities

a) Library

Books	Journals/Magazines/Periodic als		CDs, VCDs and	Others
	National	International	Multimedia	
515	1	-	53	366 project reports

#### b) Internet facilities for staff and students:

**Internet facilities** : 100 MBPS (BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c) Total number of class rooms : 5

d) Class rooms with ICT facility : 4

e) Students' laboratories :

UNIX LAB, WINDOWS NT LAB, INTERACTIVE LAB

f) Research laboratories : Nil

### 28. Number of students of the department getting financial assistance from College.

Nil

### 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

- Getting Feedback from all stakeholders viz. Industry, parents, students and faculty
- Assessing the availability of job opportunities in industry, research and academia
- Collecting information about emerging areas of engineering growth and development

#### 30. Does the department obtain feedback from

### a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BOS meetings.

#### b. Students on staff, curriculum as well as teaching-learningevaluation and what is the response of the department to the same?

Feedback will be collected from students twice in a semester i.e during mid-semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.

### c. Alumni and employers on the programmes and what is the response of the department to the same?

#### Alumni Feed-back/Alumni Survey:

Institute conducts Alumni meets regularly (at least once in a year) at various places in the country. Few of our alumni are successful in

establishing and running consultancy firms, software companies, Power plants, service and manufacturing industries. The alumni survey is conducted to obtain feedback regarding their employment, higher studies, suggestions for improvement of institution etc. The inputs from the alumni are used in curriculum design, best practices, programme objectives etc. Alumni survey is conducted during alumni meets, visits to institution, stake holders meeting etc. Institute has separate alumni portal to facilitate the alumni interaction and updation of alumni database. Board of Studies of each department has an alumni nominee.

#### **Employer feedback/Employer Survey:**

- Eminent Persons from the industry having keen interest in academics are inducted in the academic Council (AC) and in the IQAC of the institution. Valuable suggestions are taken for the betterment of the institution from time to time.
- A survey questionnaire is prepared for the employer to assess the performance of the graduates recruited in different industries. This questionnaire is circulated among the employers through emails and social networking sites and responses are received. These responses are analyzed to assess the technical knowledge and leadership skills of the graduates of this institution. The results from the above feedbacks are analyzed and discussed in the department meetings. The feedback taken is used to make necessary improvements in the curriculum, teaching-learning process, up gradation of the facilities etc. Institute encourages Industry-Institute Interaction which will in turn useful in curriculum design and development.

#### 31. List the distinguished alumni of the department

Name of the student	Designation	Company Name
V. Vennela	Software Engineer	Honey well
B. Srivalli	Software Engineer	Infosys
Suresh	Software Engineer	Honey Well
Krishna Chaitanya	Business Associate	IBM
M. S. K. Phanindhra	Network Administrator	Progressive Constructions Ltd,
K. Pradeep	Analyst	Verizon Data Services India
B.Sai Kumar	Principal Software Engineer	Nisum Technologies India Pvt Ltd
T. Santosh	Assistant Systems Engineer	TCS

K. Sekhar Babu	R & D Engineer	Airvana Networks India Pvt. Ltd.
D.Surya Mohan	Network Administrator	Progressive Constructions Ltd.

# **32.** Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

S.No	Special Lectures	Date	Participant s	No. of particip ants
Acader	nic Year 2014-15			
1	Guest lecture on "Way Forward statement" by Mr. K.S. Reddy, Head Training and placement, GMRIT.	03-07-14	IV-IT	64
2	Guest lecture on "Emplyoability skills and Technology Expectations" by Mr. Deevi Srinivas, TCS	17-07-14	IV-IT	64
3	Guest Lecture on "Recent Trends & Research Issues in modern computer & communication n/w" by Dr. K. Nageswara Rao, Andhra University.	19-07-14	III&IV-IT	120
4	Guest Lecture on "Various Career options for Engineers" by Mr. Winny Patro, IIM- Kolkatta.	19-07-14	III-IT	58
5	Guest Lecture on "IBM Bluemix-Cloud Training" by Mr. Yukesh.Ch, Software Engineer(AI), IBM	6-9-14	II,III&IV- IT	154
6	Guest Lecture on "Project Management System" by Dr. Sunil Kumar Dhal", SRI SRI University.	19-12-14	IV-IT	63
7	Guest Lecture on "Focus Research & Execute" by Malla Vijaya Sarathi, Software Engineer, Washinton DC	22-01-15	II,III&IV- IT	130
8	Guest Lecture on "The Role of IT Sector" by Mr. G.Venkata	08-04-15	II-IT	39

	Rajesh", Software Engineer, Infosys					
Academic Year 2013-14						
1	Guest lecture on "Pattern Recognition "by Dr.R.RajeswaraRao, Associate Professor,JNTUKVizianagara m Campus	20-07-2013	III&IV IT	114		
2	Guest lecture on "Talent Sprit on First Job Pointers to Students" Sri. Madhu Murthy Rolanki, Talent Sprint, Hyd	31-07-2013	IV -IT	41		
3	Guest lecture on Distributed Databases by Dr.G.Jayasuma, JNTUK Vizianagaram Campus	22-11-2013	III- IT	64		
4	Guest lecture on Mobile Applications: Opportunities And Challenges by Mr.Yuktesh Chaintamadaka, IBM	28-11-2013	III-IT	20		
5	Guest lecture on" Skills needed to excel in IT/ITES industry" by Mr Rajavel Sekaran IBM Kenexa	23-12-2013	MCA ,II - IT	87		
6	Guest lecture on" Microsoft Ed-Vanatge Platinum level Program"by Mr.Saikuamr Business head, NecxPvtLtd	10-01-2014	III -IT	49		
7	Guest lecture on" Overview Of SAP" Mr.MJRK RAJU ,Sr Technical Quality Manager, SAP ,Canada	22-01-2014	III-IT	55		
8	Guest lecture on" How to read newspaper and its importance" How to read newspaper and its importance Mr.K.RaviChandra Rao Mr.K.SreenivasaRao, Trainers-Indian Express	04-02-2014	III- IT,MCA	38		
9	Guest lecture on" INDUSTRY EXPECTATIONS "	25-03-2014	III-IT	28		

	Mr.Nikhil Chaturvedi,			
	Mr.Nikhil Chaturvedi, Wipro			
	Technologies			
	Guest lecture on" Pattern recognition & Image			
10	Processing"by Dr.C.Chandra Sekhar, ProfessorDept.of	29-03-2014	IV-IT	56
	CSE,IIT Chennai			

Acader	nic Year 2012-13			
1	Guest lecture on "Advanced Image Processing Techniques based on Fuzzy Systems" by Mr K Venkata Rao, Assoc Professor, Web Master, Deptof CSSE, AU, Andhra University, Vishakapatnam	31-07-2012	IV,III-IT	117
2	Guest lecture on "Data Mining Opportunities and Challenges"By Dr.P.Krishna Reddy, IIIT,Hyderabad	03-10-2012	IV-III,IT	157
3	Guest lecture on "Pattern Software Architecture" By Dr K.R.V.Subramanian IIIT,Banglore	02-02-2013	III-IT	62
Acader	mic Year 2011-12			
1	Guest lecture on "Data Structures and its Applications" Dr P.Sanyasi Naidu, Professor, GITAM University,VSKP. GITAM University,VSKP	09-09 -11	III-IT	114
2	Guest lecture on "Pattern Recognition Techniques" By Dr. Krishna Mohan, Professor ,IIT, Hyderabad, IIT ,Hyderabad	30-09-11	II,III,MC A-IT	179
3	Guest lecture on" Overview on Industry Oriented Projects" By Mr.P Murali Krishna, Project Analyst, HSBC, UK,	10-10-11	MCA	85
4	A Guest Lecture on "Latest	29-12-2011	IV-IT	106

	Developments in CAD/CAM			
	and Software Applications in			
	Medical Field "Dr. B Ravi,			
	Chair Professor, Mechanical			
	EngineeringDepartment I.I.T			
	Bombay,			
	A Seminar on Computer			
	vision ,Graphics and			
	Applications, Dr. Uma			
5	Mudenagudi, Professor,	05-01-2012	II,III-IT	95
	Department of E&C			
	BVBCET, Hubli, Department			
	of E&C BVBCET,Hubli			

Acadeı	Academic Year 2010-11					
1	Guest lecture on Technology and Trends in Airports" Mr.A.S.Viswanathan, Global Head-Mobility, Siemens IT Solutions & Services	20-07-2010	IV -IT	92		
2	Guest lecture on "Data Mining and its Applications" Prof.Tammi Reddy, Vignan Institute of Technology, VSP	04-08-2010	IV – IT,MCA	135		
3	Guest Lecture on"Overview of Bsiness Intelligence" By Dr.DVLN Somayajulu, Professor,NIT Warangal	24-12-2010	III-IT	84		
4	Guest lecture on "Engineering for Environment" Dr.KVSG Murali Krishna JNTUK,Kakinada.	14-02-2011	II-IT	50		

**Students workshops:** 

S.No	Student workshops	Date	Participants	No. of participa nts
Academ	nic year 2014-15			
1	STEPCONE-15	Jan 30 <sup>th</sup> , 31 <sup>st</sup> 2015	Other College Students & Internal students	50

Academ	Academic year 2013-14					
2	STEPCONE-14	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	36		
Academ	nic year 2012-13					
3	STEPCONE-13	4 <sup>th</sup> & 5 <sup>th</sup> January, 2013	Other College Students & Internal students	36		
Academ	nic year 2011-12					
4	STEPCONE-12	6 <sup>th</sup> & 7 <sup>th</sup> January, 2012	Other College Students & Internal students	84		
Academ	Academic year 2010-11					
5	STEPCONE-11	7 <sup>th</sup> & 8 <sup>th</sup> January, 2011	Other College Students & Internal students	110		

### 33. List the teaching methods adopted by the faculty for different programmes.

- Tutorial is followed apart from the curriculum for the benefit of the Students
- Lecturing, Working models, Demonstration, Animation,
- Industrial visit
- Seminars
- Projects
- Teaching aids: Black board and LCD projectors
- Group Discussions
- Remedial Classes for Slow learners and backlog students
- LAN based courses

### 34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

#### **Internal assessment tools:**

- Assignments
- Mid examinations
- Quiz examinations
- Daily assessment of Laboratory performance
- Internal & External laboratory exams
- End –semester theory examinations

#### **External assessment tools:**

Feedback from the stake holders.

- Feedback is collected from the employers through placement cell.
- Through publications/presentations in conferences.
- Through governing council constituted at institutional level
- Periodic review through AMC Meetings

#### Achievement of the Learning outcomes consists of following processes

• The process recommended in NBA's OBE is being followed to attain this objective

### 35. Highlight the participation of students and faculty in extension activities.

- Blood Donation awareness Program
- Voluntary Blood Donation Camp
- Observance of NSS day
- Clean Campus(5S practicing Institute)
- Promoting Hygiene and Cleanliness in canteen
- Every Thursday is observed as a Pollution Free day.
- Observance of Sports day.
- Professional Activities of ISTE/CSI
- SAC Club activities
- Hobby Projects
- Student / Faculty Paper Presentations
- CSW activities

S.No	Name of Extension activity	Date
1	Pulse Polio Immunization Programme	22-02-2015
2	Republic Day Celebrations	26-01-2015
3	World Cancer Day	04-02-2015
4	BloodDonationCamp	06-02-2015
5	Voters Awareness Rally	05-04-2014
6	Mega Rangoli for awareness of the electoral Voting.	03-05-2014

Some of recent Community services through GMR Varalashmi Foundation, Rajam,

S. No.	Name of the Activity	Name of the Branch	Date
1	Joy of Giving	Information Technology	Every Monday
2	Contribution for distribution of books to poor children	Information Technology	23-07-2013

S. No.	Name of the CSW Project	Activity	Name of the Branch	Date
1	Helping Hands	Distributed school bags, cheppals, Note books & Pens for 51 poor orphan students in Dolapet Government High school, Rajam	Information Technology	18- 04-14
2	Helping Hands	Distributed school bags, cheppals, Note books & Pens for 17 poor orphan students in Tana street primary school, Rajam	Information Technology	18- 04-14
3	Helping Hands	Distributed school bags, cheppals, Note books & Pens for 6 poor orphan students in Telaga street school, Rajam	Information Technology	21- 04-14

### 36. Give details of "beyond syllabus scholarly activities" of the department.

- The department is organizing Add-on Courses on latest technologies
- Conducting Infosys campus connect classes to train students for placements
- Conducting GATE Classes to encourage students for further studies
- Conducting CRT Classes to enable them to participate in placement tests
- Students are encouraged to involve in the ongoing research of faculty members.
- Guiding hobby projects.
- Conducting guest lectures and faculty seminars

#### **CSI Events**

S.No	Activity	Date	Participants	No. of participants
Academic year 2014-15				
1.	Brain Storming	15–07–14	IT Students	20
2.	Guest Lecture on "Modern Computer and	19–07–14	IT Students	93

	G : .:			
	Communication Networks" by Dr. K. Nageswara Rao			
3.	"En-Tech-Apt"	24-07-14	IT Students	38
4.	"JAM (Just – A – Minute)"	26-08-14	IT Students	23
5.	Presentation on "Bioinformatic Tools in Diabetic Research" by Mrs. V. Vasudha Rani	26-08-14	IT Students	61
6.	Techno Reels	04-09-14	IT Students	45
7.	Think & Play	23-09-14	IT Students	29
8.	Build Your Brilliance	25-10-14	IT Students	21
9.	Webinar on "How Technology has changed in last 20 years" by Ruhani Arora	30-10-14	IT Students	22
10.	Technical Reasoning	26-12-14	IT Students	14
11.	Boost Your IQ	08-01-15	IT Students	26
12.	Just C it	10-01-15	IT Students	16
13.	IF I Were	06-02-15	IT Students	25
14.	Presentation on "Research Issues in Big Data & Cloud Computing" By Mr. M. Satish	10-02-15	IT Students	45
15.	Speak, Answer, Perform (SAP)	19-02-15	IT Students	31
16.	Mock Placement Exam	20-02-15	IT Students	24
17.	Mock Placement Interviews	06-03-15	IT Students	20
18.	Perfect Text	19-03-15	IT Students	19

19.	TechnoSketch	23-04-15	IT Students	16
20.	Brain Charger	16-05-15	IT Students	31
Academ	nic year 2013-14			
1	Technical Presentation Contest	18.06.2013	IT Students	20
2	Technical Quiz	22.06.2013	IT Students	36
3	Game Over	20.07.2013	IT Students	32
4	MOCK GATE 2014	22.07.2013	IT Students	19
5	Student Centric Workshop on Introduction to Flash Animation Software	16.11.2013	IT Students	44
6	IEEE Computer Society Webinar on Best Practices in Software Architecture	20.11.2013	IT Students	27
7	InQuizzitive	30.11.2013	IT Students	36
8	Dr. Technocrat	22.02.2014	IT Students	18
9	Poster Designing on Green Computing	26-04-2014	IT Students	10
10	START	31-05-2014	IT Students	10
11	Guest Lecture by Mr. C. Chandra Sekhar	29-03-2014	IT Students	52

Academic year 2012-13				
1	Guest Lecture on "Advanced Image Processing Techniques based on Fuzzy Systems" By Mr. K. Venkata Rao (Andhra University)	31-07-12	IT Students	116
2	A Seminar on "JDBC Programming" By Mr. N. Sridhar	25-08-12	IT Students	31
3	"Brain Charger"	01-09-12	IT Students	39

	A Seminar on	15-09-12		
4	"Computing with Grid		IT Students	16
4	& Clouds" by Mr. M.		11 Students	10
	Balajee			
5	"Expressive Minds"	29-9-12	IT Students	19
			TI Students	17
	A Seminar on	19-11-12		
6	"Application		IT Students	15
	Development for			
	Windows Phones"			
7	Just – A – Minute	21-11-12	IT Students	10
	Eggay Waiting			
8	Essay Writing Competition on	18-12-12	IT Students	8
0	"Energy Conservation"	10-12-12	11 Students	0
	"New Year			
9	Colors"	29-12-12	IT Students	35
10	Sparkling Words	23-02-13	IT Students	5
1.1	(CD 1 2 3 A 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	16.02.12	III C. 1	27
11	"Fresher's Mania"	16-03-13	IT Students	37
Acador	nio voor 2011 12			•
Acadei	mic year 2011-12			
1	Seminar on "An	25-06-11	IT Students	28
	overview on Artificial			
	Intelligence"			
2	Quiz for 2 <sup>nd</sup> year IT	12-07-11	IT Students	38
	Students			
3	Brain Bowl Contest	16-07-11	IT Students	33
4	Crazy Housie	06-08-11	IT Students	50
6	Student Centric	01-10-11	IT Students	65
	Workshop on Ethical			
	Hacking			
7	Guest Lecture on	10-10-11	IT Students	81
	"Overview on Industry			
	Oriented Projects"			
8	A Seminar on	15-11-11	IT Students	179
	"Personal hygiene &			
	behavioral problems of			
	adolescence" for Girls			
	Students			
9	A Seminar on "Data	24-12-11	IT students	68
	Security for virtual			
	data centers by			

	Commutative Key" By Mr. M. Balajee			
11	A Seminar on "The Quick & Easy way to Effective Speaking" by Mrs. Geetha R. B.	04-02-12	IT students	62
12	Science Day Celebrations	28-02-12	IT students	13
13	Brain storming	30-03-12	IT students	28

Acader	Academic year 2010-11			
S.No	Activity	Date	Participants	No. of participant s
1	Create a Story	17-07-2010	IT Students	46
2	"Aptitute Test"	27-08-2010	IT Students	80
3	"Mind Game"	25-09-2010	IT Students	13
4	Guest Lecture on "Overview of Business Intelligence"	24-12-2010	IT Students	185
5	Collagen	12-02-2011	IT Students	24
6	"Aptitude test on C++"	26-02-2011	IT Students	21
7	Quiz	05-03-2011	IT Students	36
8	Logic Mania	16-03-2011	IT Students	43

#### **ISTE Events**

S.No	Name of the Event	Date	Participants	No.of Participants		
Academi	Academic year 2014-15					
1	Pirates of IT	08-05- 2015	IT Students	25		
2	Techno Quiz	13-05- 2015	IT Students	31		
3	Soch	04-02- 2015	IT Students	26		
4	Fast and furious	03-01- 2015	IT Students	30		
5	Out of Box	07-01- 2015	IT Students	30		
6	Think Quest	30-10- 2014	IT Students	30		

7	Group Discussion	26-09- 2014	IT Students	19
8	Just Click IT	22-09- 2014	IT Students	21
9	Buzz Your Brain	09-09- 2014	IT Students	27
10	Group Discussion	23-07- 2014	IT Students	30
Academ	ic Year 2013-14			
1	Macrenos	29.06.13	IT Students	21
2	Technical Quiz	18.02.14	IT Students	18
3	Spot out	20.02.14	IT Students	20
4	Matinee	11.03.14	IT Students	26
5	Test your IQ	20.03.14	IT Students	34
6	Mock Written Test	04.02.14	IT Students	23
7	Elocution	12.02.14	IT Students	17
8	Poster Presentation	15.03.14	IT Students	
9	Science day Quiz	28.02.14	IT Students	145
9	Guest lecture on Distributed Databases by Dr. P. Jaya Suma (JNTU Vizianagarm)	21.11.13	IT Students	110

#### <u>2012-13</u>

S.No	Name of the Event	Date	Participants	No.of Participants
1	Memory Game	30.06.12	IT Students	26
2	HIT CALCEI of your Brain	28.07.12	IT Students	27
3	Beg Borrow Steal	22.12.12	IT Students	40
4	Buzz your Brain	24.01.13	IT Students	27
5	Check Points	16.03.13	IT Students	27
6	Snake and ladder without Dice	22.09.12	IT Students	39
7	Experience the Interview	13.10.12	IT Students	12
8	Essay Writing	22.12.12	IT Students	14
9	Coding and Debugging	14.03.13	IT Students	40
10	Colors Quiz	14.03.13	IT Students	48
11	Guest Lecture on Data Mining: Opportunities	03.10.12	IT Students	130

and Challenges by Dr.		
P. Krishna Reddy (IIIT		
Hyderabad)		

#### **A.Y.2011-12 Events**

S.No	Name of the Event	ne Event Date		No.of Participants
1	ADD Design	23.07.11	IT Students	25
2	Math Logic	21.09.11	IT Students	101
6	Exhibit the talent	17.12.11	IT Students	06
4	Brain Storming	18.2.12	IT Students	15
5	Creative Photography	23.02.12	IT Students	31
6	Guest Lecture on Data Structures & its Applications by Dr. P. Sanyasi Naidu (GITAM)	09.09.11	IT Students	112
7	Guest Lecture on Pattern Recognition Techniques by Dr. Krishna Mohan (IIT – Hyderabad)	30.09.11	IT Students	182

#### **2010-11**

S.No	Name of the Event	Date	Participants	No.of
				Participants
1	Aptitude Test	09-08-2010	IT Students	15
2	Best PPT	22-09-2010	IT Students	17
3	Gate Mock Test	03-02-2011	IT Students	40
4	Quiz on world icons	26-02-2011	IT Students	12
5	Treasure hunt	05-03-2011	IT Students	14
6	Debate Competition	19-06-2010	IT Students	16

### 37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

- The programme is recognized by AICTE
- First Accreditation by National Board of Accreditation for 3 Years
  - o F.No. NBA/ACCR-836/2006 Dt. 29.03.2007.
- Latest Accreditation by National Board of Accreditation for 2 Years

- o File. No.11-46/2010/NBA, Dt: 14.08.2013
- Institute is accredited by NAAC from 2010, Dt.28.03.2010 with A Grade

### 38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

#### **Strengths:**

- Dedicated faculty group
- Good retention of faculty
- Well Equipped Laboratories with latest technologies
- All the faculty are pursuing Ph.D
- More participation of students in Curricular and Extracurricular activities

#### Weaknesses:

- No senior Professors
- Laboratory facilities need to be augmented for R&D
- Less Number of externally-funded projects and consultancy services
- Less number of indexed journals
- Diversity in Students input

#### **Opportunities**

- Organizing industry oriented ADD-ON courses
- Exploring best teaching & learning practices
- Collaboration with industries on several training programs
- Financial Support for publications / Projects
- Scope for good number of placements

#### **Challenges:**

- Attracting meritorious students
- Ensuring 90% employability.
- Dynamic changes in educational and recruitment policies.
- Students opting engineering education by chance and not by choice because of free education policy
- Attracting senior faculty

#### 39. Future plans of the department.

- To enhance consultancy work
- To increase the research activities in the department.
- To improve the quantity of quality publications
- To establish a research laboratory
- To enhance the student participation in competitive exams for placement and higher education

#### E7. Evaluative Report of Mechanical Engineering

1. Name of the Department & its year of establishment :

#### **Mechanical Engineering & 1997**

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :

**UG:** Mechanical Engineering **PG:** Thermal Engineering

3. Interdisciplinary courses and departments involved:

Title (s) of the Course(s)	Other department involved
Elements of Electrical Engineering	EEE
Fundamentals of Computer	CSE, IT
Programming	
Object Oriented Programming	CSE, IT
Electrical and Electronics Engineering	EEE
Environmental Studies	CHEM
Managerial Economics and Financial Analysis	BS&H
Data Base Management System	CSE, IT
Interactive Computer Graphics	CSE, IT
Industrial Pollution Control	СНЕМ
Industrial Water and Waste Water	СНЕМ
Management	
Instrumentation	EEE
Disaster Management	Civil
Bio Medical	ECE
Open source Software	CSE
Cloud Computing	IT
Industrial Safety and Hazards	СНЕМ
Management	
Soft computing	CSE
Fundamentals of Global Positioning	ECE
System	
Renewable Energy Resources	EEE

- 4. Annual/ semester/choice based credit system:
  - > Semester based credit system

5. Participation of the department in the courses offered by other departments:

Title(s) of the course(s)	To which department Programme	Programme UG/PG	Semester
Elements of Mechanical Engineering	Civil, EEE, ECE, CSE, IT, CHEM & PE	UG	I & II Sem
Engineering Mechanics	Civil	UG	III Sem
Basic prime movers and pumps	EEE	UG	III Sem
Engineering Thermo Dynamics	PE	UG	III Sem
Mechanics of Solids	PE	UG	III Sem
Fluid Mechanics	PE	UG	III Sem
Applied Thermal Engineering	PE	UG	IV Sem
HydraulicMachinery	PE	UG	IV Sem
Steam and Gas Turbines	PE	UG	V Sem
Heat Transfer	PE	UG	V Sem
Power Generation engineering	PE	UG	V Sem
Advanced optimization technics	CE,EEE,ECE,C SE and CHEM	PG	I Sem
Operations Research	CSE	UG	VI Sem
Management Science	Civil, EEE, ECE, CSE, IT and CHEM	UG	V Sem

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

Designation	Sanctioned	Filled
Professor	4	5
Associate Professors	8	5
Asst. Professors	15	16

# 7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Name	Qualifi- cation	Designati on	Specializati on	No. of Years of Experien ce	No. of Ph.D. students guided in the last 4 years
Dr. C.L.V.R.S.V. PRASAD	Ph.D	Professor &Princip al	Manufacturi ng	28	
Dr.M.Srinivasa Rao	Ph.D	Professor	Reliability Engg.	15.5	
Dr.V.ChittiBabu	Ph.D	Professor	Applied Mechanics	15.5	
Dr.S.V.Ramana	Ph.D	Professor	Machine Tools	19	
Dr.V.Rambabu	Ph.D	Prof &HOD	Thermal Engg.	16	
Dr. R Umamaheswara Rao	ME	Asso.Prof	Optimizatio n Nano composites	12	
Dr.D.Srinivas Kumar	Ph.D	Asso.Prof	Financial Managemen t	15	
Sri MVS Babu	M.Tech	Asso.Prof	Manufacturi ng	13	
Sri P Govinda Rao	M.Tech	Asso.Prof	Machine Design	13	
Sri R Pola Rao	M.Tech	Asso.Prof	Design & Production	11	
Sri K Prasada Rao	M.Tech	Sr.Asst.P rof	Industrial Engg.	12	
Sri V.Jagadeesh	M.E.,	Sr.Asst.P rof	Tool designing& Manufacturi ng	11	
Ms. PNL Pavani	M.Tech	Sr.Asst.P rof	CAD/CAM	7.5	
Sri GVSS Sharma	M.Tech	Asst.Prof	CAD/CAM	6	
Sri M Anilkumar	M.E	Asst.Prof	CAD/CAM	8.5	

G : IX G · D	N ( T )	A . D C	CAD/CANA	T = 1
Sri K Santa Rao	M.Tech	Asst.Prof	CAD/CAM	5
	.,			
Sri D Venkata	M.Tech	Asst.Prof	Machine	7
Rao			Design	
Sri S	M.Tech	Asst.Prof	Thermal	9
Chiranjeeva Rao			Engg	
Sri M Vykunta	M.E	Asst.Prof	CIM	8
Rao				
Sri U.Sudhakar	M.Tech	Asst.Prof	Machine	7.5
			Design	
Sri G	M.E	Asst.Prof	CAD/CAM	4.5
VamsiDurga				
Mohan				
Sri	M.Tech	Asst.Prof	Thermal	3
P.Saichaitanya			Engg	
Sri K.Simhadri	M.Tech	Asst.Prof	Thermal	2
			Engg	
Sri. CH.	M. E	Asst.Prof	Machine	3
VinodBabu			Design	
Mrs. Y.Sirisha	M.	Asst.Prof	CAD/CAM	2
	Tech			
Sri B.V.Suresh	M.Tech	Asst.Prof	CAD/CAM	2

8. Percentage of classes taken by temporary faculty – programme-wise information :

Nil

9. Programme-wise Student Teacher Ratio

UG: 15:1 PG: 12:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Filled/Existing	Sanctioned
No.of academic support Staff	8	8
Administrative	2	2

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

Nil

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

a) National:

Academic Year	Funding Agency	Project Name	Grant Received in Rs. Lakhs
2014-15	DST	Travel Grant to Dr CLVRSV Prasad for participating in 10 <sup>th</sup> ASME 2015 Manufacturing Science and Engineering conference held from 08.06.2015 to 12.06.2015 in Charlotte, USA.	1.28
2014- 15	BRNS	Demographic and Health Status Survey in Kovvada Region	37.71
2013-14	UGC	Travel Grant to Dr CLVRSV Prasad to present technical paper in an International Conference on Modeling of Machining Opeerations- 2013(14th CIRP CMMO) held during 13 -14 June 2013 at Turin, Italy.	1.5
2012-13	AICTE	Entrepreneurship Development cell	7.21
2011-12	DST	Travel Grant to Dr. S V Ramana to Present Technical Paper in an international conference in Portugal	0.70
2010-11	MSME	Design and construction of Low cost Tri-Cycle Base Pavement Cleaning Machine	1.87
2010-11	DST	Travel Grant to Dr CLVRSV Prasad to present technical paper in an International Mechanical Engineering Congress & Exposition (ASME-2010)held during 12th to 18th Nov 2010 at	1.2

		Vancouver, British Columbia, Canada.	
2009-10	DST	Investigation on Cutting Tools with Array of Nano Films and their Performance Evaluation	18.33
2009-10	AICTE	Development of Industrially Oriented Mechatronics Laboratory	10.00
		Total Grants Recived	79.8

b) International: Nil

c) Total grants for projects (a+b) =79.8 lakhs

#### 13. Research facility / centre with

- State recognition
  - ➤ Department of Mechanical Engineering Recognized as Research Centre for the academic years 2014-15 & 2015-16 by JNTU, Kakinada

• National recognition :Nil

• International recognition : Nil

#### 14. Publications:

\* number of papers published in peer reviewed journals (national / international)

Publications	Academic Year					
	2014-15	2013-14	2012-13	2011-12	2010-11	
Research papers published in Journals (National/ International)	30	24	17	12	4	
Papers presented in the proceedings of Seminars or Conferences (National/International)	12	8	12	12	8	

\* Monographs : Nil

\* Chapter(s) in Books: Nil

\* Editing Books : Nil

\* Books with ISBN numbers with details of publishers

S.no	Name of the	Author name	Publisher	ISBN
	book			Number
1	Production	Dr.S.V.Ramana	I.K.International	978-93-
	Technology		Publishing House	80578-52-1
			Pvt Ltd., New	
		Delhi		
2	A Study on	Dr.V.Rambabu	Lambert	978-3-659-
	VCR Engine		Academic	27155-7
	with Preheated		Publishers,	
	Cottonseed		Germany	
	Methyl Ester			
3	CI Engine	Dr. Joshua Jaya	Lambert	978-3-8484-
	Operation with	Prasad	Academic	9106-3
	Neat		Publishers,	
	MahuaMethyle		Germany	
	Ester along with			
	EGR			

\* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):

	2014-15	2013-14	2012-13	2011-12	2010-11
Citation Index – range / average	1-10	1-11	1-3	1-6	1-4
SNIP	0	0	0	0	0
SJR	0	0	0	0	0
Impact factor – range / average	0.52- 2.5	0.594- 2.538	0225- 2.552	0.103- 1.129	0.776
h-index	10	11	4	3	2

## 15. Details of patents and income generated

S. No	Title of the Patent	Agency to which application is made	Year of application
1	Cutting tools with mono layered multi striped nano/micro coatings and the method of making		2010

## 16. Areas of consultancy and income generated

Academic Year	Area of consultancy	Income Generated(Lakhs)
2014-15	Academic consultancy – GMR Airports Ltd     Research consultancy from MVGR	0.60
2013-14	1.Academic consultancy - (World wide Diamond Manufacturing PVt.Ltd (Manager Skills Training program) 2.Fabrication of Nano Composites.	1.105
2012-13	Academic consultancy - Manager Skills Training program-World wide Diamond Manufacturing PVt.Ltd.	0.624
2011-12	Academic consultancy –Content development and delivery for a virtual institute for GETs-GMR Energy	5.75

## 17. Faculty recharging strategies

# > Workshops/seminars/conferences attended by faculty during the academic years:

2014-2015 : 11 2013-2014 : 28 2012-2013 : 19 2011-2012 : 34 2010-2011 :06

## 18. Student projects

- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

		Students who have done projects		
Academic year	Programme	In-house projects including interdepartmental	In collaboration with industries or institutes	
2014-15	B.Tech (ME)	144/144(100%)	Nil	
2013-14	B.Tech (ME)	140/140(100%)	Nil	
2012-13	B.Tech (ME)	134/134(100%)	Nil	
	B.Tech (ME)	67/67(100%)	Nil	
2011-12	M.Tech (CAD/CAM)	5/5 (100%)	Nil	
	B.Tech (ME)	66/66(100%)	Nil	
2010-11	M.Tech (CAD/CAM)	2/2 (100%)	Nil	

- 19. Awards / recognitions received at the national and international level by
  - Faculty: Nil
  - Doctoral / post doctoral fellows : Nil

# Faculty members recognized as research supervisors registered with JNTU-K $\,$

S.No	Name of research supervisor
1	Dr.CLVRSV Prasad
2	Dr. S.V.Raman
3	Dr.V.Rambabu
4	Dr.M.Srinivasa Rao
5	Dr.V.ChittiBabu
6	Dr.R.Umamaheswara Rao

### • Students

Academic Year	Awards / recognitions received at the		
Academic Tear	National level	International level	
2014-15	09	Nil	
2013-14	11	Nil	
2012-13	09	Nil	
2011-12		Nil	
2010-11	01	Nil	

20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Academic Year	Seminars/ Conferences/Workshops organized (national / international)	Source of Funding	No. of Participants
2014-15	01 (National Workshop)	Institute	30
2013-14	01 (National Workshop)	Institute	38
2012-13	01(National Workshop)	Institute	50
2011-12	01(National Workshop)	Institute	30
2010-11			

# 21. Student profile course-wise:

UG: B.Tech

Batch	Applicati	Selected		Pass percentage	
	ons received	Male	Female Male Fe		Female
2011-15	NA	114	30	85.08%	96.6%
2010-14	NA	105	33	86.67%	96.66%
2009-13	NA	96	27	87.5%	85.18%
2008-12	NA	50	17	80%	100%
2007-11	NA	44	18	79.54%	94.44%

PG: M.Tech

Batch	Applicati	Sel	ected	Pass percentage	
Butch	ons received	Male	Female	Male	Female
2013-15	NA	10	2	Result	s awaited
2012-14	NA	0	0	0	0
2011-13	NA	3	2	100%	100%
2010-12	NA	1	1	100%	100%
2009-11	NA	6	1	100%	100%

## 22. Diversity of students

Name of the				% of students
Course	students	students	students	from other
	from the	from the	from other	countries
	College	State	States	
UG: B.Tech	Nil	97.5%	2.5%	Nil
PG: M.Tech.	8.3%	91.7%	Nil	Nil

# 23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Academic Year	No. of the students Qualified in GATE
2014-15	07
2013-14	15
2012-13	11
2011-12	03
2010-11	17

## 24. Student progression

Academic Year	UG to PG (Percentage against enrolled)	PG to Ph.D (Percentage against enrolled).	Employed (Campus selection) UG (Percentage against enrolled)
2014-15	4.86		19.4
2013-14	5.54%	-	17.09%
2012-13	5.66%	-	34.9%
2011-12	5%	-	63.33%
2010-11	21.8%	-	63.33%

# 25. Diversity of staff

Percentage of faculty who are graduates			
of the same parent university	Nil		
from other universities within the State	96.3%		
from other universities from other States	3.7%		

- 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.
  - > Number of Ph.D awards during the assessment period: 06
- 27. Present details about infrastructural facilities

a) Library (Department Library)
No. of Titles : 211
No. of books : 265
No. of NPTEL courses : 45
No. of LAN courses : 38

b) Internet facilities for staff and students:

Internet facilities : 100 MBPS (BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c) Total number of class rooms : 08

d) Class rooms with ICT facility : 08

e) Students' laboratories :13

- Engineering workshop, Fluid Mechanics and Hydraulic Machinery Lab, Production Technology Lab, Dynamics of Machinery Lab, CAM Lab, Mechatronics Lab, Instrumentation Lab, Metrology Lab, Machine Tools Lab, CAD Lab, Thermal Engineering Lab, Mechanics of Solids Lab, Metallurgy Lab
- f) Research laboratories: 01

Research Facilities:

- ➤ Cutting force Transducer, Electro Discharge Machine, Pin-On-Disk Apparatus, Profile Projector, Planetary Ball Mill, Ultrasonic Sonicator, VCR Diesel Engine, Vibratory Welding Facility, Stir-Casting Facility, Image Analyzer, Wind Tunnel Test Rig. Bio-Diesel (Transesterification process)Preparation facility
- 28. Number of students of the department getting financial assistance from College.

Nil

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

Yes,

- > Feedback from all stakeholders
- > Assessing the availability of job opportunities in industry, Research and academia

- ➤ Collecting information about emerging areas of engineering growth and development
- 30. Does the department obtain feedback from
  - a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
    - Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BOS meetings.
  - b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

    Feedback will be collected from students twice in a semester i.e during mid semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.
  - c. Alumni and employers on the programmes and what is the response of the department to the same?

#### Alumni Feed-back/Alumni Survey:

Institute conducts Alumni meets regularly (at least once in a year) at various places in the country. Few of our alumni are successful in establishing and running consultancy firms, software companies, Power plants, service and manufacturing industries. The alumni survey is conducted to obtain feedback regarding their employment, higher studies, suggestions for improvement of institution etc. The inputs from the alumni are used in curriculum design, best practices, programme objectives etc. Alumni survey is conducted during alumni meets, visits to institution, stake holders meeting etc. Institute has separate alumni portal to facilitate the alumni interaction and updation of alumni database. Board of Studies of each department has an alumni nominee.

#### **Employer feedback/Employer Survey:**

Eminent Persons from the industry having keen interest in academics are inducted in the academic Council (AC) and in the IQAC of the

institution. Valuable suggestions are taken for the betterment of the institution from time to time.

A survey questionnaire is prepared for the employer to assess the performance of the graduates recruited in different industries. This questionnaire is circulated among the employers through emails and social networking sites and responses are received. These responses are analyzed to assess the technical knowledge and leadership skills of the graduates of this institution. The results from the above feedbacks are analyzed and discussed in the department meetings. The feedback taken is used to make necessary improvements in the curriculum, teaching-learning process, up gradation of the facilities etc. Institute encourages Industry-Institute Interaction which will in turn useful in curriculum design and development.

#### 31. List the distinguished alumni of the department

Name of the student	Designation	Company Name
K YerrayyaBabu	Mech.Engineer	Jindal Shipyard Ltd.,
P Santosh	Prod.Engineer	NavayugaEngg,,
M Kartheek Raj	CAD Engineer	L&T
K Varaprasad	Asst.Engg	HAL, Sunabeda
M Prasant	Systems Engineer	Infosys
V Bhujanga Rao	Design Engineer	Infotech
V Venkata Ramana	Mechanical Engineer	FabtechProj Ltd.,
AkiriVenkatesh	Associate Manager	GMR Airport
CH.Kiran Kumar	Field Service Engineer	GE Oil & Gas
M.Durga Prasad	GET	Hyundai, R& D, Hyderabad

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

# > Student Enrichment Programmes:

A.Y.	Торіс	Name of Resource Person	Affiliation	Duration
	Entrepreneurship: Opportunities & Challenges	Dr.Srinivasa Rao	Department of Humanities and Social Sciences & Centre for Entrepreneurial Leadership, BITS Pilani, Dubai Campus	06.08.2014
	OIL & GAS Exploration Development	Mr. Bhaskara Rao Kosama	Lead Application Specialist, GE, Bangalore	29.09.2014
2014	Introduction to Hydro Power	Mr.Ajit Singh	General Manger, Hydro Energy Business, Hindustan Power Projects Pvt Ltd.	22.11.2014
-15	& Electronics Engineering  Mr.K.V.V.Ra o  Mraintenance and Dr. P.B.	Mr.K.V.V.Ra o	Director, GMR Infrastructure Ltd, Bangalore	05.01.2015
		AhamadMohi	Dy. Vice President , Plant and Equipment Lodha group Mumbai	23.01.2015
2013 -14	Advanced Manufacturing Systems and its Applications	Dr. P N Rao	Northern IowaUniversity, USA	01.07.2013 to 06.07.2013
	Adiabatic Compressed Air Energy Storage	Mr. Bhaskara Rao Kosama	GE-Bangalore	26.07.2013
	Power Industries	Sri	GMR Energym	31.07.2013

	Overview in India and Positive Approach for the Challenges" & "power Scenario in India and Opportunity in Power Sector"  Power Scenario in India and Scope for Poer Engineers	Hanumanth Reddy & Sri Navaraj Singh  Mr. Navaraj Singh	Rajahmundry  GMR Energy Development Centre, Rajahmundry Department of	08.01.2014
	AutoCAD Based Engineering Drawing Practice	Dr. Vikas V. Chaudhari	Mechanical Engineering, BITS -Pilani , K K Birla Goa Campus, Goa.	24.10.2013 to 25.10.2013
	Recent Developments in Sheet Metal Forming for Automotive Applications and Research Issues	Dr. D. Ravi Kumar	Professor, IIT Delhi	10.01.2014
	Hydrological cycle / flow measurement – drainage area characteristics – Hydrographs – storage and Pondage – classification of dams and spill ways.	Mr. Hari Samal	Manager GMR Power, Delhi	06.02.2014
	An Awareness on Entrepreneurship & how to become and Entrepreneur	Mr. PrasanthMek ka	CEO Akshara Speech Technologies & Incubator-IITH, Hyderabad	10.03.2014
2012 -13	"Insight to Manufacturing Technology"  Power Generation	Dr. P N Rao Dr. R	Northern IowaUniversity, USA Sr.Professor,VIT,	09.07.2012 to 14.07.2012 17.08.2012

	from Waste Bio Mass	Natarajan	Vellore	to 19.008.201 2
	Scopes & Trends in Welding Technology	Prof. GL Datta	Chancellor, KL University	17.12.2012
	Power Plant Familiarizaion	Sri Navaraj Singh & Ms. Y Deepti	Gen.Manager, GMREDC,Rajahm undry Manager,EDC, Rajam	6.2.2013
	Pumps and its utility in industries with special emphasis on Power Plant & Preparedness for the industry ready	Mr. T Karunakaran,	Asset Management, Delhi International Air Port Ltd., New Delhi	15 <sup>th</sup> & 16 <sup>th</sup> March,201
	"Insight to Manufacturing Technology"	Dr. P N Rao	Northern IowaUniversity, USA	11.7.2011- 16.7.2011
2011 -12	"Latest Development in CAD/CAM and Software Applications in Medical Field	Dr. B Ravi	IIT, Bombay	29.12.2011
	Manufacturing Sciences	Dr. P N Rao	Northern Iowa University, USA	28.6.2010- 03.7.2010
	CNC/CAM/Nano Dr. P N Rao Manufacturing	Dr. P N Rao	Northern Iowa University, USA	12.7.2010- 17-7.2010
2010 -11	Suitable combustion strategy to make Trails with Alternate fuels to reduce emissions	Dr B V Appa Rao	Andhra University, Visakhapatnam	17.08.2010
	Friction Stir Welding	Dr N Ramanaiah,	Professor, AU College of Engg, Andhra University, Visakhapatnam	29.09.2010
	"I C Engines and Alternate Fuels	Dr A Amba Prasad	Professor NIT,Warangal	24.02.2011

## > Student Workshops:

S.No	Student Seminars	Date Participants		No. of participa nts
Acade	mic year 2014-15			
1	STEPCONE-15	Jan 30 <sup>th</sup> , 31 <sup>st</sup> 2015	Other College Students & Internal students	33
Acade	mic year 2013-14			
2	STEPCONE-14	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	50
Acade	mic year 2012-13			
3	STEPCONE-13	4 <sup>th</sup> & 5 <sup>th</sup> January, 2013	Other College Students & Internal students	36
Acade	mic year 2011-12			
4	STEPCONE-12	6 <sup>th</sup> & 7 <sup>th</sup> January, 2012	Other College Students & Internal students	84
Acade	mic year 2010-11			
5	STEPCONE-11	7 <sup>th</sup> & 8 <sup>th</sup> January, 2011	Other College Students & Internal students	110

- 33. List the teaching methods adopted by the faculty for different programmes.
  - > Tutorial is followed apart from the curriculum for the benefit of theStudents
  - ➤ Lecturing, Working models, Demonstration, Animation, Industrial visit, Seminars, Project etc
  - > Teaching aids: Black Board, LCD Projector etc.
  - > Group discussions
  - ➤ On-Line (LAN) course content to supplement classroom teaching
- 34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Achievement of the POs mechanisms consists of following processes

#### **Internal assessment tools:**

- > Assignments
- ➤ Mid examinations
- Quiz examinations

- ➤ Daily assessment of Laboratory performance
- ➤ Internal & External laboratory exams
- > End –semester theory examinations

#### **External assessment tools:**

- > Feedback from the stake holders...
- Feedback is collected from the employers through placement cell.
- ➤ Through governing counsel constituted at institutional level.
- ➤ Through publications/presentations in conferences.

# Achievement of the Learning outcomes consists of following processes

- The process recommended in NBA's OBE is being followed to attain this objective
- 35. Highlight the participation of students and faculty in extension activities.
  - ➤ Blood Donation awareness Programme
  - Voluntary Blood Donation Camp
  - ➤ Observance of NSS day
  - Clean Campus(5S practicing Institute)
  - Promoting Hygiene and Cleanliness in canteen
  - > Every Thursday is observed as a Pollution Free day.
  - Observance of Sports day.
  - ➤ Participating in community services through GMR Varalakshmi Foundation, Rajam
  - ➤ Creating Awareness on various issues and job opportunities for rural people through GMR Community Radio (FM 90.4 MHz)
  - ➤ Some of recent extension activities by students and faculty

S.No	Name of Extension activity	Date
1	Pulse Polio Immunization Programme	19-01-2014
2	Republic Day Celebrations	26-01-2014
3	World Cancer Day	04-02-2014
4	BloodDonationCamp	14-03-2014
5	Voters Awareness Rally	05-04-2014
6	Mega Rangoli for awareness of the electoral Voting.	03-05-2014

# > Some of recent Community services through GMR Varalashmi Foundation, Rajam,

S. No.	Name of the Activity	Date
1	Joy of Giving	Every Monday
2	Book Donation	24-07-2013
3	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, Dolapeta (V), Rajam	27-12-2013
4	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, A.V. Puram (V), Rajam	28-12-2013

- 36. Give details of "beyond syllabus scholarly activities" of the department.
  - Students are encouraged to participate in the ongoing research of faculty Projects
  - Students participation in paper presentations :

Academic Year	No. of Students Participated
2014-15	74
2013-14	24
2012-13	15
2011-12	03
2010-11	07

### > Students participation in Co- Curricular and Extra-Curricular activities

Academic Year	Co- Curricular activities	Extra-Curricular activities
2014-15	75	400
2013-14	71	397
2012-13	62	373
2011-12	19	393
2010-11	09	335

- 37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
  - All the programmes are recognized by AICTE
  - First Accreditation by National Board of Accreditation for 3 Years F.No.NBA/ACCR-836/2006dt. 29.03.2007.
  - Latest Accreditation by National Board of Accreditation for 2 Years File. No.11- 46/2010/NBA,dt: 01.02.2013
  - B.Tech (ME) is accredited by NAAC from 2010,Dt.28.03.2010

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

#### **Strengths:**

- ➤ Good Number of faculty with PhD
- Green and ecofriendly campus.
- Faculty are having good number of Publications
- ➤ LAN Based Courses for all subjects available to students
- Add on Courses on advanced courses as per the industry need base
- ➤ Consistent good academic performance of students
- > Students have obtained University sports medals
- ➤ Wi-Fi facility with e-learning resources on campus LAN and round the clock web connectivity
- ➤ Recognized as research centre by JNTUK, Kakinada
- ➤ Good team work among all faculty and staff members

#### Weaknesses:

- Linkage with Industry needs to be strengthened
- Laboratory facilities need to be augmented for R&D
- Number of externally-funded projects and consultancy services need to be improved.

#### **Opportunities:**

- > Training of industry personal
- ➤ Collaboration with industries on R & D
- > Steps to be taken to improve the number of students seeking admission in to PG programme

#### **Challenges:**

- > Attracting meritorious students
- > Ensuring all the students employable.
- ➤ Peer Competition from other institutions located in urban areas
- ➤ Peer Competition from other institutions located in urban areas
- 39. Future plans of the department.
  - > To develop the department as center of Excellency
  - ➤ Quality Research Work and consultancy
  - > To enhance the capacity and quality of the departmental library
  - ➤ Increase the research activities of faculty in their chosen areas such as Alternate Fuels, Nano Materials & Coatings, Metal Metrix composites, Bio degradable polymers, Reliability Engineering.

•

## **E8.** Evaluative Report of Power Engineering

1. Name of the Department & its year of establishment

## Power Engineering & 2012

2. Names of Program's / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D etc.)

## **UG-Power Engineering**

3. Interdisciplinary courses and departments involved

S. No	Interdisciplinary courses	Departments involved
1	Elements of Mechanical Engineering	MECH
2	Environmental Studies	BS&H
3	Fundamentals of Computer Programming	CSE
4	Elements of Electrical Engineering	EEE
5	Analog and Digital Circuits	ECE
6	Engineering Economics and Project management	BS&H
7	Microprocessors and micro controllers	ECE
8	Cloud computing	IT
9	Disaster management	CE
10	Fundamentals of Global Positioning Systems	ECE
11	Industrial safety and Hazards management	СНЕМ
12	Renewable Energy Sources	EEE
13	Soft computing	CSE

4. Annual/ semester / choice based credit system

## Semester based credit system

5. Participation of the department in the courses offered by other departments

Nil

6. Number of teaching posts sanctioned and filled (Professors / Associate Professors / Asst. Professors)

Designation	Sanctioned	Filled
Professors	1	Nil
Associate Professors	2	2
Asst. Professors	5	4

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualific ation	Designatio n	Specializatio n	No. ofYears of Experienc e	No. of Ph.D. Students guided for the last 4 years
Mr. M Venkateswar a Rao		Associate Professor & HOD	High Voltage Engineering	15	Nil
Mr. A Appa Rao	IMI Tech	Associate Professor	IT & Power Engineering	14	Nil
Mr. S Ravi Babu		Sr. Assistant Professor	Thermal Sciences	11	Nil
Mr. P Srinivasa Rao	MI Tech	Assistant Professor	Computer Integrated Manufacturin g	6.5	Nil
Mr. V Manoj	IMI Tech	Assistant Professor	Power Systems & Automation	2.7	Nil
Mr. G Bhagawan	M/LTech	Assistant Professor	Machine Design	8.5	Nil
Mr.K.Hari Krishna	M/L Tech	Assistant Professor	Power Systems & Automation	0.5	Nil

8. Percentage of classes taken by temporary faculty – programme-wise information

Nil

9. Programme-wise Student Teacher Ratio

UG: 25:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	filled
Lab Instructors	1	1
Assistants	1	1

11. Number of faculty with ongoing projects from a) National b) International funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.

Nil

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

Nil

13. Research facility / centre with

State recognition - Nil
 National recognition - Nil
 International recognition - Nil

#### 14. Publications:

• number of papers published in peer reviewed journals (National / International)

C		No. of Papers					
S. No	Journal/Conference	2010- 11	2011- 12	2012- 13	2013- 14	2014- 15	
1	National Conference	03	00	03	00	-	
2	National Journal	00	00	01	00	-	
3	International Conference	01	01	02	00	01	
4	International Journal	04	01	02	04	01	
	Total Papers	08	02	08	04	02	

Monographs
Chapter(s) in Books
Editing Books
Nil

• Books with ISBN numbers with details of publishers : Nil

 Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database -International Social Sciences Directory, EBSCO host, etc.): 0

	2013-14	2012-13	2011-12	2010-11
Citation Index – range / average	2-12	NA`	NA	NA
SNIP	0	NA	NA	NA
SJR	0	NA	NA	NA
Impact factor – range / average	0.2-2.3	NA	NA	NA
h-index	1-2	NA	NA	NA

15. Details of patents and income generated : Nil

## 16. Areas of consultancy and income generated

Academic Year	Area of consultancy	Income Generated (Lakhs)

#### 17. Faculty recharging strategies

 Workshops / seminars / conferences attended by faculty during the Academic year

2014 - 2015 : 2013 - 2014 : 2012 - 2013 : 2011 - 2012 : 2010 - 2011 :

#### 18. Student projects

- Percentage of students who have done in-house projects including inter-departmental
- Percentage of students doing projects in collaboration with industries / institutes

		Students who have done projects		
Academic year	Programme	In-house projects including inter- departmental	In collaboration with industries / institutes	
2014-15	B.Tech. (PE)	NA	NA	
2013-14	B.Tech. (PE)	NA	NA	
2012-13	B.Tech. (PE)	NA	NA	
2011-12	B.Tech. (PE)	NA	NA	

- 19. Awards / recognitions received at the National and International level by
  - Faculty : Ni
  - Doctoral / post doctoral fellows : Nil
  - Students

Academic Year	Awards / recog	nitions received at the	
Academic Tear	National level	International level	
2012-13	Nil	Nil	
2013-14	Nil	Nil	

- 20. Seminars / Conferences / Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.
  - Seminars/ Conferences/Workshops organized during the academic years are as follows

Academic Year	Seminars/ Conferences/Workshops organized (National / International)	Source of Funding
2014-15	Nil	-
2013-14	Nil	-
2012-13	Nil	-

## 21. Student profile course-wise:

### Name of the Course: UG (B.Tech. in Power Engineering)

Name of	Applications received	Selected		Defected 1 abb per century		centage
the course	received	Male	Female	Male	Female	
2012-16	NA	NA	NA	NA	NA	

## 22. Diversity of students

Year	Yearly Intake	% of students from the State	% of students from other States	% of students from other countries
2014 - 18	60	93.65%	6.35%	Nil
2013 – 17	60	93.65%	6.35%	Nil
2012 – 16	60	98.61%	1.39%	Nil

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Academic year	2014-15	2013-14	2012-13
GATE	NA	NA	NA

## 24. Student progression

Student progression	Percentage against enrolled	
UG to PG	NA	
PG to M.Phil.		
PG to Ph.D.		
Ph.D. to Post-Doctoral		
Employed	2012-13	2013-14
Campus selection	NA	NA
Other than campus recruitment	-	-
Entrepreneurs	-	-

## 25. Diversity of staff

Percentage of faculty who are graduates

of the same parent university	16.66%
from other universities within the State	83.34%
from other universities from other States	-

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

27. Present details about infrastructural facilities

a) Library

	Journals//Ma	agazines/Periodicals	CDs, VCDs	
Books	National	International	and Multimedia	Others
120	1	2	78	8

b) Internet facilities for staff and students:100 MBPS

(BSNL: 34 MBPS, TTSL: 64 MBPS, TCL: 02 MBPS)

c) Total number of class roomsd) Class rooms with ICT facility: 03

e) Students laboratories are being shared EEE Departments) : 01 (Remaining all other laboratories with ME and

f) Research laboratories : Nil

28. Number of students of the department getting financial assistance from College.

Nil

- 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
  - Getting Feedback from all stakeholders viz. industry, parents, students and faculty
  - Assessing the availability of job opportunities in industry, research and academia
  - Collecting information about emerging areas of engineering growth and development
- 30. Does the department obtain feedback from
  - a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
    - Yes. Department takes the feedback from the faculty regarding curriculum design, evaluation and updating of the syllabi. There is involvement of all the faculty members in the preparation and design of curriculum. Each course is designed with SMART outcomes and it will be discussed and approved in BOS meetings.
  - b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

Feedback will be collected from students twice in a semester i.e., during mid semester and end-semester. The feedback questionnaire is scientifically designed based on fifteen parameters, which are evaluated on a 6-point scale. Parameters involved are preparedness for classes, delivery and handling of questions in the class, usage of teaching aids, timely evaluation of tests and assignments, level of interest and excitement generated, extra help outside the class room, control and command of classes etc. Faculty member who gets feedback less than 3 will be counseled by the HOD and the faculty concerned shall initiate necessary measures to improve the performance.

c. Alumni and employers on the programmes and what is the response of the department to the same?
 NA

31. List the distinguished alumni of the department (maximum 10)

S.No.	Name of the Alumni	Designation	Company Name	Batch
1	NA	NA	NA	NA

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

#### **Student Enrichment Programmes:**

S.No	Special Lectures	Date	<b>Participants</b>	No. of participants		
	Academic Year 2014-15					
1	Guest lecture on "power plant functions and new initiatives" by Shri. S. Ravi Shanker, Vice President, GMR Energy.	10-10- 2014	II & III-PE	125		
2	Guest lecture on "Power Plant Familiarization and Operation" by Shri. Navraj Singh, Head, GMR EDC, Rajahmundry.	08-10- 2014	II-PE	58		

#### **Student Workshops:**

S.No	Student Seminars	Date	Participants	No. of participants		
Acado	Academic year 2014-15					
1	STEPCONE- 15	Jan 30 <sup>th</sup> , 31 <sup>st</sup> 2015	Other College Students & Internal students	20		
Academic year 2013-14						
1	STEPCONE- 14	7 <sup>th</sup> & 8 <sup>th</sup> January, 2014	Other College Students & Internal students	10		

33. List the teaching methods adopted by the faculty for different programmes.

Some of the teaching methods adopted by the faculty are:

- Tutorial is followed apart from the curriculum for the benefit of the Students
- Lecturing, Working models, Demonstration, Animation, Industrial visit, Seminars, Project etc
- Teaching aids: Black Board, LCD Projector etc.
- Group discussions
- LAN Based Courses
- Remedial Classes for Slow learners and backlog students
- 34. How does the department ensures that the programme objectives are constantly met and learning outcomes monitored

  Achievement of the POs mechanisms consists of following processes

# **Internal assessment tools:**

- Assignments
- Mid examinations
- Ouiz examinations
- Daily assessment of laboratory performance
- Internal and external laboratory exams
- End-semester theory examinations

#### **External assessment tools:**

- Feedback from the stake holders.
- Through governing council constituted at institutional level.
- Through publications / presentations in conferences.

### Achievement of the Learning outcomes consists of following processes

- The process recommended in NBA's OBE is being followed to attain this objective
- 35. Highlight the participation of students and faculty in extension activities.
  - NSS activities
  - Participating in community services through GMR Varalakshmi Foundation, Rajam
  - Creating Awareness on various issues and job opportunities for rural people through GMR Community Radio (FM 90.4 MHz)

Some of recent extension activities by students and faculty

S.No	Name of Extension activity	Date
1	Pulse Polio Immunization Programme	19-01-2014
2	Republic Day Celebrations	26-01-2014
3	World Cancer Day	04-02-2014
4	Blood Donation Camp	14-03-2014
5	Voters Awareness Rally	05-04-2014
6	Mega Rangoli for awareness of the electoral Voting.	03-05-2014

Some of recent Community services through GMR Varalakshmi Foundation, Rajam,

S. No.	Name of the Activity	Date
1	Joy of Giving	Every Monday
2	Book Donation	24-07-2013
3	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, Dolapeta (V), Rajam	27-12-2013
4	Orientation program on Career Guidance to 10 <sup>th</sup> Class Students at ZPH School, A.V. Puram (V), Rajam	28-12-2013

Community Radio programs given by students

S. No.	Name of the Program	Name of the Student and Branch
1	Phone in Live Program	Ms. B.PARINITA
2	Phone in Live Program	Mr. P.HAREESH KUMAR
3	Phone in Live Program	Mr.N. SHIVA PRASAD

36. Give details of "beyond syllabus scholarly activities" of the department. **Organization of paper contests, design contests** 

S.No	Activity	Date	Participants	No. of participants		
	Academic year 2013-14					
1	Mind Stormer	10-04-14	All years	48		
2	I for all	24-03-14	All years	36		
3	Game Zone	15-03-14	All years	36		
4	Group Discussion	25-02-14	All years	26		
5	Mech Tech	27-07-13	All years	30		

- 37. State whether the programme / department is accredited / graded by other agencies. Give details.
  - All the programmes are recognized by AICTE
  - Institute is accredited by NAAC from 2010, Dt.28.03.2010 with A Grade
- 38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

#### **Strengths**

- Introduction of unique featured course in the state of Andhra Pradesh
- Committed and dedicated faculty with minimum qualification of M.E/M.Tech
- Well-equipped laboratory with good infrastructure
- Expert guest lectures by eminent academicians and industrialists.
- Wi-Fi facility with e-learning resources on campus LAN and round the clock web connectivity

#### Weaknesses

- Independent department laboratories need to establish.
- Lack of R & D activities.
- Lack of interest among students for higher studies.
- Research activities to be initiated / enhanced.

#### **Opportunities**

- Exploring best teaching and learning practices.
- Organize industry oriented Add-on courses.

• Induction with experienced industry personnel.

### Challenges

- Ensuring all the students employable
- Attracting senior faculty
- 39. Future plans of the department
  - To enhance the student participation in competitive exams for placement and higher education.
  - To introduce more add-on courses related to industry applications
  - To provide internships for students with Industries
  - Conducting additional / special GATE classes for getting good GATE score to get admissions for higher education in premier institutes
  - To develop the department as center of excellence.

#### F. POST ACCREDITATION INITIATIVES

The Institute has been accredited by NAAC in 2010 for the first cycle and since then has taken up all the initiatives is to maintain the quality in all aspects of the institute performance. IQAC has been established which is continuously striving to ensure the systems in place and submits the compliance report from time to time. To ensure the quality in all the curricular aspects, the acedemic regulations of JNTUK Kakinada have been followed scrupulously. Complying with the regulations of all the statutory bodies the institute strive hard to maintain the quality of technical education. With the increase in the intake and addition of the new programs infrastructure and other resources have been added complying AICTE norms. In the year 2012 the institute is conferred with autonomy based on the preparedness and resources of the institute. Complying with UGC regulations in true spirit the institute has put on all its efforts to implement autonomy. In line with the UGC guidelines the governance bodies viz. Board of Studies (BoS), Academic Council and Finance Committee are constituted to continuously monitor the implementation of autonomy.

Under autonomy several best practices for curriculum development and evaluation procedures have been initiated with the support of affiliating University. Industry based internship, term paper, Mini project, audit courses, open electives, uniform evaluation and hybrid grading system are some of the initiatives that have been taken up post autonomy. Post accreditation and autonomous status several quality improvement programmes have been organized for the capacity building of the faculty. Faculty members are encouraged to register for their Ph.D. programmes with reputed universities and faculty members are also sponsored under QIP for acquiring Ph.D at premier institutes. To promote research on the campus several cash incentives have been declared for journal publications and funded research projects. As on date nearly 25% of the faculty are with Ph.D. qualification and more than 50% are pursuing Ph.D.

All the eligible UG programmes are accredited by NBA for the second time in the year 2013. NBA re-accreditation under tier-I (3<sup>rd</sup> Cycle) is in process. The institute has been identified by NBA as a training centre for disseminating the concepts of OBE. Since 2010 the following additions have been taken up. Post Graduate programmes in VLSI Design, Environmental Engineering and Thermal Engineering are introduced with an annual intake of 18 in each specialization. Another Under Graduate programme in Power Engineering is introduced with an annual intake of 60. Annual intake in Electronics & Communications Engineering and Computer Science & Engineering has been enhanced from the existing 120 to 180.

The curriculum has been fine-tuned / upgraded based on the needs of industry and research requirements. The curriculum complies with the overall standards as prescribed by JNTUK, AICTE, UGC, Professional Bodies and other regulatory agencies. The UG and PG programme has been offered in a semester-wise system with maximum internal component of 30% and 40% for UG and PG programmes respectively. The institute strives to create conducive environment for learning and shaping of the young talents. UG and PG curriculum are prepared in well-structured manner with the vision and mission of the institute. Curriculum and course structure are designed complying with cognitive learning levels. Choice Based Credit System has been introduced to promote courses of interdisciplinary nature.

Institute Organizes meetings with all the stakeholders periodically and invite their views and suggestions. Remedial measures are initiated based on the analysis of the feedback. Lifts, ramps and battery cars are provided at various locations for the convenience of differently abled students. Some of the academic blocks are inter-connected with bridges facilitating differently abled students to move easily. Institute also has various committees viz. Academic Monitoring Committee, Grievance Redressal Committee. Women Empowerment Cell etc. to look after the wellbeing of the students. The Grievance-Redressel Cell and Woman Empowerment Cell attend to related grievances and gender sensitization activities. In addition institute also has mentoring system wherein each faculty member counsels 13-15 students for academic and personal issues.

Institute prepares annual academic calendar for all the UG and PG programmes well in advance before the commencement of academic sessions incorporating the schedules for all the Curricular, Co-Curricular and Extracurricular activities enabling the faculty and students to plan accordingly. Academic calendar ensures minimum days of instruction as per UGC regulations apart from maintaining minimum weeks of instructions for every sessional examination complying with affiliating university norms. Handout/lecture schedule, mode of evaluation etc. are communicated to the students before the commencement of class work. The autonomous rules & regulations, syllabi with handouts of respective courses are also uploaded in the institute website for the benefit of the stakeholders. This keeps the student on guard in his/her academic programmes.

The theory courses with lecture notes, slides, power point presentations, animations, assignments, descriptive and semester end examination question papers are uploaded in LAN in the institute website for benefit of the students.

Full semester credited internship offered by the institute is a rare feature in the curriculum, which is instrumental in making the students more industry ready. Enhanced self-learning through more number of laboratory courses and audit

courses with continuous assessment reinforces the technical competencies of the student. The institute aims for enhancement of self-learning skills in the students through audit courses, hobby projects, term paper, mini project and add-on courses viz. DB2, RAD, Embedded systems, MATLAB, Pro/E, Ansys etc., are conducted beyond the credit-based courses to inculcate the culture of self-learning and innovative thinking of students. In every programme Add-on / certificate courses / workshops in collaboration with Industries like IBM, Micro soft, Infosys, GMR Energy, GMR Infrastructure etc., to enrich the knowledge of the students in emerging areas increasing the employability. Institute also conducts regular industrial visits to nearby industries to facilitate industrial exposure to students and faculty.

Institute always encourages the entrepreneurship in younger generation. In compliance with the idea the institution has established Entrepreneurship Development Cell (EDC) and is supported by AICTE with a financial grant about 15 lakhs. Further, Institute is also recognized as incubation centre by MSME, Govt. of India. EDC of GMRIT in collaboration with MSME conducts business skill development programs by successful entrepreneurs and financial institutions.

Uniform course delivery for multi-section courses enabled both students and faculty members to have a seamless instruction process in compliance with the course handout. Uniform evaluation process in internal as well as in external examinations for multi-section courses are implemented in the autonomy to minimize the variation in the evaluation process. The internal and external evaluation is made transparent and reviewed intermittently for quality. Scheme of evaluation of each course is displayed in the department notice boards on the day of sessional examination. Further, the sessional examination question paper along with the scheme is uploaded in the institute LAN portal. Reevaluation and challenge evaluation are put into practice to ensure transparency in evaluation and semester end examination results are declared within a week from the date of final examination.

To support the students who are academically backward, Slow learners are identified based on their performance in continuous assessment and semester end examinations. Two months prior to the supplementary examinations, remedial classes are conducted for those who have backlogs. Track sheets are maintained to assess the incremental academic growth of each student irrespective of the category. In addition, bridge courses are conducted to the lateral entry students in selected courses like mathematics, C-programming etc.

Institute always encourages periodical motivation lectures by eminent persons for the personality development of the students. Institute organizes industrial study tours to help the students to understand the real time applications of the technology. Student seminars, awareness talks, expert lectures from industry / Academia/ R&D personnel, industrial visits etc. are conducted on a regular basis. This would encourage the students to become familiar with current trends in technology and research, to develop self-learning and life-long learning interests, to become aware of professional, ethical and social responsibilities.

To give more scope for the students to learn beyond class room students are facilitated with various avenues on the campus. Students Activity Centre (SAC) having various clubs viz. hobby club, literary club, creative club, dance club, music club, quizzing clubs etc conducts various activities like cultural competitions, project exhibitions, quizzes, debates, Hardware design contests etc. Every department has professional body chapters viz. ISTE/IEEE/ASME/IETE/IE(I)/CSI/IIChE conducting various events like seminars, paper presentations, quizzes, circuit design contests etc. Cash prizes are instituted for academic excellence and merit prizes, medals for achievement in co-curricular & extra-curricular activities, motivates the students and instill & nurture scientific temper among the learners.

To enhance the faculty competency to face the autonomous procedures, faculty members are trained through course design workshops and training programs by eminent academicians/researchers to prepare syllabus and question papers based on cognitive levels. Tutorial classes are introduced in each course with involvement of students to suit all kinds of learning style following educational taxonomy.

Institute has a transparent and well-defined HR policy to encourage and support faculty members for quality improvement and research. Institute encourages the faculty members for their quality improvement by sponsoring them to attend various workshops/ seminars/conferences in addition to organizing them periodically. Institute constantly encourages faculty to pursue higher studies at premier institutes with financial support. Institute also encourages faculty to publish research papers/books with financial support. In addition, institute encourages non-teaching staff to pursue higher studies and attend workshops to improve their technical skills. Institute also encourages the departments to organize seminars/conferences and workshops at least once in a year in different thrust areas. As per the policy, the institute provides Honorarium, travel and local logistics to the invited guests/ subject experts.

Average experience of faculty in each department is more than 8 years and the efforts are on to employ faculty with experience and Ph.D. Nearly 25 % of the faculty members are having Ph.D. and more than 50% are pursuing Ph.D. Internal Career advancement scheme is in place to promote the eligible faculty to maintain cadre ratio. The research policy at institute is intended in a way that faculty can carry out research effectively as they are guaranteed certain freedom and are required to accept corresponding responsibilities. Research

policy at institute presents broad guidelines to monitor the research endeavour and assure the integrity of scholarly inquiry at the institute.

To promote research culture five research groups are formed to coordinate research among the staff members and have established two centers of Excellence in the department of Mechanical and Electrical engineering. Institute encourages faculty members to apply for sponsored projects from different funding agencies like AICTE, UGC, MHRD, DRDO, NRB, DST etc., for additional support as well as to project the research activity at the national level.

Institute puts up all efforts to expand and satisfy the infrastructural requirements commensurate with the growth of the institution. The institute having 100 MBPS dedicated Internet bandwidth to provide internet facility to all the inmates of the campus. Wi-Fi facility is also provided within the campus.

Career Development Cell (CDC) encompassing career counseling, recruitment training, personality development and soft skills training programmes, entrepreneurship development and placements facilitates the students to increase employability. A special corporate training program is conducted for final year students in resume building, group discussions, general knowledge and current affairs. In addition, mock interviews are conducted by inviting HR Heads and Technical Experts from well-known companies. In order to bridge the gap between the university curriculum and industry needs, the institute offers various short-term training programs. In addition, on campus training for competitive exams like GRE, GATE, CAT etc. is also conducted. Cocurricular and Extra-curricular activities like seminars, workshops, technical quizzes, guest lectures, sports, soft skills development programmes, personality development programmes are conducted to improve the professional skills and employability. Moreover, institute provides soft skills training and psychological counseling to the needy through dedicated staff members.

The Institute hosts different academic initiatives as part of industry institute interactions in collaboration with major corporate companies. A few of these are:

- Infosys Campus Connect Program
- Microsoft academic initiative- cloud campus
- TCS academic initiative.
- IBM software CoE- Training Programme on RAD and DB2
- Oracle University for Work Force Development
- Wipro-Mission 10X Programme for faculty enablement and training

- National Institute of Amateur Radio (NIAR) established Amateur FM Radio Client Station
- Dr. Reddy's labs
- GMR Aviation Academy
- GMR EDC

To make the students understand about the industry requirements, Institute organizes interaction with various Corporate HR Heads as guest speakers. Interactions are also conducted through Video Conference (VC) with distinguished speakers. As a part of the industry-institution interaction, Institute has been accredited by:

- TCS for Academic Initiatives
- Infosys for Campus Connect Program
- HCL Info Systems for HCL Education
- Wipro for Mission 10X
- IBM -Centre of Excellence
- L&T

The institute offers consultancy services to several government and non-governmental agencies in different works. The consultancy works are being taken up in the respective departments and 80% of the revenue is shared among the staff involved as per the institutional policy.

To inculcate social responsibility in the minds of the students the NSS units of the institute organizes several community service activities. Activities are being carried out within and beyond the campus. Activities on campus will be conducted in the leisure time after the scheduled classes. Off campus, activities like special camps in adopted villages are conducted during vacation. Blood Donation in association with Indian Red Cross Society is one of the major activities. The institute received Gold and Silver Medals from the Governor of Andhra Pradesh for promoting blood donation camps. Several service activities like Health camps, Veterinary camps, Relief camps for natural calamities, awareness programs on HIV/AIDS, Plastic usage, Voting, Plantation, alcohol and tobacco de-addiction camps, Nutrition, Public Health, Pulse Polio Immunization etc are organized.

Knowledge Resource Centre (KRC) along with eight departmental libraries collectively supports the teaching, research and extension programmes of the Institute with nearly 15000 titles and 50000 volumes of books. KRC has subscription to online journals of IEEE (ASPP), ASME, ASCE, SPRINGER, ELSEVIER (Science Direct), MC GRAW HILL (Access Engineering Library), ASTM DIGILAL LIBRARY,J- GATE (Engineering and Technology) etc. The online journals are accessed through Digital Library. KRC uses LIBSYS software Package, which is an integrated multi-user library management system that supports all in-house operations of the Library. The

Digital Library is having 50 computers connected on LAN and allows browsing the internet for Academic purpose. Digital Library also has NPTEL video courses, general educational CDs/DVDs, SONET CD and E-Books.

To ensure holistic development, students are encouraged to participate in sports and extracurricular activities. Students won prizes in the inter college sports competitions that were conducted by JNTUK and participated in inter university sports as a representative of JNTUK & participated in national level sports tournaments. Institute provides well equipped indoor and outdoor sports facilities along with a Gymnasium.

Dispensary with a qualified heath assistant is available round the clock on the campus to attend to all the first-aid problems. GMRVF runs 135 beds GMR Varalakshmi CARE multi specialty hospital located adjacent to the institute where free outpatient medical care is offered to the students and staff.

Institute has state-of-the-art auditorium, well-ventilated and modern dining halls for Boys and girls hostels. Students are encouraged to attend Yoga classes to help them balance work and recreation, mind and body. All the Hostels are provided with net facility. To encourage English speaking and improve communication skills all the hostel rooms are provided with English news paper free of cost. Bank, ATM and Post office are available within the campus for the convenience of students and staff.

The institute releases e-News letter with a periodicity of four months covering the news related to the institute and the newsletter is uploaded in the institute website. The institute publishes a technical magazine called TechMag every year.

### G. DECLARATION BY THE HEAD OF THE INSTITUTION





GMR Nagar, Rajam-532 127 Srikakulam (Dist.) Andhra Pradesh

T +91 (8941) 251 592/251 593/ 252 989 F +91 (8941) 251 591 W www.gmrit.org

CIN: U80301AP2003NPL042195

### Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

MAJAM-592 127

Place: Rajam Date: 24-01-2015 Signature of the Head of the institution
Dr. CLVRSV Prasad

PRINCIPAL

GMR Institute of Technology GMR Nagar Rajam 532127 AP



A Division of the GMR Varalakshmi Foundation