SELF STUDY REPORT

CYCLE - II

Submitted to

National Assessment and Accreditation Council

COLLEGE OF ENGINEERING
(Autonomous)

GAYATRI VIDYA PARISHAD
COLLEGE OF ENGINEERING
(Autonomous)

CONTENTS

GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING
(Autonomous)
Approved by AICTE & Affiliated to JNTU - Kakinada
Accredited by NAAC with 'A' Grade with a CGPA of 3.47/4.00
All UG Programs accredited by NBA, AICTE

From
The Principal

No. GVPCE(A)/NAAC/CYCLE-2/SSR/2014 Date: 01.05.2014

To
The Director,
National Assessment and Accreditation Council (NAAC),
P.O. Box No.1075, Nagarbhavi,
BANGALORE – 560 072.

Sir,

Sub: Submission of Self-Study Report (SSR) to NAAC for the purpose of 2nd Cycle of Accreditation by NAAC – GVP College of Engineering (Autonomous), Madhurawada, Visakhapatnam – 530 048 – Reg.

Ref: Our Institute Track ID: **APCOGN13918**, vide LoI dt. January 3, 2014.

The G.V.P. College of Engineering (Autonomous) was accredited by NAAC for the first cycle for five years w.e.f. 15.06.2009 for its B.Tech., M.Tech. and M.C.A. courses. The Self Study Report (SSR) for second cycle of accreditation by NAAC is placed on the college website www.gvpce.ac.in on 28th of April, 2014. The hard copy of SSR will be submitted well within the due time.

This is for your kind information.

Thanking you,

Yours faithfully,

(Dr. A.B. KOTESWARA RAO)
PRINCIPAL

Dr. A.B. KOTESWARA RAO
PRINCIPAL
G.V.P. COLLEGE OF ENGG. (Autonomous)
Madhurawada, Visakhapatnam-530 048

Madhurawada, Visakhapatnam - 530 048. Ph : 0891-2739507, Fax : 0891-2739605
e-mail : gvpce@yahoo.com, website : www.gvpce.ac.in

B.EXECUTIVE SUMMARY-SWOC ANALYSIS

The Gayatri Vidya Parishad College of Engineering (Autonomous) [GVPCE(A)] had its humble beginning in December 1996 with 4 branches and 200 intake established under the parent society 'Gayatri Vidya Parishad'(GVP).The GVP is a non profitable organization composed of noted educationists and eminent philanthropists who have a missionary zeal to provide quality technical education.

At present the college offers 7 UG and 14 PG programmes (13 M.Tech, MCA) in the thrust areas. While the sanctioned intake is 1134 (B.Tech-840, M.Tech-234, MCA-60), the total strength in the campus approximates to 4000. There are 236 faculty members among whom 62 are doctorates. The faculty student ratio is close to 1:15.

The GVPCE (A) is affiliated to JNTU-Kakinada and is a reputed self-financing college in Andhra Pradesh, which is known for its academic standards, discipline and holistic approach in terms of co-curricular, extra-curricular and extension activities alongside an impressive placement record. It ranks among the top 5 colleges in the state in terms of student preference inseeking admission through EAMCET at B.Tech level. In case of PG, 60% seats are filled with GATE qualified students. Under PIOs scheme of the AICTE, 16 students are enrolled (B.Tech.12 and M.Tech.4) for the academic year 2013-14.

The college has been granted autonomous status by the UGC in 2008 and by the JNTU-K in 2009. The curricula and examination systems for all the programmes are designed through respective Boards of Studies, Academic Council and are revised in 2013-14 to get into the framework of Outcome Based Education (OBE) as suggested by the NBA of AICTE. Several components that enhance employability and meet industry needs find a place in the new curriculum.

The performance of the students on both the academic front and outside the curriculum is commendable which may be attributed to the right combination of quality input, competent students, and committed faculty.

All the UG programmes are accredited by NBA atleast twice by now with the duration of 5 years for some programmes and 3 for some others. Currently 2 programmes are holding the status. Visit of expert team of NBA is over for the remaining programmes in the new OBE format and the result is awaited. An application has been submitted for accreditation of all the eligible PG programmes. The NAAC also accredited the college with 'A' grade with a CGPA of 3.47/4.00. The UGC recognized the institution under 2(f) and 12(B) facilitating financial assistance from central government agencies.

The college is one among the 4 self financing institutions in Andhra Pradesh selected by MHRD under TEQIP-II, S.C.1.2 to receive a grant of Rs. 4 Cr. to up-grade the quality of PG education, research and innovation. The MOU has been signed with AP State Government in this regard to

implement the same through SPFU in September, 2011. Under this project 58 M.Tech students are provided with teaching assistantship at Rs 8000/- per month as on the lines of GATE fellowship programme. Five of our faculty participated in institutional Management Capacity Enhancement programmes at IIM Kozhikode, ISB Hyderabad and ASCI-Hyderabad. Performance auditing, R&D and institutional consultancy are other important programmes organized through TEQIP.

On the research front, 32 members of the faculty are recognized as research supervisors by the affiliating university JNTU-Kakinada and a total of 20 research scholars registered with our faculty. Recently, 7 departments have been recognized as research centers to conduct research programmes and the remaining departments await the communication. Faculty have been publishing around 100 papers per year in peer reviewed National and International journals with impact factors and presenting papers in reputed conferences in India and abroad. Work on funded research projects to a tune of Rs. 494.23 lakhs is now in progress. M.Tech.projects/dissertations are qualitative enough in the sense that they facilitatepublication of papers in research journals.Adequate research facilities are provided with internal and external funding. The faculty is encouraged to pursue research by sponsoring through QIP / granting study leave on pay.

The research activity on campus has made the College a component of SIRC, which is recognized by the DSIR. The recognition of different programmes as research centers by JNTU-K and the granting of sponsored research projects by various Government and Non-Government Agencies like DST, DAE, ADA, NRB, DRDO, UGC, AICTE and so on is creating a great opportunity to grow further in this direction also.

The college has a total of 37,500 sq. mts. of built-up area providing adequate infrastructure in the total outlay of 20.02 acres. A 250 kVA capacity generator provides power back-up facility. A hygienic canteen apart from a separate food center and book stall is available. Separate hostels are provided for boys and girls with capacities of 400 and 450 respectively. The college provides adequate sports facilities with a multi-station gym and courts for volleyball, football, tennis, ball badminton and enough play-field for cricket. The performance of students in extra-curricular and sports addlustre to the academic laurels they bring to the institution.

The college library is well placed with 10,700 titles of books and 54,000 volumes. A total of 156 print and 1,939 online journals (by IEEE, Springer, Science-Direct and so on) are available. A digital library with a good collection of online resources is at the disposal of students and faculty.

The administration is decentralized across the departments and cadres as required. The Principal is ably supported by seven Deans who look after administration, academic affairs of UG, PG & Research, Industrial Consultancy & Sponsored Research, Infrastructure & Planning, Placements & Foreign Relations, and Student Affairs. And, Heads of the Departments closely monitor the academic and administrative functioning of their

branches and keep the Principal updated with relevant information. The Principal on his own tracks academic progression and administrative activity facilitating participatory management by all principal stake holders.

An Internal Quality Assurance Cell is functioning to monitor the quality of implementation of academic programmes effectively.

The Placement Cell is actively facilitating opportunities for all eligible students to get placed through campus drives. On an average 60% of the eligible students are placed over the past four years in spite of the fluctuating market demands. The Entrepreneur Development Cell (EDC) and Industry Institute Partnership Cell (IIPC) have been functioning to guide some of the students to be job providers instead of seekers.

The college signed MOUs with important organizations like TCS, IBM, Microsoft, Intel and organize quality enhancement programmes for both students and faculty. These programmes provide them an exposure to the intellectual and pragmatic demands of the outside world.

Slow learners among the students are identified and the required academic support is extended to make up the gap. At the same time fast learners are encouraged to participate in academic and technical competitions to exhibit their talents.

A Centre for Innovation is functioning to nurture and bring out the latent talents by catching them young starting from first year itself. They are involved in activities beyond the curriculum through a structured approach.

The quantum of extension activities on campus is noteworthy, supported by a well established NSS unit, which is acclaimed in the first year of inception itself as one of the best amongst the institutions under JNTU-K University. Apart from the NSS unit, students form voluntary groups and take up activities of societal concern in the neighborhood. Rotaract, YES, and WeR4 Help are some such functionaries. The college is awarded the best blood donating agency in the district for two successive years. Eminent people from different walks of life are invited to deliver talks on different facets of human endeavors.

It is relevant to recall here what Thoreau says, “I know of no more encouraging fact than the unquestionable ability of man to elevate his life by conscious endeavour”. We can have a similar echo from Socrates as well – “the way to gain a good reputation is to endeavour to be what you desire to appear”.

The college conducted three international conferences during the last four years with a good number of participants from outside the country. Several faculty recharge programmes are held during the last four years. On an average, 100 faculty-attended FDPs in a year. Workshops on an aggregate of 15 per annum take place. The departments organize not less than 20 guest-lectures each year.

Faculty members are provided with benefits like gratuity, medical leave, academic leave, special leave formarriage alongside the earned leave.

Needy students are provided with financial assistance through 'SAHAKARA' an "Earn while you learn" scheme.

The college stands as a front-runner in the peer group to promote appliances of non-conventional energy sources. A 100 kWp solar power generating unit has been commissioned along with a bio-gas plant thereby reducing the usage of fossil fuels. Towards green initiatives, the college also laid special emphasis on greenery by maintaining green cover under the supervision of a qualified and experienced horticulturalist.

To bridge the gap between academic and industrial practices and to make the students industry-ready, several concepts on the lines of a finishing school are initiated through IBM Center of Excellence, Microsoft Innovation Centre, CISCO academy, Intel-Embedded Systems Laboratory and so onto train students in hardware and software related aspects.

However, the main challenge for the College to take a quantum jump into quality enhancement is that it has been a self-financing college. This makes the College to take care of its admission numbers without sacrificing any of its quality parameters.The next challenge is to cater to the needs of wide ranging social strata interms ofquality while adhering to the admission policy of the State Government. Thirdly, the student acceptance of a different curriculum under the same University for the award of the same degree poses a serious challenge. Apart from these is the maintenance of financial stability to renew, upgrade or induct modern infrastructure to the growing needs of the institution apart from attracting committed and qualified faculty who are willing to walk that extra mile for the growth of the institution.

It is to be noted that the main strength of the institution lies in its vision and mission to deliver thevalue based quality technical education and more so the support of the main stakeholders towards attaining this end. The interest of the management to provide the necessary infrastructural facilities and adequately qualified man power on a not-to-profit basis, the untiring spirit of faculty and staff to achieve more for self and the growth of the institution academically, the responsive administration, the high ranking students opting for admission, the industry willing to associate itself through MOUs to train and place the majority, the alumni who toiled day and night to keep the flag high with University gold medals and readily sharing their experiences with juniors, enlightened faculty and effective administration are making the institution stronger day-by-day. Strengthening research, leveraging moreconsultancy works, providing exposure to current industrial practices for students and faculty, adding state of the art infrastructure steadily may hopefully lead to quality enhancement thus providing the institution its rightful place of pride.

As Bill Gates proclaims "It is fine to celebrate success but it is more important to heed the lessons of failure". While this institution take note of this caution, believes firmly in what John Dewey, an American philospher and educator says, "Education is not a preparation for life; education is life itself".

C. PROFILE OF THE INSTITUTION

1. Name and Address of the College:

Name	: Gayatri Vidya Parishad College of Engineering (Autonomous)
Address	: Gayatri Vidya Parishad College of Engineering (Autonomous), Madhurawada, Visakhapatnam
City	: Pin :530048 State :Andhra Pradesh
Website	: **www.gvpce.ac.in**

2. For communication:

Designation	**Name**	**Telephone with STD code**	**Mobile**	**Fax**	**Email**
Principal	Prof. Dr. A.B.KoteswaraRao	O: 0891-2739507 R:0891-2521668	9441919560	2739605	abkr_gvp@gvpce.ac.in; principal@gvpce.ac.in
Vice-Principal		O: R:			
Steering Committee Co-ordinator	Prof. V.Dharma Rao	O: 0891-2739507 EXTN-447	9705333317		vdharmarao@gvpce.ac.in

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

   Jawaharlal Nehru Technological University-Kakinada

5. a. Date of establishment, prior to the grant of 'Autonomy'

   (16/12/1996)

   b. Date of grant of 'Autonomy' to the College by UGC:

   (01/10/2008)

6. Type of Institution:

   a. By Gender

i. For Men	
ii. For Women	
iii. Co-education	✓

b. By Shift

i. Regular	✓
ii. Day	
iii. Evening	

c. Source of funding

i. Government	
ii. Grant-in-aid	
iii. Self-financing	✓
iv. Any other (Please specify)	

7. It is a recognized minority institution?

Yes	
No	✓

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

8. a. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks(If any)
i. 2 (f)	01/06/2008	--
ii. 12 (B)	01/09/2011	--

(Enclosed the Certificates of recognition u/s 2 (f) and 12 (B) of the UGC Act – pages 274-275))

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 (dd-mm-yyyy)	Validity	Programme/ institution	Remarks
i. AICTE	First approval 22-12-1996 Latest Approval 19-03-2013	2013-2014	B.Tech, M.Tech, M.C.A	
ii. JNTU	First Affiliation 7-12-1996 Latest Permanent Affiliation 26-06-2013	2013-2016	B.Tech, M.Tech, M.C.A	
iii.NBA	22-09-2011	15-09-2014	B.Tech. in EEE &IT	Visit of expert team of NBA is over for the remaining programmes in the new OBE format and the result is awaited. In fact, All the 7- UG programmes are accredited by NBA atleast twice.
iv. NAAC	15-06-2009	15-06-2014	B.Tech, M.Tech, M.C.A	

(Enclosed the Certificates of recognition/approval – page nos. 276 - 287)

9. Has the college recognized
   a. By UGC as a College with Potential for Excellence (CPE)?

   Yes [ ] No [✓]

   If yes, date of recognition:……NA…….… (Dd/mm/yyyy)

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

   Yes [✓] No [ ]

   If yes, Name of the agency NPIU of MHRD and
   The college is one among the 4 self financing institutions in A.P. selected by MHRD under TEQIP-II, S.C.1.2 to receive a grant of Rs. 4 Cr. to up-grade the quality of PG education, research and innovation.
   Date of recognition: 19/09/2011(dd/mm/yyyy)

10. Location of the Campus and area:
    (* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

Location*	Urban
Campus area in sq. mts. or acres	20.02 acres
Built up area in sq. mts.	37500

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

• Auditorium/seminar complex	✓
• Sports facilities ∗ play ground ∗ swimming pool ∗ gymnasium	 ✓ ✓
• Hostel ∗ Boys' hostels ∗ Girls' hostels	 ✓ ✓
• Residential facilities ∗ for teaching staff ∗ for non teaching staff	
• Cafeteria	✓
• Health centre – * First aid facility * Inpatient facility * Outpatient facility * Ambulance facility * Emergency care facility	 ✓ ✓

Health centre staff –			
*	Qualified doctor	Full time ✓	Part-time
*	Qualified Nurse	Full time ✓	Part-time

• Other facilities * Bank * ATM * post office * book shops	 ✓ ✓ ✓ ✓
• Transport facilities * for students * for staff	 ✓ ✓
• Power house	✓
• Waste management facility	✓

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

S.No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student intake	No. of students admitted
1	UG	Computer science and Engineering	4	Intermediate, Diploma	English	120	120+5*
		Electrical & Electronics engineering	4	Intermediate, Diploma	English	120	110
		Mechanical Engineering	4	Intermediate, Diploma	English	120	116+3*
		Chemical Engineering	4	Intermediate, Diploma	English	60	47
		Civil Engineering	4	Intermediate, Diploma	English	120	115+4*
		Information Technology	4	Intermediate, Diploma	English	120	98
		Electronics & Communication Engineering	4	Intermediate, Diploma	English	180	176+1*
2	PG	CAD/CAM	2	B.Tech	English	18	14+1*
		Infrastructure Engineering and Management	2	B.Tech	English	18	17
		Software Engineering	2	B.Tech	English	18	16+1*
		Embedded Systems and VLSI Design	2	B.Tech	English	18	18
		Communications and signal Processing	2	B.Tech	English	18	18
		Structural Engineering	2	B.Tech	English	18	18+1*
		Computer Aided Analysis and Design	2	B.Tech	English	18	13
		PowerElectronics andDrives	2	B.Tech	English	18	15
		Thermal Engineering	2	B.Tech	English	18	14
		CyberSecurity	2	B.Tech	English	18	15
		Computer science and engineering	2	B.Tech	English	18	18+1*

		Power system control and automation	2	B.Tech	English	18	16
		Thermal Engineering	2	B.Tech	English	18	14
3	Integrated Masters						
4	M.Phil.						
5	Ph.D.						
6	Integrated Ph.D.						
7	Certificate						
8	Diploma						
9	PG Diploma						
10	Any Other	MCA	3	A bachelor degree with computer science as one of the majors	English	60	47

* PIO Candidates

13. Does the institution offer self-financed Programmes?

Yes ✓ No

If yes, how many? 21

14. Whether new programmes have been introduced during the last five years?

Yes ✓ No

If yes, Number: 7

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**
Science	Under Graduate Post Graduate Research centre(s)		
Arts	Under Graduate Post Graduate Research centre(s)		
Commerce	Under Graduate Post Graduate Research centre(s)		
Any other (Please specify) Engineering	Under Graduate Post Graduate Research centre(s)	07 (B.Tech) 14 (M.Tech, MCA) 07	840 294 Yet to register

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, MSc, B.Com etc.)

a. annual system	
b. semester system	B.Tech, M.Tech, M.C.A
c. trimester system	

18. Number of Programmes with

a. Choice Based Credit System	No
b. Inter/ Multidisciplinary Approach	B.Tech,M.Tech, M.C.A
c. Any other (Specify)	Open Electives in UG

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

(a) Including the salary component	Rs. 68,311 / -
(b) Excluding the salary component	Rs. 30,716 / -

20. Does the College have a department of Teacher Education offering NCTE recognized degree programmes in Education?

    Yes [ ] No [✓]

    If yes,

    a. How many years of standing does the department have?
       _____ Years
    b. NCTE recognition details (if applicable) Notification
       No.: …….
       Date: ……... (dd/ mm/ yyyy)
    c. Is the department opting for assessment and accreditation separately?

    Yes [ ] No [ ]

21. Does the College have a teaching department of Physical Education offering NCTE recognized degree programmes in Physical Education?

    Yes [ ] No [✓]

    If yes,

    a. How many years of standing does the department have?
       _____ Years
    b. NCTE recognition details (if applicable) Notification
       No.: …….
       Date: ……... (dd/ mm/ yyyy)

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

Yes ☐ No ☐

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.

The college is offering B.Tech. and M.Tech. programmes in various engineering disciplines and also MCA programme.

The college is affiliated to JNTU-kakinada, and has been accorded autonomous status by the affiliating University.

23. Has the College been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

The college has been reviewed by the regulatory authorities like AICTE, Affiliating University-JNTU, Kakinada and UGC.

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

Positions	**Teaching faculty**						Non Teaching Staff		Technical Staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by theUGC / University / State Government										
Recruited										
Yet to recruit										
Sanctioned by the Management / Society or other authorized bodies	28		52		180		80		35	
Recruited	41	02	34	04	99	56	58	16	31	02
Yet to recruit	24						8			

***M-Male *F-Female**

25. Qualifications of the teaching staff

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc. / D.Litt.							
Ph.D.	34	02	15		06	03	60
M.Phil.							
PG	07		20	04	93	53	177
Temporary teachers							
D.Sc. / D.Litt.							
Ph.D.							
M.Phil.							
PG							

26. Number of Visiting Faculty/ Guest Faculty engaged by the College.

2

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

Students	UG		PG		Integrated Masters		M.Phil.		Ph.D		Integrated Ph.D		D.Litt./ D.Sc.		Certificate		Diploma		PG Diploma	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
From the state where the college islocated	491	287	141	105																
From other states of India	10	2																		
NRI Students																				
Foreign Students	13	0	3	1																
Total	514	289	144	106																

***M-Male *F-Female**

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

UG 0.5% PG 0.4%

29. Number of working days during the last academic year. 297

30. Number of teaching days during the last academic year. 234

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

Programme	Teacher-Student ratio
UG	1:16
PG	1:13

33. Is the College applying for?

Accreditation :	Cycle 1		Cycle 2	✓	Cycle 3		Cycle 4	

Re-Assesment [ ]

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

Cycle 1: 01/06/2009 Accreditation outcome/results

Accredited with "**A**" Grade with a CGPA of **3.47/4.00**

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)
12/01/2009 (dd/mm/yyyy)
b.Dates of submission of Annual Quality Assurance Reports (AQARs).

(i) AQAR for year 2009-10 on 30-07-2010
(ii) AQAR for year 2010-11 on 22-08-2011
(iii) AQAR for year 2011-12 on 26-10-2012
(iv) AQAR for year 2012-13 on 09-09-2013

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

- The college has been conferred the status of autonomy with effect from the academic year 2008-09 by UGC and the affiliating university JNTU-K

- Seven departments of this institution have been recognized Research Centers affiliating university JNTU-K
- College is among thefirst fifteen institutions selected by NPIU of MHRD to implement TEQIP-II, SC1.2. This is effective from 19th Sept. 2011
- The college is recognized by DSIR as a component of Scintific and Industrial Research Center.

D. Criteria-wise Analytical Report

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?

The vision statement facilitates institute's evolution into a Centre of excellence in technical education and research with a holistic approach. Accordingly, the curriculum is designed to embed in it, various aspects like knowledge application, problem analysis, solution development, usage of modern tools, translating knowledge to meet contextual needs of society, besides offering scope for engineering solutions to environmental issues.Further, designing of the syllabi, instruction methodology, and evaluation process with outcomes targeting the vision and mission of the institute.

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

During the process of designing the curriculum, the broad spectrum of requirements for a graduate student in the specific discipline are surveyed through various means like curricula at higher institutes of repute, domain specific international picture, accreditation criteria, model curriculum proposed by competent authorities alongside ever changing industrial needs and the feedback from all the stake holders involved.

After this preparatory activity a mock Board of Studies (BoS) with senior faculty, subject experts are held. Later, the same is placed before the statutory bodies for approval. The BoS has adequate representation from the industry, alumni and subject experts.

After a thorough discussion in the BoS the proposals are finalized and placed before the Academic Council for necessary approval. The academic council ensures the standards in the preparation of the contents in terms of regulations as well as the mechanisms used to evolve the syllabi and evaluation process before it recommends for final approval by Board of Governors (BoG). The BoG after due deliberation on the recommendations of the academic council gives its nod for implementation.

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 the stakeholders?

The institution adheres to the norms of the UGC in formulating the statutory bodies by involving personnelfrom industry and academicians from higher institutes of repute.

Feedback is obtained from the employers, alumni andlearned researchers from various disciplines who are invited to the campus for the introduction of advanced electives in the emerging areas of research.Inputs are taken regularly from industry experts, academicians, reports from agencies like NASSCOM from time to time

To cite some instances,

- The leading MNC Infosys suggested introduction of aircrafts systems as an elective in mechanical engineering and offered 30% participation in course delivery.
- An association with a leading civil society in the region "Bhagavatula Charitable Trust-BCT" helps engaging the students in the activities of societal concern. This later gave a fillip to introduce 32 hours of mandatory service activities in UG curriculum.
- Inputs from the industry experts in the academic council resulted in the introduction of displaying attendance grading in the marks memo.

The following courses have been introduced in various departments on the suggestion of industries.

Department	Courses/Electives introduced	Industry / Organisation that Suggested a course component
Chemical Engineering	UG (2013-14)	
	Green Chemical Engineering (VII Sem-Elective)	HPCL, Visakhapatnam
	Instrumental analysis for cemical analysis (VIII Sem-Elective)	NSTL, Viskhapatnam
	Waste water treatment (VII Sem-Elective)	IITM, Chennai
	PG (2013-14)	
	Air pollution control (Sem-I Elective)	HPCL, Visakhapatnam
	Energy production , conservation and management (Sem-II)	IITM, Chennai, HPCL and NSTL, Visakhapatnam
	Water and waste water treatment (Sem-II Elective)	HPCL, Visakhapatnam
	Solid waste management (Sem-II Elective)	HPCL, Visakhapatnam
Civil Engineering	Construction Management	R& D, L& T ECC, Chennai. GVR Infrastructure Pvt. Ltd., Chennai. Theme Engineering Services Pvt. Ltd., Hyderabad. JNTU Kakinada, and Andhra University.
EEE	UG (2013-14)	
	PowerElectronics applications to power Systems (Elective)	Visakhapatnam Steel Plant (RINL)
	Smart Grids (Elective)	N I T - Warangal
	Electrical Power Quality (Elective)	N I T - Warangal
	Restructured Power Systems (Elective)	Global Energy Consultancy
	M.Tech. in PSCA	

	Real Time Control of Power Systems	Global Energy Consultancy
	Distributed Generation (Elective)	Visakhapatnam Steel Plant(RINL)
	Modeling and Simulation of Power Electronic Systems (Elective)	Dr. Sastry V Vedula, former Professor of IIT Madras
	Dynamics of Electrical Machines (Elective)	Dr. Sastry V Vedula, former Professor of IIT Madras
Information Technology	Big Data & Hadoop	EMC^2, CDAC
	Cloud Computing	
	Information Storage Systems	
	Information Storage Security and Management	
	Multi Core Programming	
	Intellectual Property rights and patents	
	Data structures	
	Data Structures lab	
	Principles of Digital Signal Processing	
	adhoc Networks	
	Digital forensics	
	Proffessionsl ethics	
	Compiler Design	
	Basic Computations Lab	
Mechanical Engineering	Value Engineering	M/s Srujana Towers

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

- Employability
  - Industry oriented mini project and the project at the end the programme with the possible internship at the industry is aimed at preparing the student for the employment.
  - An advanced communication skills lab established as part of the curriculum in the campus enabling further increase in the employability of the student.

- Innovation
  - Students are encouraged to undertake innovative projects as part of the assignments as and when the course work permits. An exclusive centre for innovation is set up to nurture the talents in this direction.
  - Apart from the above, value-added programmes with industry support are conducted to make the students industry ready.
  - An IBM Centre of Excellence and an innovation center established in association with Microsoft where value additions to the courses offered through certification programmes lend to brighten the chances of employability further.
  - Weightage to innovative lab activity beyond the prescribed experiments is considered.

- Research
  - Students are involved in sponsored research programmes.
  - Student projects on societal concerns like traffic regulation based on

lane-wise vehicle density, low cost flash drive, detection of fat content in milk, visual aid for small print readability .

- Depending on the learners' capability, they are encouraged to undertake research oriented projects.
- To cite an instance, enthusiastic students are drawn and engaged in Photonics for application in avionics.

1.1.5 How does College ensure that the curriculums developed (a) address the needs of the society and (b) have relevance to the regional / national developmental needs?

The curriculum is developed in such a way that the fundamentals initiated at the beginning gradually evolve into classroom and laboratory learning and application through project work. The societal needs are familiarized, analyzed and adopted into the project work to find out solutions through the 32 hours of mandatory community work as an extension to the field.

The policy documents both at regional and national level are studied from time to time and due consideration is given in the preparation of the curriculum. New programmes have been introduced in the thrust areas of national importance like cyber security, which is gaining importance due to whopping gap of shortage of qualified manpower.

The satisfactory placements in IT sector, encouraging recruitments in core sector from the institution may be an indication ofthe efforts of the college in ensuring the curriculum's relevance to the regional and national needs.

Further, attempts at ' learning transfers' to the societal needs through institutions 'innovation centre' and mandatory community service programmes, student projects and faculty research projects that offer learners' involvement amply evidences this point.

The department of civil engineering involve their students in precast, no-aggregate concrete, quick setting high strength concrete and so on to help them know the advanced areas prove to be useful for guiding construction activities as required in the society. Projects on cell tower radiation by department of ECE and safety norms of electrical home appliances training for house-wives by department of EEE are some other examples.

Name of the Department	UG/PG Projects on Societal needs	UG/PG Projects on regional/national developmental needs
Chemical	Essential oil extraction from lemon gross, eucalyptus	Essential oil extraction from lemon gross, eucalyptus, turmeric, tamerind
		Chitisan extraction from shrimp shells
		Production of mesophase pitch (Carbon fibre)
Civil	Infrastructural Engineering & Management Economic Feasibility and	For the planning of new flyovers for any region, the project report can become a

	Efficient Project Scheduling of Fly-Over in Visakhapatnam	guideline.
CSE	Library management	
	Traffic analysis	
	Gesture identification	
ECE		EMI related for cellular Mobile Communication.
		GPS based tracking for vehicles.
EEE	Modeling and Analysis of Micro turbine Generation System using Auto Disturbance Rejection Controller (ADRC)	Modeling And Control Analysis of A Universal Power Quality Conditioning System
	Stable operation of a single phase multilevel cascaded H-bridge converter	
IT	Development of pattern matching techniques and its applications to computational biology	Generation of assembly patches in Telecom Switch.
	Privacy Preserving Sequential Pattern Mining Based on Data Perturbation.	Development of hardware inventory tool.
	Implementation of dual signature with elliptical cryptography	Scripting and automation of telecom node.
	An autonomous context aware agent architecture for personnel management systems	
	Fast Algorithms for frequent item set mining using FP array	
ME	Manually Operated stair case climbing mechanism	Prototype development of Dinghi boat with natural fibres
	Low Head pedal operated bicycle water pump	

1.1.6 To what extent does the College use the guidelines of the regulatory bodies for developing or restructuring the curricula? Has the Collegebeeninstrumental in leading any curricular reform which has created a national impact?

While restructuring the curriculum, AICTE guidelines and model course components are kept in view.
Also care has been taken to be in tune with the affiliating university as it being a guiding and regulatory authority.
Some of the curricular reforms include:

- Subject-wise attendance to imbibe the importance to all course components and to enhance student regularity to classes.
- Introduction of 32 hours of community service and 32 hours of participation in extra-curricular activities.
- Open electives

- Continuous assessment through tests, assignments and any other teacher-learner specific methods that suit thesyllabus chosen by teacher
- Semester system for the entire programme

This institution is the first to get conferred the status of autonomy among colleges under combined JNTU Hyderabad. Several other colleges that followed studied our curriculum and customized as per their requirements.

1.2 Academic Flexibility

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

a. Core/Elective Options:
Care has been taken to ensure the core content is incorporated into the curriculum. Apart from the core, flexibility is given to students to opt for pattern oriented electives beginning in the VI semester. Open electives have also been introduced where students across the disciplines can choose, depending on their interest in the VIII semester.

b. Enrichment Courses:
Certification and training programmes are being organized beyond the curriculum to enrich the knowledge levels of the students.
Some of the courses include:
CISCO certification course
IBM-DB2, RAD
MATLAB, CAD
LABVIEW, Pro E, Stad Pro

Name of the Department	Academic Year	Name of Certification course
Chemical	2010-11	Imparting Chemical Engineering fundamental knowledge to MACRED Technicians
	2011-12	Imparting Chemical Engineering fundamental knowledge to Ecologic Technicians
	2012-13	Imparting Chemical Engineering fundamental knowledge to Ecologic Technicians
Civil	2009-10	Auto CAD
	2012-13	STRAP
CSE	2009-10	RAD, DB2
	2010-11	RAD,DB2,LOTUS,TIVOLI
	2011-12	CISCO,DB2,RTC
	2012-13	CISCO,DB2,RAD,MIC
EEE	2010-11	Organized a 3-Day workshop on **"Energy Conservation and Electrical Safety"** during 22nd -24th July 2010, Dr.K. Narasimha Rao as coordinator.
IT	2010-11	IBM-DB2,IBM-RAD
	2011-12	IBM-DB2,IBM-RAD
	2012-13	IBM-DB2, IBM – RTC Tool
	2013-14	IBM-DB2,IBM-RAD, Microsoft Technical Associate, Microsoft APP FEST

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 five modules in the curriculum proposed for 2013-14 admitted batches onwards.
Earlier it was made into 8 modules.

d. Credit Transfer and accumulation facility
Credit transfer within the college does not exist. However, for students getting admitted into the programmes after first year from outside institutes, credit transfers are considered on the advice of the affiliating university and state council of higher education. The transfer is facilitated as per the recommendations of BoS and approval of the University.

Credits get accumulated for a period of 8 years for the UG student and 4 years for the PG pursuant as per the existing regulations. The learner is provided with an opportunity to get qualified in the respective programmes when one fails to do within the stipulated time frame of 4 and 2 years, respectively.

e. Lateral and vertical mobility within and across programmes and courses:
No lateral mobility exists as per the norms of state council of higher education as the programmes are decided at the time of admission itself. Regulated vertical mobility is permitted within the programmes in consonance with promotion rules.

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

Since the admission of PIOs is permitted very recently efforts are on to fine tune the existing programmes and to specially design to attract the foreign students.
M.Tech. (Cyber Security) in CSE department is one such course as it has a lot of potential.
M.Tech. in Infrastructure Engineering and Management in Civil Engineering department drew attention from foreign students. However, in the absence of permissions from the regulatory bodies for the earlier batches it did not materialize.
Subsequently, the regulatory bodies have allowed admissions into UG and PG programmes, and students across the border started seeking admission. Now, there are 16 foreign nationals are pursuing their studies in different programmes.
But, when introduced it could not draw any from across the Globe. Now that the institution is permitted to admit PIOs, admissions into this coursemay take place. Admissions are expected to improve henceforth.

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

No

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?

The college is established as an unaided self-financing institution.The regulatory authorities at state and central government levels, viz., state council for higher education and AICTE govern the policies regarding admission, fee structure, teacher qualification and salary. All programmes offered by the institution are self-financed

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

No, however, choice based electives are offered.

1.2.6 What percentage of programmes are offered by the College as follows:

All programmes are under Semester system.

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

No specific programme in its entirety is being offered in inter-disciplinary mode.
However, the college has initiated a modest introduction of interdisciplinary courses in its programmes as electives as a first step.
The choice of such inter-disciplinary programmes is based on the suggestion of the stake holders like industry, expert academia, alumuni and so on.

Name of the Department	Programme/ Branch	Course having scope for interdisciplinary mode	Related other programmes /branch	Outcomes *
Civil	B.Tech	Computer Programming through C	Computer Science Engineering	At the end of the course, the student will be able to apply knowledge in projects
		Computer Programming Lab		
		E-commerce		
		Software project management		
	B.Tech	Elements of EE & ME	Electrical and Electronics Engineering and Mechanical Engineering	At the end of the course, the student will be able to apply knowledge in projects
	B.Tech	Engineering Drawing	Mechanical Engineering	At the end of the course, the student will be able to apply knowledge in projects
		Engineering Workshop		
		Renewable sources of engineering		
		Project management		

	B.Tech	Bio-medical instrumentation	Electronics and Communications Engineering	At the end of the course, the student will be able to apply knowledge in projects
	B.Tech	Electrical safety management	Electrical and Electronics Engineering	At the end of the course, the student will be able to apply knowledge in projects.
		Reliability evaluation of engineering systems		
		Design concepts for engineers		
		Special electrical machines for industrial applications		
		Neural networks		
	B.Tech	Entrepreneurship and small business management	Management studies	At the end of the course, the student will be able to apply knowledge in projects
		Financial Management		
		Indian and International Business environment		
	B.Tech	Bio-metrics	Information Technology	At the end of the course, the student will be able to apply knowledge in projects.
	B.Tech	Nano Technology	Physics	At the end of the course, the student will be able to apply knowledge in projects.
	M.Tech (Infrastructure Engineering and Management)	Infrastructure planning and Finance management	Management studies	At the end of the course, the student will be able to apply knowledge in projects.
CSE		Campus Recruitment Training		Placements in MNC's
		Open Elective		Implementing the interdisciplinary technicalapplications
IT	M.Tech (Software Engg.)	Neural Networks	EEE	At the end of the course, the student will be able to apply knowledge in projects
	B.Tech (IT)	Bio-Informatics	CSE	At the end of the course, the student will be able to apply knowledge in projects
Mechanical Engg	B.TECH	Non conventional Sources of Energy	Chemical Engg	Academic Development

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?

The autonomy came into existence from the academic year 2009-10 onwards. The regulations, complete course structure and syllabi for I,II semesters has been prepared in the first year of autonomy. The performance has been reviewed annually and revised according to the needs for smooth functioning. Minor changes have been made as per the norms and a major revision of curriculum was brought in after the first batch has left the portals of institution in tune with the AICTE model curriculum duly weighing the recommendations of industry and academia.

1.3.2 How many new programmes at UG and PG level have been introduced during the last four years? Mention details.

Department	Name of the PG (M.Tech) programme
Civil	Structural Engineering
CSE	Cyber Security
ECE	Embedded Systems & VLSI Design
	Communication & Signal Processing
EEE	Power Electronics & Drives
ME	Computer Aided Analysis and Design
	Thermal Engineering

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

The college has become autonomous from the academic year 2009-10 and has independent curriculum and regulations different from the affiliating University. To formulate and fine tune these mid-term, end-term and end of the year students' feedback as well as faculty feedback were taken and relevant changes have been discussed in the BoS, Academic Council and BoG. The observations and recommendations of industry, academia and alumni helped in fine tuning the same for quality and practicability.

First major revision ofthe curriculum for all UG and PG programmes has taken place w.e.f. 2013-14 based on the feedback from industry, students, exit surveys, and the other stakeholders.While revising the curriculum, the need to catch-up with the national and international accreditation norms is examinedand all the programmes are restructured in accordance with the requirement of Outcome based education.In the process, due care is taken to focus on program specific criteria.

The new curriculum is made more learners centric infusing the concept of life-long learning.The credit structure is also revamped to be in-tune with the affiliating University and in agreement with the concurrent professional practices acceptable to apex regulatory bodies like the AICTE.

Name of the Department	Academic year	Courses revised	Total number of courses	Percentage
Chemical	2009-10	Chemical process calculations (Sem-III,IV)	40(including electives)	12/40=30%
		Mass Transfer operations-I,II, III (Sem-IV,V)		
		Design and analysis of experiments(Sem-V)-new		
		Chemical process equipment design(Sem VI,VII)		
		Applied Numerical Methods-new (elective-Sem-VII)		
		Chemical engineering mathematics-new (Sem VII)		
		Membrane separation process-new (Sem-VII)		
		Corrosion engineering-elective (Sem -VII)		
		Chemical Engineering Principles in drug delivery-new(Sem-VIII)		
		Non-newtonian flow in chemical engineering-new(Sem-VIII)		
		Design of multiphase reactors-new(Sem-VIII)		
		Multicomponent Mass Transfer- new (Sem-VIII)		
Civil	2013-14	Finite Element Methods		
		Ground Improvement Techniques		
CSE	2012-13	48	48	100%
ECE	2011-12	EDC (1)	43	2.3
	2013-14	DIP (1)	43	2.3
EEE	2009-10	B.Tech (EEE) – 71	71	100
	2013-14	M.Tech(PSCA) - 14	14	100
		B.Tech(EEE) - 70	75	94
IT	2012-13	1.Computer Graphics	13	10%
		2.Data Warehousing and data Mining		20%
		3.Data Base Management Systems		15%
		4.Computer programming through C		10%
		5.Computer programming Lab		10%
		8.Web Programming		20%
		9.Switching theory and Logic design		05%
		10.Object Oriented Programming Lab		40%
		11.Engineering workshop		05%
		12.Operating Systems		05%
ME	2013-14	B.Tech	08	12.5%

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?

Domain specific value added programmes are being offered.
Some of the progarmmes are:
CISCO certification course
IBM-DB2, RAD
MATLAB, LABVIEW

The course schedules are announced in advance to the students and work schedule is drawn beyond the regular time table enabling access to the desired learners.

Name of the Department	Name of the programme	Duration	Dept	Supporting agency	Frequency
Civil	AutoCAD	4 Weeks (April 6th- May 18th 2011.	CIVIL	GVPCOE	Once in a year
CSE	CCNA training	12 weeks	CSE	CISCO	Thrice a year
ECE	Embedded System Training	3 months	ECE	GVPCE	Once a year
EEE	"Simulations Tools for Electrical Engineering Solutions", (SIMTELENS-2011),	15 days (2 WEEKS)	EEE	College Management	Once in a year
IT	IBM DB2	1 week	Placement Dept	IBM	Every year
	IBM RAD	1 week		IBM	Every year
	CCNA			CISCO	Twice a year

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

Afinishing schoolis likely to beestablished and plans are afoot to undertake such programmes.

1.4 Feedback System

1.4.1 Does the College have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

Feed back on curriculum is collected from students in different ways.

- Through class committee meetings held at departmental level on specific courses.
- Through meetings of the class representatives on the regulations and related implementation issues.
- Through interactions with the students of different abilities at HoD/faculty level
- From Alumni through interactions
- Graduate -survey
- Course-end survey

The feedback is analyzed and used to re-orient the courses and regulations if necessary in the subsequent revisions.

1.4.2 Does the College elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods adopted to do the same - (conducting webinar, workshop, online forum discussion etc.). Give details of the impact on such feedback.

Experts from academia drawn from premier institution are either placed on Board of Studies, Academic Council or consulted through interaction and discussion. Workshops and forum discussions held during the four year period have been helping in progressive revision of the curriculum.Feedback from the national and international faculty is collected as and when they visit the institution on academic assignments or interactive promotional sessions.
Webinars and online forum discussions are now on way to enhance knowledge intensity.
The feedback thus collected is used in designing and/or updating the curricula.

1.4.3 Specify the mechanism through which alumni, employers, industry experts and community give feedback on curriculum enrichment and the extent to which it is made use of.

Feedback from alumni is collected at department level from time to time.
Placement cell gets engaged actively in collecting the feedback from the employers as and when they visit the campus for placements and also through regular interactions online.
Indirect feedback from the community is collected through reports of various surveysby national and regional agencies and from interactions with NGOs.
Feedback has been helpful in introducing

- multi-disciplinary electives
- Professional ethics, IPR, Environmental studies
- Subject wise attendance criteria
- 32 hours of community service
- 32 hours of participation in extra-curricular activities

1.4.4 What are the quality sustenance and quality enhancement measures undertaken by the institution in ensuring effective development of the curricula?

- The Academic Council and the Governing Body reviews the performance periodically on the academic front and make suggestions for improvement and the sustenance of the quality.
- Feedback on the performance of our graduates already placed and new recruits from industry when they visit for campus placements.
- The chairpersons of various Boards of studies are in regular contact with the domain specific experts and also others on the statutory bodies like BoS and Academic Council.
- The college takes up academic audit both by internal and external agencies.

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?

Publicity: The admission and college information of the UG and PG programmes is displayedon the college website. The stake holders such as alumni, industry, students studying in the college and their satisfied parents help by giving publicity of the college. The campus recruitments in previous years also serve as a means of publicity. The popularity of the college among the prospective students and their parents can be observed from the fact that students with the best EAMCET ranks joined the college in the previous four years.

Transparency: Admission of students into UG and PG programmes in the college is made based on the merit ranks secured by them in common tests EAMCET, PGCET and GATE conducted by the state and national agencies.Hence the admission processes for both UG and PG programmes are transparent.

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?

The admission process for category A is through the state agency APSCHE.

UG: Admissions into UG programmes in the college are made by Convenor, EAMCET, who is nominated by the Govt. of Andhra Pradesh based on the statewide ranks in EAMCET (Engineering and Medical Common Entrance Test).

PG: Admissions into PG programmes is based on the merit ranksof candidates in GATE and in statewide test PGCET conducted by APSCHE for category –A.

For category –B in both UG and PG is according to the procedure prescribed by APSCHE to the self-financing institutions.

2.1.3 Does the College have a mechanism to review its admission 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?

The societal category-wise lists of the candidates (such as OC, OBC, SC and ST) admitted into the college are passed on to the college by the APSCHE. Modalities are worked out by the college administration with the association of the faculty to improve the academic performance of the students of all categories.

Remedial classes are conducted to the needy students. Projects beyond the syllabus are offered to the students excelling in academics to be beneficial to them in competitive examinations. Additional English speaking and writing classes are conducted to the students of rural background.

As a result the students of all categories are getting selected in campus recruitments and are securing good ranks in GATE and other tests.

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 achievers in sports and extracurricular activities

The students belonging to all the above categories get admission into the college as per the reservation policies of the state government.

1. A book- bank in the library.
2. Student counseling.
3. Remedial classes for slow learners.
4. Suitable supplemental assistance for disabled.
5. Smooth horizontal and vertical movement across corridors and floors as well as free transport for deserving.
6. Student sahakara scheme with a principle of earn while you learn.

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

	UG	PG
2013-14:	795	257
2012-13:	796	168
2011-12:	790	144
2010-11:	684	142
2009-10:	659	130

The discipline-wise particulars are given below.

Categories	2010-11		2011-12		2012-13		2013-14	
	Male	Female	Male	Female	Male	Female	Male	Female
Chemical								
SC	5	3	4	2	7	0	4	0
ST	2	0	3	0	1	0	1	0
OBC	12	10	13	10	12	6	9	9
General	9	4	6	4	12	4	8	6
Others	11	4	7	4	5	3	7	3
Civil								
SC	8	6	10	3	8	5	9	4
ST	3	2	5	1	2	3	2	2

OBC	31	13	23	11	34	13	26	17
General	12	6	18	11	9	7	15	7
CSE								
SC			8	4	7	5	6	6
ST			3	3	4	0	3	2
OBC			20	7	22	11	20	15
General			25	15	19	16	30	38
Others			18	17	16	15	6	0
ECE								
SC	11	5	15	9	15	9	12	9
ST	4	2	7	3	6	3	5	2
OBC	35	19	48	25	47	27	38	17
General	16	13	35	15	36	15	25	16
Others	1	0	1	0	1	0	1	0
EEE								
SC	9	4	7	6	9	4	9	5
ST	3	3	4	1	3	2	5	2
OBC	36	15	33	17	38	15	31	16
General	38	12	31	14	33	9	29	12
IT								
SC	6	4	2	1	7	7		
ST	1	3	6	3	3	2		
OBC	11	13	9	10	14	18		
General	10	15	10	22	15	18	51	46
Others	12	12	13	11	12	11		
ME								
SC	2	1	3	2	9	4	3	2
ST	1	--	8	5	4	1	8	5
OBC	20	10	14	27	27	17	22	12
General	24	6	18	7	16	6	22	8

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.

The demand ratio for various programmes is noticed to vary according to the following observations.

A study on the merit ranks may offer a clue which may lead to

1. Better ranks year by year.
2. More girls at UG level suggest discipline, quality education, safety for girls etc.
3. Better GATE ranks and more GATE and PGECET students at PG level indicate the quality sustenance.

Programmes	Number of applications	Number of students admitted	Demand Ratio
UG: B.Tech.	NA Seats filled by APSCHE		NA Best ranks admitted in UG and PG are mentioned below
1.2013-14		795	
2. 2012-13		796	
3. 2011-12		790	
4. 2010-11		684	
5. 2009-10		669	
PG: M.Tech			
1.2013-14	NA Seats filled under the guidelines of APSCHE	257	
2. 2012-13			
3. 2011-12			
4. 2010-11			
5. 2009-10			

Best EAMCET ranks joined the college:

- 470 joined ECE in 2011
- 651 joined ECE on 2010

Candidates admitted into M.Tech:

- 100% of the students admitted in ECE and EEE in 2013 are qualified in GATE.
- Best GATE ranks admitted in ECE are 57 and 164 in the years 2010 and 2013 respectively.
- All the students admitted in other disciplines are qualified are either in GATE or PGECET.

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

No.

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.

To the students seeking admission into engineering:
A bridge course is being conducted for aspiring engineering students before the admissions to give a feel of engineering education and make-up for the gaps between 10+2 and engineering.

To the students newly admitted into first year of engineering:
Orientation classes are conducted by the senior faculty in each of the depts. to the freshers explaining the importance and applications of the discipline to industry and the society. Various subjects/courses offered in the curriculum are explained. The scope for further studies after graduation is also illustrated.

The feedback collected during these programmes is utilized for the

improvement in the content and mode of 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?

The differential requirements of students are identified by conducting diagnostic tests, besides their previous academic performance and special classes are offered in terms of language, communication and fundamentals.

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?

- After three weeks of the commencement of every semester diagnostic tests are conducted and weak students are identified. Extra classes are conducted beyond their regular classes.
- Bridge courses are conducted to the lateral entry students in select subjects like mathematics, C-programming.
- Remedial classes are conducted to slow learners and students who have back-logs.
- Add-on courses like DB2, RAD, Embedded systems, MATLAB, etc., are conducted beyond the credit-based subjects.

The following table gives the details of the number of students who attended remedial classes and how they are benefited.

Years	Total No. Of Students	Male	Female	OC	BC	SC	ST	No.of Students Passed
2013-14	1220	780	440	430	666	98	26	1163
2012-13	1026	779	247	394	501	82	49	977
2011-12	170	109	61	64	77	18	11	158
	2416	**1668**	**748**	**888**	**1244**	**198**	**86**	**2298**

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.

Incremental academic growth is tracked for socio-economically backward students and slow learners. In each semester slow learners are identified and category wise analysis is done. Remedial classes are conducted to improve their performance

How the study has helped?

Years	Total No. of Students	Male	Female	OC	BC	SC	ST	No.of Students Passed
2013-14	1220	780	440	430	666	98	26	1163
2012-13	1026	779	247	394	501	82	49	977
2011-12	170	109	61	64	77	18	11	158
Total	**2416**	**1668**	**748**	**888**	**1244**	**198**	**86**	**2298**

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

Facilities are available in the college to the advanced learners among the students. 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.

1. TCS best project prize
2. IBM-TGMC project prize
3. Microsoft project prize
4. Madras IIT model making prize.

Name of the Department	Name of the Student	Name of the Award	Awarding Organization
CSE	A.V.J.S. Karthik	Best Student for the year 2013	JNTUK
	K.Vijaya Lakshmi	Best Student for the year 2012	JNTUK
	Ch.PadhmaPriya	Best Student for the year 2011	JNTUK
	SrinivasBehra	Best Project Award 2012	TCS
	N.Sateesh	Best Student for the year 2012 (PG)	JNTUK
EEE	Neha Rai	Prevega2014, Science Tech And Cultural Fest, Secured First Place	
	P Harish	Prevega2014, Science Tech And Cultural Fest, Secured First Place	
	Tadi Rajasekhar	Currents14, First Place In Circuit Trix, First Place In Lab Ratrace, Best Design In Rush Hour-Line Follower Event	
	P Harish	Currents14, First Place In Lab Rate Race, First Place In Circuit Trix, Best Design In Rush Hour-Line Follower Event	
	Narendra Katta	Currents14, Award For Most Creative ECE Student, 3rd place In Lab Rat Race	
	Md.Ibrahim Vali	Innovation, Won First Prize	
	P.S.L.Dattatreya	Innovation, Won First Prize	
	Sai Ram Colluru	Innovation, Won First Prize	
ECE	K.Akhila Naidu, K Divya, K.S.Madhuri	Stochastic Modeling for Real Time Tracking Applications	

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 admissions for differently-abled students are based on govt. policy
- Ramps are provided for horizontal commutation wherever there is a difference in level
- Elevators are provided intermittently in addition to staircases.
- Class rooms / Labs and examination halls are located in the ground floor whenever required.
- Full adherence to government policies regarding examinations is observed.

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.)

- Academic calendar is prepared at the beginning of each academic year and circulated among all the departments and also displayed on notice boards and website.
- Teaching plan is prepared by the faculty for the subjects they teach, and the same is circulated among the students at the beginning of each semester.

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?

- The lecture schedule and scheme of work are prepared by the faculty and distributed to the students at the beginning of the semester.
- Syllabi for various courses along with regulations are circulated in the form of a book to the students at the time of admission.
- Class wise departmental reviews are conducted time to time towards regulated academic process.
- Deans of Academic Affairs of UG and PG monitor and ensure the effective implementation of the above process.

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 subjects follow the lecture method, some of which are by interactive sessions like group discussions, role play, seminars.
- All practical classes are conducted in student groups for day to day evaluation.
- Apart from the above students learn through home assignments, model making and project work within and outside the institution.

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.

- Seminars are organized by the faculty, in which students are asked to collect information from internet on certain selected topics and to present the same in the class room with the aid of the LCD projector.
- Hands on experience through industry and community based projects, model making, sponsored research and consultancy projects are expected to enthuse students in further learning even after leaving the institution.
- Laboratory experiments are designed to help the students in selflearning.

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

Experts are identified to give lectures on topics related to latest technological development, and topics of industrial interest and societal needs. Experts are invited from higher institutes of learning, industry and those in public administration and public life.

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.

- NPTEL Lectures
- e-learning, resources from ABB, IEEE, Siemens, Microchip, Renesas, ARM, CD, AC and EDX (MOOCS)
- MOODLES
- MATLAB, PRO-II, COMSOL -for analysis of chemical systems
- Triangle simulation software - for understanding process control systems
- NPTEL Videos are downloaded and video lectures are presented in classroom for visual understanding of lectures.
- Moodle open source tool for online quiz examination
- Brainstorming technique
- Visual Chart working/Models
- Role play and Quiz
- Digital library Video Lectures
- Internet/ Intranet Simulations
- Group Discussions/Seminars/Projects
- Webinar
- Access the MIT Lectures, from the internet of the individual faculty.
- E learning resources from ABB,IEEE,SIEMEN's
- Control Systems design by Graham C Goodwin and Sin www.csd.newcastle.edu.au
- Signal and Systems course file "Stanford University"
- EMF Course material "LAMAR University"
- Signal and Systems M.J. Roberts "Stanford University"

2.3.7 Is there a provision for the services of counselors / 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.

- A group of students are attached to a faculty advisor to take care of their academic and minor personal interests.
- Separate counselors are on the rolls of the college for the psycho-social guidance to anybody in need.

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?

Innovative teaching methods:

Internet and Wi-Fi are 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. The members of the faculty encourage students to have online access and use of video lessons such as NPTEL, MIT Press, Stanford University, MOODLE, MOOCS etc., and other online video courses also.

The innovative teaching methods introduced by faculty like MOODLES to conduct online quizzes, industry oriented Projects, Brainstorming technique, Role play and so on.

The effectiveness of implementation of innovative practices is measured through student feedback and also from the feedback from accredidating agencies from time to time.

The faculty sponsored by the institution for training in teaching-learning:

- Dr. K. Siva Kumar attended a Pedagogical Training Program on Core Module at ESCI, Hyderabad during 20th – 25th January 2014 under TEQIP.
- Sri. V. Kasiviswanatham attended NBA resource person training at JNTUK, Kakinada, Sep 2013 under TEQIP-II.
- Sri. U HariPrasad is at IIT Guwahati for one month from July /August 2013 where he is working on the kinetics of adsorbtion
- Ms P J SubbaLaxmi visited IICT Hyderabad for two weeks in May / June 2013.
- Mrs. P.J. Subba Lakshmi and Mr. K.Santosh attended Mission10X-aramb - FDP by WIPRO at GVPCE, on 21 Dec 2011.
- M.S.N. Murthy & B. Sreenivasulu attended Mission 10X- FDP by WIPRO at GVPCE during 21st - 25th June 2010

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

The College helps in developing creativity and scientific temper among the students by encouraging them to participate in model making, paper presentations in student seminars, innovative projects, sponsored research and consultancy projects, design of new experiments.

Name of the LAB	**No of experiments beyond the curriculum**
C ProgrammingLab	15
Data Structures Lab	5
Operating Systems Lab	10
Web Programming	5
DBMS Lab	5
AC Machines lab	2
DC Machines lab	1
Electrical Measurements Lab	1
Power Electronics and Drives Lab	1
Micro processor & Micro controller Lab	20

2.3.10 Does the College consider student projects a mandatory part of the learning programme? If so, for how many programmes is it made mandatory?

* Number of projects executed within the College
* Names of external institutions associated with the College for student project work
* Role of the faculty in facilitating such projects

Minor and major project works are mandatory during the programme as detailed below:

Minor project: Duration is 6 weeks. Carried out in an industry in summer after VI semester and submitted in VII-Semester for assessment.

Major project: Carried out in VIII semester along with two electives. The student prepares a working model of a piece of equipment or designs a new feature either within the institution or in coordination with an industry. This project is evaluated at the end of VIII semester.

Role of the faculty in facilitating such projects: Faculty play a supervisory role to a group of students, and help them in choosing a project or suggest one in his mind or advise to participate in an ongoing research or consultancy project if it is carried out within the institution. If the project is carried out in association with an institution of higher learning or industry, the faculty coordinates with the other institutional member in the progress of the project.

Academic Year	Name of the programme (UG/PG)	No of projects carried out in association with an institution of higher learning or industry	No of projects carried out within the college
2009-10	UG	3	122
	PG	2	27
2010-11	UG	2	111
	PG	9	28

2011-12	UG	2	114
	PG	12	37
2012-13	UG	8	136
	PG	9	43

2.3.11 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?

- Modern teaching aids such as LCD projector with internet facility and education CDs/DVDs are provided to the faculty in the department to transmit the knowledge in the classroom.
- Online access to different e-learning facilities like NPTEL, MIT, IIT(US) etc. are provided to faculty through intranet and internet.
- Apart from the above the library subscribes to a good number of e-journals as per AICTE norms for the benefit of the faculty and students to update themselves in the knowledge domain of their interest. The library also stocks enough reference books in addition to the departmental libraries to cater to the needs of the students.

2.3.12 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?

- Feedback is obtained from students on each subject / course twice in a semester. Feedback is obtained from alumni periodically. Thus the teachers have the facility to correct their shortcomings and improve their teaching methods.
- The student feedback is used to have a mid-course correction and/or revamp the methodology of teaching towards a better reach to the slow-learners.
- The alumni feedback is used to adopt the teaching methodology to suit the demands of higher education and industry, and towards updating the syllabi and curriculum.

2.3.13 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.

- The common challenges are (i) delayed admissions and (ii) interruption to class work due to unforeseen long term conditions like bandhs and agitations of general nature.
- The academic schedule is modified / extended with prolonged working hours and condensed vacations.

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

- The central library possesses all the text books and many reference books of all the subjects/courses of all disciplines. A digital library containing many e-journals related to all disciplines is accessible to the faculty and students through the website of the college.

- The library helps faculty to update themselves with the developments in the subjects of relevance and transmit them to the student through their teaching, and suggesting topics for UG and PG projects.
- The students use the material available in preparing for paper presentations, choosing topics on their own and working assignments.

2.3.15 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.

An Internal Quality Assurance Cell (IQAC), as suggested by NAAC is created, in the college.An academic audit committee is also constituted.

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?

Sanctioned Strength	Recruited	From other states
260	236	15

2.4.2 How are the members of the faculty selected?

An advertisement is issued in newspapers. The candidates are interviewed by selection committee constituted with external experts for mid-term requirements.
Interviews for ratification of posts are conductd annually by the selection committee constituted by the affiliating university.

2.4.3 Furnish details of the faculty

Highest Qualification	**Professor**		**Associate Professor**		**Assistant Professor**		**Total**
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc. / D.Litt.							
Ph.D.	34	02	15		06	03	60
M.Phil.							
PG	07		20	04	92	53	176
Temporary teachers							
D.Sc. / D.Litt.							
Ph.D.							
M.Phil.							
PG							

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

Number of teachers qualified in UGC-CSIR-NET, UGC-NET, and SLET exams: 19 (9%) (faculty from basic sciences, and humanities)
Percentage of teachers with PG has higest qualification: 214 (90.23%)

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

Department	% of faculty who are product of the same College	% of faculty from other Colleges within the State	% of faculty from other States	% of faculty from Abroad
CHEMICAL	NIL	10*(67%)	5(33%)	NIL
CIVIL	3	14	9	NIL
CSE	(5/35)14%	(28/35) 80%	(3/35)0.08%	NIL
ECE	11 /36 (29.73)	20 /36 (54.05)	16.21%	NIL
EEE	14.81%(4 / 27)	33.33%(9 / 27)	51.85%(14 / 27)	NIL
IT	8 (40%)	10 (50%)	2 (10%)	NIL
MECH	10 (35%)	13 (46%)	5 (19%)	NIL
Humanities	14%	61%	25%	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?

The number of faculty in the departments is as per the teacher-to-student ratio stipulations of AICTE.
The faculty competency is increased time to time by sponsoring them to faculty development programmes, workshops, seminars, conferences and industry interaction to familiarize themselves with the concurrent developments in the fields of interest.

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

Two

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.)

The college extends the following facilities to its faculty.
Research grant
Study leave
Sponsoring to seminars/conferences
Training in higher level institutes and industry
Organizing seminars/conferences
Arranging guest lectures by experts from educational, R&D institutes, and Industry

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.

- Dr.A.B.K.Rao - Best Researcher award from JNTU-K
- Dr.D.S.Murthy - Best teacher, Best Researcher, Engineer of the year awards from JNTU-K

- Prof.P.S.Rao - Lifetime achievement award from L&T
- Dr.P.Praveena - Younng scientist award from DAE, Govt of India
- Dr.P.Krishna Subbarao - Gold Medal from Intel
- About 10 faculty members are serving on editorial boards/as reviewers for reputed peer reviwed international journals
- 32 faculty members are recognized as research supervisors by the affliating university JNTU-K

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)

Refresher courses:
HRD programmes:
Orientation programmes:
Staff training conducted by the college:
Staff training conducted by any University/other colleges:
Summer/winter schools, workshops:

Academic Staff Development Programmes	**Number of faculty**
HRD programmes	27
Orientation programmes	54
Staff training programmes conducted by the College	344
Staff training programmes conducted by University/ other Colleges	120
Refresher courses / Summer / Winter schools / Workshops, etc.	205
Any other (please Specify) Visit to higher institutes for Research & Instrument training	12

2.4.11 What percentage of the faculty have

- been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies: 41.24%
- participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies : 82.12%
- presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies: 42.23%
- teaching experience in other universities / national institutions and others: 3.53%
- industrial engagement: 10.24%
- international experience in teaching: 2.10%

A detailed information is presented in the table below.

	Chemical		**ECE**		**EEE**		**IT**		**ME**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**No**	**%**
been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies	4	27	4	11	51	93	2	10	01	

participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies	12	80	12	33.3	24	86	22	100	22	
presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies	10	67	12	33.3	16	57	10	45	05	
teaching experience in other universities / national institutions and others	0	0	0	0	3	11	1	5	01	
industrial engagement	3	20	3	8.3	7	25	NIL			
international experience in teaching	0	0	0	0	2	7	NIL			

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

* Curricular Development

  Yearly once

* Teaching-learning methods

  As and when new faculty recruited (At least twice a year)

* Examination reforms

  Once in three years

* Content / knowledge management

  15 workshops, 20 guest lectures on average are organized per year

* Any other (please specify)

  Two international conferences in the last four years

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

The course or learning objectives and outcomes are written/re-defined in the syllabus of each course. They are given wide publicity among students in class room teaching and are also written in question papers.

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

  (1) Dr. B. Srinivasulu to BHEL-Hyderabad
  (2) Dr. S. Ramakrishna to NSTL, Visakhapatnam
  (3) Prof. G. Muralidhar Guest faculty in workshops
  (4) Sri J. V. S Murty cooperative research with American University, and consultancy to VSP and LG Polymers.

(5) Prof. V. Dharma Rao, Member for CFO, APPollution Control Board
(6) Three faculty to IIIT-Hyderabad and IIIT-Bangalore

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?

Meetings are conducted with the participation of all stakeholders. The evaluation process is explained to them and feed back is collected from them for future implementations.

The entire process of evaluation is made available on the college website and explained in the handbook given to students.

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?

- More freedom to faculty in internal evaluation.
- Internal and external evaluations of end-semester answer scripts.
- Mininimum requirement for promotion to next academic year
- Attendance requirements for promotion to next semester and subject-wise attendance report in marks memo
- Moderation of question paper for end semester, and no moderation of marks either subject wise or overall

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

Periodic internal evaluation on apportioned syllabus in case of theory, and regular evaluation in labs.

Based on the performance of students in diagnostic tests, slow-learners are identified and provided with additional inputs. Apart from this, review and counseling for improving the regularity is carried out.

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

UG:

30% of marks for theory subjects and 50% of marks for labs are earmarked for continuous internal assessment.

Internal Evaluation: The 30 internal marks are awarded as follows:

a) Two Tests - 20 marks. Weighted Average of 2 tests carries 20 marks.
b) Four assessments by atleast any two of the following methods -10 marks: Assignment / Quiz / Term paper / Tutorial / Surprise test / Open book test / Seminar / Case study / Lab activity / Projects etc. as notified by the teacher at the beginning of the semester and distributed evenly over the entire semester.

PG:

40% of marks for theory subjects and 50% of marks for labs are earmarked for continuous internal assessment.

Internal Evaluation: The 40 internal marks are awarded as follows:

a) Two Tests - 30 marks. Average of these 2 tests carries 30 marks.
b) Two assessments by any of the following methods for 10 marks
   Assignment / Quiz / Term paper / Tutorial / Surprise test / Open book test / Seminar / Case study / Lab activity / Projects etc. as notified by the teacher at the beginning of the semester and distributed evenly over the entire semester.

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

The college conducts examinations as per schedule. Whenever there is a forced delay rescheduling is done for a single exam or more as close as possible to the declared schedule without significant disruption to the total academic calendar.

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.

UG: 20 days after the last examination.
PG: 30 days after the last examination.

Results are displayed on the notice boards of respective departments, and also published on the college website.

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

∗Pre-examination processes - Time table generation, OMR, student list generation, invigilators, attendance sheet, online payment gateway, etc.
∗ Examination process - Examination material management, logistics.
∗ Post examination process - attendance capture, OMR based exam result, auto processing, generic result processing and certification.

The integrated examination platform is as follows. However, it is not OMR-based:

Pre-examination processes – Time table generation, student list generation, invigilators, squads, attendance sheet, payment through bank.

Examination process –Examination material management logistics such as question paper printing, distribution. Maintaining confidentiality.

Post examination process – attendance is taken manually, auto processing, generic result processing and certification (issue of marks memos).

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

The college cannot admit any Ph.D. student directly.

However, a research centre sanctioned by the affiliating university is ready to function from the academic year 2014-15 with the rules prescribed by the affiliating university.

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?

- A separate office of the Controller of Examinations is established with separate man-power. An Additional Controller of Examinations is also appointed to supplement/assist the CE in effectively organizing the process until the results are announced.
- Paper setters are identified very early and addressed so that the examination process will go smoothly according to schedule.
- A stand-by question paper is always kept ready in case of unexpected delays.
- A process of coding and decoding is introduced to maintain confidentiality until the results are finalized.
- Candidates detained due to shortage of attendance are informed in advance so that the planning for seating in examination goes smoothly.
- All the internal marks are collected before the start of the first examination to avoid scrambling at the time of announcement of results.

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

Revaluation process is in vogue for those who are aggrieved.

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?

The learning outcomes for the programmes are designed at the time of framing the syllabi, and brought to the notice of students, faculty and staff through a printed book, and by displaying on the college website.

The program outcomes are also displayed on notice boards in the respective departments.

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

Teaching, learning and evaluation processes are submitted by the faculty for each subject at the beginning of the semester, and the same are displayed on the college website.

Periodic internal evaluation on apportioned syllabus in case of theory, and regular evaluation in labs.

Review and counseling on attendance and performance wherever needed.

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

Collection of data:

1. A course end survey is made in which a questionaire is prepared on topics in different units in the syllabus of each subject and the opinions of the students are collected with respect to the level of their understanding of each topic.
2. A graduate survey is conducted at the end of the final year to assess the level of understanding of the student on all the subjects in the curriculum, teaching methods, etc.,

Analysis of data:

The departmental advisory committee analyses the above data and sends its recommendations to BoS for modification of learning outcomes, if necessary.

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

Name of the Department	Accademic Year	No of students Appeared for the Exam	Completion Rate (number of students passed)	Pass percentage
Chemical Engg. (UG)	2009-13	49	49	100%
	2008-12	62	62	100%
	2007-11	57	57	78%
	2006-10	52	52	73%
Chemical Engg. (PG)	2011-13	12	12	92%
	2010-12	6	6	83%
	2009-11	10	10	60%
	2008-10	2	2	100%
Civil Engg. (UG)	2009-13	129	90	70%
	2008-12	70	48	69%
	2007-11	67	59	88%
	2006-10	66	49	74%
Civil Engg. (PG) M.Tech (Infrastructure Engg. and Management)	2010-12	4	2	50%
	2009-11	4	3	75%
	2008-10	2	2	100%
Civil Engg.(PG) M.Tech (Structural Engg.)	2011-13	11	4	36%
Computer Science and Engineering (UG)	2009-13	111	98	88%
	2008-12	131	103	79%
	2007-11	123	115	93%
	2006-10	132	125	95%

Computer Science and Engineering (PG)	2011-13	14	14	100%
	2010-12	17	17	100%
	2009-11	18	18	100%
	2008-10	17	17	100%
Electronics and Communications Engineering (UG)	2009-13	127	122	96%
	2008-12	137	105	77%
	2007-11	130	104	80%
	2006-10	125	97	78%
ECE (PG) M.Tech.(Embedded system and VLSI design)	2011-13	16	15	94%
	2010-12	17	17	100%
	2009-11	NA	NA	NA
	2008-10	NA	NA	NA
ECE (PG) M.Tech.(Communications and signal processing)	2011-13	12	12	100%
	2010-12	12	12	100%
	2009-11	NA	NA	NA
	2008-10	NA	NA	NA
EEE (UG)	2009-13	117	112	96%
	2008-12	66	61	92%
	2007-11	65	63	97%
	2006-10	61	59	97%
EEE (PG) M. Tech (Power system Control & Automation)	2011-13	12	12	100%
	2010-12	18	18	100%
	2009-11	17	16	94%
	2008-10	18	18	100%
Information Technology (UG)	2009-13	74	63	85%
	2008-12	91	64	70%
	2007-11	66	55	83%
	2006-10	70	59	84%
Information Technology (PG)	2011-13	12	11	92%
	2010-12	7	7	100%
	2009-11	18	17	91%
	2008-10	16	15	94%
Mechanical Engg. (UG)	2009-13	57	55	96%
	2008-12	68	60	88%
	2007-11	63	53	84%
	2006-10	64	59	92%
Mechanical Engg. (PG) M. Tech (CAD/CAM)	2010-12	14	14	100%
	2009-11	16	14	88%
	2008-10	10	7	70%
	2007-09	1	1	100%
Master of Computer applications	2010-13	41	39	95%
	2009-12	42	42	100%
	2008-11	53	50	94%
	2007-10	61	57	93%

Any additional information regarding Teaching, Learning and Evaluation, which the institution would like to include.

1. This is the first autonomous college under combined JNTU and under JNTU-Kakinada.
2. This college is accredited by NAAC with A grade with a CGPA of 3.47/4.0.
3. All the departments in the college are accredited by NBA at least twice and some of them for a maximum period of five years

4. All the departments in the college are sanctioned Research Centres by JNTU-Kakinada.
5. The college is among the first fifteen institutions in the country selected by NPIU under TEQIP-II, S.C.1.2.
6. Pedagogical trainings, faculty and staff development programmes, enhanced interaction with industry, academic support for weak students, teaching assistantships to PG students, and assistantships to research scholars are among those sanctioned under TEQIP-II. These activities help in strengthing the teaching-learning process.

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 beenimplementedand their impact.

Yes. The College has a research committee with Principal as the Chairman. The composition of the latest committee is as follows:

Dr.A.B.KoteswaraRao, Principal, Chairman
Dr.RaoTatavarti, Dean, Industrial Consultancy and Sponsored Research
Dr.C.V.K.Bhanu, Dean Academic Programes (PG and Research)
Dr.V.DharmaRao, Professor, Dept of Mechanical Engineering
Dr.S.AtchutaRamam, Dean Administration
Apart from the above, Prof.P.S.Rao, Director General GVP-SIRC and Prof.P.Somaraju, Secretary,GVP act as advisors to the committee from the parent body.

The committee reviews the research activities in the college and recommends action plan.

Some of the recommendations of the earlier meetings are:

- To provide fiscal incentives to faculty who publish their papers in peer-reviewed journals.
- To provide financial assistance to faculty to present their papers in reputed national and international conferences.
- To apply for recognition as research center by the individual departments.
- To provide study leave on case-to-case basis for those who pursue Ph.D.
- To send faculty under QIP for higher institutes of repute for pursuing Ph.D.
- To identify and provide adequate infrastructural facilities for faculty based on the merits of research.
- To provide financial support wherever necessary to fill the gap in spending on research projects.
- To grant permission to spend limited time at external research facilities in other higher institutes of repute in the area of relevance.
- To subscribe as many research journals as possible beyond the mandatory requirements.
- To identify department wise thrust areas and invite reputed researchers to promote or support the activity for enhanced levels of achievement.
- To encourage regular departmental peer-level seminars on the upcoming areas of research to inculcate the research interests in those areas.

- Measurable impact can be observed in terms of number of publications in peer-reviewed journals and number of paper presentations in reputed national and international conferences.
- Apart from that the increase in the admission into the research programmes at reputed universities can also be measured.
- Thirty faculty members are recognized as research guides by the affiliating university JNTU-Kakinada, and a good number of students joined for research programmes under above said recognized guides.
- The sponsored research activity is also picking up. In 2013-14, 6 out of 32 proposals submitted to various funding agencies, are sanctioned so far.

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

- The administration always strives to maintain a right mix of faculty with senior researchers in various disciplines active researchers at middle level and research enthusiasts at the entry level in each of the departments.
- To facilitate periodic interactions across the cross section of researchers, which may keep-up the spirit and sense of team work.
- To encourage faculty pursuing research by extending due administrative and financial support.
- To offer fiscal incentives to faculty who get involved in advanced research and publications.
- To keep overheads granted in the research projects at the disposal of the Principal Investigators.
- To encourage faculty members attend short term programmes and conferences relevant to their research fields.
- To include research contribution of faculty as one of the factors of evaluation for performance based increments.

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

Photonics, Robotics, Vibration studies on machines and components, Nano-science and technology, concrete technology, Meso-phase pitch, non-linear mathematical analysis, arc welding, PEM-fuel cells, industrial condenser design, Data Mining, Mobile Ad-hoc Networks, Antennas, Communications, Image Processing, VLSI, Embedded Systems, Power Systems, Power Systems,Power Electronics & Drives, Control Systems, Accounting & Finance, Micro Finance are some of the thrust areas.

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
* providing seed money
* autonomy to the principal investigator/coordinator for utilizing overhead charges

* timely release of grants
* timely auditing
* submission of utilization certificate to the funding authorities.

- The college is providing seed money to the faculty for applying for research projects.
- For all the sponsored projects the grants are released in time.
- Actively pursues to complete the project in-time providing all support for auditing and submission of utilization certificates.
- The college is also advancing funds for sanctioned projects to take-off early.
- The Principal Investigator is given freedom to use the overhead charges in his/her project.
- Timely auditing and submission of utilization certificates to the funding authorities are effectively done.

3.1.5 How is interdisciplinary research promoted?

The college is striving hard to promote interdisciplinary research

- Between/among different departments of the College.
- Collaboration with national/international institutes /industries.
- By involving faculty and students in the sponsored projects from different national agencies.
- By inviting experts from outside the country for a short stay in the college for utilizing their guidance.

Some of the research works that are interdisciplinary are in the areas of

- Applications of photonics in electronics, mechanical engineering.
- Deployment and operations of solar power systems in EEE Engg.
- Bio-gas and waste water treatment in Chemical Engg.

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 college organizesguest lectures by researchers from all over the country and outside from time to time providing travel and hospitality.
- Invites people who are on sabbatical leave from foreign universities to spend some time in the campus and interact with the faculty.
- Invites superannuated professors with good research background to guidefaculty in research.
- Conducting national and international conferences and work-shops on emergingareas of relevance to expose the faculty to the outside world and provide a platform for the outside researchers to visit the college.

Name of the dept.	Name of the researcher	Affiliation of the researcher (place/institute from)	Broad area of research of the visitor	Purpose (talk/visit) Title of the talk if presented	Duration
Management Studies	Prof J V Prabhakar Rao	Vice Chancellor RayalaSeema University	Human Resource Management	Talk-Entrepreneurship Development	1 day
	Mr S Nandagopal	Director-Odin Controls (P) Ltd	Electric Drives	Talk-Marketing of Electric Drives	1 day
	Prof R Ravi Kumar	Professor-I I M – Bangalore	Organizational Behaviour	Talk- Psychology & Parapsychology	1 day
	Mr V S Appaji	AGM-NTPC Ltd-Visakhapatnam	Organization Effectiveness	Talk-Total Quality Management	1 day
	Mr Sahu	Prime Minister Office	Philosophy	Talk- Gandhian Philosphy	
IT	Mr.Srinivas Varanasi	ExcelionConsulting, CA,CPA(Bots),Carlingford,NSW 2118	Big Data	Big Data &Emerging Trends	1 day
	Dr.S.K.Sen,Adjunct Professor	IISC Banglore and Florida Institute of Technology	Computational Mathematics	Applicable Computational Mathematics with MATLAB	30 Days
	Ms.Kalpana Margabandh, Director	India CIO lab IBM	cloud computing	Analytics / Mobility / cloud computing& Career opportunities for women engineers in IT sectors	1 day
EEE	Dr. K. Rajmohan Padiyar,	IISC Bangalore	HVDC Technology and Applications	Innovations in HVDC Technology and Applications	1 day
	Dr. Dr. K. Santhi Swarup	Indian Institute of Technology Madras	Micro Grids	Micro Grids - Research leading to Smart Grid Technology	1 day
	Dr. Ganti Prasada Rao	UNESCO-EOLSS Joint Committee, Abu Dhabi, UAE	Control Systems	A Perspective of the field of control systems	1 day
IT	Ms.Geetha Adinarayan, Practice Lead	IBM, India	cloud computing	Analytics/Mobility / cloud computing & Career opportunities for women engineers in IT sectors	1 day
	Dr.Prasad Pingali, CEO	SETU software systems(p)Ltd	Dataware Housing & Data Mining	Recent Trends in Dataware Housing & Data Mining	1 day
	Dr. PKrishna Reddy, Professor	IIIT HYD	Dataware Housing & Data Mining	Recent Trends in Dataware Housing & Data Mining	1 day
	Dr.D.V.L.V. Somayajulu, Professor	NIT Warangal	Dataware Housing & Data Mining	Recent Trends in Dataware Housing & Data Mining	1 day
	Dr.R.B.V.Subramanyam, Professor	NIT Warangal	Dataware Housing & Data Mining	Recent Trends in Dataware Housing & Data Mining	1 day

	Dr.Vijay Sekhar, Head	QFG,TCS-Hyderabad	Risk Metrics	A Tutorial on Risk Metrics	1 day
	Mr.Ramswaroop, Director	Sapient's marketing services business	Digital Marketing	Digital Marketing	1 day
	Mr.Srikar Chilakamarri	TCS,Hyd	Data mining	Data mining tools	1 day
	Mr.Arun Karthik , Ph.D Student	Newyork University	Networks	Role of Networking in Career Development	1 day
	Mr.Navjot singh, Program administrator	EMC^2 Academic Alliance	Information Storage Management	Information Storage Management	1 day
	Dr.Vemuri Venkateswara Rao, Professor	University of California,Davis	Neural Networks	Neural Networks	1 day
	Prof.R.GovindaRajulu	IIIT -Hyderabad	Concurrent computing	Concurrent computing	1 day
	Dr.C.S.Rao	Managing Director, Intel	4G Technologies	4G Technologies	1 day

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

Sabbatical leave for research activities is granted for any faculty desirous of availing it. Those who utilized have been contributing well to uphold the research quality and culture in terms of M.Tech. project guidance and Ph.D guidance.

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

Name of the Organizing Department(s)	Title of the Conference	National / International	Duration	Eminent Scholars Participated (From other countries and within India)
Mathematics	Recent advances in mathematical sciences and applications (RAMSA-09)	International	19-21, Dec, 2009	8 Participants from U.S.A. 1 Participant from Australia 1 Participant from Netherlands 1 Participant from Turkey 1 Participant from Malaysia 1 Participant from Algeria Also eminent scholars from within India
Civil Engineering	International conference on pre-cast practices and construction	International	21-22 , Apr, 2013	2 Participants from Germany Also eminent scholars from within India
All engineering departments and Mathematics	Recent advances in mathematical sciences and applications (RAMSA-13)	International	19-21, Dec, 2013	5Participants from U.S.A. 1 Participant from Australia 2 Participant from Italy 2 Participant from Turkey 1 Participant from Poland Also eminent scholars from within India

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).

The college encourages such activities. Some of the initiatives include:
The college has entered into an MoU with Eco-Carbon (P) Ltd which has come up with new ideas to replace present concrete with newly developed no aggregate concrete. Under the MoU testing and experimentation agency will be the GVPCE(A). This will greatly benefit the student to come up with new ideas.

Undergraduate students are involved into the Photonics research labestablished under the research project, which deals with usage of LASERs for collection and processing air data.

Development of low cost boat with natural fibers, remote controlled water level indicator, bio tooth-brush, Storm water drainage system. Solar powered three wheeler. Biological flash drive, Camera mouse - a visual aid to visually impaired for reading small print, Multi terrain vehicle are some such ideas.

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

About 62 of the 236 faculty have Ph.D. degrees and are actively engaged in research work and publishing research papers.
32 faculty members have been recognized as Research Supervisors by the affiliating university JNTU-K.

The list of the faculty offering Ph.D. guidance and research projects is given below:

S. No	Name of the Faculty	Department	Ph.D. Guidance		Research Projects	
			Awarded	Guiding	Completed	Ongoing
1.	Dr.A.B.K.Rao	Mechanical	1	2	1	1
2.	Dr.V.Dharma Rao	Mechanical	9	1		
3.	Dr.B.V.Ramana Murty	Mechanical	1			
4.	Dr.G.Govinda Rao	E.E.E.	2			
5.	Dr.K.Narasimha Rao	E.E.E.		1		
6.	Dr.C.V.K.Bhanu	E.E.E.		1		
7.	Dr.P.S.Rao	Civil	1			
8.	Dr.V.S.N.Rao Tatavarty	Civil			1	2
8.	Dr.N.B.Subrahmanyam	E.C.E.		1		
9.	Dr.D.S.Murthy	E.C.E.		6		
10.	Dr.Aditya Mukherjee	Chemical		1		1

3.2 Resource Mobilization for Research

3.2.1 What percentage of the total budget is earmarked for research? Give details of major headsof expenditure, financial allocation and actual utilization for last four years.

In the budget proposed for the financial year 2013-14 an amount of Rs. 116.60 Lakhs is allocated (4.6%).

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

Financial support is provided to procure hardware components and other amenities for student projects on case to case basis.

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 hasreceived seed money in the last four years?

Seed money is provided to faculty on case to case basis to initiate research ideas and apply for procurement of research projects. Approximately 2% of the faculty utilized this opportunity.

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.

The college provides assistance to the faculty to file the patents. The details of the patents filed and obtained are given below.

S.No	Name of the Faculty	Title of the Patent	Patent No
Patents obtained			
1.	Dr Sastry V.Vedula, Professor, EEE, and others	Power conversion control system including slide mode controller and cyclo-converter	US 2010 / 0284208 A1 Dt. Nov. 11, 2010
2		Identification and protection of an aero-space AC/ DC power system in the presence of DC content due to faulty loads.	US 2010, 0208393 A1 Dt. August 19, 2010
3		Electromagnet and Elevator door coupler	WO 2007/ 044008 A1 Dt. Dec. 29, 2009
4	Dr. Tatavarti V.S.N. Rao, Director, SIRC and others	New method and apparatus for simultaneous generation and detection of the optical diffraction pattern for vibration monitoring	Indian Patent IPO No. 1469/DEL/2007
5		Opto-electronic system for real time monitoring of motions in stratified fluids	Indian Patent– IPO No. 1819/DEL/2008
6		New method and apparatus for simultaneous generation and detection of the optical diffraction pattern for vibration monitoring	US Patent No. US 2010/0321698/A1.
7	Dr. G. Muralidhar,	Improved processes for production of 2 –	Indian Patent

	Professor, Department of Chemical Engineering	methyl pyrazene (2 – MP) from etnelenedianine and Propylene Glycol.	No:185482
8		Novel Promoted Zinc Chromite based catalysts for production 2 MP from etnylenediamine and propylene glycol.	Indian Patent No:185150.
9		A process for production of crystalline vanadium silicate by sol-gel technique	Indian Patent No:195810.
10	Sri J.V.S.MURTY, Associate Professor, Dept of Chemical Engineering	An Improved Device for Producing Granulates Pitch of Reduced Moisture Content	195002 dated 05-07-2006
11		A Process of Manufacturing of 95% Pure Anthracene from Coal Tar	198565 dated 11-10-2000
12		A Process for the Manufacture of Technical Grade Carbazole	199410 dated 11-10-2000
13	Dr. P Srinivasa Rao, Professor, Department of Mechanical Engineering	Flexible Contact Tube For Rotation Arc Welding	Indian Patent No: 206453 dt. 02/07/2004
Patents filed			
14	Mr. Pilla GuruMurty Patrudu	Mechanism and System for Representing and Processing Activity Models-	Application No: US 13/851,168, Date: 27/03/2013
15	K. Ganesan and Tatavarti V.S.N. Rao	Wireless communication system for automatic operation of routing gates at cross road junctions and for providing advanced alerts of disasters	IPO No. 3597/CHE/2010 Patent Filed, Chennai – November 2010
16	M. Rajasekhara Babu, P. Venkata Krishna , B. Ramakrishna Rao, Tatavarti V.S.N. Rao, Shijo, Preetham, Rajesh	Method and apparatus for recognition of hand gestures of differently abled persons	IPO No. 2567/CHE/2010 Patent Filed, Chennai – September 2010
17	T. Santhanakrishnan and Tatavarti V.S.N. Rao	New method and apparatus for simultaneous generation and detection of the optical diffraction pattern for vibration monitoring	International Patent filed in African Countries – PCT No. 1469/IN2008/000444

3.2.5 Provide the following details of ongoing research projects:

	Year wise	Number	Name of the Project	Name of the funding agency/Industry	Total grant Received (lakhs)
A. College funded					
Minor projects					
Major projects	2012	1	Nano Science (Physics)	GVPCOE(A)	5.00
Along with Industry					

B. Other agencies - national and international (specify)					
Minor projects	2014	2	Relevant subspace clustering technique for high dimensional data (IT)	UGC	2.54
			Design of Agent based bi directional routing for asymetric mobile adhoc networks (IT)	UGC	2.44
	2013	3	Nanostructured and doped metal oxide thin films for optical and electronic applications (Physics)	UGC	1.94
			Kinetic and mechanistic studies on the oxidation of amino acids in micellar systems (Chemistry)	UGC	4.00
			Synthesis of new Co(III), Ni(II) complexes and their substitution reactions in reverse micellar medium (Chemistry)	UGC	4.55
	2012	1	Alternative Energy for Small Agricultural andRural Support (EEE)	TFAS, USA through Prof.BSR & VR Foundation	3.65
Major projects	2013	3	Development of Ln^{3+}-doped $Lu_3Sc_2Ga_3O_{12}$ nano-garnets for light emitting device applications(Physics)	DAE-BRNS, BARC	16.65
			Tunable surface plasmon resonance on Ag doped dielectric thin film matrices (Physics)	DST-SERB	18.45
			Synthesis of nanoparticle Tin oxide thin films by So-gel method and comparative study of its characteristics with thin films prepared by thermal evaporation technique for application to gas sensor (Physics)	UGC	10.13
	2012	5	Design and Development of special purpose CNC machine for 2 –D contour machining and other application (ME)	AICTE- RPS	12.00
			Coupling Sediment Transport Estimates fromNumerical Modeling with Field Observations in Gulf Mannar (SIRC)	NRB	49.39
			Design and Development of Optical Air Data System for Advanced Combat Medium Range Aircraft (SIRC)	ADA	103.92
			Production of Mesophase pitch suitable for carbon fibers (Chemical)	AICTE-RPS	9.70
			A Qualitative Study of Graph Differential Equations and Matrix Differential Equations (Mathematics)	Department of Atomic Energy, Govt. of India	20.43
	2011	2	Study of antifouling paint behavior due to loading and flow around ship hull (Chemical)	DST (collaborative work with IMU)	33.00
			A study of the role of Neutrophic factors, polyunsaturated fatty	DRDO	198.44

			acids and their metabolites in the prevention of radiation and chemical induced damage to DNA in vitro and in vivo and cancer (SIRC)		
C.Industry sponsored	2012-15	1	Mechanical Properties of No Aggregate Concrete (NAC) (Civil)	Eco-Carbon (P) Ltd.	10.00

3.2.6 How many departments of the College have been recognizedfor their research activities bynational / international agencies(UGC-SAP, CAS, DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) andwhat is the quantum of assistance received? Mention any twosignificant outcomes or breakthrough due to such recognition.

- The college is recognized under clauses (2f) and (12B) by the UGC and therefore all the departments are eligible for research funding.
- All the engineering departments received funding for research from AICTE under RPS.
- GVP-SIRC is a component of the college, recognized by DSIR of MoST.
- Research projects have also been sanctioned by DST, DRDO, DAE-NBHM and ADA.
- The college has been recongnised as a research center by DSIR and established a center SIRO. As a result of the recognition customs and excise duty exemptions are applicable for the imported equipment under research programmes.
- All the engineering departments (except chemical engineering, for which the result is awaited) have been recently recognized as a research centers by the affiliating University JNTU-Kakinada.
- GVP- Prof. V. Lakshmikantham institute for advanced studies has been recognized by IFNA as a center for research in non-linear analysis and contributed Rs. 1 lakh to conduct an international conference on Recent Advances in Mathematical Sciences and Applications (RAMSA-13).

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

The details of completed research projects undertaken by theCollege faculty in the last four years are as following

S. No	Names of PI & CO-PI	Title	Funded Agency	Duration	Grant (lakhs)
Civil Engineering					
1	Prof. P S Rao	Concrete Compressive Strength of 20 MPa at the age of 16 hrs for Reliance Gas Pipeline under Godavari River.	Zublin International GmbH, Germany	2004-2004	5.00

2	Prof. P. Veerabhadra Rao	Evaluation of bond strength between rock surface and grout.	Hindustan Construction Company	2009-2011	2.00
3	Prof. P. Veerabhadra Rao	Optimum Design of Box culvert	GVMC, Visakhapatnam	2006-2006	1.00
Chemical Engineering					
4	Prof. M.S. Rao	Application of Bootstrapping Techniques To Regression Problems-Analysis of Catalytic Rate Models	AICTE-RPS	2006-2009	9.20
5	Prof. P.V.Ravi Kumar	Modernization of The Process Control Laboratory	AICTE-MODROBS	2006-2010	13.00
Computer Science Engineering					
6	Sri N.V.Brahmaji Rao	Modernization of Networking & Security Lab with Industry Relevant Cisco Devices	AICTE - MODROBS		13.00
11	Sri M.BenSwarup	Development of Software Safety Model and Metrics for high-risk software-controlled Critical Systems used in Transportation sector	AICTE-RPS		5.00
Electronics and Communication Engineering					
12	Dr. N. Balasubramanyam/ Sri. S.M.K.Chaitanya	Development of Industry Lab For Real Time	AICTE-MODROBS	2010-2013	15.00
13	Dr. D. S.Murthy/ Smt. V. Leela Rani	Development of New Algorithms for Improving the power efficiency through optimization of gate in VLSI	AICTE-RPS	2007-2010	10.00
Mechanical Engineering					
22	Dr.Pilaka Murty	Detailed studies on effect of ball milling grinding parameters on particle size of tungsten nano powder and develop an empirical model relating various parameters with final particle size	DRDO	2010-2011	4.97
23	Dr. B. Govinda Rao	Modernization of Thermal Engineering Lab	AICTE-MODOROBS	2010-2011	10.00
24	Dr. A.B. K. Rao	Modernization of CAD/CAM & Robotics Lab with Industry Relevant Mechatronics	AICTE-MODOROBS	2007-2009	8.50
25	Dr. A.B. K. Rao/ Sanjay Darvekar	Development of Parallel Kinematics Based Machine Tool	AICTE- RPS	2007-2009	9.00
26	Dr. P. Srinivasa Rao/ Dr. A.B. K. Rao	Improving weld bead characteristics in pulsed GMA welding using Automated are rotation Mechanism	AICTE- RPS	2006-2008	10.00
Mathematics departments					
27	Prof. J.Vasundhara Devi	A Quality Study of set Differential Equations involving casual operators with memory	DST	2009-12	9.82

3.3 Research Facilities

3.3.1 What efforts are made by the College to keep pace with theinfrastructure requirements tofacilitate research? How andwhat strategies are evolved to meet the needs of researchers?

Suitable Infrastructural facilities are provided to the faculty on case to case basis to facilitate research taking the capabilities and deliverables of the respective faculty into confidence.

Some of the facilities include:

- Construction of the test center to test the strength of the RCC beams.
- Two lab spaces for Photonics laboratory.
- Establishment of small scale wind tunnel facility.
- Nano science research laboratory specialized in thin films
- Procurement of licensed research-oriented software like ProE, Pspice, catia, etc.,
- Establishment of Solar power generation, Utilization unit, Bio-gas plant.
- High speed internet connectivity of 40 Mbps connected through OFC backbone to reach all the staff rooms and major labs.
- Library and Digital library with a good collection of online and print journals.(IEEE, Elsevier, Springer etc)
- Free transport facility beyond the regular working hours.
- Membership in DELNET–INDEST consortium

Faculty is encouraged to apply for research grants from various funding agencies for major and minor research projects.

The institution adopts a two-pronged strategy for encouraging research among its faculty by developing the lab equipment and by utilizing resources from the institution and other funding agencies.

The college provides free transport beyond working hours for researchers.

3.3.2 Does the College have an information resource centre to caterto the needs of researchers?

- A good collection of online and print journals are made available in the library
- The digital library is accessible to the faculty through intranet
- Journal published by ASME, IEEE, Elsevier are made available

Print (Books, back volumes and thesis)
Books: 53651 (12955 PG and 40696 UG)
Titles: 13678
BackVolumes of Journals: 2166
Non-Print (Microfiche, AV) 203 Audio/Video (Cassettes)
CDs /DVD R0MS:3992

Electronic (e-books, e-Journals)

E-books	363	Access Engineering (McGraw-Hill)`
E-journals:	1940	AICTE –INDEST IEEE+ASME+ASCE+SD+springer+ DOAJ)

Apart from this all the faculty are provided with high speed internet connectivity

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

The campus is not residential presently. However faculty who wish to stay in the hostels can use the WI-FI facility.

Both the hostels (boys and girls) are provided with internet connectivity.

The college is actively considering making the campus residentialin the near future

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

Yes

Photonics laboratory, Wind tunnel facility, Load bearing test facility, Solar Energy systems, Nano research laboratory, Labview based equipment in machines lab, Parallel Kinematic Machine, Variable compression test rig,Continuous stirred tank reactor.

3.3.5 Does the College have research facilities (center, 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.

The college has research facilities of regional and national recognition, as follows:

- Regional level: JNTU-K Research Centre for all the departments
- National level: Scientific and Industrial Research Centre
- Photonics laboratory is one of such facility. Researchers from Institutes like VIT are taking part in the activities in the laboratory.

Research facilities available in the campus are

- Thermal Evaporation Unit
- Parallel Kinematic Machine
- Continuousstirred tank reactor

Students from other institutes are doing their internship under the researchers at GVPCE in this lab.

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 college encourages faculty to present papers in reputed national and international conferences by extending financial support from the college resources as well as under TEQIP-II,S.C.1.2

The number of papers presented in national and international conferences during the last four years is given by department wise in item no.14 of department evaluation reports.

* Publication per faculty

= **0.52** (2012-13 academic year)
(= total number of publications (journal + conference) / total number of faculty in the department)

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

Around 16 faculty members have been serving on the editorial boards of various journals and also as reviewers.

* Faculty members on the organization committees of international conferences, recognized by Reputed organizations /societies.

Dr.RVG Ravi Kumar, Dr.MPK.Kishore, department of mathematics are on the organizing committee of international conference "international conference on algebra and applications-2014" being held at Andhra University.

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)
* Monographs
* Chapters in Books
* Editing Books
* Books with ISBN numbers with details of publishers
* Number listed in International Database

(For *e.g.* Web ofScience, Scopus, Humanities International Complete, DareDatabase - International Social Sciences Directory, EBSCOhost, etc.)

* Citation Index – range / average
* SNIP refer: http://www.journalmetrics.com/snip.php
* SJR http://www.journalmetrics.com/sjr.php
* Impact factor – range / average
* h-index

	Civil	Chemical	EEE	ECE	Mechanical	CSE	IT	Total
National / International Journals	29	45	54	64	24	24	23	263
Monographs	0	0	--	3		1		4
Chapters in Books	0	0	--	0		0		0
Editing Books	0	0	--	0		0		0
Books with ISBN numbers with details of publishers	2	0	--	0	2	1		5
number listed in International Database	0	0	--	0		0		0
Citation Index – range / average	0	1597	--	0	1.28	0		--
SNIPrefer:	0	0	--	0		0		--
SJR		0	--	0		0		--
Impact factor – range / average	0	2.228	--	0.81-1.686	0.7-2.5	1.932-2.31	0-2.5	--
h-index	0		--	0	11	0		11

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

8 scholars are awarded Ph. D on the guidance by faculty during last 4 years

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

Open source software like "*TURN IT*" is being used for testing plagiarism for all research write ups.

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.

Faculty and PG students have been undertaking interdisciplinary research work by forming into groups from relevant disciplines duly utilizing the following sources.

- Renewable energy resources
- Photonics

- Nano research laboratory
- Optimization of structures

3.4.7 Mention the research awards instituted by the College.

Cash awards are given to faculty who publish papers in peer-reviewed journals/Books/Monographs/Patents.

Faculty who obtained their doctoral degrees will also be felicitated

3.4.8 Provide details of

* research awards received by the faculty
* recognition received by the faculty from reputedprofessional bodies and agencies

Affiliating University has instituted best researcher award

- Dr.A.B.Koteswra Rao, Professor, Mechanical Engineering, Best researcher award,by JNTU-K
- Dr.D.S Murthy Best researcher Professor, Electronics and Communications Engineering, award,by JNTU-K
- Dr.P.K.Subba Rao, Gold medal, from Intel corporation
- Prof.P.S.Rao, Professor, Civil Engineering, lifetime achievement award from L&T

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

Cash awards are given to faculty who won recognition at higher institutes.

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.

The following policy is being adopted for consultancy activities:

The income from the project after spending as per the heads provided in the proposal is the balance. Out of the balance, 70% goes to the investigating team, 20% will be kept for the development of the concerned department at the Principal's office, 5% is to be shared among the administrative staff of the Principal's office and 5% goes to the fund for future projects on annual basis.

Consultancy Projects:

Sl. No.	Department	Title of the Project	Year of sanction	Sponsoring Agency	Sanctioned Amount Rs. in lakhs	Ongoing / Completed
1	Chemical Engineerng	Imparting Basic Chemical Engineering Knowledge to Plant employes of Ecologic India Ltd.	2011-12, 2012-13	Plant employes of Ecologic India Ltd.	5 Lakhs/year	Completed
2	Civil Engineering	Design of a 330m long Cable Stayed Bridge	1999	M/s. CONSTRUMA Ltd., Mumbai	1.30	Completed
3		Design of Rail Vihar-II at Visakhapatnam	2001	IRWO Visakhapatnam	0.80	Completed
4		Investigation for Collapse of 400 KVA Transmission Line Towers at Tuni, A.P.	2002	A.P TRANSCO, Hyderabad	1.20	Completed
5		Surveying and Soil Investigation for Sri Balaji Medical College at Gopalpur, Orissa.	2002	Sri Balaji Educational Trust	1.85	Completed
6		Design of North Block and Gallery Stands of ACA, VDCA Cricket stadium at Visakhapatnam	2003	Andhra Cricket Association	6.00	Completed
7		Analysis of Casting of 40m Span PSC Girders	2003	M/s. Navayuga Engineering Corporation	1.00	Completed
8		Soil Investigation for Expansion of Red Mud Soil at Dhamanjodi, Orissa.	2003	M/s. NALCO Ltd.	4.50	Completed
9		Preparation of Topographical Map and Block Level Data at Muniguda, Orissa.	2004	M/s. Sterlite Ltd.	1.50	Completed
10		Preparation of Detailed Longitudinal and Cross Sectional Drawings and Quantity Estimation of 6 Eastern Dams at Damanjodi, Orissa.	2004	M/s. Gayatri Projects Ltd.	2.10	Completed
11		Preparation of DPR for a Road length of 24 Kms at Rayagada, Orissa.	2005	M/s.Utkal Alumina International Ltd	3.50	Completed
12		Preparation of DPR for high level bridges at Rayagada, Orissa.	2005	M/s.Utkal Alumina International Ltd	4.25	Completed
13		Design of IGIAT centre at Visakhapatnam.	2005	IGIAT	5.00	Completed
14		Design of PSC box girders	2006	GVMC	1.50	Completed

		Design of VIP Gallery stand in Pavilion block of ACA-VDCA Cricket Stadium at Visakhapatnam	2006	Andhra Cricket Association	3.00	Completed
15		Preparation of DPRs and Master plans for storm water drainage system under JNNURM scheme.	2007	GVMC	34.0	Completed
16		Preparation of DPRs for construction of training centre at Mudasarlova,Visakhapatnam.	2008	GVMC	5.00	Completed
17		Preparation of DPRs for drainage system at Gajuwaka, and KRM Colony, Visakhapatnam.	2008	GVMC	8.50	Completed
18		Design of Sports & Office Complex at Visakhapatnam	2009	GVMC	4.00	Completed
19		Water Supply Design for IT-SEZ	2011	GVMC	2.00	Completed
20		Design of Training Centre, GVMC	2011	GVMC	1.00	Completed
21		Design and supervision of Indoor Stadium at Gajuwaka, Visakhapatnam.	2011	GVMC	3.85	Completed
22		Design and supervision of Rajiv Smruthi Bhavan at Visakhapatnam	2012	GVMC	3.00	Completed
23		Underground Cavern at Visakhapatnam	2013	HCC, VSKP	10.00	Completed
24		Design of Oil Cargo Berth	2010	AVR Infra, Chennai	14.00	Completed
25		Deperming Facility, Vskp	2012	NSTL, DRDO	7.53	Completed
		General Cargo Berth, VPT	2012	Vedanta Group of Companies	1.30	Completed
26		Collapse of Buildings, Marripalem	2012	GVMC	2.00	Completed
27		Underwater Turbulence	2012	NSTL, DRDO	3.25	Completed
28		Ground Vibration Monitoring, Dighi, Maharashtra	2013	Dighi Oil Storage Pvt. Ltd.	1.12	Completed
29		Conveyor Gallery at Jajpur Plant	2013	TATA Steel, Jajpur	2.00	Completed
30		System Design	2013	LMS India Engg., Solutions Pvt. Ltd., Chennai	6.00	Ongoing
31	Electronics and Communications	Development of Acoustic Switching Unit (Autonomous Under Water Vehicle Applications)	2007	N.S.T.LVisakhapatnam	5 .00	Completed

32	Engineering	Study of Noise Interference for Under water telemetry	2006	N.S.T.L Visakhapatnam	4.75	Completed
33	EEE	Alternative Energy for Small Agricultural and Rural Support Yalamachalli, Visakhapatnam Dist	2012	Bhagavatula Charitable Trust (BCT) and Telugu Fine Arts Society (TFAS), USA	3.65 Lakhs	On going
34		To develop models of Aircraft Electrical power systems using "Model Based System Engineering (MBSE) methodologies"	2013	LMS India Engineering Solutions Private Limited ("LMS") , Chennai India	6 Lakhs	On going
35		Variable voltage Variable frequency drives	2013	Indo German Institute of Advanced Technology, to train the employees of Vizag Steel Plant, Visakhapatnam.	Rs.0.64 Lakhs	On going
36		Variable voltage Variable frequency drives	2013	Indo German Institute of Advanced Technology (IGIAT), to train the employees of Vizag Steel Plant, Visakhapatnam.	Rs.0.64 Lakhs	completed
37		Variable voltage Variable frequency drives	2013	Indo German Institute of Advanced Technology (IGIAT), to train the employees of Vizag Steel Plant, Visakhapatnam.	Rs.0.64 Lakhs	completed
38		Flood Lighting to ACA-VDCA Cricket Stadium, November 2007.	2007	ACA-VDCA Cricket Stadium	-	Completed
39		Variable voltage Variable frequency drives	2013	Indo German Institute of Advanced Technology, to train the employees of Vizag Steel Plant, Visakhapatnam.	-	Completed
40	Mechanical Engineering	Optimal Design of Diesel Generator Foundation	2012	DRDO, NSTL-VSP,	6.72	Completed

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

A separate cell is functioning under the leadership of Dean, Industrial relations, to cater to the needs and to bridge the gap between the two.

Apart from this an exclusive IIPC is established with funding from AICTE.

Some of the important activities include:

1. Arranging guest lectures and FDPs by experts from industry.
2. Arranging internships to students of both UG and PG for their project works
3. Arranging campus recruitments.
4. Facilitating faculty to spend in the industry of relevance to catch-up with the industrial needs and standards.

5. Enhancing capabilities of faculty from different disciplines for possible consultancy activities.
6. Facilitating the participation of people from industry in various academic bodies of the college like Board of studies, Academic Council.
7. Offering short refresher courses for people from industry.
8. Conducting advanced industry ready add-on courses outside the curriculum
9. Establishing centers of excellence with various industries like IBM, Microsoft
10. Facilitating the delivery of course contents in case of advanced electives offered by industry.

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.

The college gains publicity in consultancy activities through Presentations by the faculty competent in lending their expertise to industry and R&D, Faculty profiles and their research areas published on college website, Faculty interactions at individual level in coordinated projects, Brochures on activities and reports prepared.

Departments of Civil, Mechanical and Chemical Engineering are major contributors to consultancy services.

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

The college encourages faculty to utilize expertise for consultancy by,

- providing suitable advertisement at various avenues
- offering remuneration from the income generated
- providing infrastructural facilities to organize and conduct consultancy services.

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

Given in item No. 3.5.1

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 college administration has identified the social responsibility as one of the major priorities to act upon, which is being reflected in the Vision and Mission statements.

- This attitude has been reflected in making the community service as a mandatory programme at undergraduate level to inculcate the sense of social responsibility and to provide a platform for self-learning and group learning mechanisms in future life.
- Apart from the above students and faculty are sensitized on such activities on every platform.
- Regular programmes are being organized by inviting visionaries from the society to interact with the faculty and students.
- Students form groups among themselves and design their own programmes.
- A good number of such groups are active in the college:
    - YES group
    - Rotaract
    - WeR4 help
- Organizing Blood donation camps, plantation, helping the needy at places like orphanages, promoting adult literacy among rural public are some of the activities undertaken by these groups.

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

Students are encouraged to participate in social outreach programmes in the college neighborhood by engaging themselves in activities that has relevance to their programme of study.

Some of the activities are:
1. Water purity testing in surrounding villages
2. Storm water drainage system.
3. Sensitization on lane discipline.
4. Functional literacy programmes.
5. Educating on domestic power safety measures.
6. Providing computer literacy to rural public.

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?

The college has a dedicated unit of NSS established in 2012-13.

The unit is actively conducting programmes and has won laurels in the field of extension activities. The unit is adjudged the best among the affiliated colleges under JNTU-K during 2013-14.

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?

Students are being motivated in this direction and they are bringing out special volumes containing surveys and research articles under the name “SPURTHI” highlighting various problems of the poor and under-

privileged, under the guidance of (Mr.Ravi Sankar Saripalli) Director, Innovation.

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

- The college NSS unit has been adjudged as the best unit under JNTU-K during 2013-14 by the JNTU-K Kakinada
- Appreciations from villagers for YES
- Adjudged as the highest number of units of blood donated during 2011-12 and 2012-13.

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?

The extension activities help complement and supplement the learning outcomes beyond the class room and create awareness among the young citizens about the dynamics of the society which they face in near future.Apart from this, self learning, team work, constructive use of knowledgeto benefit the society are some other outcomes.

Extension activities also aimed at inculcating values like

- Social responsibility
- Ethics and values
- Human values
- Societal behavior
- Communication with community
- Team work
- Learning transfers

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.

Community participation through collaborative activity with leading NGOs like Bhagavatula Charitable Trust (BCT)

Community participation is ensured by making 32 hours of mandatory community service as part of the curriculum, community participation is ensured.

Some other activities that promoted active community participation are:

- Boat project
- Voter awareness
- Power safety and conservation
- Environmental awareness/concerns

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

The college established a cell under the leadership of Dean, Student affairs who co-ordinate extension activities with various student groups. Apart from this NSS Co-ordinator of the college monitors and lead the activities through the unit.

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 college believes in co-operative activities in this direction. It works with Bhagavatula charitable trust, a non-profitable organization involved in such activities.
- Student body "Rotaract" affiliated to Rotary club is actively taking up several outreach activities.

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

- The college NSS unit has been adjudged as the best unit under JNTU-K during 2013-14 by the JNTU-K Kakinada.
- Adjudged as the highest number of units of blood donated during 2011-12 and 2012-13.

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 college is actively collaborating with other agencies like, TCS, IBM, Microsoft, WIPRO, IGIAT, EMVEE,EMC^2 etc.,
- The participation of students and faculty in the programmes organized under these activities has provided a good platform to showcase the talents and strengths at national level on academic front.
- FDPs organized by some organizations is benefiting academically to upgrade the knowledge levels and to fill the gap between the industry and academics.
- This has also influenced in introduction of special electives in the curriculum.

3.7.2 Mention specific examples of, how these linkages promote

* Curriculum development

Inviting members from industries under collaboration onto the Boards of studies and Academic Council which helped in design of curriculum and

introduction of special electives like Aircraft structures, Value engineering, storage area networks.

* Internship, On-the-job training
Internships at TCS, and other institutes, establishment of Center of Excellence by IBM and Innovation center by Microsoft and training center by CISCO.

* Faculty exchange and development
Faculty development programmes by TCS, IBM and Wipro

* Research, Publication
Research on up-coming technologies like No Aggregate Concrete

* Consultancy, Extension
Undertaking consultancy activities in the areas of low cost housingAssociation with Bhagavatula charitable trust helped in enhanced activities ofextension programmes.

* Student placement
Every year campus placements are being organized as a result of tie-up with organizations with TCS, INFOSYS. Every year large number of students are being placed through campus placements. Around 80% of the eligible students are being placed every year.

* Any other, please specify
Participation and leading in the green initiatives with the cooperation and tie-up with organizations like EMVEE, in the areas of renewable energy sources like solar power and bio-gas etc., certification programme for Ecologic employees.

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?

S.No	Name of the Organization MOU	Type/Title of MOU	Purpose	Out come
1	Tata Consultancy Services	TCS - SANGAM	TCS agrees to offer the TCS - Sangam a package of TCS Academic Interface Programme. According to this TCS every year conducts minimum 2 FDP Programs and 4 Workshops to students on latest technologies. TCS gives preference to	Upto now **05** FDPs and **10** Students Workshops conducted. In the year 2011 TCS recruited **287** students In the year 2012 TCS recruited **263** students In the year 2013 TCS recruited **210** students In the year 2014 TCS recruited **170** students Mr. Rajanna, Vice President and Head AP Operation

			GVPCE(A) in campus recruitments. TCS will support the curriculum updation activities through nominating the expets in BOS and Academic council meetings.	attended for Academic Council Meeting of GVP.
2	IBM	IBM Centre of Excellance Training on IBM Tools (DB2, RAD,RFT,TIVOLI, WID, RTC & LOTUS)	IBM's provides training and certification on its technology products and services to Students and Faculty .	Stood top 30 in TGMC 2011 & 2012 competition. Upto now **71** faculty members and **1254** number of Students certified in IBM tools. More than 80% of the students certified or placed.
3	WIPRO	WIPRO Mission 10x	Faculty Development Programmes	Organized FDP program **20**faculty trained.
4	MICROSOFT	Microsoft Innovation Center	Encouraging students towards innovation, apps development, usage of Microsoft technologies, industry oriented competitions and certification programs.	• Organized MICROSOFT App Fest. More than 600 students from 15 reputed colleges of this region participated and developed 200 app ideas. • 15 students participated in MICROSOFT App Fest at Hyderabad. • Organized Training Cum Certification program on ".Net Framework, building Metro Style Apps for Windows 8". 94 students trained in this program. • 53 students certified in MICROSOFT Technology Associate (MTA). • Organized Windows Appathon, around 201 App ideas was collected from the students. • In collaboration with Microsoft team organized 3 check points for training the students for development and deploying the Apps • 34 Apps are deployed in the Microsoft Web store and 39 Apps yet to be deployed • 20 students are undergoing training in Microsoft Certified Systems Engineer(MCSE)
5	EMC2	EMC Academic Alliance Agreement	This Agreement shall govern Licenses's use and provision of EMC training classes and materials.	Total **131** and **03** faculty trained

			Encouraging students in training and certifications in Storage Management Devices.	
6	CISCO	CISCO Networking Local Academy Agrement	To implement the CISCO Networking Academy, the Local Academy shall entitled to organise training programs in CISCO programs like CCNA and CCNP	Total **224** students trained in CCNA through this academy. Consultancy services offered to GIZ gmabh Gulbarga Project.
7	Infosys	Infosys Capmus Connect	Enriching the technical education process and to jointly work for enhancing the quality of education imparted to students of all the engineering disciplines in the field of Information Technology (IT) throguh offerering industry oriented electives. Guiding the institutes in curriculum development in CSE and IT UG and PG programs	Offered Aero Space Structures as elective to Mechanical Engineering, Web Programming and Data warehousing & Data Mining as elective in IT program. Three Faculty members attended Infosys Campus Connect FDP on 21st - 22nd February 2013 Mr.Sudheer Reddy, Manager - AIP, Infosys nominated in BOS of CSE and IT for designing the curriculum of B.Tech,M.Tech and MCA courses

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

The interactions resulted in establishing

- IBM center of excellence,
- Microsoft center for Innovation,
- Training center under CISCO,

Introduction of industry oriented electives like aircraft structrures, storage area networks are some of the results.

FDP programmes and student development programmes are also part of the MoUs

Any additional information regarding Research, Consultancy and Extension, which the institution would like to include.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

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

The college plans its growth and allocates adequate budget for its infrastructure, laboratory equipment and other requirements. The campus spreads over 20 acres with a total built up area of 37,500 m^2. The College is situated in a beautiful green valley far from the madding crowds.

(a) Academic activities

- 56 Nos. class rooms,
- 63 Nos. labs, workshop
- English Language lab
- Nos. drawing halls,
- Library with 53,651 book volumes, titles 13, 678, back volume of journals 2166 and 2303 online reference material, DELNET and online journals
- Departmental libraries : 07
- Conference rooms-2Nos.
- Video and digital library.
- ICT facilities
- Internet with 40 MbPS and Wi-Fi connectivity
- Over 998 Computers connected in LAN
- Placement cell
- Reprographic facilities
- 250kVA generator and 100 KWP Solar power
- 11 KVA dedicate power line
- Medical center
- Canteen
- Lifts-2 Nos
- Transport facility
- Separate hostels for boys and girls with shared accommodation.
- Bank
- ATM
- Post office
- Book stall
- Student service center

(b) Co-curricular activities

- One acoustically designed AC auditorium provided with public address system
- Two seminar halls
- Two committee rooms

(c) Extra-curricular activities and sports

Indoor facilities:
Gymnasium
12 station multi-gymnasium
04 station multi-gymnasium
300 kgs Weight training equipment
Individual Dumb bells
Chess
Table Tennis

Outdoor facilities:
Ball Badminton
Basketball
Cricket Net practicing wicket
Football
Tenni-Coit
Tennis – Clay court
Throw ball
Volleyball
Multi-purpose playground for Cricket & Athletics (6 lane 200 mts.)

Department timings:
The Department is kept open from 6:00 am to 7:45 am in the morning and from 2:30 pm to 7:00 pm in the evening on all working days.

Coaching camps:
To nurture and to develop good commendable teams, coaching camps are arranged. Camps in Table Tennis, Throwball, Cricket and Volleyball are conducted every year.

Transportation:
To encourage and to boost large participation in sports, free bus plies to the city after college hours at 6.10 pm every day.

Incentives:
Students representing the college teams in sports meets are presented with play kits, T.A. & D.A., Cash prizes and best outstanding sports person's award every year.

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

Annual review and budgeting for the infrastructural needs for effective teaching-learning environment in the governing body meetings at the college level as well as the society level.

Maintenance of infrastructural facilities is taken care by seeking for departmental requirements before budgeting. A separate Dean of infrastructure and planning looks after the activities supported by the following wings.

Civil: An exclusive wing for construction and maintenance functions on campus for all day to day as well as new infrastructural needs.

Electrical: The department of quality maintenance and technical services takes care of the power requirements including installation and maintenance.

Internet Services: A data center is established with two system managers who take care of data protection and maintenance of internet and intranet services. The data center also looks after the maintenance of the college website.

Tele-Communications: The College has an intercom system connecting 200 lines apart from 22 independent P&T lines.

Library: The library is headed by a qualified librarian and assistant librarian's .The processes of issue, receipt and search location of books is automated. A library committee reviews time to time and takes care of the requirements for addition and replacement of text and reference books and maintenance.

Drinking Water: Adequate bore wells supported by an RO plant with 1000 lph capacity cater to the drinking water needs.

Greenery: Landscaping and greenery maintained by a qualified and experienced horticulturist provides the necessary cooling effect to the eyes and minds of the stimulating academic environment.

Recent initiatives in enhancement of infrastructure

Structures

- Boys hostel
- Girls hostel
- B10 and B0 Blocks for additional classrooms and laboratories

Major Equipment

- Computing systems – 400 nos
- Reprography machinery for library and examination cell- 5nos

Furniture

- Four seat student desks – 200 nos
- Luxury chairs for seminar halls – 50 nos

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, the college provides all its departments with

- Separate office rooms
- Separate rest rooms for women faculty, staff and students

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

Lifts are provided for vertical transmission and corridors are made continuous for horizontal movement across different departments.

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

∗ Capacity of the hostels and occupancy (to be given separately for men and women)
∗ Recreational facilities in hostels like gymnasium, yoga center, etc.
∗ Broadband connectivity / wi-fi facility in hostels.

a. Hostel for Boys and Girls

Hostels	No. of rooms	No. of students accommodated
Hostel for Boys:	117	400
Hostel for Girls:	112	450

b. The hostels are in the campus enabling the students using indoor and outdoor sports facilities, auditorium and the like for their recreation. A yoga teacher visits the campus for training the students. All the hostels are provided with Television sets with cable connections.

c. Internet and Wi-Fi facilities exist in the hostels.

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?

- The college has a residential medical officer with a health center for routine and emergency medical facilities. An ambulance is available at call.
- The parent body is maintaining a 300 bed hospital with specialist attention at a nearby location and is accessible for majority of the health requirements with specialized case.
- The college also provides for psychological solace through consultants for the stressed souls.

4.1.7 What special facilities are made available on the campus to promote interest in sports and cultural events?

Physical Education department is headed by a doctorate in physical education. He is adjudged as the best physical director by the affiliating university for the year 2013-14. Under his guidance the college teams earned several prizes at inter-collegiate, zonal and university sports meets.

To encourage the students to accomplish their sports goals, the College has the following facilities:

- Basketball
- Ball Badminton
- Cricket
- Cricket practicing Nets
- Football
- Table Tennis
- Tenni-coit
- Tennis
- Throw ball
- Volleyball
- Shuttle Badminton
- 200 mts Track and Field

- The college has indoor facilities with Table Tennis, Caroms, Chess, 12 station-multi-gym and 4 station-gym, tread-mill with electronic controls.
- The college also provides free transport back home after college hours to those of the students getting engaged in sports and the cultural activities.
- The students formed a cultural club titled GC^3under the guidance of faculty and teams are sponsored for inter-collegiate competitions. The GC^3conducted workshops for painting, art and caricature drawing. Some of these students accomplished themselves in music and won laurels to the college.

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?

Composition of LibraryAdvisoryCommittee

1. Ex-Officio Chairman : Principal
2. Convener : Senior facultynominated by the Principal
3. Member Secretary : Librarian
4. FacultyRepresentatives : 12 members from differentDisciplines
5. Student Representatives : 14 students from PG and 14 from UG
6. External Representative : An eminent academician

The advisory committee advises the library in the purchase of books, journals and the improvement of library information services. Approval of the committee is essential for all developmental activities required.

The significant initiatives that have been implemented by the committee to render the library, student/user friendly are:

- Open access of books.
- Computerized search.

- Issue and receipt of books.
- Book-bank.
- General book collection.
- Adoption of modern technology and digitalization of thelibrary.
- Provision of display racks.
- Augmentation of book collection catering to the changing needs and for the purpose of general and extensive studies.
- Extension of special services to differently-abled students.
- Provision of generator backup to library in case of power failure.
- Provision of reprographic facility to cater to the needs of users.
- Extension of library timings beyond class hours with free transport facility.

4.2.2 Provide details of the following:

* Total area of the library (in Sq. Mts.)
* Total seating capacity
* Working hours (on working days, on holidays, before examination days, during examination days, during vacation)

a) Total area ofthelibrary (in Sq. Mts.):	1300 sqmtrs
b) Total seating capacity	300
c) Working hours	
On WorkingDays	7 A.M to 7 P.M
On Holidays	9 A.M to 1P.M
BeforeExamination Days	7 A.M to 7 P.M
DuringExamination Days	7 A.M to 7 P.M
During Vacation	9 A.M to 5 P.M

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

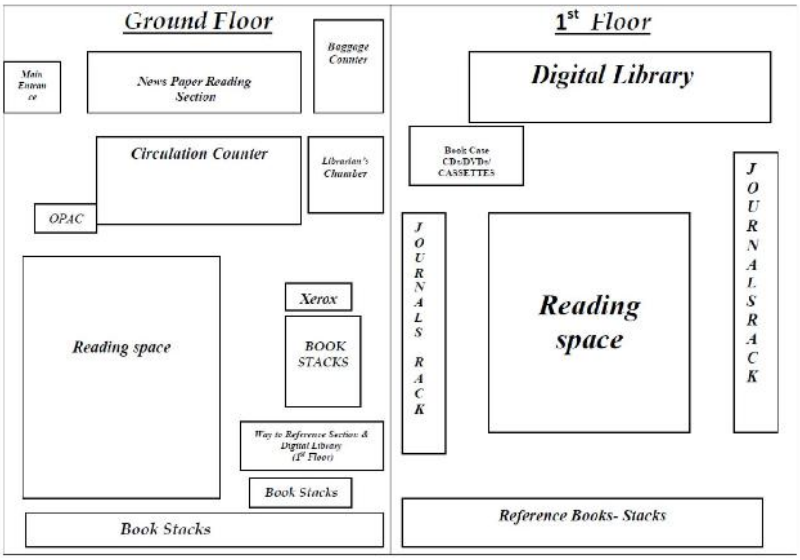
Plan of the Library is displayed at the entrance of the library.

* Access to the premises through prominent display of clearly laid out floor plan; adequate signage; fire alarm; access to differently abled users and mode of access to collection)

The following measures are taken to ensure access to collection in the library:

- Prominently displayed signage boards help in the easy location of different journals and books.
- Books are arranged according to Dewey Decimal Classification (DDC) scheme.
- New arrivals of book are displayed on theNoticeBoard.
- Safety measures (Pest control and Dusting every day).
- Special services to differently-abled users.
- Accessibility through Online Public Access Catalogue (OPAC).
- Open access to books and journals.

- Display of guidelines touse OPAC and ERM packages



4.2.3 Give details on the library holdings Total No.

a) Print

Books: 53651(12955 PG and 40696 UG)
Titles: 13678
BackVolumes of Journals: 2166

b) Non Print (Microfiche, AV)

2 0 3 Audio/Video (Cassettes)
CDs /D V D R0M S:3 9 9 2

c) Electronic (e-books, e-Journals)

E-books	363	Access Engineering (McGraw-Hill)`
E-journals:	1940	AICTE –INDEST IEEE+ASME+ASCE+SD+springer+ DOAJ)

d) Special collection
(eg. Text book, Reference books, standards, patents)

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

- OPAC

Online Public Access Catalogue service is made available for users to know the bibliographic information, and enabling them search books and journals author-wise, title-wise, subject-wise, index-wise and for the location of the document.

- Electronic Resource Management package for e-journals

E-Resource Management facilities include AICTE - INDEST programme through which we can access IEEE, ASME, ASCE, Science Direct.

- Federated searching tools to search articles in multiple databases

A federated search tool "KNIMBUS" is available for gathering information on any particular query from multiple data resources.

- Library Website

The homepage of the College central library directs the user's location of materials such as books (OPAC). The old question papers of the previous years can be accessed. The library home page provides electronic access to various full text & bibliographical databases &e-journals through Digital Library. The Video lessons from NPTEL, MIT Press can also be accessed from the library home. It can be access through campus LAN

The URL of the library home page is
http:// 132.200.13.1/gvp/libhome/index.html

- In-house/remote access to e-publications

The library provides resource facility to the entire faculty and students. The College is well equipped with internet facility with IPaddress/wi-fi facility which facilitates the use of e-resources for in-house access.

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

* Library automation
  The college library is fully automated deploying ICT using ERM packages.The day-to-day operations are performed using Software developed in house where as OPAC is used for indexing.

* Total number of computers for public access in library:
  One for OPAC and 30 in the Digital Library

* Total number of printers for public access
  One

* Internet band width Speed
  High speed internet facility is provided through 40 MBPS leased line. And Wi-Fi connectivity is also available.

* Content management system for e-learning
  The library has the facility of NPTEL (National Programmeon Technology Enhanced Learning) which has an excellent content management system, providing e-learning through online Web and Video courses in Engineering, Science and other streams.The college endeavors to enhance the quality of higher education by providing free online course ware through NPTEL, MIT Press, Stanford University etc.

* Participation in Resource sharing networks/consortia (like Inflibnet):
  The Library subscribes to DELNET and INDEST which enable to participate in resource sharing networks/consortia.They facilitate inter–library loan and downloading texts of e-Journals.

4.2.6 Provide details (per month) with regard to.

∗Average number of walk-ins	300 per day
∗ Average number of books issued/returned	225/190 per day
∗ Ratio of library books to students enrolled	1:10
∗ Average number of books added during last three years	4198
∗ Average number of login to OPAC	125
∗ Average number of login to e-resources	53 per day
∗ Average number of e-resources downloaded/printed	35 per day
∗ Number of information literacy trainings organized	once in a year

4.2.7 Give details of the specialized services provided by the library

* Manuscripts:
1. Project reports of UG and PG students.
2. Copies of reports of project works of faculty members funded by UGC, AICTE and other funding agencies.

* Reference:
Text books of reference value are kept in active stacks of reference section.

* Reprography:
The library has the reprographic facility for the benefit of students and staff.

* ILL (Inter Library Loan Service)
The library provides Inter Library Loan services through DELNET.

* Information Deployment and Notification
The information related to the arrival of new books and journals is deployed in the notice board.

* OPAC
Online Public Access Catalogue service is made available for users to know the Bibliographic information and enable them search books and journals.

* Internet Access
Free internet with 40Mbps facility is provided to staff and students and Wi–Fi facilityis also available in the library.

* Downloads
Students are allowed to download articles from e-books and e-journals, online lessons from NPTEL and material required for personality development sessions.

* Printouts
Facility to take print outs of downloaded material is available.

* Reading list / Bibliography compilation
Course wise, author wise and title wise reading list of books and journals is provided.

* In-house / remote access to e-resources
The library provides excellent e-resource facility to all the faculty and students. The college is well equipped with internet facility with IP address/ Wi-Fi facility which facilitates the use of e-resources for in-house/remote access.

* User Orientation:
The library organizes a user orientation program every year at the commencement of the academic program.The objective of this practice is creating awareness about the library services, facilities and resources among all the stakeholders.

* Assistance in searching Databases:
The staffs in the library provide assistance required by the users in searching databases and e –journals.Whenever a new database or journal is subscribed, users are informed of the same. Orientation programmes are organized for the benefit of the users.

4.2.8 Provide details on the annual library budget and the amount spent for purchasing new books and journals.

							(Rs. InLakhs)	
	Budget Allocation	**Amount Spent**	**Budget Allocation**	**Amount Spent**	**Budget Allocation**	**Amount Spent**	**Budget Allocation**	**Amount Spent**
Particulars	**2009-10**		**2010-11**		**2011-12**		**2012-13**	
Non-Recurring (Books and Stacks)	30.00	16.78	40.00	11.00	45.00	20.30	50.00	15.75
Recurring (Journals Including E-Journals)	10.00	8.31	15.00	11.22	20.00	18.88	25.00	19.97
Grand Total	40.00	25.09	55.00	22.22	65.00	39.18	75.00	35.72

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services.

The feedback is taken once in a year from the library and used to augment the library facility.

The feedback forms are available to the users at the circulation counter. The library committee analysis and submits the report to the Principal for the initiation of appropriate steps for improving the facilities in the library.

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

- Establishment of digital library - 2006-07
- Subscription of onlinejournal indexes
- IEEE, EDSU - 2006-07
- ASME, ASCE, SD, SPRINGER - 2013-14
- Increasing the number of national and international journals since 2000.
- Providing NPTEL facility and e-material to the students since 2010-11
- Increasein number of stacking racks since 1997
- Extensions of issue counter since 2009-10
- Increasein the number of books, reference books, journals and news papers. Every year member in DELNET since2002

ITEMS	2009-10	2010-11	2011-12	2012-13
Chairs (DigitalLibrary)	18	24	30	30
Chairs	150	180	200	270
StudyTables	44	52	56	58
Book Racks (6'H single faced)	02			
Book Racks (7.5Hx3'Lx22"D double faced)	05		03	04
Godrej Almarah	02	03		
Book Case	02			
Extension Counter			01	
Computers	15	20	25	30
Reprographic Machine		01		
HP Scanner		01		
HPLaser Jet Printer		01		

4.2.11 Did the library organize workshop/s for students, teachers, non-teaching staff of the College to facilitate better Library usage?

It is customary on the part of the Library to organize a user orientation programme every year at the commencement of the academic program. The objective of this practice is to create awareness among all the stakeholders on OPAC, NPTEL and the services, facilities and resources available in the library. Such programs have largely benefitted the new admitants, faculty and scholars of the research centre.This process is essentially user-centric and enhances the teaching learning and research process. Product demonstration of E-journals like IEEE, Science Direct, Proquest Thesis and Dissertations are being conducted. Book exhibition is conducted.

4.3 IT Infrastructure

4.3.1 Does the College have a comprehensive IT policy addressing standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management?

The College avails of learning material resources from NPTEL (National Programme on Technology Enhanced Learning).

It also subscribes for ERM Package. The College subscribes to E-Journals through AICTE-INDEST Consortium, and DELNET.

The INDEST provides access to e-resources to students, researchers and faculty from Colleges and other beneficiary institutions through server(s) installed at different parts of the world. The users from the College can now access e–resources and download articles required by them directly from the publisher's website once they are duly authenticated as authorized users through servers deployed at the different parts of the world.

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

* Number of systems with configuration 998
* Computer-student ratio 1:4
* Dedicated computing facility Yes (40 computers)
* LAN facility All the departments are connected through LAN
* Wifi facility Yes
* Propriety software / Open source software's

Civil Engineering	WINDOWS –98 OS, STADD-III (Release 22.0) STAAD PRO AUTOCAD 2000 TOWER CAD STRAP	CABFADD SAP 2000 (Non –Linear) ARCHICAD E-TABS ESR –GSR
Chemical Engineering	SIMSCI FROM PRO II, MATLAB	TRIANGLE simulation software for real time simulations
Electronics & Communication Engineering	CADENCE P-SPICE MATLAB XILINX CODE COMPOSER STUDIO CADENCE VLSI TOOLS WINQCAD	DSP Kits FPGA Boards Microcontroller Kits ARM Processors, MSP -430 kits
Electrical & Electronics Engineering	WINDOWS 2000 SERVER ACADEMIC VERSION P-SPICE MI POWER	MAT LAB WITH CONTROL SYSTEMS TOOL BOX ORCAD CAPTURE MATLAB & SIMULINK
Mechanical Engineering	CATIA V5 ANSYS Pro-E Master CAM	UG-Nx 7.5 IRON CAD NISA

Computer Science Engineering	ADOBE CS 5 Professional, KEIL MAK-ARM MSDN ACADEMIC ALLAINCE KIT, ORACLE 10g STANDARD ONE EDITION, RATIONAL ROSE IBM RELATIONS UNIVERSITY PROGRAM, ORACLE DATABASE SOFTWARE, WINDOWS SERVER 2003, NORTON ANTI VIRUS, RED HAT LINUX, NOVEL SOFTWARE,	BORLAND TURBO C++ SOFTWARE, POWER BUILDER ON DIGITAL UNIX, IMAC OS C, C++, JAVA COMPILLER ON MAC OS, DIGITAL UNIX OS, AUTOCAD-2000 NETWORK VERSION, SUN SOLARIS, MICROSOFT WINDOWS NT WORKSTATION, VISUAL STUDIO

* Number of nodes/ computers with internet facility
  300 through LAN + 300 through Wi-Fi

* Any other

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

- 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.

4.3.4 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 are accessible to all in the campus. The members of the faculty optimally utilize Electronic Resource facilities to teaching-learning process. The members of the faculty encourage students to have online access and use of video lessons such as NPTEL, MIT Press, Stanford University, MOODLE, MOOCS etc., and other online video courses also.

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.

S. No	ICT facility	Number
1	ICT enabled class rooms (with LCD facility)	11
2	ICT enabled seminar halls	3

- The traditional chalk and talk method of teaching is supplemented with ICT facility by all the departments.
- All the computer laboratories are provided with internet facilities where students can access online resources apart from a digital library provided with access to online journals.
- The online journals are also made available to all the faculty and students through intranet inorder to promote quality in teaching-learning process and research. Seminar presentations are made part of the assessment process.

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?

- Each department is having LCDs.
- Faculty rooms are equipped with computer with internet connectivity. Lectures are prepared wherever necessary through power point presentations.
- Video cassettes and CDs on different topics are available in the library for preparing lecture material.

Department	**Facility provided**	
Chemical Engineering	Wifi –ALL Computers provided with net facilty	• OHP-01 • Projector -3 • Computer-3
Civil	LAN Facility is provided to faculty to prepare Course materials.	• OHP-01 • Projector -3 • Computer-3
CSE	NPTEL videos, ScienceDirect, IEEE Portal, Systems with Internet Facility	• OHP-01 • Projector -3 • Computer-3
ECE	Faculty makes use of this facility for lecture preparation.	• OHP-01 • Projector -3 • Computer-3
EEE	• Access the NPTEL MIT Lectures, from the internet of the individual faculty. • E learning resources from ABB,IEEE,SIEMEN's • Control Systems design by Graham C Goodwin and Sin www.csd.newcastle.edu.au • Signal and Systems course file "Stanford University" • EMF Course material "LAMAR University" • Signal and Systems M.J.Roberts "Stanford University"	• OHP-01 • Projector -3 • Computer-3
IT	• Internet • Open access to digital libraries of IEEE,Springer,Elsevier	• OHP-01 • Projector -3 • Computer-3
ME	• 2 Nos of LCD Projectors • NPTEL videos, ScienceDirect, IEEE Portal, Systems with Internet Facility	• OHP-01 • Projector -3 • Computer-3

4.3.7 How are the computers and their accessories maintained? (AMC, etc.)

Each lab is manned by a qualified technical assistant with skills in hardware engineering. A data center is established with two systems administrators who take care of data protection, maintenance besides providing internet services. To cope with the storage of data highly configured systems are put in place. The college hires 40 Mbps internet connectivity to support digital library besides all other requirements in the labs, of the faculty and the students. All systems in the campus are connected through LAN. Wherever required AMC's are in order.

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

Yes. Inter library loan facility is available through DELNET as resource sharing.

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 our own qualified technical staff maintain the systems.
- 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.

Civil: Building construction and maintenance is taken care of by specifically designated personnel. The team is headed by the dean infrastructure development. Dean's office is supported by a Campus Engineer, a draftswoman, three works supervisors. The responsibilities of this wing include periodical maintenance and repairs of the buildings, alongside planning and construction of new buildings.

Electrical: The department of quality maintenance and technical services takes care of the power supply arrangements, installation maintenance. This department also enters into agreements on AMC of costly equipments with leading service agencies. This wing is headed by a well experienced senior executive. It is manned with a maintenance engineer, two supervisors and four electricians on shift duty. Responsibilities of this wing are to provide uninterrupted power supply, maintenance of all electrical installations, generator, lifts, campus lighting and so on.

Cleanliness: Cleanliness of the class rooms, tutorial rooms, seminar halls and laboratories are maintained by one supervisor and 12 workers under the control of campus engineer who is member of civil engineering department.Disposing all the waste material on a daily basis with the help of sufficient man-power. Waste water is drained out by the well maintained side canals. Each block is provided with toilets in each of the floors for boys, girls and faculty separately. All the toilets are cleaned every day.

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.

- Minor maintenance is attended within the college by the staff of the estate unit and of the respective departments.
- Major repairs and maintenance are carried out under AMC for different equipment by respective agencies.

Any additional information regarding Infrastructure and Learning

Resources, which the institution would like to include.

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?

Student counseling

- Dean of student affairs takes care of general interests in coordination with the Dean (administration), Dean (academics), wardens etc. while regular academics are taken care by faculty counselors in the respective departments.
- College provides academically supportive environment to the students with enthusiastic faculty who continuously motivate students for progression.
- A group of students are attached to a faculty member after admission to follow up their progression in studies as well as provide necessary emotional support in case of slow learners or those having difficulty in adjusting to the new environment.
- The faculty member will be in continuous contact with the students as well as their parents throughout their course of study for guidance and advice in building up their career.
- A separate career guidance and placement cell operates to take care of the employment opportunities of eligible students.
- The physical education department and the Dean (student affairs) strive hard from day one of every admitted batch to identify talent in sports and extracurricular activities and encourage the students to excel in their field of without prejudice to the academics.
- The suggestions from alumni, graduate survey and industry also help in designing a new or improving upon to make the environs more studentscentric for a better multi-directional performance.
- General and motivational talks by leading personalities in the society are arranged to foster ethical and value based culture among students.

5.1.2 What provisions exist for academic mentoring apart from classroom work?

- Student chapters of professional societies.
- Publication of technical magazine.
- Conduct of competitions, participation in curricular, co-curricular activities.
- Performance review of students by respective counselors.
- Remedial classes for slow learners

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.

1. **EDC and IIPC:** These centers are funded by AICTE initially and maintained by the college for continued interaction with industry for

academic and employment enhancement of students in order to train them as job providers than job seekers.

2. **Finishing school:** A finishing school on campus is training students to make them industry-ready with necessary skills.

3. **Career guidance:** Placement cell provides training to eligible students for campus placements through mock interviews, group discussions, quantitative aptitude, analytical reasoning etc.

4. **Innovation:** Exhibitions are conducted to explore their creativity and innovative skills in a competitive way along with others from higher institutes.

5. **Communication Development:** Advanced English Communications Lab is included in UG Curriculum to improve communication Skills. Students are encouraged to present Papers in Conferences.

6. **Professional ethics:** Professional ethics subject is introduced in the curriculum to inculcate morals and ethics to be followed in the profession.

7. **Morals and spiritual values:** College organizes special talks to develop human and spiritual values for every semester.

8. **Social Activities:** A 32-hour social activity is mandated for all the UG students in the autonomous curriculum in order to create social consciousness among the future citizens. An NSS Unit also functions in the college to generate a sense of voluntary service towards societal needs among the student community. Apart from the NSS Unit, students form into voluntary groups like YES, WE ARE 4 HELP, ROTARY CLUB to serve the needy and destitute.

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

The college publishes annually an updated hand book and the same information is also disseminated through the college website.

The hand book includes:

- Vision and Mission of the Institute
- Academic Regulations
- Curriculum and syllabi
- Method of Evaluation
- Attendance Requirements
- Minimum Academic Requirements

Various Courses Offered with Course Educational Objectives and Course Outcomes

The Information Brochure includes:

- Vision and Mission of the Institute
- College History
- Academics
- Departments
- Life on Campus
- Sports and Cultural Activities
- College Placement
- Organization Structure

The website also contains information on the merit ranks admitted into different programs in the previous academic year.

5.1.5 Specify the type and number of scholarships / freeships 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.

College provides scholarships for financially weak students in the form of sahakara scheme. It enables the students to earn by working part time beyond class hours in the library.

Title	Sponsor	2010-11 Rs	2011-12 Rs	2012-13 Rs	2013-14 Rs
Sahakara scheme	Management	73,500	83,684	65,265	64,830
Merit scholarships		34,500	34,500	34,500	51,000
Endowment awards	Facilitated by management	61,750	61,750	61,750	61,750

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.)

- Financial aid of Rs 8,000/- per month is given to M.Tech Students through TEQIP –II: 58 of 257 (23%)
- GATE: 112 of 257 (44%)
- Social welfare (Fee reimbursement) 1730 of 3800 (46%)
- Central sector scheme Merit scholarships (MHRD of GOI): 315 of 3478 (9%)

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?

The college has a provision for International Students. International Relations cell isformed in the college to look after the admission procedures of Foreign Students headed by a senior professor experienced in catering to the needs of PIOs.

5.1.8 What types of support services are available for

∗ Overseas students
- Hostel facilities
- Personal attention through PIO/foreign national cell

∗ Physically challenged / differently abled students
- Assistance for Physically Challenged Students is given to students whenever they need in the campus.
- Two Lifts and ramps are available for easy movement.
- Fee reimbursement is leveraged through Disabled welfare department

∗ SC/ST, OBC and economically weaker sections:
- Reservation in admissions as per statutory norms.
- Income-linked fee concessions to economically weaker Sections.
- Maintenance allowance to SC,ST and OBC students through respective welfare departments
- Book Bank is available for SC/ST Students.

∗ students to participate in various competitions/ conferences in India and abroad
- Encouragement is given to students to participate in conferences and Technical Symposia by means of travel concessions, academic flexibility etc.
- Free transport is provided for local industry visits.
- Students are extended financial assistance to participate in National programmes like Lead Prayana.

∗ health centre, health insurance etc.
- An exclusive health center in the campus is available with a resident medical officer on duty. It is equipped with two beds and oxygen cylinder and other relevant amenities to meet the first aid requirements.
- Medicines are given to the students free of cost for routine complaints.
- In case of emergency, the ambulance and other facilities at Gayatri Vidya Parishad Institute of Health Care and Medical Technology, which is a sister institute near by the college, are utilized.
- The College has a multi-station gym to maintain fitness and good health and a wide range out-door and in-door sports facilities.
- Efforts are on to cover the students under health insurance

∗ skill development (spoken English, computer literacy, etc.,) :
- Advanced English Communications Lab is included in UG Curriculum to improve communication Skills.
- Training and placement cell offers employability enhancement training programmes in co-ordination with leading market players.

- Special certification courses like CISCO, DB2 and RAD through IBM center of excellence and Microsoft innovation center
- Students are encouraged to participate in workshops where model, design and fabrication are to be presented there by enriching hands on experience.
- Finishing school commenced to make students industry ready with requisite skills.

* performance enhancement for slow learners / students who are at risk of failure and dropouts
  - Slow learners are identified through Diagnostic Test conducted after 3 weeks of the commencement of the class work every semester.
  - Remedial Classes are arranged for slow learners to minimize the failure Rate.
  - The dropout rate is negligible (less than 1%). Make-up classes are arranged specially for those who were detained in any subject.
  - A team of counselors have been nominated to look into the academic improvement of slow learners.

* exposure of students to other institutions of higher learning/ corporate / business houses, etc.
  - Students are encouraged to present Papers in Conferences organized by premier Institutes in the country.
  - Students are encouraged to participate in Technical Expos for latest advancement in Technology.
  - Industrial visits are arranged to expose the students to the industrial practices.
  - students participated in Lead Prayana, a unique programme where in the learners have an opportunity to know about emerging trends in industry by interacting with corporate giants of reputed business houses like Infosys, TATA Consultancy Services and so on.

* publication of student magazines
  - ELECTRO ZOOM - a monthly technical concoction, is a technical magazine published by students. Students only run editorial board and marketing.
  - A newsletter covering various activities of faculty and students is released periodically.
  - SPURTHI1 and SPURTHI 2, Magazines to showcase innovative ideas of social concern that need to be addressed scientifically .
  - LAST MILE - A magazine that endeavors to identify key problems and envisioning corresponding engineering solutions.
  - OASIS - An exclusive periodical magazine run by girl students highlighting the issues related to women.
  - IN SEARCH OF RURAL TRUTH - A magazine that records the rural exploration programme by our students.

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?

- The college has been offering coaching classes only for GATE aspirants.
- Some of our faculty offered free coaching to NET/SLET aspirants. Two participants got selected in NET.

Number of students qualified in GATE in the last four years

Academic Year	Number of students qualified in GATE	All India Best Ranks in GATE
2013-14	191	20, 25, 76 (EEE), 40 (ECE), 119 (Chem)
2012-13	127	51, 77, 127 (EEE), 188 (Chem)
2011-12	130	168 (Mech),
2010-11	124	45, 63, 147 (EEE), 178 (ECE)

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 as per the government norms.
- Coaching programmes are offered to the identified sports persons to hone their skills enabling them to compete at higher levels.
- Free transport is provided to the sports persons facilitating more time for play in the campus.
- Flexibility to sports persons in house examinations by rescheduling the date(s) whenever needed

∗ special dietary requirements, sports uniform and materials

- College provides necessary sports material and uniform to participant sport persons.

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?

An exclusive placement and entrepreneur development cell functions under the guidance of a Dean, Training and Placement. It overseesinviting companies to the campus, getting students trained in various job ready skills like

- personality development, communication and interview skills
- arranging internships in industries during their project period

Entrepreneurship development cell organizes programmes and arranges talks by eminent entrepreneurs to motivate young students develop entrepreneurship skills.
These are in addition to the regular curriculum for enriching communication skills that include preparation for interview as well.

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).

2013 - 2014 Batch (till date)

S.No	Name of the Company	B.Tech	M.C.A	M.Tech	Grand Total
1	TCS	159	8	3	170
2	WIPRO	65	1		66
3	DST World wide	7			7
4	VERIZON	5			5
5	ADP	4			4
6	Kony Labs	9			9
7	Sokrati	1			1
8	Turaco Mobile Pvt Ltd	2			2
9	Cloud Gust	3			3
10	Rapid Biz	0			0
11	Ascendant	3	1		4
12	Sankalp Semiconductor	3			3
13	Intergraph	2			2
14	TATA Steel	3			3
15	Infosys	60	1		61
16	Rise India Pvt. Ltd.	2			2
17	Tech Mahindra	7			7
18	AMI Pvt Ltd.	1			1
TOTAL Offers		336	11	3	350
Selected Candidates		240	9	3	252

Academic Year 2012 - 2013

S.No	Name of the Company	B.Tech	M.C.A	M.Tech	Grand Total
1	TCS	190	10	10	210
2	WIPRO	40	5		45
3	HCL	55			55
4	MICROSOFT	2			2
5	CISCO	1			1
6	Cloud Pact	1			1
7	Paypal	2			2
8	Pramathi	1			1
9	Sethu	2			2
10	Captial IQ	5	1		6
11	Integraph	6			6
12	DST World Wide	5	2		7
13	ORACLE	1			1
14	TATA Advance System	1			1
15	L&T	23			23
16	NFCL	14			14
17	Trimex Sands Pvt.Ltd.	3			3
18	Rise Pvt.Ltd.	1			1
19	Medha Servo Drive	6			6
20	IOCL	2			2
21	HPCL	1			1
22	Hyundai Motors	7			7
23	Tech Mahindra	6			6
24	Virtusa	1			1
25	Hurix System	3			3
26	IBM	0	1		1
TOTAL Offers		379	19	10	408
Selected Candidates		322	19	10	351

Academic Year 2011 - 2012

S.No.	Name of the Company	B.Tech	M.C.A	M.Tech	Grand Total
1	TCS	233	20	10	263
2	WIPRO	136	11	13	160
3	Mahindra & Mahindra	12		7	19
4	L & T	24		2	26
5	Intergraph	5			5
6	Astra	4			4
7	TATA steel	3			3
8	Soma	2			2
9	Ramkey	1			1
10	Oracle	1			1
11	Syntel	2			2
12	Sonata	1			1
13	Sasken	1			1
14	Jaypee Cement	1			1
15	J.K.Paper Mill	4			4
16	Indian Navy	1			1
17	Efftronics	1			1
18	Vasathi Housing	3			3
19	NFCL	9			9
20	Medha Servo Pvt. Ltd	3			3
21	IBM	1			1
22	Smilax Laboraries Ltd.	6			6
23	Elsoft Technologies	1			1
24	Dell	3			3
TOTAL Offers		458	31	32	521
Selected Candidates		361	26	29	416

Academic Year 2010 - 2011

S.No	Name of the Company	B.Tech	M.C.A	M.Tech	Grand Total
1	TCS	253	17	17	287
2	WIPRO	76	8	10	94
3	Mahindra Satyam	18			18
4	Virtusa	15			15
5	L & T	15		2	17
6	IVRCL	14			14
7	Mahindra & Mahindra	14			14
8	PERSISTENT	9		2	11
9	Syntel	8			8
10	Mphasis	7			7
11	N.C.C	7			7
12	Simplex	6			6
13	Soma	4			4
14	Solivar	1	1		2
15	Power Mech Project	4			4
16	MEDHA	4			4
17	DOZCO	4			4
18	Sankalp Semiconductor	3			3
19	TATA STEEL	2			2
20	ABIR Infra Pvt.Ltd.	2			2
21	Intergraph	2			2
22	Infotech	2			2
23	KMC Construction Ltd.	2			2
24	Continental Carbon	2			2
25	Vasant Chemicals	2			2
26	Finisar	1			1
27	Genpact	1			1
28	TRIMEX	1			1
29	IBM India Pvt. Ltd.	3			3
30	Zuti Engg. Solutions	1			1
31	Utited Helth Group	0	3		3
32	Coromandel Fertillsers	3			3
TOTAL Offers		486	29	31	546
Selected Candidates		378	24	23	425

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?

Alumni Association:

President	Mr.P.Srikanth & Mr.Raghuveer Pulaparthi
Vice- Presidents	Mr.Uday Madireddy, Mr.C.Srinivas, Mr. I.Avinash, Mr. G.Santhosh Kumar
Secretary	Mr.Niranjan Rao Botsa
Joint-Secretary	Ms.K.Manikyakanthi, Ms.P.Vani kiranmayi, Mr.R.P Singh, Ms.V.Usha Rani.
Treasurer	Mr.T.Ajit Prabhu.

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.

- The Grievance redressal Committee is in existence since the beginning. It is re-constituted as per the regulation of AICTE on 24-12-2012 with Dr.Y.V.P.K. Raghava, Dean, Student affairs as head of the registry to receive the grievances, where an aggrieved student or person shall send their representation for redressal.
- The Grievance Redressal Committee undertakes the processes of attending to the grievances put forward by the students and staff. It focuses its attention on setting proper facilitation procedures for settling the issues in a cordial atmosphere.
- The committee initiates proper or appropriate enquiry or investigation mechanism within 24 hours from the receipt of the complaint in written form duly signed by the complaint.
- The committee meticulously adheres to the standard arbitration procedures of the college and those of other state government and AICTE time to time.

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

Women Welfare Committee:

- The cell aims at resolving any harassment of women in the college premises.
- The complaints are registered with the coordinator or any of the members of the committee.
- Complaints can be given either in sealed covers or by sending email or personal representation either to the convener or members of the committee.
- Identification of the people who have lodged the complaint is essential, but will be kept confidential if necessary.
- Complaint will be attended based on the nature, complexity, identity of the other party/persons within reasonable time.

- An enquiry committee will be formed which will address the grievances reported.
- Action will be taken based on the enquiry committee report.
- Initiatives will be generally in the form of amicable settlement of the issues without loss of dignity and projection of ego of persons involved.

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, there is Anti-ragging Committee to prevent and prohibit ragging in the institution commensurating with the norms laid down by AICTE vide its notification dated 1-07-2009. Affidavits as designed by the UGC are collected from each student ever year duly counter signed by the parent and the same are placed in the respective websites.

No incidents of ragging occurred in the campus so far. Our institution is absolutely ragging free.

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.?

Students: The Principal stakeholders being the students, at the beginning of the first year, a detailed book containing the regulations and syllabi is being given and they will be sensitized towards the types of activities and the level of achievements expected from them in curricular and co-curricular aspects. They will also be informed regarding the facilities and flexibilities available and the mechanisms to achieve the goals.

Parents: The parents will also be informed about the opportunities for the overall growth of the students and the range of activities that the student is expected to perform in the initial interactions with parents. From time to time when the parents meet is organized, the status of the achievements of their wards and necessary actions to be taken are informed.

Industry: The people from the industry are invited to the campus for interaction with students and teachers as well. This facilitates to understand the gap between the industry and academia and to build bridges in the form of MoUs and also to provide right opportunities for the graduating students to get placements through campus recruitment.

Alumni: Apart from the structured programmes of the alumni association, Alumni are encouraged to visit the institution as and when possible to share their real time experiences with the juniors so that they can catch-up quickly to the demanding situations in the outside world.

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

- Students are encouraged to participate in extracurricular activities such as sports and cultural events.
- Every department has its own student association.
- Student association of the department conducts various curricular and extra-curricular activities frequently to motivate students

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?

Details of participation of women in 'intra' and 'inter' institutional sports competitions and cultural activities in various departments are presented in item 19 in departmental reports

List of Sports & Games activities:

- G.Sirisha (10131A0819)-Chess at JNTUK.
- Marella Pavan (10131A0833) - Table Tennis at JNTUK.
- Patharlapati Bindu Sandeep (10131A0839) – Foot Ball at JNTUK.
- Lanka Deepak (09131A0819) - Foot Ball at JNTUK.
- K Bhavani (11131A0816) – Volley Ball at JNTUK.

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)

Programme-wise success rate of the college for the last four years is already provided in 2.6.4.

This college, being the first autonomous college under combined JNTU and also under JNTU-K, is recognised as a model in preparing the regulations and curriculum by all other colleges which have become autonomous subsequently.

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

Academic Year	Department	UG to PG	PG to Ph.D.	Employed (Campus selection) UG
2012-13	Chemical	9	14	6
	Civil	10		19
	CSE	3		36
	ECE	3		99
	EEE	2		55
	IT	1		30
	ME			30

2011-12	Chemical	12	2	35
	Civil	11		30
	CSE	1		33
	ECE	1		13
	EEE			48
	IT	1		48
	ME			44
2010-11	Chemical	9		22
	Civil	13		52
	CSE			41
	ECE	7		84
	EEE			62
	IT			58
	ME	1		33
2009-10	Chemical	13	1	13
	Civil			
	CSE		1	39
	ECE	11		93
	EEE			29
	IT		1	31
	ME			17

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

UG Programme - Average completion rate in each department is 80%
UG Programme - Average drop rate in each department is 0.1%

PG Programme - Average completion in each department is 82%
PG Programme - Average drop rate in each department is 0.5%

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.

Department	Name of the examinaion	2013-14	2012-13	2011-12	2010-11	2009-10
		No. of students qualified	No. of students qualified	No. of students qualified	No. of students qualified	No. of students qualified
Chemical	GATE	17	12	11	13	11
Civil	GATE	33	10	11	13	12
	GRE		01		01	01
CSE	GATE	5	17	21	21	
	GRE	2				
	TOEFL	2				
ECE	CAT	40	52	41	24	
	GRE	2				
	TOEFL	10	6			
EEE	GATE	57	10	15	10	13
IT	GATE	2				
ME	GATE	20	18	25	21	

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.

Year	Ph.D/D.Sc./D.Litt.	Submitted/Accepted/ Rejected/Registered	Number
CSE			
2013-14	Ph.D	Registered	1
2012-13	Ph.D	Accepted	1
2012-13	Ph.D	Registered	2
ECE			
2010-11	Ph.D	Awarded	1
2012-13	Ph.D	Submitted	1
2013-14	Ph.D	Submitted	1
MECH			
2013-14	Ph.D	Awarded	1
2012-13	Ph.D	Awarded	1
2011-12	Ph.D	Awarded	1
2010-11	Ph.D	Awarded	1
EEE			
2013-14	Ph.D	Registered	3
2012-13	Ph.D	Awarded	1
2010-11	Ph.D	Awarded	2
CIVIL			
2013-14	Ph.D	Submitted	1
		Rigistred	2
2012-13	Ph.D	Awarded	1
IT			
2013-14	Ph.D	Rigistred	2
2010-11	Ph.D	Awarded	1
BS& H			
2012-13	Ph.D	Rigistred	12

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.

SPORTS AND GAMES ACTIVITIES:

A good number and a wide variety of sports and games are organized in the college by the department of Physical Education utilizing the facilities mentioned below.

INDOOR FACILITIES:	**OUTDOOR FACILITIES:**
Gymnasium 12 station multi-gymnasium 04 station multi-gymnasium 300 Kgs. Weight training equipment Individual Dumbles Chess Table Tennis	Ball Badminton Basketball Cricket Net practicing wicket Football Tenni-Coit Tennis – Clay court Throwball Volleyball Multi-purpose playground for Cricket & Athletics (6 lane 200 mts.)

PHYSICAL EDUCATION DEPARTMENT TIMINGS:

The Department is kept open from 6:00 am to 7:45 am in the morning and from 2:30 pm to 7:00 pm in the evening on all working days.

COACHING CAMPS:

To nurture and to develop good commendable teams, coaching camps are arranged. Camps in Table Tennis, Throwball, Cricket and Volleyball are conducted every year.

TRANSPORTATION:

To encourage and to boost large participation in sports, free bus plies to the city after college hours at 6.10 pm every day.

INCENTIVES:

Students representing the college teams in sports meets are presented with playing kits, T.A. & D.A., Cash prizes and best outstanding sports person's award every year.

CULTURAL AND EXTRA-CURRICULAR ACTIVITIES:

Prof.Y.V.P.K.Raghava, Dean (Student Affairs) looks after the cultural and extra-curricular activities of the students. Committees are appointed by him to look after individual events and activities with faculty members as coordinators and student members, who take responsibility to organize the respective activities in the college.

Every year a good number of students participate in games and sports events conducted at state and national level and also occasionally at international level. The achievements of students during the last four years are presented below briefly.

International Level:

- 2009-2010 - Ms. N. Aashrita of E.C.E. (2006 batch) conferred with Doctorate in Sports by AIMS West Brook University USA.
- 2009-2010 - Mr. S. Arvind Raja chowdary (2009 batch) participated in the INDIA OPEN Grand Prix Gold Badminton Championship held at Chennai, from 8th to 13th Jnune 2010.

National Level:

- 8 students won gold and silver medals at national level championships held at New Delhi during the last four years

Inter -University Level: 26 teams

- JNTU-K Inter-College Zone-D, Inter – Zonal & Central Zone Tournaments:29 teams
- 23 students represented Inter-University tournaments since 2009 to 2013.

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.

Every year, a good number of students participate in games and sports events conducted at state and national level and occasionally at international level. The achievements of students during the last four years are presented below briefly.

International Level:
1. 2009-2010 - Ms. N. Aashrita of E.C.E. (2006 batch) conferred with Doctorate in Sports by AIMS West Brook University USA.

2. 2009-2010 - Mr. S. Arvind Raja chowdary (2009 batch) participated in the INDIA OPEN Grand Prix Gold Badminton Championship held at Chennai, from 8th to 13th Jnune 2010.

National Level:
8 students won gold and silver medals at national level championships held at New Delhi during the last four years

Inter -University Level: 26 teams

JNTU-K Inter-College Zone-D, Inter – Zonal & Central Zone Tournaments:29 teams

23 students represented Inter-University tournaments since 2009 to 2013.

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

The student feedback is taken twice a year regarding services extended through library and department of physical education. And necessary improvements are made, provisions facilitated as required.

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?

- The college has a mechanism to take feedback from its alumni every year which helps in development of the College.
- Alumni member is a part of Board of Studies and their feedback helps us in improving the curriculum.
- Yes, their constructive comments are utilized and interaction with industry increased by doing UG and PG projects. Latest software applicable in chemical engineering like COMSOL, PRO-II and MATLAB are regularly updated and short term workshops are periodically arranged.

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.

SI. No.	Technical Magazine / News Letter	Name of the Technical Magazine / News Letter	Name (s) of the Editor	Name (s) of the Publisher (s)
1	News letter (periodical)	Gayatri Vani	Dr. S. Atchuta Ramam, Mr. I. Raja sekhar	G.V.P.C.E(A)
2	Technical Magazine (Bi-monthly)	Electrozoom	P. Prashant Reddy V. Ravichandra A. Kumar Sarath B. Krishna Chaitanya GVS Kishore	Students of E.C.E G.V.P.C.E(A)
3.	Women Magazine	Oasis	R Sai Surekha K Sai Divya	Girl Students of G.V.P.C.E(A)
4	Student cultural Magazine (Annual)	Annual Revista	Dr. Ravindranadh Vivek Atamakuri	G.V.P.C.E(A)
5	Magazine of societal concerns	SPURTHI 1 & 2	Dr. S. Ravishankar	G.V.P.- S.I.R.C
6	Technical Magazine	LASTMILE Experience	Dr. S. Ravishankar Sri Sai Harshith and others	G.V.P.C.E(A)
7	Rural Exploration Journal	In search of rural truth	B. R. Karthik G. T. Harini And others	G.V.P.C.E(A)

5.3.6 Does the College have a Student Council or any similar body? Give details on its constitution, major activities and funding.

- Yes, Acadamic and cultural representatives are nominated from among students from each section for all the course years. They constitute the student representative board who lead all the student activities under the guidance of faculty advisors at programme level and Dean student affairs at apex point.
- Nearly Rs. 15-20 Lakhs earmarked for all student activities every year.
- Fresher's day, foundation day and sports & cultural day are some of the major student activities.
- A mega technical fest titled EKATHRA is conducted together by all branches of engineering once in two years.
- In addition to these, branches organize technical events through associations like SEEE, ASME, and so on.

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

- Students are part of academic committees like Class Review Committee, Anti-Ragging Committee, Women-Welfare Committee.
- The class review committee meets twice in every semester and offers feedback on syllabus coverage, areas of difficulty, performance of teachers and others.
- The student members of anti-ragging committee take up peer-sensitizationof the students on the consequence that follow ragging and related laws and Acts.
- Similarly, the girl students who are on committees bring to the notice of administration any grievance and help in redressal. They also run a magazine titled OASIS which brings out woman related issues.

Any additional information regarding Student Support and Progression, which the institution would like to include.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the College.

VISION OF THE INSTITUTE: To evolve into and sustain as a Centre of Excellence in technological education and research with a holistic approach.

MISSION OF THE INSTITUTE: Toproduce high quality engineering graduates with the requisite theoretical and practical knowledge and social awareness to be able to contribute effectively to the progress of the society through their chosen field of endeavor.To undertake research and development, and extension activities in the field of science and engineering in area of relevance for immediate application as well as for strengthening or establishing fundamental knowledge.

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.?

The characteristics like offering requisite theoretical and practical knowledge, social awareness of the mission statement are well grounded in the course component thereby enabling the graduates to work for the society in their chosen area.

The mission statement very distinctly states about the characteristics envisaged by the college from an outgoing student while preparing the students to serve the society with necessary technical knowledge in theory enabling them to analyze the problems and offer training towards practical solutions.

The mission statement further expands the scope for learning, research and development, obtaining solutions which can be of immediate utility in effectively dealing with problems, the society is facing and expected to improve the quality of living in future.

Simultaneously, the mission statement offers scope for orientation to its learners to inculcate values and time tested traditions. The mission statement also guides the policy matters and the course designers to realize needs of the future society duly assessing the emerging needs of the society, academia and the industry from time to time.

The same belief is reflected in the vision statement of the institution also.

6.1.3 How is the leadership involved inensuring the organization's management system development, implementation and continuous improvement (Decentralization of administration, role definition, accountability, periodical review, assessment, recommend changes necessary,

The management ensured decentralization by creating Deans to help the Head of the institution in day-to-day activities at the top of a multi-tier

system of administration with HoDs, lab in-charges etc., down the ladder on the academic front.

- The management and the HoD interact with the parents by conducting annual meets. The administration on its part is accessible to them at different levels for any help or guidance to benefit the students.
- The student interactions are regular for curriculum development, improvement in learning skills and counseling on career and growth as well as matters of personal interests/ concerns.
- The industry interaction is of supportive and participatory nature in developing the curriculum training the student and faculty and in recruiting students.
- The societal interactions helps in designing, training, assessing the moral and ethical standards the college wishes to be maintained during and after studies in their interactions with society in general and industry in particular. Inviting experts from higher institution and industry to up-date theknowledge levels and enforce research culture.
- Students are encouraged, advised/guided to participate in competitive paper presentation, model making, projects etc., on the academic front as well as cultural, sports and games meets to bring out their talents and excel in their fields of interest without affecting he academics- the college students brought several laurels in this direction.
- The developmental needs are identified during the Governing Body meets time to time reviewing and trying to eliminate the hurdles involved in functioning as well as furthering the progress of the institution. The process involves in resource mobilization in terms of finances, man power, expertise in the targeted direction.

A parallel system of office management exists to assist the principal in the governance in general.

A finance committee advises the Principal in the planning and spending the available finances effectively and constructively while an independent auditing mechanism takes care of procedural snags and avoidable wastage.

The Governing Body on its part supports the college administration with timely decisions and approvals and developmental matters.

Management capacity enhancement training is being imparted to those identified as future leaders for continuing the policies.

- Management Capacity Enhancement training is provided to faculty at different cadres.
- Departmental advisory committees monitor, advise and implement the performance of the decisions at the department level.
- Deans are allotted in all-important administrative areas to assist the Principal in key decision-making process in implementation of college mission and continuous improvement based on the report of IQAC.

- Meetings are conducted under the leadership of the Principal with Deans and HoDs, periodically, to review the progress of ongoing works and discuss the working plan of upcoming activities.

* Interaction with stakeholders
  - Feedback from the stake holders at various levels is analyzed and important inputs are taken into consideration in all management decision making process
  - Involving the alumni, industry and faculty in curriculum design through BoS and Academic Council.
  - All the issues related to faculty and students are discussed in the meetings of the Principal and HoDs, same is recorded in minutes circulated to all the departments
  - The decisions taken and the issues discussed in meetings of the HoDs are informed to the faculty in the department level meetings.
  - Suggestions are invited from the alumni through an exclusive web portal apart from interactive sessions during alumni meets.
  - Enhanced interaction is facilitated through MoUs with industry in collaborative activities like FDP training, skill development for students and internships.
  - Parents' feedback helps in the betterment of student amenities, socio-cultural environment and gender sensitization for maintaining a healthy academic atmosphere.

* Reinforcing culture of excellence
  - Inviting experts from different fields to support in academics and research.
  - Encouraging faculty to up-date and publish in peer-reviewed journals by extending necessary support and incentives.
  - Training faculty and staff to meet the demands of modernization.
  - Leadership training by inviting experts from industry and other agencies as well as deputing to reputed institutions in imparting similar skills.
  - Facilitating students to excel in co- and extra-curricular activities over and above their academics.
  - Fostering best practices in all spheres of activity.

* Identifying needs and championing organizational development (OD)

The administrative structure within the institution and guiding the institution involves all the stakeholders in preparing the action plans and goals for the short term as well as long term development of the institution. The future needs are identified through brainstorming sessions held at various levels.

At department level, the requirement of establishment of new labs and introduction of new programmes are discussed and suggested to the administration.

At college level, weighing the entire pro and cons, the new proposals from all the departments are discussed and finalized. These are presented to the

Boards of studies and Academic Council and finally to the Governing Body for the final approval and implementation.

The governing body on the advice of the Head of the institution takes care of developments required time to time in the organization.

The principal on his turn examines the proposals submitted by the departments in consultation with the finance committee draws out the budget annually before submitting to the governing body for approval.

The HoD at his level, reviews with the faculty on the previous performance of the department and proposes the infrastructural and faculty needs to the principal for the coming academic and financial years.

Thus the decentralized organizational set up has been bestowed with necessary authority along with accountability as a part of leadership training as well as participation in organizational development.

The institution which started basically as an Undergraduate institution with 4 UG programmes to cater to the seekers of quality technical education has gone through several accreditation processes by NBA and NAAC, and presently stands as the most preferred self-financing institution with autonomy in the region as well as in the state.

This has resulted in the demand for admission into both UG and PG programmes which have risen to 7 and 14, respectively.

The institution is now the beneficiary of World Bank funding through TEQIP-II, S.C1.2 for up scaling PG education and research. It is also a recognized institution for research by the affiliating University and DSIR of MoST.

The above progress is result of the interest being shown by the administration and management in providing the necessary infrastructure ownership of faculty and staff in the growth of the institution.

The support and encouragement from all the principal stake holders, prompts the institution to stake its claim to be a deemed to be University.

An application to this effect is under active consideration by the UGC, the materialization of which makes its growth and development easier in the designed direction of vision and mission.

- Regular IQAC audits are conducted to identify the needs of the organizational development.
- Yearly Alumni meets are organized to identify the needs of improvement of the organization
- Broucher is published on the latest developments and achievements of the organization.

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 statutorybodies are filled and conduct of meetings at the stipulated intervals?

Yes.

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

Yes.
The college involves faculty, staff and students in its day-to-day maintenance as well as developmental activities.
The HoD seeks the advice of laboratory in-charges for maintenance and development.
The faculty members advocate other infrastructural facilities, syllabi, schedules, etc.
The students' share of participation is ensured through their presence on various committees and platforms.
The Head of the institution in turn seeks suggestions from HoDs and prepares institutional draft proposals in consultation with Deans.

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 on to the different statutory bodies, viz., Governing Body, Academic Council and BoS to support and guide the administrative and academic mechanisms as and when scheduled. It confers permanent affiliation and makes due recommendations to governmental agencies like state council for higher education, AICTE and UGC.
The University also approves and awards degrees for the students of the college in its UG and PG in approval of its autonomy.

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

- Administrative and academic responsibility with accountability is distributed at various levels of decentralized organizational set up. Relevant decision making and financial powers are vested with the concerned administrators at different levels to avoid delay and simplify the management of localized issues within their domain.
- Leadership training is being imparted to those identified as future leaders for carrying over the vision and mission.
- It is proposed to bring in a system of time bound ratio of administrators at various levels so that there shall be no dearth of administrators/leaders in future.

- Also, some of the identified senior faculty members are sent in turns for managerial / leadership training to premier institutions like IIMs with the support of TEQIP.

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

Yes.

- The college has a good number of online journals and made them available to faculty and students through intranet.
- Quite a few print versions where journals are not published on line are made available in the reference section of the library and back volumes are issued to faculty.
- A digital library caters to the needs of the students.
- The library is also a member of INDEST and is headed by qualified staff in library science.
- Facultyis encouraged to participate in workshops/seminars /conferences at national and international levels to up-grade their knowledge with current topics of interest to industry and research.
- Distinguished senior academicians from within and outside the country and 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
  - By training quality technical graduates and post graduates through concurrent curriculum who can take any responsibility and discharge with ethical standards.
  - By encouraging research and innovation leading to practical solutions to societal and strategic needs of the country.

* Fostering global competencies among students
  - By inviting experts from industry and academia with international exposure to deliver technical talks, conduct training programmes, workshops as well as teach for short periods and continued involvement in their research.
  - By seeking to admit foreign national in the programmes offered by the college.

* Inculcating a value system among students
  - By arranging motivational talks by leading personalities from different walks of life who contributed significantly to the society in promoting standards of life through their services.
  - By making community service mandatory in the curriculum as well as partnering in the activities of prominent NGOs of the region.

- By contributing through NSS activities in brining awareness in matters of societal concern like environment, corruption, voting rights, rural activities, literacy and so on.
- By supporting the formation of voluntary clubs to help the differently-abled and socially oppressed.

* Promoting use of technology

The management has taken a lead in promoting the use of technology from the campus itself.

- The college is presently having a 100 kWp solar power unit contributing the idle capacity to the regional grid thus reducing the hydro-carbon consumption.
- A bio-gas plant is in use by recycling the organic waste in the hostels.
- A research project on the use of fly ash in the manufacture of no-aggregate concrete is under progress in a tie-up with local R&D and industrial organization.
- A hybridization project with wind power and solar power to cater to the entire demand of the college and hostels is under consideration of the MNRE.
- Another project on recycling the sullage to feed the greenery on the campus is proposed to take shape shortly.

* Quest for excellence

- In pursuit of excellence in quality the college went for early accreditation by NBA and NAAC. The NBA, NAAC have been kind enough to commend the efforts of the college on various fronts with higher grades and scores.
- Re-accreditations by NBA for various programmes exposes the quest of the institution for quality sustenance
- The UGC made it the first autonomous college under JNTU in 2008 and also under JNTU-K in 2009.
- The curriculum and regulations designed by the college has been a model for all other autonomous colleges. The college is now having recognized centers for research by JNTU-K in all its core departments while some of the faculty are co-supervisors as well as sole supervisors already and produced a few Ph.Ds.
- The college is also a component of SIRC of the parent society recognized by DSIR of MoST and is having projects worth more than Rs. 4 Cr. from DRDO, ADA, DST etc.,. Further the faculty secured research projects from different organizations like UGC,AICTE, DRDO, DST, DAE etc.
- In addition, the college is developing a research center in Nano science and Technology on its own with projects from DST.
- A Center for innovation is functioning in the college to explore the innovative talents of the students under the directorship of a person with industry experience and a penchant for innovation.
- Further an annual budget of Rs.50.00 lakhs is provided as college support for research apart from several incentives to faculty in terms

of administrative and academic support including sponsoring for Ph.D under QIP.

- Students are encouraged to participate in co-curricular and extra-curricular competitions as well as service oriented activities where in several prizes is obtained keeping the flag of the college high at the University and institutes of higher learning.

6.1.11 Give details of the UGC autonomous review committee's recommendations and its compliance.

The UGC autonomous review committee stated in its first report that autonomous status is to be conferred on GVP College of Engineering.

6.2 Strategy Development and Deployment

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

* Teaching and learning

Short range goals:

- Effective implementation of outcome based education
- Enhanced ICT based learning
- Introduction of smart class rooms
- Increasing the component of self learning through hands on experience
- Enriching self learning process through on-line mode.

Long range goals:

- Choice based credit systems
- Offering vertical and horizontal mobility across the courses
- Total internal assessment

* Research and development

- A special research Centre SIRC of DSIR is established in college campus to enhance the research and development activities
- Recently JNTUK recognized all the departments of our institute as research center for guiding the research scholars
- Faculty are encouraged to apply for sponsored research projects

* Community engagement

The college has been providing various platforms to involve the community and students to exhibit their creativity and hone their talents

The students engaged in a lot of social service activities and they have also formed themselves into service Organizations like

- WeR4 HELP
- ROTARACT GVP
- Gayatri Cultural Club
- NSS

* Human resource planning and development
  - HOD's submit the requirement of faculty before the start of the academic year
  - As per the requirement,the administration recruits faculty through selection committees with experts in respective subjects from both internal and external to the institute.

* Industry interaction

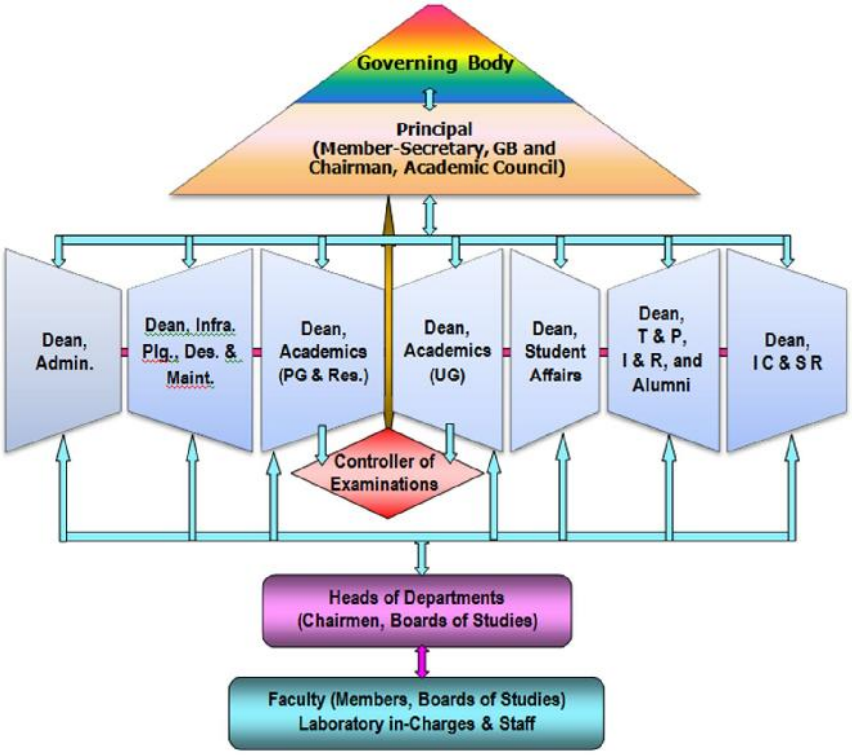
An exclusive industry and institute partnership cell is functioning with a well-qualified person heading the team to plan and execute programmes for career guidance, providing placement services.

The activities of the Cell Include:

- Strengthen Industry-Institute Interaction.
- To visit industries frequently to explore possibilities of students recruitment through campus interviews
- To conduct workshops/ training programmes for students from industry personnel on latest developments in technology.
- To help students to get vocational training in industries during vacation.
- Students are sent for internships as part of MoUs to organizations

* Internationalisation
  - 15% of the total intake is meant for foreign nationals on supernumerary basis.
  - Faculty from abroad are invited as adjunct faculty or for conducting short term courses or delivering guest lecturers as well as helping in research.
  - Periodical organization of international conferences/workshops with a high degree of participation from outside the country.
  - Steps initiated with the support of World Bank funding under TEQIP-II to improve quality towards globalization to meet ABET standards.
  - Research support for publications of international standards.
  - MoUs with foreign universities are under active consideration.

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



Internal Organizational Structure of the College

6.2.3 Specify how many planned proposals were initiated / implemented, during the last four years. Give details.

- Recognition of seven departments as research centersby JNTU-Kfor guiding the research scholars
- Establishment of a research Centre, SIRC of DSIR in college campus to enhance the research and development activities
- Providing various platforms to involve the community and students to exhibit their creativity and hone their talents
- Introduction of 32 hours of mandatory social service activity as part of curriculum leading to identification of social issues and offering technical solutions
- Establishment of Gayatri College Cultural Club-$GC^3$with the soul aim of promoting cultural activity among the student community
- MoUs with leading MNCs like TCS, IBM and Microsoft who offer various certification programmes to students and faculty
- Enriching the component of self-learning through hands on experience and on-line mode
- Introduction and effective implementation of outcome based education (OBE)
- Decentralization of administration for executing actions fast pertaining to academic, administrative, research, placements, so on by creating seven deans who work in tandem with the principal

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

- The quality policy is designed keeping in view the vision and mission statements with the given inputs of student quality, faculty as well as expectations of the stakeholders in order to contribute to the growth of knowledge, national development and answering 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, involvement of administration and faculty, and zeal of the student community as the principal stakeholders in taking forward the knowledge base gained behind the portals of learning to help the community around in particular and to the larger interests of the nation.
- 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 college for approval and guidance in future course of action.

6.2.5 How does the College ensure that grievances / complaints arepromptly attended to and resolved effectively? Is there amechanism to analyse the nature of grievances for promotingbetter stakeholder-relationship?

- Dean students affairs attend all the grievances / complaints received from the students
- Committee, women's grievance cellattends all the grievances / complaints received from the women.

6.2.6 Does the College have a mechanism for analyzing studentfeedback on institutional performance? If yes, what was theinstitutional response?

- The faculty in-charge of the student feedback activity collects the feedback once at the end of the first half of instruction for all the courses and the other at the end of the semester. A consolidated feedback report is generated for all the subjects of a semester
- A comprehensive score on a scale of 0-5 is arrived at for each subject based on the student feedback. In general, if the score is above 4 then the teacher's performance is considered very good, and if the score is less than 2 then the teacher's performance is below normal. HoDs track the record of the faculty.
- Faculty members who get score below 2 identify the weak areas of content delivery and get a chance to rectify. They are given orientation and special inputs for improment. Necessary counseling to the teachers will be done.

- Also the faculty members who get score of 4 or above 4 are appreciated and provided incentives.
- Feedback on institution by alumni and feedback on institutional students by MNCs relating to performance is obtained. The information received evidences satisfactory performance of institution.

6.2.7 In what way the affiliating University helped the College toidentify the developmental needs of the College?

- The University appoints affliation committee time to time to review the performance of the college and provides suggestions for better functioning while granting permanent affliation and its renewals.
- The University nominates its representatives on various statutory bodies, namely, BoS, Academic Council, Governing Body to serve as a link between the University and the college in carrying forward the University policies without affecting the autonomy of the college.

6.2.8 Does the affiliating University have a functional CollegeDevelopment Council (CDC) or Board of College and UniversityDevelopment (BCUD)? If yes, In what way College is benefitted.

Yes, University has functionaries for Academic Planning, Evaluation, and Training& Placement, R&D, Foreign relations which perform the role as defined by CDC above.
The college owes its standing among the community because of the fully extended support from the University in maintaining the academic standards and executing its autonomy satisfactorily.

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 HoD in the day-to-day interactions as well as periodical meetings with in the department obtains a first hand feedback from the teaching and non-teaching.
- The minutes / observations thus recorded are transferred to the administration for necessary improvement or corrective steps.
- The feedback of the alumni is collected through regular alumni meets and involving them in BoS.
- The parents have open access to faculty, HoD and other administrators wherein they do express their feelings which help in serving the students better both academically and administratively.

6.2.10 Does the College encourage autonomy to its academicdepartments and how does it ensure accountability?

Autonomy:

- Freedom to design the curriculum to match the contemporary developments in domain knowledge, subject to the approval of BoS.
- Freedom to design internal components of in-course assessment.
- Freedom to design and offer new topics beyond curriculum and value added programmes.

Accountability is measured through:

- Reconciliation with scheme of valuation in the internal evaluation mechanism
- Student feedback, counseling, review on internal evaluation, result analysis, question paper moderation
- Self-appraisals of faculty
- Review on performance in Academic Council

6.2.11 Does the College conduct performance auditing of its variousdepartments?

Yes.

6.3 Faculty Empowerment Strategies

6.3.1 What efforts are made by the College to enhance the professionaldevelopment of teaching and non-teaching staff?

Professional development of teaching staff is ensured by encouraging them to acquire higher qualifications with administrative and academic flexibilities like

- Deputing under QIP, providing long / short time paid leave for external registrants at higher institutes
- Sponsoring to short-term programmes like seminars / workshops on specialized topics and on pedagogical training
- Encouraging to get exposed to specialized research facilities in IITs/IISc/R&D organizations etc.
- Providing seed fund/basic infrastructure to externally funded schemes for initiating and reducing time lag
- Providing cash awards / financial incentives for publications / award of doctoral degrees
- Modernization of laboratories with research facilities
- Exposing to international expertise through invited lectures, workshops, seminars and conferences

The non-teaching staff are encouragedto upgrade their skills by deputing them to relevant authorized /recognized training centers in their activity domain.

6.3.2 What is the outcome of the review of the Performance AppraisalReports? List the major decisions.

Performance review is done annually on a well discussed and thought over format in an objective way. The review is done at three levels viz., student feedback on performance of the teacher, self analysis by the individual faculty, HoD's assessment and finally at the institutional level.

- The student feedback helps the teacher in knowing the acceptance of the faculty, on content delivery, approachability for clarifications in the subjects concerned, evaluation and his/her sociability as a fellow human being during the counseling.

- The HoD's assessment gives one's attitude as a teacher, colleague and member of the department in accepting and discharging a given responsibility within and outside the sphere of teaching.
- The institutional level assessment helps in understanding one's enthusiasm to play an active and supportive role in administration by accepting traditional responsibilities at the department and institutional levels, with accountability.
- Since the performance review offers scope to understand an individual in wide perspective of multiple role play, it also helps in grading the faculty and rewarding, in that order the achievers and it opens a window into the learning and disseminating abilities of a faculty member in a given subject; the innovative nature and interest in R&D; the leadership qualities for future responsibilities and training needed.

The above analysis resulted in development of the institution and individual faculty in different ways like

- identifying achievers and rewarding
- devising a pro-active mechanism for self-improvement of faculty
- establishing / organizing new laboratory activities
- encouraging innovation
- supporting research, publication and patenting
- interacting and coordinating with outside world in academic activities and consultancy

Apart from the above the scheme of performance based incentives as per sixth pay commission recommendations is implemented with the help of performance appraisals of faculty.

6.3.3 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefitof such schemes in the last four years?

- Transport facility
- Contributory provident fund
- Gratuity
- Medical leave on half-pay
- Academic Leave
- Special Leave
- Maternity leave
- Study leave for qualification up-gradation

6.3.4 What are the measures taken by the College for attracting andretaining eminent faculty?

- Academic flexibility
- Flexible timings and leave facility
- Deputing under QIP, providing long / short time paid leave for external registrants at higher institutes
- Sponsoring to short-term programmes like seminars / workshops on specialized topics and on pedagogical training

- Encouraging to get exposed to specialized research facilities in IITs/IISc/R&D organizations etc.
- Providing cash awards / financial incentives for publications / award of doctoral degrees
- Registration and travel grant for presentations in international conferences on invitation, chairing a session and the like etc.,
- Providing matching grant to the externally funded schemes, if necessary
- Modernization of laboratories with research facilities
- Exposing to international expertise through invited lectures, workshops, seminars and conferences

6.3.5 Has the College conducted a gender audit during the last fouryears? If yes, mention a few salient findings.

Some of the findings of the gender audit conducted at UG level are:

- Girls admitted beyond the reserved quota of 33%, inferring the cultural conscience and personal safety for which the college is known, are instilling the necessary confidence among parents and students alike
- Girls are more studious than boys
- Girls are excelling in extra-curricular activities as well

6.3.6 Does the College conduct any gender sensitization programs for its staff?

The college has a women welfare cell with central coordination by the director at the university level. The cell also conducts activities independently. Otherwise, also there is an atmosphere of bonhomie prevailing on the campus right from inception among its cadres. The very fact, that there are no complaints in the entire history from any quarter in gender discrimination itself is ample evidence to say that gender sensitization programmes are redundant in this institution.

6.3.7 What is the impact of the University's UGC-Academic StaffCollege Programmes in enhancing competencies of the Collegefaculty?

The faculty attended various programs organized by Staff College and other similar institutions of high repute like IITs, ESCI, IISc, and NITTR and so on. They helped the faculty to be intune with the emerging trends in research, curriculum updation leading to OBE and pedagogy modes.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective andefficientuse of financial resources?

- Annual budgetary reviews and allotment to different departments
- Decentralized financial powers and limits
- Finance committee to approve procurements beyond limits of the principal.

- Resource mobilization through sponsored schemes and projects from MHRD and other similar government agencies, and consultancy apart from tuition fees as approved by the State Council for Higher Education
- PG assistance from AICTE and TEQIP-II
- Scholarships and prizes through donations by alumni, parents and well-wishers as well as memorials

6.4.2 Does the College have a mechanism for internal and externalaudit? Give details.

- Internal audit is conducted by preparing and reviewing income-expenditure statements
- External audit is conducted by an independent chartered agency
- Both the audits are conducted annually and reports are submitted to the Governing body along with the budget proposals for review and approval.

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 enclosed at the end of the report (page nos 288-291)

6.4.4 Have the accounts been audited regularly? What are the majoraudit objections and how are they complied with?

Yes, Regular audit of accounts is taken up by an authorized chartered accountant and no objections have been recorded.

6.4.5 Narrate the efforts taken by the College for resource mobilization.

- Encouraging faculty to submit proposals to several government agencies and NGOs for funded projects
- Advising faculty to expand the sphere of consultancy
- Exploring ways of optimizing the utility of existing infrastructure by offering training programmes and courses to industry personnel
- Offering value added programmes

6.4.6 Is there any provision for the College to maintain the ‘corpusfund’? If yes, give details.

Yes, AICTE corpus fund, TEQIP four funds.

6.5 Internal Quality Assurance System

6.5.1 Does the College conduct an academic audit of its departments?If yes, give details.

Yes.
Department level audits are taken up regularly.

The members of the respective Board of Studies also scrutinize the quality of question papers of the external examinations, and the academic council reviews the academic performance.
Apart from these, a team from the University visits the college and conducts fact finding on academic front every year.

6.5.2 Based on the recommendations of academic audit what specificmeasures have been taken by the College to improve teaching,learning and evaluation?

- Internal verification system by senior faculty within each department is introduced to further improve question papers for the mid-term tests.
- Common question papers are prepared for same subject taught by different teachers for different sections.
- Attainment levels of course outcomes are introduced.

6.5.3 Is there a central body within the College to continuously reviewthe teaching learning process? Give details of its structure,methodologies of operations and outcome?

Yes.
The structure of audit committee, appointed by the Principal, consists of senior professors

- Allotting 15 students provide mentoring system to continuously review the teaching learning process at departmental levelenabling each faculty member to get the feedback from the students.
- A student feedback form is prepared as per the guidelines given by IQAC of NAAC. Student feedback covers to review the teaching learning process by various questions related to motivation levels of the students towards the subject, clarity of presentation, preparedness, pace of the content coverage, regularity / punctuality, audibility, clearance of doubts, overall opinion, etc
- Based on the percentage of opinion expressed by the students the following are inferred
    * To what extent the students are motivated to learn the concepts
    * Whether the syllabus coverage is evenly paced
    * Whether the content is given with clarity
    * Whether the classes are taken punctually
    * Whether the teacher is supplementing contents beyond the syllabus
    - Whether the student is satisfied with his performance or not
- The faculty in-charge of the student feedback activity collects the feedback once at the end of the first half of instruction for all the courses and the other at the end of the semester. A consolidated feedback report is generated for all the subjects of a semester
- A comprehensive score on a scale of 0-5 is arrived at for each subject based on the student feedback. In general, if the score is above 4 then the teacher’s performance is considered very good, and

if the score is less than 2 then the teacher's performance is below normal. HoDs track the record of the faculty.

- Faculty members who get score below 2 identify the weak areas of content delivery and get a chance to rectify. They are given orientation and special inputs for improment. Necessary counseling to the teachers will be done.
- Also the faculty members who get score of 4 or above 4 are appreciated and provided incentives.

6.5.4 How has IQAC contributed to institutionalizing qualityassurance strategies and processes?

- IQAC plays major role to achieve the quality by regular internal audits
- Benchmarking and internal quality checks through the Academic audit
- Linking the annual increments with academic performance as per self-appraisal format
- Providing autonomy to faculty for framing the syllabi
- The committee collects the data from all the departments as per the format by the NAAC for review and monitor
- Student feedback as per for the format by the NAAC for review and monitor

6.5.5 Does the IQAC have external members on its committees?If so, mention any significant contribution made by suchmembers.

Yes.
Suggested to have common question paper for same subject taught by different teachers for different sections.

6.5.6 Has the IQAC conducted any study on the incremental academicgrowth 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.
It recommended to take measures such as conducting remedial classes, communication skills development etc.

6.5.7 What policies are in place for the periodic review ofadministrative and academic departments, subject areas,research centres, etc.?

- Service Rules & Policies: As published and communicated by the parent body, GVP to all its constituents and their employees.
- Recruitment & Promotions: As per AICTE norms for faculty and A.P. State Government norms for non-teaching staff.
- Academic Regulations: As prescribed by Board of Studies and approved by Academic Council and Governing Body in tune with the affiliating University.

S. No.	Description	Year of publication	Awareness among the employees/ students
1.	Standing rules of the college	1999	Circulated among faculty and staff
	Revised leave rules	2011	
2.	Guidelines for Consultancy activity	2009	Circulated among faculty and staff
3.	Syllabi and academic regulations	2013-14	One copy to each faculty and student. Also available on website www.gvpce.ac.in

Any additional information regarding Governance, Leadershipand Management, which the institution would like to include

CRITERIA VII: INNOVATION AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the College conduct a Green Audit of its campus?

The institution is very much committed to preserve and protect environment in its entirety. A qualified and experienced horticulturist takes care of developing and maintaining greenery. The green cover encompasses 20% of the campus land area with various shady trees like Delonix, Pongamia, Palm and Neem species alongside the lush green lawns. The college has taken its share of social responsibility in reducing carbon emission through renewable energy methods like solar and hybrid power, biogas generation and optimizing the use of fossil fuels wherever possible.The conventional lighting is steadily replaced with CFL and LED lamps. The campus limits the use of four and two wheelers to keep away corbon pollutants by facilitating students and faculty use the institutional and public transport facility. The college has no scope for emission of hazadorous chemical fumes as the laboratories related take adequate care to neutralize such emissions, if any. Though the institution has not gone for any formal green audit, it can be confidently proclaimed that adequate mechanism exists for preventing any environmental damage.

7.1.2 What are the initiatives taken by the College to make the campus eco-friendly?

* Energy conservation

The college class rooms are made airy and well ventilated so that they hardly need any artificial lighting. The conventional lighting is being phased out by replacing with CFL and LED lamps. Students are well sensitized so that they switch off lights and fans when not required. Air-conditioners are used only at essential places.

* Use of renewable energy

Several Green initiatives like 100kWp on-grid Solar PV system and 80m^3Bio-gas plant based on food waste are now in function. In addition to these, the college sensitizes the community around on conservation of energy, water harvesting, and plantation, organic and e-waste management through its social service army. A senior horticulturist is engaged for developing and maintaining greenery in the campus.

A hybrid solar cum wind energy system proposed by the college for the entire campus including hostels is under active consideration by MNRE.

*Water harvesting

A scheme is under active consideration for recharging wells from rain water and also diverting the sullage for garden plantation.A committee is constituted with a senior professor of civil engineering as its head to work out modalities for implementing the action plan expeditiously.

∗ Check dam construction
Not Applicable

∗ Efforts for Carbon neutrality
The college at its own level has taken up certain preventive measures to check the emission of carbon dioxide. Around 60% of the students and faculty commute to the college using profit free transport facility provided by the institution thereby reducing the carbon footprint by design.Other measures include reducing generator usage, recycling food waste, steam cooking enabling reduction in the usage of conventional fuels, annual mechanical maintenance of all vehicles to upkeep environmental standards and replacing outdated vehicles

∗ Plantation
The greenery of the campus is taken care of by a qualified horticulturist throughout the year. A contingent of 20 gardeners works under his guidance for regular maintenance of all flora and fauna in the institution. Well laid lawns enhance the glow of lush green carpets reared in various corners of the institution. Drip irrigation across the lawns keeps the greenery alive even during tropical times. The trees on either side of the campus roads lend natural beauty to the campus.

∗Hazardous waste management
The only hazardous waste generated on campus is from the chemistry and chemical engineering laboratories in terms of fumes and vapours and these are managed by providing adequate exhaust and diluting as much as possible.

∗ e-waste management
The only e-waste generated now and then is computer peripherals and some obsolete electronic equipment. The working outdated computer peripherals which are replaced are given in charity to some needy institutions that can use them. The other condemnations are auctioned out or simply evacuated to make room for the new ones.

∗Any other
Creating awareness in the campus and surrounding community through NSS and other service organizations on the importance of environment, water conservation and public health add to the list.

7.2 Innovations

7.2.1 Provide details of innovations introduced during the last four years which have created a positive impact on the functioning of the College.

- The institution through its consistent interaction with its stake holders displays sensitivity towards changing educational, social and market demands. Industry representatives, expert academia alumni working for various organizations across the globe who are part of the board of

studies (BoS), and Academic Council have been catalyzing the process of identifying market demands, course content requirements and need for timely updating of the same in tune with global standards annually .The essential suggestions find a place in the curriculum of the institution with the concurrence of the governing body.

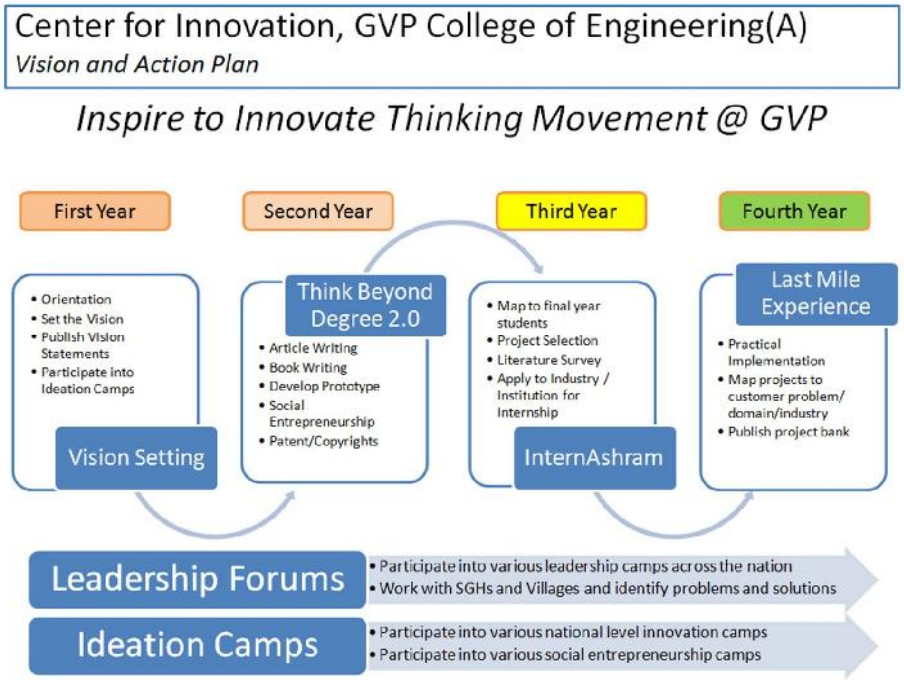
- The institution through these initiatives promotes an ambience of creativity, innovation in all spheres of academic progression thereby lending quality enhancement.
- Further, the institution takes all measures to offer value based education by organizing lectures, talks, workshops inviting persons of eminence in selective areas.
- Mandating social work and cultural activity, each with a duration of 32 hours for students pursuing BTech program during their course of study resulting in inculcating social responsibilities, cultural enhancement and good citizenry among the student community.
- The institution also adopts measures to promote inclusive practices for social justice among all sections of society. The Andhra Pradesh government's flagship program offering tuition fee reimbursement is executed effectively enabling steady increase in beneficiary base from 900-1730 over a period of last 4yrs.
- Similarly, all most all the PG course pursuant (except sponsored category) are covered by GATE assistance or tuition fee reimbursement. Those who could not get either are supported by studentship on the lines of AICTE'S GATE scholarships through a prized program TEQIP-II of SC.1.2 a scheme granted by MHRD-GOI.
- The steady growth in the number of beneficiaries from socially and economically weaker sections in UG and PG program stand in testimony of the addressing issues relating to inclusive growth.
- Remedial instruction to the slow learners, repeat instruction sessions to low-attendance learner groups are some other practices in the similar direction.
- The women's protection cell and women's grievance cell actively addresses gender-related grievances, ifany, under the leadership of a Chairperson of the rank of a Professor.

India declared 2010-2020 as "***Decade of Innovation***" to instill innovative fervor in the country. Our institution therefore resolved to play a critical role in promoting individual innovation as well as research to build a sustainable world.

In tune with this, the GVP College of Engineering (Autonomous) established a *Centre for Innovation* in the year 2011 with the designation of a Director who had experience in Industry with social entrepreneurship background.

This Centre for Innovation conducted multiple surveys, campaigns and trainings before designing innovative programs in the campus. The goal of these surveys is to help student understand innovative traits, societal backdrops and various other influencing factors. The surveys carried at regional level help students to understand area specific issues. Post survey with due-diligence as a follow up.

The Centre for Innovation designed four major programs spread across course years. 1. Vision Setting (for First Year students) 2. Think Beyond Degree (for Second Year students) 3. Intern Ashram (for Third Year students) 4. Last Mile Experience (for Fourth Year students)



1. **Vision Setting (First Year)**: The goal of this program is to provide orientation on the significance of innovation (using live case studies, prototypes and opportunities) and thereby, facilitating students developing their own vision. The activity involved field trips to various ideation camps.As part of this in 2014, nearly 55 students from first year travelled to IIT KGP ideation program and few students shortlisted for internships in some enterprises. Centre for Innovation interviewed aspirants to sense their zeal, commitment before selecting for such camps. As part of the process, students have to write their Vision for next 10 years. This process helps broadly to understand individual aspirations and eco-system. Individuals mentored and the process is customized.

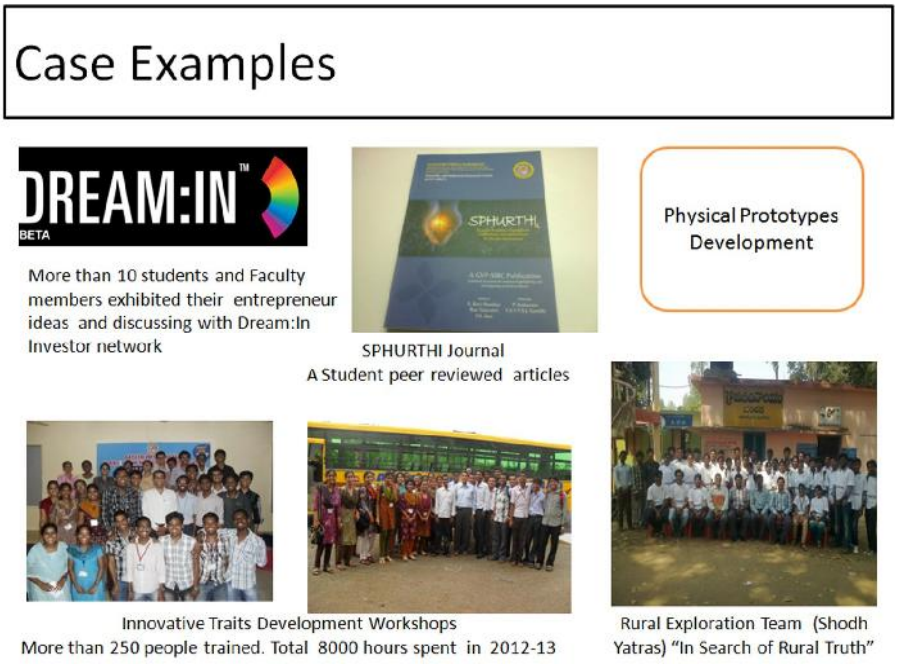
2. **Think Beyond Degree 2.0 (Second Year)**: - Once vision is set, students are encouraged to think beyond degree. Students can opt to work on either 1) article writing or 2) book writing or 3) prototype development or 4) entrepreneurship or 5) Apply for patent or copyright. The goal of this program is make student think free and builds ideas, develop articulation and analytical skills, communicate thought process, empathize social issues. Students responded positively towards this program. During 2012-14 while 170 students contributed articles, 5 others took up book publication, and other 200 students contributed towards prototype development. The Centre is working with an incubation company called "**DREAM: IN**", a Bangalore based student

entrepreneurship promotion organization into which 80 students shared their dreams and looking forward to take entrepreneurship as career. More than 10 students participated in ***Lead Prayana*** Program (Leadership development and ideation program) conducted by ***Deshpande Foundation***. Around 25 students presented their prototypes/ processes at various ideation camps across the nation and 250 students participated in dedicated innovative traits workshop. The team developed a book called "Haritha Vidya", an English text book for 3rd standard students to sow seeds of agri-"culture" among young minds. Another team developed a book called "Siksha, a physics handbook by students". The Idea is to make students write their own handbook using various modes (lots of pictures, questions, dramas, conversations, cartoons, etc). Students developed and published a technical journal, named SPHURTHI- a compendium showcasing societal problems understood, researched to herald innovation. This has 58 peer reviewed articles. Some other students of this project have been executing two magazine projects covering various interdisciplinary subjects. Institute conducted "ShodhYatra", a rural exploration program to understand pressing needs of rural community. More than 50 students participated in this program and published book called "In Search of Rural Truth". Our institution-GVPCE (A) is nominated as nodal center for IIT Chennai RTBI (Rural Technology and Business Incubator). As part of this program, GVPCE work with 4 districts of Seemandhra in the areas of Agriculture and Self Help Groups. It monitors 8 engineering colleges in this endeavor from 4 districts.

3. **Intern Ashram (Third Year)**:-The goal of this project is to encourage the students a steady transition from concept learning to application **(**replicating in-campus internship for all students). This is to be conceived in such a way as to map his/her final year project with the one that got grounded in 3rd year. They do-diligence on the same topic, learn if any skills required, develop pseudo-prototypes and so on. They have clear deliverables.The Project team in 3rd year do detailed Literature review on the *project chosen by their counterpart 4th year students* and deliver Literature Survey document to the concerned guide seeking approval. Literature Survey document needs to detail all references like 1) Internet Search 2) journals 3) Books (4) Interviews with experts and Personal Observations.

4. **Last Mile Experience (Fourth Year):-** A successful journey ends with one last meaningful step. The practices the learners engaged in, the problems they identified and offered possible solutions to the societal problems or others get documented in the "Last Mile Experience" .This book is endeavors to put together key problems and corresponding engineering solutions envisioned by budding engineers with the help of their guides. This is likely to give direction to future students. The entire exercise makes students understand existing problems that enable carving out alternatives, highlight new problems and finding out solutions. The ultimate goal of this project is to "connect the dots"

among departments (identify cross functional and cross domain areas), seniors and juniors, professors and students, management and project teams. Finally, the individual needs to assess what he or she has contributed to the world as an engineer as part of his or her last mile endeavor.



Elaborate on any two best practices as per the annexed format have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

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:

Training Employable and Innovative Engineers with a Holistic Curricular Approach

Objectives:

1. To impart technical education with necessary practical bias and theoretical background to meet the concurrent industry needs with learner centric approach, while infusing a sense of self-learning among the student community for further benifits.
2. To promote innovative research/culture in support of the advancement of knowledge and know-how frontiers, transfer of technology to benefit the society.

3. To familiarize and strengthen the value system andprovide cultural base to the young generation to develop in them a personality with social concern and human values.
4. To create and build up confidence in the amateur minds to face the life boldly even in difficult situations in the interests of self and family.

The Context:
Reviewing and updating the curriculum is deemed an essential ingredient to keep the academic system as vibrant as possible. An opportunity to redesign the curriculum in tune with the vision and mission of the institution is given through accreditation by NAAC with aimpressive grade and confering autonomy by the UGC and the affiliating university.

Features:
1. An independent Academic Council and Board of studies conforming to the norms prescribed by UGC and encouragement by the university to pursue the chosen path.
2. Support extensively offered by industry and alumni with timely constructive suggestions in the design of value based, product oriented quality curriculum.
3. Extensive research and internal discussions carried out with the active and enthusiastic faculty to live up to the expectations of learners, employers and other stake holders along with a deep intention not to demean the standards of the affiliating university for the award of degrees while formulating the curriculum instead of a copy cat methodology.
4. Greater freedom to the faculty in teaching and evaluation within the boundaries of curriculum.
5. Student to leave the portals with a comprehensive knowledge useful to the self and society.

Challenges:
1. Acceptability by primary stakeholders and the society in general, a major challenge to change the system significantly.
2. Resource and time limitations to put the system in place.
3. Creating awareness among faculty, examiners and students about the intricacies in conforming to standards while implementing.
4. Devising mechanisms to ensure confidentiality wherever required without shutting down the neededtransparency.
5. Being a self-financing engineering college under university regulations for more than a decade and half, the transition to stand-alone and deliver quality education by working out of the mould.
6. Standing in competition with the new approach among sister institutions goverened by the affiliative university and those across the state.

The Practice:
The uniqueness in practice is to make the student focused on one's purpose even by force, occasionally, so that one is useful to self and the society by

the time of leaving the portals of the institution in the stipulated time without being outdated due to unwanted diversions unconcered.

The first step in this direction is to make the student realize the importance of attending the academic programs regularly through learner centric knowledge transfer. As a follow up, the curriculum, syllabi and objectives are given to every student at the time of admission. The academic calendar, the lecture schedule and the mechanism of internal evaluation in each subject are informed at the beginning of the semester to encourage the enthusiastic and keep on guard an under performer from neglect as well as to provide necessary transparency in the teaching-learning process. The guidelines making a minimum attendance in every subject and a higher level of promotion requirement are expected to help the students target their direction on academic record. The external paper setting and double valuation expose the student to outside assessment placing on a firm pedestal during placement as well as to pursuit for higher education.

Mandated community service and extra-curricular participation results in a good physical and psychological tuning of one's personality to meet the employment demands with social consciousness. The cultural awareness imbibed brings out the human values and elevates the ethical standards in serving the society consciously.

A system of remedial classes is introduced to make-up for those promoted with backlogs so that they join the main stream sooner than later.

Before putting the system in place a series of faculty interactions took place to empower them in communicating to students class-wise about the functioning of the system and explaining their role in the success of the system as well as their own success. Also students and parents are educated on the day of admission and are advised to go through the hand-book thoroughly to seek any clarification required at a later date.

To take along the student community in overcoming teething problems in implementation student interactions have been organized for feedback half-way after first mid-semester internals, first semester, first year. Similarly, faculty feedback was also taken and student feedback was given to the faculty. The experiences are consolidated before going to the next Board of Studies, Academic Council and Governing Body meets with necessary amendments without disturbing the broad framework. The process continued annually till the system evolved into a stable process.

A review of results at the end of each semester and a comparison of internal and external marks helped in incorporating the necessary corrective measures.

A major revision has been brought into the curriculum based on the latest OBE model given by NBA and AICTE after the first batch under autonomous curriculum passed out the institution with confidence

redeeming the institution's effort in making the system practically successful.

Constraints/Limitations:

1. To cater to the wide ranging input levels of students as a result of the admission policy while maintaining quality.
2. To put forth effort and invest time demanded by the system from faculty for simultaneous implementation of the old and new systems.
3. To impress upon the primary stake holders on the long term benefits of the system.

Evidence of Success:

The targets were initially to put the system in place in the immediate academic year (2009-10) that followed and make it functional effectively during the inception to build confidence within faculty and students. The institution has been successful in meeting the deadlines in spite of short interval available after conferring autonomy. The faculty and students have shown necessary grit and enthusiasm in tuning themselves with it seamlessly making the follow up easier. The belief of success has emanated from the following observations from I year through all the subsequent years.

1. Attendance to classes improved significantly.
2. Student performance has improved even with double valuation resulting in higher scores than average as observed from result analysis.
3. Admissions in the following year show more merit students choose this institution than earlier.
4. An examination of admitted ranks suggested best rankers are preferring this institution to others.
5. Increase in placements and MOUs entered pointed to the acceptance of the product and system by the industry.
6. Repeated recruitments by top notch industries like Microsoft, Yahoo, R& D, Pay pal, TCS, Wipro, Tata Steel etc. strengthen the confidence and enhance quality of the students.
7. Students pursuing voluntary service activities by forming into different clubs on their own and the prizes secured in different extra- curricular and sports activities made the mandate in the curriculum look an exercise in redundancy.

The institution was able to promote research and innovations among its faculty and students by making them part of ongoing research projects.

Problems Encountered and Resources Required:

The positive outcomes are beset with some intriguing problems as well. To cite a few,

a) Infrastructural and trained human resource shortage stand in the way of putting the system in place more effectively.
b) The faculty had difficulty in working simultaneously with both curricular streams, (Conventional University pattern and Autonomy)during transition.

c) Administrative mechanism had to be geared up to accommodate the change.
d) Creating an independent examination cell competent to handle the volume of and confidentiality in work requires addressing carefully.
e) Acceptability of the institution by the expert academia, representatives of the universities and industry as a developing autonomous institution to support in the conduct of examinations independently confirming to norms set by the institution. Further, getting acceptance of these intelligentsia to be on the Board of Studies, Academic Council for designing, modifying, and amending the curriculum for practicability while upholding standards has been an arduous task.
f) Above all, mobilization of financial resources to meet the additional commitments for effective implementation.as UGC is not extending its financial support to self-finance private institutions.

Best Practice for Replication:
The alarming unemployment and underemployment among the youth of today is one prime reason for the cultural dilution of the recent times leading to the spread of social evils like terrorism, extremism and so on the fact that these are the result of misguided faculties and energies of the young minds is anybody guess. Textual information, technical knowledge devoid of wisdom in application may tend to destructive use of the knowledge gained. This is proved by the rise and fall of people like Hitler in the past and Osama Bin Laden in recent times. It is therefore, felt that the young minds, if directed properly will be helpful to the society with constructive their application of intelligence.

With this concept in mind, this institution has mandated community service, sports and extracurricular activities to be part of the curriculum so that the adage, “A healthy mind in a healthy body”, comes live into practice for the constructive channelization of ever-growing intelligence of the present young generation. This may help the young understand the societal problems better while interacting with it and search for effective technological solutions for the upliftment in various aspects andthe programme effectively executes the concept-campus to community.
The experience of this institution in mandating these activities along with curriculum has only proved that the infinite energies need an opportunity to vent the ideas into constructive practice instead of letting them out for destructive negativism.

It is therefore; strongly felt that this practice, if replicated in other institutions, may lead to progressive transformation resulting in healthy growth of the nation in manifold dimensions.

BEST PRACTICE-2:

Decentralization of Administration/Participatory Management

Objective:

1. To localize routine decision making and speed up solutions.
2. To make faculty accept, responsibility and be accountable for the same, thus eliminate leadership gap and establish hierarchy in an evolving organizational mechanism to suit the changing environment.
3. To distribute administrative responsibility and channelize the process for smooth running of the institution and improve the quality of administration.
4. To reduce the administrative burden over the head of the institution, which is growing faster in size and stature simultaneously so that more time, will be available at the highest level of decision making to concentrate on developmental needs commensurate with growth.
5. To train faculty in identifying local needs, problems, and solving them within the limits of demand instead of placing on a broader arena resulting in delayed solutions.
6. To infuse a sense of belonging into and ownership over the successes and failures at all levels of the organizational setup so that even a limited effort makes the goals nearer.
7. To create financial empowerment at different levels of administration with accountability and avoid delays in case of simple contingencies

The context:

This institution started with four departments and an intake of 240 as a small self-financing college in pursuit of delivering quality technical education with a holistic approach as well as training the students in a research and innovative direction for the cause of the society, has grown over the years to its present seven departments with 840 intake and 13 P.G programmes with the encouragement and support of the stake holders and the affiliating university.

Repeated accreditations by NBA and NAAC with a high score along with autonomy conferred have, while resulting in enhancing the reputation and elevating the institution among others enormously increased the pressure to deliver better year after year. The decentralization is chosen as one of the important steps towards this end in both the academic and administrative channels.

The practice:

Different areas of importance have been identified along with faculty with matching competency levels to shoulder the respective responsibilities and high self-accountability in taking forward the mechanism. These are called Deans each heading of the areas of activity. The activities and responsibilities in each of the following designated areas are defined. They are Deans (UG), Dean (PG & Res), Dean (R&D), Dean (Admin), Dean (Training & Placement and Foreign Relations), Dean (Student affairs) and Dean (Infrastructure). They are meant to correlate and coordinate in their

activities whatever necessary and be in touch with the Head of the institution for any policy resolutions. Otherwise, they take care of the routine downstream through their interaction with HODs and faculty helping them in discharging their responsibilities effectively to the satisfaction of administration and the primary stake-holders.

A senior faculty member is put on additional charge of a separate examination section as recommended in the guidelines of the UGC for autonomous colleges, in the capacity of the Controller to take care of all related activities, partly external system. As the system evolved into a full-fledged mechanism and to cater to the growing volume of work another faculty is in the capacity of Additional Controller. The mechanism is computerized with fool proof software till the results are announced. The entire process of drawing regulations, administration, financial management and conduct of examinations is previewed, reviewed and supported by an advisory committee. A system of revaluation is devised in such a way that a worthy candidate does not loose and a gullible aspirant does not take chances.

The Dean (Admin) takes care of the management of finances also (and explores the ways and means of resources available) in consultation with the principal. The funds received from different external sources like research and consultancy are also channelized to the respective destinations through this Dean. Any procurement is made at different levels of authorization and proposals beyond, reach the Head of the institution for approval. The expenditure beyond the limits of the principal is previewed by a three-member committee for which principal is the convener. All procurements are made by negotiation and as per accepted financial and audit guidelines.

The experience from the past few years after decentralization shows that there exists a clear and complete understanding of the roles by the people at various levels of devolution as there is no overstepping or dragging behind. A time to time review and guidance from the statutory and recommendatory bodies will hopefully take its functionality to the level of replication.

Evidence of Success:
Participatory management has lent more responsibility and accountability as well among the principal functionaries like the Deans, controller of examinations and the head of departments. Monitoring curricular activity is strengthened. It resulted in improved attendance by the students and drop in the detentions, besides growth in pass percentage. Decentralized Administration with Principal as prime leader at the apex accelerated accreditation activity by course Heads together with Deans meant for monitoring UG and PG engineering programs.

Research activity augured due to focused attention and guidance by the personnel meant for its promotion like the Dean (PG & Research). Director–Scientific & Industrial Research. More attention is centered

towards enhancing technical competence and conceptual knowledge by facilitating student participation in technical fests, presentation of papers in premier institutions like IITs.

The new wing called **Center for Innovation** initiated innovative programs for our young engineering students enabling them to analyze, communicate and empathize with some of the problems of todays-India. This is intended to transform 'good' students into 'performing' students. The activities rendered by the students are show cased in two magazines called 'Sphurthi' and 'In search of rural truth'. 'Dream in' is part of this program where in prospective entrepreneurs share their views and got trained through project activity.

The Dean of Placements and trainingcould bring in many leading MNCs both from ITES and core sectors; more than 60% of eligible students are getting placed. This cell has been organizing various useful certification programmers that enhance skill input of enthusiastic learners. Another activity worthy of note is leveraging MOUs with leading industries\institutions.

The affiliating university JNTU-K recognized seven UG Departments as Research Centers.

The Principal effectively monitors various existing programs, plans future activity and envisions qualitative academic growth. The leader focuses attention towards outcome based education in 2-3 years to come which is now on the anvil.The latest on the cards of planning is preparing the institution for the deemed to be university status.

Problems Encountered and Resources required:
Participatory management in a growing institution is beneficial to the extent of making everyone feel the ownership. But finding right person to the Job, and all the members of the team working in the wavelength is a difficult attainment.

Similarly owning responsibility, shouldering accountability, reporting updates to the leader and the help at right time are compulsive traits among partners of the programme. Success or outcome of this activity depends on the attitudes and traits of the participants.

Succession of leaders and sustenance of the fruitful outcomes of devolved system may be major challenges to overcome in the long run. Unless the institution identifies right persons and get second line of leaders, trained to carryout the legacy, continued success may be a distant reality.

Replication possibility by other institutions:
The two-year experience of decentralized administration resulted in useful outcomes in this institution. A Dean exclusively for UG programmes lead to intensive monitoring of academic activity-such as time bound tracking of curricular progression, remedial instruction, student attendance, parent-

faculty interaction, adoption of learner-centric pedagogy and so on. This inturn has an important bearing on student discipline along side quality enhancement in teaching-learning practices.With regard to PG programmes the institution attained not only scaling up of diverse courses in PG, but it could attract meritorious participants into the stream.

Surge in research activity among the faculty resulted from effective guidance from Director-Scientific and Industrial Research Center and Dean, PG & Research are worthy of note.

Center for innovation proved a useful wing in this institution as it could ignite young engineers to work in neighbouring societies and identify social issues the society confront with and offering technical solutions wherever feasible. Similarly, the placement and training cell did get the support of many major MNCs who imparted skill based trainings to the students. Microsoft that supported an incubation center in this institution encouraged students to come forward with various applications who interned responded with 75 applications of which 35 found a place in Microsoft's Web store.
The ability of the central leadership lies in identifying the right person for the right job and a second line of leadership for establishing continuance. When once decentralization is grounded effectively, activities abound in any institution.Decentralized administration facilitating participatory management is need of the hour in any developing institution. Hence the need for replication of this kind of activity.

BEST PRACTICE-3:

Class Room to Community

The Context:
The mission of the college is "to produce quality engineering graduates with requisite theoretical and practical knowledge and social awareness to be able to contribute effectively to the progress of the society….". In tune with this, the curriculum envisagesto combine the conventional classroom instruction with the community based learning that offers scope for program participants to enhance their learning alongside their civic participation. The curriculum's focus on learner's engagement with community forges linkage between theory and practice and between knowledge and action towards its logical need of benefitting the society.

Objectives of the practice:

- To make students empathetic towards social problems/issues.
- To inculcate among the students human values like joy of dedicated service, selflessness and scientific temper.
- To induce a sense of responsibility amongst students towards the society they live in.
- To provide the students an exposure to needs and enthuse towards working solutions.

- To develop among learners the skills of integrating theory and practice.

The practice:
The college established a 'Center for Innovation' under the leadership of a 'Director' who had experience in an industry with social entrepreneurship background. In addition to this the institution has an NSS unit.

These conducted multiple surveys, campaigns and trainings while designing novelprogramsand innovatve solutions in. They intended to help student understand societal backdrops and various other influencing factors. The students using live case studies on issues of social concern develop their own vision. This kind of a vision setting helps the students understand broadly their aspirations, zeal and commitment to the chosen cause instead of narrowing or restricting oneself to the unimaginative beginning made at the time of admission.

When once the vision is set, students have an option to work on a) article writing b) modeling and so on. This enable the learner think free and build ideas and work for materializing the same and develop articulation and analytical skills, communicate thought process and empathize social issues. Students responded positively to this kind of program and 170 students contributed articles basing on their observations and surveys. Some of these are brought out in the name of 'Spurthi', a technical compilation showcasing societal problems-which heralded innovative solutions for implementation for better living.

The 'Innovation center' also conducted another program called 'ShodhYatra', a research activity to explore the pressing needs of rural community. Around 50 students who participated brought a volume "**In Search of Rural Truth".**

This college is nominated as nodal center for IITM's Rural Technology and Business Incubator-RTBI and a member of the Rural Engineering Technology. This opened an opportunity to work collaboratively with several leading NGOs in agricultural and other domains recently. The basic aim of the club is to identify agricultural productivity issues and propose ICT solutions. Further, the college being a nodal center the institution has to inspire a few engineering colleges across four districts of Andhra Pradesh to work on similar lines. Around 54 students constituted into ten teams who start working in ten villages withBhagavathula Charitable Trust, a leading National NGO in the areas of their operation which include tribal villages as well.

A batch of 25 students presented their prototypes at various ideation camps.This team embedded their ideas in a book called "**HarithaVidya**", in English that sow seeds of "Agri" culture among young children pursuing primary education.

All this was possible as the administration made community service a mandatory program at UG level to inculcate the sense of social responsibility and to provide a platform for self- learning and group learning mechanisms.Under this practice, the students are encouraged to form into groups among themselves and design their own programs under the supervision of faculty.The result is the emergence of a few student voluntary service organizations like Rotaract,WeR4Help,YES group and so on.In addition to these,the college has a dedicated NSS unit.The students have been participating in several outreach programs in the neighborhood communities and conduct activities likewater purity testing, community sensitization on storm water drainage system, traffic regulations and lane discipline, awareness on domestic power safety and conservation and computer literacy to primary school children.

The college has built in a strong mechanism to track students' involvement in various social activities through the Dean, Student Affairs, a post exclusively created for coordinating all these activities and promote cultural awareness as well. These activities are expected to inculcate a sense of discipline among the student community.

Obstacles/Constraints:
Time and academic constraints, lack of exposure to community work among students, limited response from communities to get engaged, general apathy and usual cynicism towards a new program, absence of financial incentives for public participation and resource constraints are a few obstacles.

Evidence of success:
The impact of the program is immense. Students have developed greater social sensitivity and self-confidence, improved their ability in group dynamic skills and gained knowledge in areas they worked.
This classroom to community focuses on instilling values among youth,cultivate sensitivity towards issues of social concern.The principal objectives of their exercise is to establish a basis for institution's engagement in community development and the same is attained to a larger extent as seen from the result. The student survey teams identified excessive use of pesticides, which might adversely affect the vegetable crop scenario in and around Visakhapatnam. The teams also identified certain eco imbalances resulting out of sand mining resulting in changing the course of the rivulets.More focus on commercial brick industry moving away from conventional agriculture resulted in the butterfly and bee population thinning steadily reflecting reduced pollination activity. These few instances amply evidence the students' success in their community engagement. The needs of the institution- community matrix that motivate the activity of classroom to community are dynamic and complex. However, all challenges considered, various problems encountered, a meaningful engagement between the two result in benefittingboth alike.

Replication possibility by other institutions:
Though students' involvement in community development activity is not new, institutionalized exercise is not common.It is now gaining significance among the institutions of repute in our country.To make the young graduates socially responsible and make their learning, socially relevant, the student community engagement need to be facilitated by institutes that offer higher learning.

Establishment of a center for Innovation, mandatory social work proved useful in our institution as they could ignite upcoming engineers to work in neighborhood societies and identify issues that confront the society and come out with technical solutions wherever possible.

At a time when all MNCs and corporates are earmarking a part of their revenue for social service and community development, there is an imperative need on the part of higher educational institutions to give a firm grounding to this classroom to community at under graduate level itself.

One of the dimensions of higher education is the community engagement as part of the institutional responsibility to society. If we leave this to NSS-led wing alone, it turns out just episodic. So to make student community engagement more pragmatic and result oriented several measures are to be evolved and contemplated. This institution's success in this direction will stand out as an example and could lead to better society.

E.1. CHEMICAL ENGINEERING DEPARTMENT

1. Name of the Department & its year of establishment
   Chemical Engineering, 1996

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
   UG: Chemical Engineering
   PG: Chemical Engineering

3. Interdisciplinary courses and departments involved

Title(s) of the course(s)	Other department involved
Design and Analysis of Experiments	ME, Chemical
Project Management	ME,Chemical, Management Studies
Nano Technology	Chemical, ME, physics

4. Annual/ semester/choice based credit system :
   Semester 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	Filled/Existing	Sanctioned
Professor	3	3
Associate Professor	5	4
Asst. Professor	7	12

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,) \

S.NO	Name	Qualification	Designation	Specialization	No.of years of Experience	No. of Ph.D students guided for the last 4 years
1	Dr. G. MURALIDHAR	Ph.D	Professor	Hydrotreating, Hydro Desulphurization, Catalyst Development	36	—
2	Dr. ADITYA MUKHERJEE	Ph.D.	Professor	Two Phase flow, Interfacial Phenomena	26	01(Regd at IMU)
3	Dr. B.SRINIVAS	**Ph.D**	Professor	Mathematical Modelling, Simulation	22	—
	Dr. M.S.N.	Ph.D.	Associate	Mass Transfer,	22	—

4	MURTY		Professor	Three Phase Fluidization		
5	Dr. B. SANKARA RAO	**Ph.D**	Associate Professor	Process Modelling, Simulation & Optimization, Chemical Reaction Engg., FCCUs, PSAs, Steam Reformers	08	—
6	Mr. V. KASI VISWANATHAM	**M.Tech.**	Associate Professor	Environmental and Hazard Management	31	—
7	Mr. J.V.S.MURTY	M.Tech	Associate Professor	Petroleum Refinery Engg	34	—
8	Mr. B.SREENIVASULU	**M.Tech.**	Associate Professor	Fuel cell, Process Control, Process Modelling and Simulation	11	—
9	Dr. C.V. NAGESWARA RAO	Ph.D.	Sr. Assistant Professor	Process Control	13	—
10	Dr. K.SIVA KUMAR	**Ph.D**	Assistant Professor	Membrane Separation, Modelling & Simulation	3	—
11	Ms. S. PADMA	M.Tech	Assistant Professor	Biochemical Engineering	4	—
12	Mrs. P.J. SUBBA LAKSHMI	M.Tech	Assistant Professor	Computer Aided Process and Equipment Design	4	—
13	Mr. T. AJEETH PRABHU	M.Tech	Assistant Professor	Computer Aided Process and Equipment Design	3	—
14	Mr. B.L.N.RAJU	B.Tech	Assistant Professor	Environmental Studies	32	—
15	Mr. U. HARI PRASAD	M.Tech	Assistant Professor	Separation and storage of gases	2	—

8. Percentage of classes taken by temporary faculty (if exist) – Programme-wise information: no temporary faculty

9. Programme-wise Student-to-Teacher Ratio
   UG: 1: 15 (180/12=15)
   PG: 1: 12 (36/3=12)

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	Filled
Number of academic support staff (technical)	2	2
Number of administrative staff	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.
a) National: 3
b) International: Nil
c) Total grants for ongoing projects (a+b) = 49.55 lakhs.
(Details of the projects available in Item no. 3.2.5 of Criterion-III)

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
a) National: 5(Rs 71.75 lakhs)
b) International: Nil
c) Total grants for projects (a+b) =71.75 lakhs.
(Details of the projects available in Item no. 3.2.7 of Criterion-III)

13. Research facility / centre with
- state recognition : recognised research centre of JNTU-K (JNTUK Research committee visited, waiting for result)
- national recognition: college in component of SIRC
- international recognition:NIL

14. Publications:
* number of papers published in peer reviewed journals (national /international) International: 33, National: 12
* Chapter(s) in Books

Kapil Soni, Thallada Bhaskar, Manoj Kumar,Kamaraju Seetha Rama Rao, and Gudimella Murali Dhar , "Hydrodesulfurization Studies on SBA-16 Supported Molybdenum Hydrotreating Catalysts", Novel Materials for Catalysis and Fuels Processing, ACS SYMPOSIUM SERIES 1132, American Chemical Society: Washington, DC, 2013.

* Citation Index – range / average Average=1.597
* Impact factor – range / average Average=2.228

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	6	2	9	5	11
2.	National Journal	2	3	5	1	1
3.	International Conference	7	1	4	6	10
4.	National Conference	0	4	0	6	0
	Total Papers	15	10	18	18	22

15. Details of patents and income generated

Name of the faculty	Title of the Patent	Approval Number	Year of approval	Area of specialization
Dr. G. MURALIDHAR	Modified Zeolite Catalyst Useful for The Conversion of Paraffins, Olefins and Aromatics in a Mixed Feed Stock into Isoparaffins and a Process Thereof.	US 8349754 B2 (Jan 8, 2013)	2013	catalyst development

- No income

16. Areas of consultancy and income generated: Nil

17. Faculty recharging strategies
    - Workshops/seminars/conferences attended by faculty during the Academic year 2009-2010: **7** Nos
    - Workshops/seminars/conferences attended by faculty during the Academic year 2010-2011: **5** Nos
    - Workshops/seminars/conferences attended by faculty during the Academic year 2011-2012: **4**Nos
    - Workshops/seminars/conferences attended by faculty during the Academic year 2012-2013: **11**Nos

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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	B.Tech. (CHE.)	100%(64/64)	--
	M.Tech. (CHE)	50%(1/2)	50%(1/2)
2010-11	B.Tech. (CHE.)	100%(63/63)	--
	M.Tech. (CHE)	40%(4/10)	20%(2/10)
2011-12	B.Tech. (CHE.)	100%(64/64)	--
	M.Tech. (CHE)	17%(1/6)	67%(4/6)
2012-13	B.Tech. (CHE.)	100%(54/54)	--
	M.Tech. (CHE)	58%(7/12)	42%(5/12)

19. Awards / recognitions received at the national and international level by

- Faculty:

Dr G Muralidhar's credentials

- Member of HPCL R and D board.
- Delivered a plenary lecture in 2nd Indo-French symposium on catalysis for sustainable and Environmental chemistry at Lille, France , 11-13 July 2012.
- h-index is 42.
- Chaired a session in 20th National symposium on Catalysis IIT Madras, December 2010.
- Delivered in invited lecture in "Catalysis by Nano Materials" symposium at Loyola College, Madras December 2010.
- Delivered an invited lecture in National seminar on "Current Trends in Chemistry", Cochin University of Science and Technology, Cochin, 6th March 2011.

- Reviewer for "Journal of Catalysis", "Catalysis Today", "Indian Journal of Chemical Technology", "Microporous Mesoporous Materials", "Molecular Catalysis", "Topics in Catalysis, Studies in Surface and Catalysis", "Bull. Catal. Soc. India", "Catalysis Letters", "Catalysis Communications", "Chemistry of Materials"(ACS), "Energy & Fuels", "Fuel Processing Technology", "Industrial Engineering Chemistry Research", "International Journal of Oil, Gas and Coal Technology", "Magnetism and Magnetic Materials".
- Guest Editor Special Issue of the "Catalysis Today" an Elsevier Journal(2009)
- Editor of "Studies in Surface Science and Catalysis", Vol. 113, Elsevier.
- **Dr B. Srinivas** is a reviewer for Heat and Mass Transfer (Springer Journal) and Chemical Engineering Science (Elsevier Journal) and Caledonian Journal of Caledonia University UK.
- **Dr C V Nageswara Rao** and **Dr Srinivasulu** are reviewers for International Journal of Applied Science and Engineering.
- **Dr. K. Siva Kumar** is a reviewer for Iranian Journal of Chemistry and chemical Engineering

- Doctoral / post doctoral fellows

  Faculty members recognized as research supervisors, registered with JNTUK/AU

S.No.	Name & Designation
1	Dr. Aditya Mukherjee, Professor
2	Dr. B. Srinivas, Professor
3	Dr. M.S.N. Murthy*, Associate Professor
4	Dr. K. Siva Kumar, Assistant Professor

*Andhra University Recognized Research Co- Supervisor

- Students
  - Two students won university gold medals for being toppers during the academic years 2010-11 and 2008-09.
  - Three students got summer fellowships IITM, NCl-pune, IISCduring years ofMay-June-2012 and May-June 2011.
  - Best project award by TCS during the year 2012.

20. Seminars/ Conferences/Workshops organized and the source of funding (national /international) with details of outstanding participants, if any.

2009-10: 1
2010-11: 2
2011-12: 2 :Prof. S. Pushpavanam, IITM, Prof. S. Sirshendu De, IITKGP(outstanding participants)
2012-13: 3Prof. Tanmay Basak , IITM, Prof. N. Venkata Reddy, IITH(outstanding participants)

21. Student profile course-wise:

UG

Name of the Course	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
2009-13	NA	35	14	88% (31)	78% (11)
2008-12	NA	43	19	56% (24)	89%(17)
2007-11	NA	35	22	24 (68%)	95% (21)
2006-10	NA	32	20	66% (21)	85%(17)

PG-1:

Name of the Course	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
2011-13	NA	6	6	67% (4)	83% (5)
2010-12	NA	5	1	80% (4)	100% (1)
2009-11	NA	9	1	56% (5)	100% (1)
2008-10	NA	0	2	NA	100% (2)

22. Diversity of Students

Name of the Course	**% of students from the college**	**% of students from the state**	**% of students from the states**	**% of students from the countries**
UG (2009-13)	NIL	96% (47)	4% (2/49)	NIL
UG (2008-12)	NIL	100% (62)	NIL	NIL
UG (2007-11)	NIL	100% (57)	NIL	NIL
UG (2006-10)	NIL	100% (52)	NIL	NIL
PG(2008-10)	50%(1)	50%(1)	NIL	NIL
PG(2009-11)	NIL	100% (10)	NIL	NIL
PG(2010-12)	NIL	100% (6)	NIL	NIL
PG(2011-13)	NIL	100% (12)	NIL	NIL

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
(Details are available in Item no. 5.2.4 of Criterion-V)

24. Student progression
(Details are available in Item no. 5.2.4 of Criterion-V)

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	NIL
from other universities within the State	10(67%)
from other universities from other State	5(33%)

26. Number of faculty who were awarded Ph.D, D.Sc.and D.Litt. during the assessment period.
Number of Ph.D awardes during the assessment period: 4

27. Present details about infrastructural facilities

a) Library :

Number of Titles:	300 in the Department
Number of Volumes:	400 in the Department

b) Internet facilities for staff and students: 100 Mbps LAN network, 40 Mbps wifi

c) Total number of class rooms: Three

d) Class rooms with ICT facility: Two

e) Students' laboratories:

S.No.	Name of the Laboratory	Area of the Laboratory, ft^2
1	Chemical Reaction Engineering Laboratory	1076
2	Mass Transfer Laboratory	1130
3	Mechanical Unit Operations Laboratory	861
4	Physical Chemistry Laboratory	2490
5	Process Dynamics and Control Laboratory	1022
6	Simulation Laboratory	807

f) Research laboratories: Advanced Chemical Reaction Engineering Laboratory

28. Number of students of the department getting financial assistance from College.

Program	2011	2012	2013
M.Tech	6*	1*	1*

*From TEQIP-II

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
NA

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, the HOD takes opinion of the faculty regarding syllabus, curriculum and course structure before BOS.

b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
Yes, the student feedback is taken in every course in each semester. HOD dicusses with the respective teacher and regarding delivery, interaction and assessment of the students in the light of feedback. Their constructive comments from the students received in the department meeting and considered for adaptation wherever possible.

c. Alumni and employers on the programmes and what is the response of the department to the same?
Yes, their comments are considered and interaction with industry increased UG and PG projects. Latest software applicable in chemical engineering like COMSOL, PRO-II and MATLAB are regularly

updated and short term workshops are periodically arranged for the benefits of faculty industry and students.

For discussion during BoS meetings as far as the curriculum is concered.

31. List the distinguished alumni of the department (maximum 10)

Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position
Dr. SRIRAM RAJU	1999-03	UG	GE , New York
KIRAN SADANANDA GOPAN	1999-03	UG	Chemical Engineer, Nuclear Fuel Complex, Hyderabad
RAJESH ADIBATLA	2000-04	UG	USA
A.CHANDRIKA	2001-05	UG	Municipal Commissioner, Bobbili
S.SURYA MOULI	2001-05	UG	Manager, HPCL, Visakhapatnam
J V S N MURTHY	2005-09	UG	Ph.D, State University of NY, Buffallo
AMMU PRHASHANNA	2004-08	UG	Ph.D, NU, Singapore
SUNKARA SWATHI	2006-10	UG	Ph.D, U of Lousivelle, USA
SUDARSHAN KONIDENA	2006-10	UG	Ph.D, IIT Guwahati
CHEMUDUPATI SANJIV	2008-12	UG	Simulation Engineeer, ANDRITZ Technilogies Pvt. Ltd

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
Student enrichment programmes conducted: 24

33. List the teaching methods adopted by the faculty for different programmes.
- Lecture / Discussion
- Demonstrative mode
- Power point presentation
- Access to online lectures

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

The Department ensures that the program objectives are met and learning outcomes are monitored based on the following Class room tests / open book tests etc. (will be teacher specific and announced to the class at the beginning of the semester)

- Mid semester exams
- Take home assignments
- Since these internal evaluations constitute as much as 40 percent of marks those are taken seriously by the students and prepare them towards the semester end exams which account for the remaining 60 percent

- Remedial classes are planned wherever necessary to help the slow learners.
- Laboratory performance is evaluated on an experiment by experiment basis and students are encouraged to complete during their spare time the experiments that they might have missed due to valid reasons.
- In addition, two internal laboratory exams are held prior to the semester end practical exam.
- Comprehensive Viva-Voce for student performance at program level.
- Mini industrial project is jointly evaluated by industry experts and institutional level.

35. Highlight the participation of students and faculty in extension activities.

Extension activity	Duration of the program	No.of participants	Outcomes
first special camp at Anandapuram village	25-01-2012 to 31-01-2012	46	Addressing of challenges such as awareness on ethical voting for democratic country, sanitation, HIV/AIDS, infected diseases, first aid measures, yoga for leading a healthy life, literacy. Also initiative in creating interest in studies among school children. Getting one aware of the government policies, cleanliness and how to prevent accidents
Special camp at Chandaka Village, Anandapuram Mandal, Visakhapatnam District.	22-02-2013 to 28-02-2013.	52	Exploring and awareness on effective farming methods Awareness of rural health care with special focus on CANCER Women health awareness by doctors of Gayatri Health care and medical technology Literacy drive in village

36. Give details of "beyond syllabus scholarly activities" of the department.
From the year 2009 to present.
Facilitating students participation in the ongoing faculty research projects

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

Details of NBA Accreditation of the Department:

- Awarded Accreditation status for 3 Years w.e.f. 12.09.2003, (Proc. File, No.NBA/ACCR-229/2003, dated:10.10.2003)
- Awarded Accreditation status for 5 Years w.e.f. 19.07.2008, (Proc. File, No. NBA/ACCR-229(II)/2003, dated: 19.07.2008)

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

- Well qualified and adequate faculty, Eight hold doctoral degrees out of fifteen and one is enrolled for Ph.D. programme.
- Course files are very well prepared, updated, and maintained.
- The department is working on two R&D projects sponsored by the AICTE and DST.
- Research output of the faculty is commendable.
- The department has one patent to the credit.

Weaknesses:

- Laboratory facilities need to be augmented further for better research .
- Testing equipment should be added.
- Specific R&D budgetary allocation is necessary.
- Linkage with Industry needs to be strengthened

Opportunities:

- Training of industry personal
- Collaboration with industries on R & D
- Industrial consultancy
- R & D projects from DST and other agencies as well as industry collaboration
- Part-Time degree for diploma holders for better intraction with industry

Challenges:

- Attract more no. of industries to absorb under graduate students
- Finding internship for UG and PG students in industry
- Increase the quantum of consultancy
- Limited chemical industry presence in the area
- Increase the no. of publications

39. Future plans of the department.

- Continue working on simulation and modeling in Chemical Engineering.
- Continue collaborating with EcoLogic industry in their process optimization.
- Continue to attract new consultancy from industries
- Publish more papers in reputed journals and get patents
- Encourage mere junior faculty to register for PhD

E.2. CIVIL ENGINEERING DEPARTMENT

1. Name of the Department & its year of establishment:
   Civil Engineering and established in the year 1999

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
   UG: B.Tech in Civil Engineering
   PG: 1. M.Tech. Infrastructure Engineering and Management
   2. M.Tech. Structural Engineering

3. Interdisciplinary courses and departments involved

Title(s) of the course(s)	**Other department involved**
Design Concept for Engineers	EEE,ECE, ME, Civil
E-commerce	CSE, Civil
Green Buildings and Infrastructure	Civil, ME
Software project management	CSE, Civil
Disaster Management	Civil, ME, EEE
Renewable sources of engineering	ME, Civil
Entrepreneurship and small business management	Management studies, Civil
Infrastructure planning and Finance management (PG)	Management studies, Civil
Financial Management	Management studies, Civil, ME
Renewable sources of engineering	ME, Civil

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
Fluid Mechanics and Hydraulic Machines	Electrical and Electronics Engineering
Fluid Mechanics and Hydraulic Machines Lab	Electrical and Electronics Engineering
Green buildings and infrastructure	Chemical, EEE, Civil
Disaster management	Civil , Chemical, EEE, ECE, CSE

6. Number of teaching posts sanctioned and filled

	Sanctioned	Filled
Professors	7	7
Associate Professors	5	5
Asst. Professors	13	13

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

S.No	Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D students guided for the last 4 years
1	Dr. Ing Prof. P.S.Rao	Ph.D	Senior Professor	Structural Engineering	50	01
2.	Prof.A.Kameswara Rao	M.E	Senior Professor	Environmental Engineering	48	--
3.	Prof. B.V.Sarma	M.E	Senior Professor	Structural Engineering	47	--
4.	Dr. N.S.V.V.S.J. Gandhi	Ph.D	Senior Professor	Geotechnical Engineering	41	--
5	Dr. V.Viswanadham	Ph.D	Senior Professor	Environmental Engineering	38	--
6	Dr. K. Viswanath	Ph.D	Senior Professor	Geology	37	--
7	Dr. Rao Tatavarthi	Ph.D	Professor	Wave hydrodynamics	28	--
8	Prof. P.Veerabhadra Rao	M.E	Professor	Structural Engineering	24	--
9	Dr. Srinivas Manchikanti	Ph.D	Professor & HOD	Geotechnical Engineering	21	--
10	Sri. M.Kishore Kumar	M.Tech	Associate Professor	Structural Engineering	23	--
11	Dr.G.Paparao	Ph.D	Associate Professor	Structural Engineering	16	--
12	Sri.K.Sridhar	M.E	Associate Professor	Soil Mechanics & Foundation Engineering	25	--
13	Dr.L.Venkat	Ph.D	Associate Professor	Structural Engineering	08	--
14	Sri.K.Padmanabham	M.E	Associate Professor	Structural Engineering	24	--
15	Sri.V.M.Naidu	M.Tech	Assistant Professor	Transportation Engineering	13	--
16	Sri.Ch.Suryanarayana	M.Tech	Assistant Professor	Water resource Engineering	09	--
17	Smt.N.Ramakumari	M.Tech	Assistant Professor	Remote Sensing & GIS	10	--
18	Sri.N.Ramakrishna	M.Tech	Assistant Professor	Structural Engineering	20	--

19	Smt.J.Sumasree	M.E	Assistant Professor	Structural Engineering	02	--
20	Ms.D.Preethi	M.Tech	Assistant Professor	Soil Mechanics & Foundation Engineering	02	--
21	Sri B.Kesavarao	M.Tech	Assistant Professor	Structural Engineering	01	--
22	Sri.K.Anil Pradeep	M.E	Assistant Professor	Structural Engineering	01	--
23	Ms.G.Madhuri	M.E	Assistant Professor	Structural Engineering	02	--
24	Sri.R.Ch.Rahul	M.E	Assistant Professor	Construction Technology &Management	06	--
25	Sri.V.Ramesh	M.E	Assistant Professor	Environmental Engineering	01	--
26	Sri.D.Vinay Ananand	M.E	Assistant Professor	Offshore structures	01	--
27	Ms.B.Sowmya	M.E	Assistant Professor	Structural Engineering	01	--

8. Percentage of classes taken by temporary faculty – programme-wise information

S.No	Name of the Programme	%	No. of subjects taken by temporary faculty /Total No.of subjects)	Year	Subject and Semester
1.	B.Tech(Civil) (Prof.R. Krishnam Raju)	3.2	2/63	2013-2014	Reinforced Concrete Bridges (VIII), RCS – II VII
2.	M.Tech(Infrastructure Engineering & Management) (Sri. C. Chandran)	5.9	1/17	2013-2014	Contracts and arbitration (I) and Ports and Harbours (II)

9. Programme-wise Student Teacher Ratio

   As on date

   UG: 1:19

   PG: 1:6

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

		Sanctioned	Filled
1	Number of academic support staff (technical)	3	3
2	Number of administrative staff	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.

a) National

Name of the faculty	Title of the project	Funding agency	Amount (in Lakhs.)	Sanctioned date, Duration(yrs)	status
Rao Tatavarti	Feasibility of detection of underwater hydrodynamic turbulence using optoelectronic techniques	NSTL, DRDO	10	25.8.11 12 months	Completed
Rao Tatavarti U.N. Das	A study of the role of neutrophic factors, polyunsaturated fatty acids and their metabolites in the prevention of radiation and chemical induced damage to DNA in vitro and in vivo and cancer	DRDO, Ministry of Defence, Govt. of India	198,44,000	22.12.11 36 months	Completed
Rao Tatavarti A.C. Narayana, U of H	Coupling Sediment Transport Estimates from Numerical Modeling with Field Observations in Gulf of Mannar	Naval Research Board (NRB), Ministry of Defence, Govt. of India	49,39,200	26.4.12 24 months	Ongoing
Rao Tatavarti P. Arulmozhivarman, VIT	Design and Development of Optical Air Data System For Advanced Combat Medium Range Aircraft	Aeronautical Development Agency (ADA), Ministry of Defence, Govt. of India	103,92,320	20.07.12 18 months)	Completed
S. Ramakrishna Rao Tatavarti	Optimal Design of Marine Engine foundation for Vibration reduction	NSTL, DRDO, Ministry of Defence, Govt. of India	6,72,000	16.08.12 8 months	Completed
Rao Tatavarti	Design of Tank Facility to Study Underwater Turbulence	NSTL, DRDO, Ministry of Defense	3,25,000	20.11.12 3 months	Completed

b) International: Nil

c) Total grants for ongoing projects (a+b) = Rs. 322.72 Lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
    a) National: Nil
    b) International: Nil
    c) Total grants for projects (a+b) = Nil

13. Research facility / centre with
    - State recognition
      Department of Civil Engineering Recognized as Research Centre for the academic years 2014-15 & 2015-16 by JNT University, Kakinada, dated 04-02-2014.
    - National recognition
      Department of Civil Engineering is identified as state resource institute by ministry of home affairs New Delhi under NPCBEERM (National Program for Capacity Building of Engineers in Earthquake Risk Management)
    - International recognition:Nil

14. Publications:
    - number of papers published in peer reviewed journals (national / international) :

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	1	1	6	4	13
2.	National Journal	1	0	2	1	0
3.	International Conference	0	2	3	2	5
4.	National Conference	0	2	3	1	1
	Total Papers	2	5	14	8	19

    - Monographs
    - Chapter(s) in Books
    - Editing Books
    - Books with ISBN numbers with details of publishers
      - Prof. A. Kameswara Rao, Professor, “Civil Engineering Objective type”, Laxmi Publications Priave Limited, 2013.
      - Prof. A. Kameswara Rao, Professor, “Building Planning and Drawing” 7th Revised and Enlarged Edition, “Charotar Publishing House Private Limited, 2014.
    - number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
    - Citation Index – range / average
    - SNIP
    - SJR
    - Impact factor – range / average
    - h-index

15. Details of patents and income generated

Name of the faculty	Title of the Patent	Number	year	Area of specialization
TatavartiV.S.N.Rao &K.Ganesan	Wireless communicationsystemforautomaticoperationofroutinggatesatcrossroadjunctionsandforprovidingadvanced alertsofdisasters'	IPONo.3597/CHE/2010	November2010	Wave dynamics
TatavartiV.S.N. Rao &M.RajasekharaBabu,P. VenkataKrishna,B.RamakrishnaRao	Methodandapparatusforrecognitionofhandgesturesofdifferentlyabledpersons'	IPONo.2567/CHE/2010	September2010	Wave dynamics

16. Areas of consultancy and income generated

S.No.	Name of the faculty	Title of the work	Amount (in Lakhs)	Duration of the work	status
1	Prof.P.Veerabhadra Rao	Design of Sports & Office Complex at Visakhapatnam	4.00	1 year	Completed
2	Prof.P.Veerabhadra Rao	Water Supply Design for IT-SEZ	2.00	6 months	Completed
3	Prof.P.Veerabhadra Rao and Dr.G.Paparao	Design of Training Centre, GVMC	1.00	6 months	Completed
4	Prof.P.Veerabhadra Rao and Dr.G.Paparao	Design and supervision of Indoor Stadium at Gajuwaka, Visakhapatnam.	3.85	1 year	Completed
5	Prof.P.Veerabhadra Rao and Dr.G.Paparao	Design and supervision of Rajiv Smruthi Bhavan at Visakhapatnam	3.00	1 year	Completed
6	Prof.P.Veerabhadra Rao and Dr.G.Paparao	Underground Cavern at Visakhapatnam	10.00	3 years	Completed
7	Dr.G.Paparao and M.Anil babu	Design and Drawings for Residential buildings of Chattisgarh housing Board, Chattisgarh	1.25	3 months	Completed
8	Prof.P.Veerabhadra Rao	Structural Design of 400 MLD pumping station at Vadlapudi at Gajuwaka, Visakhapatnam	0.5	2 months	Completed

	GVP-SIRC:				
9	Prof. P.S.Rao	Design of Oil Cargo Berth	14.00		Completed
10	Dr.Rao Tatavarthy	Deperming Facility, Vskp	7.53		Completed
11	Prof. P.S.Rao	General Cargo Berth, VPT	1.30		Completed
12	Prof. P.S.Rao	Collapse of Buildings, Marripalem	2.00		Completed
13	Dr.Rao Tatavarthy	Underwater Turbulence	3.25		Completed
14	Dr.Rao Tatavarthy	Ground Vibration Monitoring, Dighi, Maharashtra	1.12		Completed
15	Prof.P.S.Rao and Prof.Veerabhadra Rao	Conveyor Gallery at Jajpur Plant	2.00		Completed
16	Dr.Rao Tatavarthy	System Design	6.00		Ongoing

17. Faculty recharging strategies

Workshops / seminars / conferences attended by faculty during the academic year

2013- 2014: 6
2012- 2013: 4
2011- 2012: 4
2010- 2011: 4

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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	B.Tech. (Civil.)	60/60 (100%)	--
	M.Tech. (Infrastructure Engineering and Management)	--	--
2010-11	B.Tech. (Civil.)	60/60 (100%)	--
	M.Tech. (Infrastructure Engineering and Management)	02/02 (100%)	--
2011-12	B.Tech. (Civil.)	60/60 (100%)	--
	M.Tech. (Infrastructure Engineering and Management)	03/04 (75%)	--
2012-13	B.Tech. (Civil.)	119/120 (99%)	1/120 (1%)

19. Awards / recognitions received at the national and international level by

- Faculty
  Dr. Manchikanti Srinivas, (Professor & HOD) , Dr. V.S.N. Rao Tatavarti, (Director -SIRC & Sr. Professor) and Dr.L.Venkat (Associate Professor) are eligible as Supervisor / Co-Supervisor, along with Co-Supervisor/Supervisor from any State/ Central University/, NIT, IITs, or any Govt R&D organizations.
- Doctoral / post doctoral fellows
  In 2009-10 Dr. Srinivas Manchikanti, and 2012-13 Dr. G. Papa Rao was awarded with Ph. D.
- Students
  Ms.Shilpa Kuruva of 2009 batch and Silla Harish of 2011 batch have won the University Gold Medals by JNTU – H and K respectively.

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

2013-2014: 5
2012-2013: 3
2011-2012: 5
2010-2011: 4
2009-2010: 7

21. Student profile course-wise:

UG (B.Tech Civil)

Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2009-13	NA	79	37	59/89 (66.29)	31/40 (77.5)
2008-12	NA	47	17	32/52 (61.53)	16/18 (88.8)
2007-11	NA	43	18	42/49 (85.71)	17/18 (94.4)
2006-10	NA	39	15	32/48 (66.6)	17/18 (94.4)

PG-1: M.Tech (Infrastructure Engineering and Management)

Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2011-13	NA	NA			
2010-12	NA	04	--	02/04 (50)	04
2009-11	NA	01	03	01/01 (100)	02/03 (66.6)
2008-10	NA	02	--	02/02 (100)	---

PG-2:M.Tech (Structural Engineering)

Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2011-13	NA	10	01	03/10 (30)	01 (100)

22. Diversity of Students

Name of the Course(refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
UG (B.Tech Civil)	Nil	118/120(98.33%)	2/120 (1.66%)	Nil
PG-1 (M.Tech Infrastrure Engineering and Management	Nil	17/18(94.4%)	Nil	Nil
PG-2 (M.Tech Structural Engineering)	1/19 (5.2)	18/19(94.7%)	Nil	1/19(5.52)

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
(Details are available in item no. 5.2.4 of Criterion-V)

24. Student progression
(Details are available in item no. 5.2.1 of Criterion-V)

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	3
from other universities within the State	14
from other universities from other State	9

26. Number of faculty who were awarded Ph.D,D.Sc.. and D.Litt. during the assessment period.(2009-10 to 2013-14)
Number of Ph.D awardes during the assessment period: 2

27. Present details about infrastructural facilities

a) Library

Titles	102
Books	105
Conference Proceedings	07
I.S. Codes	684
Educational Videos	40
Student Project Reports	107

b) Internet facilities for staff and students :
yes with 40 Mbps Speed &100 Mbps LAN
c) Total number of class rooms 08
d) Class rooms with ICT facility 02
e) Students' laboratories 14

PG:

1. Experimental techniques in structural engineering
2. Computer applications in structural engineering
3. Geographic information systems
4. Project management

UG:

1. Concrete Technology Lab
2. Strength of Materials Lab
3. Surveying Lab
4. Computer Lab
5. Geotechnical Engineering Lab
6. Transportation Engineering Lab
7. Fluid Mechanics Lab
8. Engineering Geology Lab
9. Environmental Engineering Lab
10. Climate Controlled Lab

f) Research laboratories

1. Structural Engineering Lab
2. Geotechnical Engineering Lab
3. Transportation Engineering Lab
4. Climate Control Lab

28. Number of students of the department getting financial assistance from College. UG and PG programmes (if FA from college is available)

2013- 2014: 10
2012-2013: 03

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

Yes,
Department meetings are conducted by head of the department, opinion and advice has been taken from faculty regarding development of new program of the syllabus and subjects, the same information is forwarded to the principal.

Internal assessment committee has constituted to discuss the prospects to start new program.
External (Stake holders, Alumni, Parents) and internal committee meetings are also held for discussion of start of new programs.

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 meetings are conducted by head of the department,

opinion and advice has been taken from faculty regarding content of the syllabus and subjects, the same information is forwarded to the principal.

1. Due to vast syllabus in survey offered in B.Tech I semester as a single subject is now separated into two parts as Survey – I and Survey – II.

2. Finite Element Method is a Compulsory subject in B.Tech VIII Semester, but now offered as Elective.
3. Introduction of new subject design of public buildings in VIII semester of B.Tech Civil Engineering Programme.
4. Introduction of new subject disaster management in VIII semester of B.Tech Civil Engineering Programme.
5. Introduction of new subject Green buildings in VIII semester of B.Tech Civil Engineering Programme
6. The performance of the student in each semester will be evaluated subject wise by the following methods.
    a. Conducting seminars
    b. Conducting power point presentations
    c. Preparation of model making
    d. Conducting viva-voice
    e. Submission of report after the field visit.

b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

Yes,

a. By conducting class committee meeting.

b. Continuous oral feedback by Head of the department and senior professors.

c. Collection of Course –end surveys

c) Alumni and employers on the programmes and what is the response of the department to the same?

Yes,

Annual alumni interaction on their experiences on employment or in higher academic aspirationsand according to their responses we are trying to change curriculum.

31. List the distinguished alumni of the department (maximum 10)

S.No.	Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position	Company/ Place
1	C Maruthi Prasad	2003	UG	Manager-Operations	GMR Intl. Airport, Hyderabad
2	C Nagendra Prasad	2003	UG	Assistant Professor	Dr. LB College of Engg., Vizag
3	K Rajesh	2003	UG	Manager	Balfour Beatty Engg, UK
4	TVM Pavan Kumar	2003	UG	Manager-Infra	L&T InfoCity, Hyderabad

5	TVSS Padmanabha Rao	2004	UG	Doctoral Student	University of Michigan
6	PNH Kumar	2006	UG	Under-sea Pipeline Engineer	ETA, Dubai
7	BVSN Varma	2006	UG	Asst. Manager (Civil)	L&T Metro Rail Project, Hyderabad
8	Anil Karunakar	2008	UG	Nuclear Fuel Complex, DAE, Hyderabad	Technical Officer (Gazetted)
9	K.Ashish (kadiam.ashish@gmail.com)	2008	UG	Dredging Corporation of India, Vizag	Marine Surveyor
10	Silla Harish	2011	UG	Engineer	L&T Construction

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

    Student enrichment programmes conducted: 10

33. List the teaching methods adopted by the faculty for different programmes.

    For B.Tech, M.TechProgrammes the teaching Methods adopted by Faculty are as follows

    - Lecturing,
    - Working models,
    - Demonstration,
    - Assignment, Animation,
    - Hands on practical exercises
    - Industrial visit,
    - Seminars,
    - Group work / group discussions
    - Project etc.
    - Teaching aids: Black Board, LCD Projector etc.

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

    Internal assessment tools

    - Take home assignments
    - Sessional examinations
    - Quiz examinations
    - Any other method of assessment (as specified by the teacher at the beginning of the semester)
    - Daily assessment of Laboratory performance
    - Internal & External laboratory exams
    - End –semester theory examinations

Externalassessment tools

Feed-back is collected from the employers through placement cell.

- Feedback from the alumni.
- Through advisory boards constituted at institutional level.
- Through publications/presentations in conferences.
- Through interaction with parents.

The following tools are used to achieve above process.

- Feedback from the industry on continuous basis in the form of orientation programs by industry pre-post placement sessions, ongoing performance monitoring of the graduates from existing curriculum as well as changes required in the curriculum to satisfy the current/ future industry needs.
- Representation for industry in Board of studies to correlate the curriculum with the industry needs.
- Establish programs in line to entrepreneurship development and faculty development through entrepreneurship development cell (EDC) and industry institution partnership cell (IIPC).
- Review of performance on current curriculum and exploring possibility for betterment through academic advisory committees like BOS, Academic council etc in view of research and consultancy development.
- Annual alumni interaction on their experiences on employment or in higher academic aspirations.

Achievement of the Learning outcomes consists of following processes

- Internal and external consultancies are judged the students before placement drive. This helps students to understand their level and gives scope to improve.
- Mid-term assessments are used to understand learning levels – using innovative methods like quiz, group discussions, paper presentations, etc.
- Faculty has been trained by Wipro Mission 10x- Alternative teaching methodologies other than chalk and board. Encouraging faculty to use pedagogies like presentation model, group discussion, demonstration, etc.

35. Highlight the participation of students and faculty in extension activities.

Extension activity	Duration of the program	No of participants	Outcomes
EKATHRA-13	Two days (2^{nd} -3^{rd} March, 2013)	100	Preparation of technical Paper and Presentation, Poster Presentation, Cube Testing, and Master Builder
INSPIRATION -2011	One day (5^{th} November, 2011)	20	Preparation of Technical Presentations
EKATHRA-11	Three days (17^{th} – 19th February, 2011)	100	Preparation of technical Paper and Presentation, Poster Presentation, Cube Testing, Master Builder, team work

SEISMIC RESISTANT DESIGN OF BUILDINGS	Three days (9th -11th October, 2010)	40	Knowledge on design of seismic resistant buildings
CREADORZ-10	One day (January, 2010)	20	Preparation of technical Paper and Presentation, Poster Presentation, Cube Testing, and Master Builder

36. Give details of "beyond syllabus scholarly activities" of the department.

S.No.	Name of the Company/Agency	Type of Work	Date
1	HCC-(Hindustan Construction Company)	Testing of Bond Strength of Shortcrete concrete for underground rock cavern at Visakhapatnam	2013
2	NSTL	Verification and Validation of proposed deperming facility at Vizag	2012
3	Eco-Carbon (P) Ltd	No Aggregate Concrete	2012
4	Dighi Oil Storage Pvt.Ltd.,Chennai	Carrying out blast induced and construction induced Ground vibration monitoring at Dighi Oil Storage Pvt.Ltd, Maharastra	2012
5	DRDO	Design of tank facility to study underwater turbulence	2012

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

- All the programmes are recognized by AICTE
- B.Tech (Civil) is accredited by NBA from 2006 by 5 Years
  No. NBA/ACCR-229/2003, dated 27th July, 2006.
  B.Tech (Civil) is accredited by NAAC from 2009
  No. NAAC/A&AOC/EC-49/74,2009, dated 16th June, 2009
- Currently awaiting for accreditation by NBA(Result Pending)

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

1. NBA accredited (for 5 years in the very first attempt)
2. Good blend of senior and junior faculty. Senior faculty have very good teaching, administrative and consulting experience.
3. One of the best Civil Engineering Depts. in the State amongst JNTU-affiliatedcolleges
4. Students with better ranks have taken admission into the dept, compared to the previous years.
5. A few students have done their summer internships in IITK, IISc.

6. Students have secured university gold medals many times.
7. Dept has highly qualified faculty with Ph.Ds.
8. Faculties are actively involved on various consultancy projects and earn revenue to the department and college. This had led to a very good interaction with the industry.
9. Very good placement record.
10. Alumni are pursuing PG/ PhDs in reputed institutes in India & Abroad.
11. Good teamwork and committed people.
12. Some faculty have been identified as research guides by the various universities.
13. Students have scored good GATE, TOEFL, GRE scores.
14. Students have obtained JNTU sports medals.
15. In house expertise is using for designs and construction of GVP medical college and other GVP institutions.

Weaknesses :

1. Teaching staff are required to concentrate more on research projects and less on administrative jobs.
2. More concentration of research publications in peer reviewed national and international journals.
3. Qualified non-teaching staff inadequate (both lab technicians and clerical staff)
4. Insufficient space for some labs.
5. No separate rest room for female faculty.
6. Lab facilities just adequate to cater to 60 B.Tech students, as the strength of B.Tech students is now 120, in future the current lab facility will become inadequate.
7. Provision of Civil Licensed softwares like ArcGIS, Primevera etc.
8. Computer server room with all licensed softwares.
9. Lab facilities are also inadequate to carry out research
10. Labs have to be become NABL accredited, so as to attract more testing jobs. EnvtlEngg lab may also secure the Water and Ait Pollution Control Board's certification, for getting the third party jobs
11. Number of externally-funded projects to be improved.
12. Requirement of minimum two E- Learning class rooms, and this point is raised by NBA team.

Opportunities :

1. Students with better ranks have taken admission into B.Tech (Civil Engg) of GVPCOE very recently, which is an indication that Civil engineering is slowly becoming the preferred course.
2. Research in areas such as steel prestressed bridges, advances in cable-stayed bridges, perpetual pavements, Inter-disciplinary research in ITS, dynamics of structures, GIS applications to civil engineering problems and society, inter-disciplinary research using GIS is required.
3. Computerized equipment could be used for reliability and faster results.
4. Present PG students could be encouraged to carry out good research and their services may be used for laboratory class work for UG students.
5. Steps to be taken to improve the number of students seeking admission in to PG programme.

6. Industry-institute interaction needs to be strengthened further.
7. A few faculty have earned their Ph.Ds while serving the college, some more are pursuing their Ph.Ds.
8. Collaborations/ MOUs with industries or with IITs, SERC
9. Research ideas/ problems from the various industries could be solved by the department.
10. Part-time M.Tech programme may be introduced to make it attractive to the working professionals.
11. Finishing schools may be established to bridge the gap between the industry's requirements and the students being recruited by the industries.
12. Leveraging the contribution of the alumni
13. Students would prefer seeking admission if,
    --- the placement record is good
    --- experienced faculty are on rolls
    --- good infrastructural facilities are in place
    --- value-added courses are taught (AutoCAD, STAAD, STRUDS, openGIS, Total Station surveying)

Challenges

1. Placement of students in reputed core companies.
2. Fee reimbursement students seeking admission into college are more, hence the funds are blocked.
3. Industry joint collaboration programs
4. Tie up with institutes of national and international importance.

Attracting best faculty, as the opportunities are more outside.

39. Future plans of the department.
    1. The possibility of introducing another PG programme.
    2. Un-interrupted access to Internet
    3. Un- interrupted power supply to the department.
    4. Improvement of number of externally-funded projects.
    5. Improvement of paper publications in national and international journals.
    6. Two to four local field visits in each semester and one or two industrial tours during the 4 years of B.Tech Programme.
    7. Provision of civil licensed softwares like ArcGIS, Primevera etc.
    8. Computer server room with all licensed softwares.
    9. Conduction of more value added programs

E.3 COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

1. Name of the Department & its year of establishment
   COMPUTER SCIENCE AND ENGINEERING established in 1996

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 started from 1996

   PG:
   1.M.Tech., Computer Science and Engineering started from 2004
   2.M.Tech., Cyber Security started from 2013

3. Interdisciplinary courses and departments involved

Title(s) of the course(s)	**Other department involved**
Neural Networks	CSE, IT, EEE, ME
Nano technology	ECE, CSE
E-commerce	CSE, Civil
Software project management	CSE, Civil
Neural Networks	CSE, IT, EEE, ME
Biometrics	CSE, IT, EEE
Project Management	CSE, ME, Management
Indian and International Business Environment	CSE, Management,

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 UG/PG	Semester
Computer Organization	ECE	UG	IV
Computer Organization	EEE	UG	IV
Database Management System	EEE	UG	VIII

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Designation	Filled/Existing	Sanctioned
Professor	4	6
Associate Professor	4	4
Asst. Professor	27	23

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)\

S. No	Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D students guided for the last 4 years
1.	Dr. D. Ravi	Ph.D.	Professor	Image Processing	19	-
2.	Dr. V.Seshagirirao	Ph.D.	Professor	Systems Engineering	45	-
3.	Sri D. Murali Krishna	M. A	Professor	Software Engineering	35	-
4.	Dr.V.SomaRaju	Ph.D.	Professor	Data Mining	30	-
5.	Dr.P.Vishnu Mahesh	Ph.D.	Professor	Software Engineering	25	-
6.	Dr.P Krishna SubbaRao	Ph.D.	Professor	Data Mining , Bio informatics	14	-
7.	Sri.N.V.BrahmajiRao	M.Tech	Associate Professor	Networks	27	-
8.	Mr.P. Aravind	M.Tech	Associate Professor	Networks	6	-
9.	Mr.N.V.L.P. Raju	M.Tech	Associate Professor	Data mining & Data warehousing	12	-
10.	Mr. G. M. V. S. Murthy	M.S	Associate Professor	Data mining & Data warehousing	3	-
11.	Mr. P. GurumurthyPatrudu	B.Tech	Assistant Professor	Networks	22	
12.	Mr.S.R.M. Krishna	M.Tech	Assistant Professor	Networks	3	-
13.	Ms. K. Sudha	M.Tech	Assistant Professor	Networks	3	-
14.	Ms. P. Sravya	M.Tech	Assistant Professor	Networks	3	-
15.	Ms. G. V. Hindumathi	M.Tech	Assistant Professor	Networks	3	-
16.	GeetanjaliNayak	M.Tech	Assistant Professor	Software Engineering	5	-
17.	Mr.Y.V.Ramanjaneyulu	M.Tech	Assistant Professor	Image Processing	4	
18.	Mr.K.BalaPrakasa Rao	M.Tech	Assistant Professor	Image Processing	2	
19.	Mr.P.Sanoop Kumar	M.Tech	Assistant Professor	Image Processing	6	
20.	Ms.N.Sandhya Rani	M.Tech	Assistant Professor	Data Mining and Data Warehousing	1	
21.	Mr.N.Durga Prasad	M.Tech	Assistant Professor	Networks	7	
22.	Ms.E.Sirisha	M.Tech	Assistant Professor	Semantic Web & Web Mining	7	

23.	Ms.V.Tulasi	M.Tech	Assistant Professor	Cloud Computing, software Testing	7	
24.	Mr. N.S.S.S. Girish Kumar	M.Tech	Assistant Professor	Distributed Databases, Network Security	1	
25.	Mr. Ch. Avinash	M.Tech	Assistant Professor	Data Mining, Cloud Computing	1	
26.	Mr. S.Chiranjeevi	M.Tech	Assistant Professor	Data Mining, Network Security	2	
27.	Mr. K.SomaSekhar	M.Tech	Assistant Professor	Mobile Computing	2	
28.	Ms. G.Rohini	M.Tech	Assistant Professor	Data Mining and Software Engineering	1	
29.	Ms. G.Vani	M.Tech	Assistant Professor	Data Mining	6	
30.	Mr. M.S.N Murthy	M.Tech	Assistant Professor	Data Mining	6	
31.	Mr. G.GaneshSriram	M.Tech	Assistant Professor	SPM and Software Engineering	1	
32.	Mr. Praveen Dasari	M.Tech. & M.S	Assistant Professor	Telecommunications and Networking	1	
33.	Ms. J.B. PavanaJyothi	M.Tech	Assistant Professor	Software Engineering	3	

8. Percentage of classes taken by temporary faculty– Programme-wise information: no temporary faculty

9. Programme-wise Student-to-Teacher Ratio

UG:B.Tech.,Computer Science and Engineering) - 1:15
PG-1:M.Tech.,Computer Science and Engineering - 1:12
PG-2:M.Tech.,Cyber Security - 1:8

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Sanctioned	**Filled**
Number of academic support staff (technical)	2	2
Number of administrative staff	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 : NIL

13. Research facility / centre with

- state recognition - 1(Recognized by JNTU-K) in collaboration with IT as a research centre
- national recognition - College is a component at SIRC most
- international recognition - Nil

14. Publications:

- number of papers published in peer reviewed journals (national / international)

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	2	2	7	6	7
2.	National Journal	-	-	-	-	-
3.	International Conference	3	2	-	1	
4.	National Conference	2	1	-	-	-
	Total Papers	7	6	7	7	7

- Books with ISBN numbers with details of publishers
  "Embedded Systems" By Prof.B.KantaRao, PHI Learning Pvt. Ltd. 564 pages ISBN: 8120340817, 9788120340817
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Citation Index – range / average - NIL
- SNIP - NIL
- SJR - NIL
- Impact factor – range / average

Year	Impact Factor Range
2013-14	1.932-2.31
2012-13	0.289-1.925
2011-12	0.242-2.31
2010-11	0.583-1.289

- H - Index : Nil

15. Details of patents and income generated
    Nil

16. Areas of consultancy and income generated
    Nil

17. Faculty recharging strategies

    Workshops/seminars/conferences attended by faculty during the Academic year
    2012-2013: 29
    2011-2012 : 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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	B.Tech. (C.S.E.)	(120/120) 100%	--
2011-12	B.Tech. (C.S.E.)	(120/120) 100%	--
	M.Tech. (C.S.E.)	(18/18) 100%	--
2011-12	B.Tech. (C.S.E.)	(114/120) 95%	0.05%
	M.Tech. (C.S.E.)	(18/18) 100%	--
2012-13	B.Tech. (C.S.E.)	(115/120) 95.8%	(5/120) 0.04%
	M.Tech. (C.S.E.)	(18/18) 100%	--

19. Awards / recognitions received at the national and international level by

- Faculty
  Dr.P.KrishnaSubbaRao was awarded a Gold Medal from Intel® India Embedded Challenge 2012 on August 22nd 2012, for developing a prototype "A Processor Responsible for Type II Diabetes Mellitus Implementing & Analysis of Genomic Signal Processing".

- Doctoral / post doctoral fellows
  Dr P. Krishna SubbaRao was awarded with Ph.D. in 2012.

- Students
  - Three students got best student award(UG) by JNTU-K
  - Best project award by TCS
  - One student got best student award(PG) by JNTU-K

20. Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any.

2009-10 : 01
2010-11 : 01
2011-12 : 01
2012-13: 01

21. Student profile course-wise:

UG

Name of the Course(refer question no. 2)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
B.TECH (2009-2013)	NA	50	48	100%	100%
B.TECH (2008-2012)	NA	81	50	80%	92%
B.TECH (2007-2011)	NA	80	43	100%	100%
B.TECH (2006-2010)	NA	91	41	100	92%
B.TECH (2005-2009)	NA	90	38	98.11%	89.4%

PG-1:

Name of the Course(refer question no. 2)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
M.TECH(2011-2013)	15	8	7	100%	100%
M.TECH(2010-2012)	17	6	11	72%	83%
M.TECH(2009-2011)	18	6	12	100%	100%

22. Diversity of Students

Name of the Course(refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
UG(B.Tech)	N.A	122/127(96%)	Nil	5/127(0.03%)
PG-1(C.S.E)	0 %	17/18(99%)	Nil	1/18(0.05%)
PG-2(C.S)	0%	18/18(100%)	Nil	Nil

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
(Details are available in Item no. 5.2.4 of Criterion-V)

24. Student progression
(Details are available in Item no. 5.2.4 of Criterion-V)

25. Diversity of staff

2013-14

Percentage of Faculty who are graduates	
of the same parent university (5)	(5/35)14%
from other universities within the State(28)	(28/35) 80%
from other universities from other States (3)	(3/35)0.08%
2012-2013	

of the same parent university (5)	43.4
from other universities within the State(29)	46.6
from other universities from other States (4)	30.0
2011-12	
of the same parent university (1)	44.8
from other universities within the State(27)	44.8
from other universities from other States(3)	10.4
2010-11	
of the same parent university (1)	47.8
from other universities within the State (30)	39.2
from other universities from other States (3)	13.0
2009-10	
of the same parent university (1)	60.7
from other universities within the State(25)	28.6
from other universities from other States (2)	10.7

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: 2

27. Present details about infrastructural facilities
    a) Department Library (number of books, Lecture CDs, DVDs)

S.NO	KINDS OF BOOKS	TOTAL BOOKS
1.	Reference Books	172
2.	Prescribed Books	195
3.	Specimen Copies	63
4.	Donated Books by Students	155
	GRAND TOTAL	**585**

    b) Internet facilities for staff and students -40 Mbps Internet through 100 Mbps LANspeed , Wi-Fi: 10Mbps
    c) Total number of class rooms - 7
    d) Class rooms with ICT facility - Yes
    e) Students' laboratories -
    Computer programming Lab
    Data structures Lab
    Operating System Lab
    Database Management Systems lab
    Web Programming and UML lab
    Network Security andCryptography Lab
    Data mining and Data Warehousing lab

    f) Research laboratories: Nil

28. Number of students of the department getting financial assistance from College.

Year	2013-14	2012-13	2011-12
No. of Students getting Financial Assistance	28	12	12

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
Yes,
Department meetings are conducted by head of the department, opinion and advice has been taken from faculty regarding development of new program of the syllabus and subjects, the same information is forwarded to the principal.

Internal assessment committee has constituted to discuss the prospects to start new program.
External (Stake holders, Alumni, Parents) and internal committee meetings are also held for discussion of start of new programs.

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. When the External Experts attend the meetings of Board of Studies, the Department takes the suggestions on curriculum into consideration. Due importance is given to the suggestions accordingly.

b) students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

Yes. After verifying the students' feedback, appropriate teaching techniques are adopted.

c) alumni and employers on the programmes and what is the response of the department to the same?

Feedback is collected from alumini and employers and their impressions are duly considered in revising curricular aspects

31. List the distinguished alumni of the department (maximum 10)

Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position
Y.Sarada	1996	B.Tech.	General Manager Johnson & Johnson –USA
G.L.Sailaja	1998	B.Tech.	Wipro India Ltd.
Vijayalakshmi	1999	B.Tech.	I.A. 2005 BATCH
PratapBasanthia	2007	B.Tech	Infrastructure administratorI.B.M, Newyork
R.Venkat Ravi Kiran	2010	B.Tech	Graduate Student and Teaching assistant at University of Minnesota Duluth
Vijay Chowdary	2011	B.Tech	System Engineer,TCS
D. SaiSrinivas	2012	B.tech	Asst. System Engg.,TCS
Aditya. Sabbineni	2012	B.Tech	Project Engg. Wipro
Sujana.S	2013	B.Tech	Software Analyst, Intergraph
Hema Vishnu	2013	B.Tech	Developer at Cloud Guest.

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.

Student enrichment programmes conducted 30

33. List the teaching methods adopted by the faculty for different programmes.
    - Chalk and Talk
    - OHP/LCD
    - Visual Chart working/Models
    - Role play and Quiz
    - Digital library Video Lectures
    - Internet/ Intranet Simulations
    - Group Discussions/Seminars/Projects
    - Webinar

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

    * Detailed planning of course delivery before the beginning of the semester.
    * Academic counseling and progress monitoring at department level during the semester.
    * Student's learning monitoring is done by assignments, tests, quizzes and projects.
    * Compilation and analysis of student's feedback.
    * Final main projects, participating and presenting papers in seminars at various institutes.
    * Regular department meetings of faculty to take stock and plan.
    * Classroom seminar sessions on various topics.
    * Analysis of Semester end results

35. Highlight the participation of students and faculty in extension activities.

Extension activity	Duration of the program	No of participants	Outcomes
Youth Enlightening the Society	August 15(10:00am-5.00pm)2012	03	Cleaning the school premises with youth and school children for the use of playing games.
Youth Enlightening the Society	March(9:00am-2:00pm)2013	04	Conducting public meeting discussing about the problems faced by the villagers
Youth Enlightening the Society	April(9:00am-2:00pm)2013	08	Conducting medical camps for the children and ladies in two times in a month
Youth Enlightening the Society	July 2012	03	Inculcating Moral values to the school children
Youth Enlightening the Society	June(7days –daily 1:30 hour)2013	04	Voter Id Enrollment Camp conducted in the college
WeR4Help	once in a month(3-4hours)	01	providing basic needy 5 items for the poor people

weR4Help	once in two months(2-3hours)	01	interacting with orphan children
WeR4Help	January of 2014	01	Voluntarily collecting money for the Girl who is severely injured with burns for her operation
NSS	3rd-9th February 2014	08	plantation of saplings in the school, awareness on prevention of alcohol drinking through videos, small committee formed by the youth to solve the village problems
NSS	April8(2:00-3:30pm)2014	06	Awareness on women health problems on the eve of International Women's Day

36. Give details of "beyond syllabus scholarly activities" of the department.
Nil

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
Facilitating students participation in the ongoing faculty research projects

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

* Faculty published 23 papers in various National & International Journals/Conferences over last 3 years.
* Five faculty members got certified in various IBM tools like RAD, Tivoli, and DB2.
* Twenty faculty members attended various National & International workshops in the last 2 years.
* Good placements record of students.
* Good pass percentage (average 90% in Last 3 Years)
* Students received Gold Medals from JNTU & TCS.
* Some of alumni are settled as engineers in USA, as entrepreneurs in India and, are working in several Yahoo and R&D organizations.
* Three of our students got placements in top companies like Microsoft, PayPal, and Cisco with more than 10 lacks package.
* In the year 2014, department got a research center.
* MOU'S with the companies like TCS, IBM, and EMC2.
* Students of the department were sent to Nobel Conference to Inculcate leadership qualities.

Weaknesses:

* Lack of professional body membership among students and faculty.
* Extensive scope for more automation.

* Scope for more research activities in terms of publications in reputed journals.

39. Future plans of the department.

- Enhance the quality of labs by means of state of the art equipment and other infrastructure
- To enhance the capacity and quality of the departmental library
- To convert our class rooms into higher technology state of art classrooms
- To provide the research support to the faculty members with additional infrastructure facilities to suit their programmes
- To automate the day to day administrator procedures

E.4. ELECTRONICS AND COMMUNICATIONS ENGINEERING DEPARTMENT

1. Name of the Department & its year of establishment
   Electronics and Communication Engineering established in the year 2000

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

   UG: B.Tech - Electronics and Communication Engineering
   PG: 1.M.Tech - Communications and Signal Processing
   2.M.Tech - Embedded Systems and VLSI Design

3. Interdisciplinary courses and departments involved

Title(s) of the course(s)	**Other department involved**
Electrical Safety and Management	EEE, ME, ECE
Design Concept for Engineers	EEE,ECE, ME, Civil
Biomedical Instrumentation	ECE, ME, EEE
Nano technology	ECE, CSE

4. Annual/ semester/choice based credit system
   Semester Based System

5. Participation of the department in the courses offered by other departments

Title(s) of the course(s)	To which department	Programme UG/PG	semester
Analog and Digital Circuits Lab	Computer Science Engineering	UG	III
Analog and Digital Circuits Lab	Information Technology	UG	III
Electrical and Electronics Lab	Mechanical Engineering	UG	III
Pulse and Digital Circuits	Electrical and Electronics Engineering	UG	IV
Communication Systems	Electrical and Electronics Engineering	UG	V
Linear and Digital IC Applications	Electrical and Electronics Engineering	UG	V
VLSI Design(Elective-IV)	Electrical and Electronics Engineering	UG	VIII
Bio-Medical Instrumentation (Open Elective)	For all the departments	UG	VIII

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Designation	Filled / Existing	Sanctioned
Professor	5	6
Associate Professor	5	9
Asst. Professor	26	23

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

S. No	Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D students guided for the last 4 years
1.	Dr.N. Balasubrahmanyam	Ph.D	Professor &HOD	Antennas	21	1
2.	Dr. M.V.S. Sairam	Ph.D	Professor	Communications	18	-
3.	Dr. D. S. Murty (On Lien)	Ph. D	Professor	Embedded	33	6
4.	Prof. T.S.N. Somayaji,	Ph.D	Professor Emeritus	VLSI	47	-
5.	Prof. G.T. Rao	B.E	Professor	Communications	41	-
6.	Sri. B. Jagadeesh	M.E	Associate Professor	Image Processing	13	-
7.	Smt. V. Leela Rani	M.Tech	Associate Professor	VLSI	12	-
8.	Smt. Ch. Phanisri	M.Tech	Associate Professor	Embedded	12	-
9.	Smt. N. Deepika Rani	M.E	Associate Professor	Antennas	12	-
10.	Sri. K.R.K. Sastry	M. Tech	Associate Professor	VLSI	23	-
11.	Sri. G. Rajeswara Rao	M.Tech	Assistant Professor	Antennas	30	-
12.	Smt. P. ArunaKumari	M.Tech	Assistant Professor	Communications	9	-
13.	Sri. P. Srinu	M.Tech	Assistant Professor	Communications	08	-
14.	Ms. P. Vidyasree	M.E	Assistant Professor	Instrumentation	06	-
15.	Smt.A.Nagamalli	M.Tech	Assistant Professor	VLSI	10	-
16.	Sri. SagaraPandu	M.Tech	Assistant Professor	VLSI	07	-
17.	Sri.Sagar Krishna Sivvam,	M.Tech.	Assistant Professor	VLSI	04	-
18.	Smt. D. Priyanka	M.E	Assistant Professor	VLSI	03	-
19.	Sri. K. Naresh Kumar	M.Tech	Assistant Professor	VLSI	05	-
20.	Sri. K. Satya Krishna Murthy	M.Tech	Assistant Professor	Communications	07	-
21.	Sri. G. Anand Kumar	M.Tech	Assistant	Communication	09	-

			Professor	s		
22.	Sri. N. Santosh Kumar	M.Tech	Assistant Professor	Radar & Microwave	06	-
23.	Smt. M. Neelima	M.E	Assistant Professor	Instrumentation	07	-
24.	Ms. G Radhakumari	M.Tech	Assistant Professor	Radar &Microwave	08	-
25.	Mr.S.M.K.Chaitanya	M.Tech	Assistant Professor	Embedded	08	-
26.	Smt.PrathibhaN.Pillai	M.E	Assistant Professor	Communication s	04	-
27.	Sri Ch.Venkanna	M.Tech	Assistant Professor	Instrumentation	1	-
28.	Sri Venkatesh.Namala	M.Tech	Assistant Professor	Communication s	1	-
29.	Sri ManojKumar.Rongali	M.Tech	Assistant Professor	VLSI	1	-
30.	Sri.SreenivasuluMamill a	M.Tech	Assistant Professor	VLSI	4	-
31.	Ms. B. KeerthiPriya	M.Tech	Assistant Professor	VLSI	1	-
32. 33.	Sri TammineniRavindra	M.Tech	Assistant Professor	VLSI	3	-
34.	Sri. DadiSita Siva	M.Tech	Assistant Professor	VLSI	2	-
35.	Smt P. Pavani	M.Tech	Assistant Professor	Communication s	1	-
36.	Smt N. Santoshi	M.Tech	Assistant Professor	Communication s	1	-
37. 38.	Mrs. Ch. KusmaKumari	M.Tech	Assistant Professor	VLSI	6	-
39.	Sri LakshamanaSwamy	M.Tech	Research Associat e	VLSI	4	-

8. Percentage of classes taken by temporary faculty – programme-wise information
   No temporary faculty

9. Programme-wise Student Teacher Ratio

S.No	Name of the Programme	Student Teacher Ratio
1.	B.Tech(E.C.E)	1:15
2.	M.Tech(Communications and Signal Processing)	1:12
3.	M.Tech(Embedded Systems and VLSI Design)	1:12

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

		Filled	Sanctioned
1.	Number of academic support staff (technical)	7	7
2.	Number of administrative staff	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.

    a) National: 01 (Rs15 lakhs)
    b) International: Nil
    c) Total grants for ongoing projects(a+b) =15 lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

    a) National: 25 lakhs
    b) International: Nil
    c) Total grants for projects(a+b) =25 Lakhs

13. Research facility / centre with

    - state recognition Yes, Recognised as Research Centre by JNTU Kakinada
    - national recognitioncollege a component of SIRC most
    - international recognitionNil

14. Publications:

    - number of papers published in peer reviewed journals (national /international): 64
    - Monographs**:** 3
    - Impact factor – range / average

S.No	Year	Impact Factor Range
1.	2013-14	0.81-1.686
2.	2012-13	1-1.76
3.	2011-12	0.2-3
4.	2010-11	1.326-1.884

15. Details of patents and income generated
    Nil

16. Areas of consultancy and income generated
    Nil

17. Faculty recharging strategies

    Workshops/ seminars/ Conferences attended by faculty during the academic year
    2013-2014: 17
    2012-2013: 14
    2011-2012: 12
    2010-2011: 09

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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	B.Tech. (E.C.E)	125/125 (100%)	Nil
2011-12	B.Tech. (E.C.E)	125/125 (100%)	Nil
2011-12	B.Tech. (E.C.E)	126/126(100%)	Nil
	M.Tech. (CSP)	12/12(100%)	Nil
	M.Tech. (ESVD)	17/17(100%)	Nil
2012-13	B.Tech. (E.C.E)	129/129(100%)	Nil
	M.Tech. (CSP)	10/12(83.4%)	2/12(16.6%)
	M.Tech. (ESVD)	14/16(87.5%)	2/16(12.5%)

19. Awards / recognitions received at the national and international level by

- Faculty
    - Dr.M.V.S.Sai Ram is the member in the Editorial Board for International Journal of Electronics Engineering, ISSN: 0973-7383 from 2010 onwards.
    - Dr D.S Murthy received “Engineer of the Year ”Award in the year 2010 by JNTU Kakinada
    - Dr D.S Murthy received Best Teacher Award by JNTU Kakinada in the year 2009
    - Dr D.S Murthy received Best Researcher Award by JNTU Kakinada in the year 2009
    - Doctoral / post doctoral fellows : MVS Sai Ram was awarded Ph. D In 2010

- Students
    - N. Bhavani III year ECE student place in First Position, in the event ROBOTICS, at IISC Bangalore during 1st-4th Feb,2014Paper Presentation, JNTU Kakinada
    - Event is Lead Prayana Travelled Various Places and Met Many Prominent Figures. The Number of students selected is 100 throughout India.Met Infosys Narayana Murthy, Ratan Tata, Gururaj Deshpande and Many others

Academic Year 2013-14

S. No	Title of paper/Quiz/Hardware	Student name & Reg.no	Class (Year)	Name of event and venue	Date(s)	Awards
1	ROBOTICS	N. Bhavani 11131A04B2	III	ROBOTICS, IISC Bangalore	1st-4th Feb,2014	First Position
Academic Year 2012-13						
1	Smart Antenna	S.V.S. Teja 10131A0495 N.UmaMaheswara Rao 10131A0474	III	Paper Presentation, JNTU Kakinada	8th-9th March,2013	First Position
2	Robot With Two Transistors	Ch.Suresh 11135A0410 V.RajaSekhar 11135A0412 D.Rajeev 10131A0431	III	Hardware Designing, JNTUK	8th-9th March,2013	Second Position
3	Mechanical Robot That Operates At our Command	C.Naveen 11131A0423 G.Hemanth 11131A0433 B.GunnaRaju 11131A0417 G.RaghuNandan 11131A0447	II	Robo Designing And Race, JNTUK	8th-9th March,2013	Second Position
4	Lead Prayana	C.Naveen 11131A0423 B.GunnaRaju 11131A0417 G.V.SaiKiran 11131A0446 S.Gayatri 11131A04E0 J.SuryaGayatri 11131A0450 J.Ravindra 11131A0449	II	Lead Prayana Travelled Various Places and Met Many Prominent Figures. The Number of students selected is 100 throughout India.Met Infosys Narayana Murthy, Ratan Tata, Gururaj Deshpande and Many others	18-01-2013 to 30-01-2013	First Position
5	Arduino programming Contest	N Gowtham, 10131A0473 N.Chalapathi Rao 10131A0471 M.Mirza 10131A0467	III	Arduino Open, BITS Goa	9thFebrauary	First Position
6	Quiz	G Anish	I	NSS	28-09-	1ST

		11131A0432 B.V Praneeth 11131A0410			2012	Prize
Academic Year 2011-12						
1	Automatic Street Lights	V Manikanta (10131A04B4)	II	Interact-2k12,ANITS	24-02-2012	1st Prize
2	Hardware Expo	V Manikanta (10131A04B4)	II	Mythri 2012 VZM	11-03-2012	1st Prize
3	Quiz	G Anish 11131A0432 B.V Praneeth 11131A0410	I	NSS	02-03-2012	1ST Prize
Academic Year 2010-11						
1.	MEMS	B.N.S.K.Sameer 09131A0410 K.Teja 09131A0458	II	Trance-10, Paper Presentation, SRKR	10-12-2010	ISt prize

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

Seminars/ Conferences/Workshops organized
2013-14: 1
2012-13: 5
2011-12: 6
2010-11: 5

21. Student profile course-wise:

UG

Name of the Course(refer question no. 2)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
2009-13	NA	72	41	70(97.22%)	41(100%)
2008-12	NA	83	43	62(74.69%)	36(83.72%)
2007-11	NA	76	42	57(75%)	38(90.47%)
2006-10	NA	80	35	63(78.75%)	26(74.28%)

PG-1:

Name of the Course(refer question no. 2)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
2011-13	NA	9	3	9(100%)	3(100%)
2010-12	NA	7	5	7(100%)	5(100%)

PG-2:

Name of the Course(refer	**Applications received**	**Selected**	**Pass percentage**

question no. 2)					
		Male	Female	Male	Female
2011-13	NA	11	5	11(100%)	5(100%)
2010-12	NA	12	5	12(100%)	5(100%)

22. Diversity of Students

Name of the Course(refer question no. 2)	**% of students from the College**	**% of students from the state**	**% of students from other States**	**% of students from other countries**
2009-10				
B.Tech(E.C.E)(84)	NA	100(84)	NIL	NIL
2010-11				
B.Tech(E.C.E)(84)	NA	100(84)	NIL	NIL
M.Tech (Communications and Signal Processing)(12)	NIL	100(12)	NIL	NIL
M.Tech (Embedded Systems and VLSI Design)(17)	NIL	100(17)	NIL	NIL
2011-12				
B.Tech(E.C.E)(126)	NA	100(126)	NIL	NIL
M.Tech (Communications and Signal Processing)(24)	NIL	100(24)	NIL	NIL
M.Tech (Embedded Systems and VLSI Design)(33)	NIL	100(33)	NIL	NIL
2012-13				
B.Tech(E.C.E)(126)	NA	100(126)	NIL	NIL
M.Tech (Communications and Signal Processing)(26)	NIL	100(26)	NIL	NIL
M.Tech (Embedded Systems and VLSI Design)(31)	NIL	100(31)	NIL	NIL
2013-14				
B.Tech(E.C.E)(126)	NA	100(126)	NIL	NIL
M.Tech (Communications and Signal Processing)(32)	NIL	100(32)	NIL	NIL
M.Tech (Embedded Systems and VLSI Design)(33)	NIL	100(33)	NIL	NIL

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
(Details are available in Itemno.5.2.4 of Criterion-V)

24. Student progression
(Details are available in Itemno.5.2.1 of Criterion-V)

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	11 /36 (29.73)
from other universities within the State	20 /36 (54.05)
from other universities from other State	6/36(16.21)

26. Number of faculty who were awarded Ph.D,D.Sc.. and D.Litt. during the assessment period.
    Number of Ph.D awardes during the assessment period: 1

27. Present details about infrastructural facilities
    a) Department Library (number of books, Lecture CDs, DVDs)
    Department Library Text Books: 174
    b) Internet facilities for staff and students
    40 Mbps Leased Line from V-Online
    10Mbps Leased Line from BSNL
    Wi-Fi Facility
    100MbpsLAN
    c) Total number of class rooms :10
    d) Class rooms with ICT facility :2
    e) Students' laboratories

B.Tech

- Electronic Devices and Circuits Lab
- Electronic Circuits Lab
- IC & PDC Lab
- Analog Communications Lab
- Digital Communications Lab
- VLSI Design Lab
- Microprocessor & Microcontroller Lab
- Digital Signal Processing Lab
- Microwave &Optical Communications Lab

M.Tech (ESVD)

- HDL Programming Lab
- Embedded Systems Lab

M.Tech (CSP)

- Digital Signal Processing Lab
- Advanced Communications Lab

f) Research laboratories :

- Centre for NANO Science and Technology
- Intel Intelligent Systems Lab

28. Number of students of the department getting financial assistance from College.

S.No	Year	Course	No. of Students getting Financial Assistance	Source of Financial Assistance
1.	2013-14	UG	4	College management
		PG	3	TEQIP
2.	2012-	UG	2	College management

	13	PG	3	TEQIP
3.	2011-12	UG	2	College management
		PG	1	TEQIP

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

Since the inception, the new courses added were Post Graduate Programs in Communications & Signal Processing and Embedded Systems & VLSI Design. For this purpose the input from Alumni of the college was taken and the Technology scenario input from the Industry was considered. Demand for specialized Programs was very much . So the two additional programs have been introduced with necessary sanctions from the Affiliating University and also from AICTE.

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.Being Autonomous College, revision of Courses is a regular activity and clearance by the Board of Studies (consisting of all the Faculty members) is undertaken periodically resulting in up gradation of Curriculum.

b. Students: on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
Yes, feedback is taken periodically and any corrective measures or improvements are suggested as deemed fit.

c. Alumni and employers: on the programmes and what is the response of the department to the same?
Yes, Alumni member's feedback has been helping the department in modification of the curriculum relevant to the industry and incorporating in the syllabus.

31. List the distinguished alumni of the department (maximum 10)

Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position
AparnaBehra	2005-2009	UG	Component Design Engineer, Intel,Bengaluru
Jyothirmai	2005-2009	UG	Engineer-SC, BRAHMOS,DRDO
BhanuKarthekyian	2005-2009	UG	Engineer-SC, ISRO,Kalpakam
Snatpsh Kumar Waddi	2006-2010	UG	R& D Engineer, Samsung,R&D, Bengaluru
K Arun Kumar	2006-2010	UG	System Engineer, INTEL,Bengaluru
K KalyanPursuhotam	2006-2010	UG	R& D Engineer, Synopysys,Bengaluru

VenkataKrishnamRaju	2006-2010	UG	Engineer, ONGC,Pondicherry
T Manoj Kumar	2007-2011	UG	R&D Eng-II, Synopys ,Bengaluru
Sai Krishna Renduchintala	2007-2011	UG	Design Engineer, Cadence Design Systems, San Jose
AbhinavTekumalla	2007-2011	UG	Network Software Engineer , Cisco, San Jose

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts

Student enrichment programmes conducted
2013-14: 1
2012-13: 5
2011-12: 6
2010-11: 5

33. List the teaching methods adopted by the faculty for different programmes.

For B.Tech, M.TechProgrammes the teaching Methods adopted by Faculty are as follows

- The Department is conducting course work with the aid of NPTEL Videos and other material as per Requirement
- Lecturing, Working models, Demonstration, Animation, Industrial visit, Seminars, Project etc.
- Teaching aids: Black Board, LCD Projector etc.

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: External Processes:

- Feedback from the alumni.
- Feed-back is collected from the employers through placement cell.
- Through advisory boards constituted at institutional level.
- Through publications/presentations in conferences.
- Through interaction with parents.

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.

Students publish Magazines on the suggestions given by faculty which helps in extension activities. The list is given below

SI. No.	Technical Magazine / News Letter	Name of the Technical Magazine / News Letter	Name (s) of the Editor	Name (s) of the Publisher (s)	Outcome
1	Technical Magazine (monthly)	Electrozoom	P. Prashant Reddy V. Ravichandra A. Kumar Sarath B. Krishna Chaitanya GVS Kishore	Students of E.C.E G.V.P.C.E(A)	Young technocrats of GVPCE(A) gained creative, analytical and technical skills
2.	Women Magazine	Oasis	R SaiSurekha K SaiDivya	Girl Students of G.V.P.C.E(A)	Young technocrats of GVPCE(A) gained creative, analytical and technical skills

Students also extend their knowledge by participating in Hardware Expo, Paper Contest, Guest lecturers etc which help them to gain creative, analytical and technical skills
Blood camps by red cross societies.

Students also Participate in different Social Activities such as NSS, HEARTS OF HUMANITY, WE R FOR HELP, ROTRACT and LAKSHYA which help them to develop in the society.

Third year 10 Students are (from September 2013 to till date) actively participating in training program conducted by BSNL one day per week.
Faculty also extends their knowledge by participating in Workshops, Guest Lectures and the list is given in Section 17 which helps in modifying the curriculum

36. Give details of "beyond syllabus scholarly activities" of the department.
Facilitating students participation in the ongoing faculty research projects

37. State whether the programme/ department is accredited/ graded by other agencies. Give details

- B.Tech (ECE) is accredited by NBA from 2006 by 5 Years FNo.NBA/ACCR-229/2003 dated 27 July 2006
- Currently awaiting for accreditation by NBA(Result Pending)

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:
- Consistent High Pass Performance and Placement Record.

- The Department attracts Best Ranks from Competitive Exams
- Qualified Faculty in every Area of Electronics and Communications viz, Communications, Signal Processing, VLSI and Embedded Systems.
- Suitable Environment for Faculty Qualification up-gradation, Research and Consultancy.

Weakness:

- Department has lack of space for conducting regular course work and needs revamping.
- Laboratory facilities need continuous modernization.
- Latest Test equipment should be added.
- R&D budget allocation need enhancement.

Opportunities:

- As the foremost Autonomous Institute in this part of geography, ample scope for modernization of Courses, meeting the Industry and professional challenges can be undertaken
- Joint multi Domain Courses with Various reputed institutes can be a source of knowledge development, because this Institute has MOUs in different areas of both Engineering and Sciences Departments.

Challenges:

- The most important challenge is to encourage development of MOUs with industries related to ECE in this area and to make this an important destination to Electronics and Communications R & D in addition to being only IT industry related courses.

39. Future plans of the department

- To follow guidelines of NBA in implementing the Outcome Based Education in all aspects of teaching and learning
- All PG programs to be accreditated for improving the Research Quality among the Students
- Increase the Research proposals by Faculty from the Department to Industry for quality implementation of the latest technologies that results in patents and generation of Internal Revenue.

Since the department of ECE is recognized as Research Center of JNTU-K, enrolment of Research Scholars to encourage Research activity through more PhD scholars.

E.5. ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT

1. Name of the Department & its year of establishment :
   Electrical and Electronics Engineering, 1996

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

   UG: B.Tech. (Electrical and Electronics Engineering)
   PG1: M. Tech. (Power System Control and Automation)
   PG2: M. Tech. (Power Electronics and Drives)

3. Interdisciplinary courses and departments involved

Title(s) of the course(s)	**Other department involved**
Electrical Safety and Management	EEE, ME, ECE
Design Concept for Engineers	EEE,ECE, ME, Civil
Special Electrical Machines for Industrial Applications	EEE, ME
Reliability Evaluation of Engineering Systems	EEE, ME
Biomedical Instrumentation	ECE, ME, EEE
Neural Networks	CSE, IT, EEE, ME
Neural Networks	CSE, IT, EEE, ME
Biometrics	CSE, IT, EEE
Disaster Management	Civil, ME, EEE

4. Annual/ semester/choice based credit system :
   Semester based credit system

5. Participation of the department in the courses offered by other departments

S.No.	Title(s) of the course(s)	To which department	Programme UG/PG	Semester
1	Electronic Circuits	ECE	UG	II
2	Prime Movers & Pumps	Civil	UG	III
3	Pulse & Digital Circuits	ECE	UG	IV
4	Data Structures	IT	UG	VII

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Cadre	**Sanctioned**	**Filled**
Professors	**4**	**6**
Associate Professors	**7**	**4**
Asst. Professors	**19**	**19**

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specilization	No of Years Experience	No of Ph.D. Students uided for the last 4years
G.Govinda Rao	Ph.D.	Professor	Power Systems	54	2
Sastry V.Vedula	Ph.D.	Professor	Power Electronics	50	0
C.V.K. Bhanu	Ph.D.	Professor	Power Systems	16	1
N.Nageswara rao	Ph.D.	Professor	Power Electronics	46	0
K.Narasimha Rao	Ph.D.	Professor	Power Systems	16	1
K.Parvatisam	Ph.D.	Professor	Power Systems	45	0
B.Viswanath	M.Tech	Associate Professor	Power Systems	21	0
P.K.Das	M.Tech	Associate Professor	Electrical Machines and Industrial Drives	13	0
G.V.E.Sathish kumar	M.Tech	Associate Professor	Industrial Electrical Systems	12	0
T.S.Sirish	M.Tech	Associate Professor	Instrumentation and Control	9	0
D.Ramesh Kumar	B.E.	Assistant Professor	EEE	14	0
A.Ravi Shankar	M.Tech	Assistant Professor	Power Systems	9	0
A.S.R.Sekhar	M.E	Assistant Professor	Power Systems	8	0
P.Pawan Puthra	M.Tech	Assistant Professor	Power Electronics and Drives	5	0
K.Ravi kumar	M.Tech	Assistant Professor	Power Systems	9	0
Y.Chinna Venkata kondiah	M.Tech	Assistant Professor	Power Systems	6	0
K.S.R.Rajeswara rao	M.Tech	Assistant Professor	Power Electronics and Drives	3	0
D.Bala Bhaskar	M.E	Assistant Professor	Control Systems	2	0
G.Vanitha	M.E	Assistant Professor	Power Systems and Automation	2	0
P.Sathish	M.Tech	Assistant Professor	VLSI	5	0
P.Sai kumar	M.Tech	Assistant Professor	Power Electronics and Industrial Drives	2	0
Ch.Venkatrao	M.Tech	Assistant Professor	High Voltage Engineering	2	0
V.Umamaheswarao	M.Tech	Assistant Professor	Power Electronics	1	0
V.Rajesh	M.Tech	Assistant Professor	Power Electronics	1	0
G.Surya chandra	M.Tech	Assistant Professor	Power Systems	1	0
A.Susmitha	M.Tech	Assistant Professor	Power Electronics	2	0
K.Durga Malleswara Rao	M.Tech	Assistant Professor	Power systems Control and Automation	2	0

G.Srinivas	M.E	Assistant Professor	Power Electronics and Drives	3	0
K.srikanth	M. Tech	Assistant Professor	Control Systems	8	0

8. Percentage of classes taken by temporary faculty – programme-wise information: No temporary faculty

9. Programme-wise Student Teacher Ratio

   UG: 16.36
   PG1: 12
   PG2: 12

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

SUPPORTING STAFF	Sanctioned	Filled
Technical	5	5
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.

    a) National: 2 (Rs116.63lakhs)
    b) International: 1(Rs1.0lakh)
    c) Total grants for ongoing projects (a+b) = 1.17 Crore

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received := 1.17 Crore

13. Research facility / centre with
    - state recognition : JNTUK, kakinada
    - national recognition : Nil
    - international recognition : Nil

14. Publications:

    - number of papers published in peer reviewed journals (national / international)

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	2	1	9	20	11
2.	National Journal	2	7	1	1	-
3.	International Conference	2	1	4	1	-
4.	National Conference					
	Total Papers	6	9	14	22	11

* 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 : NIL
* SNIP : NIL
* SJR : NIL
* Impact factor – range / average : NIL
* h-index: NIL

15. Details of patents and income generated :
NIL

16. Areas of consultancy and income generated

Sl.No	Name of the faculty	Title of the work	amount	Duration of the work	status
1	Dr. C. V. K Bhanu and Sri. K. A. S MallikarjunaRao	Variable Voltage Variable Frequency Drives(VVVFD)	0.64 Lakhs	7 Months	Completed
2	Dr. Sastry V. Vedula	Modeling of aero-space power systems	6 Lakhs	2 years	In Progress
3	Dr. G. Govinda Rao	Cricket Stadium Illumination	NIL	2 years	Completed
4	Sri. B. Viswanath	Substation Automation	0.24Lakhs	14days	Completed

17. Faculty recharging strategies

Workshops/seminars/conferences attended by faculty during the Academic year 2012-2013: **21**
Workshops/seminars/conferences attended by faculty during the Academic year 2011-2012: **9**
Workshops/seminars/conferences attended by faculty during the Academic year 2010-2011: **5**

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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	B.Tech. (E.E.E.)	100%	NIL
	M.Tech. (PSCA)	100%	NIL

2010-12	B.Tech. (E.E.E.)	100%	NIL
	M.Tech. (PSCA)	100%	NIL
2011-12	B.Tech. (E.E.E.)	100%	NIL
	M.Tech. (PSCA)	100%	NIL
2012-13	B.Tech. (E.E.E.)	100%	NIL
	M.Tech. (PSCA)	100%	NIL
2013-14	B.Tech. (E.E.E.)	100%	NIL
	M.Tech. (PSCA)	81%	19%

19. Awards / recognitions received at the national and international level by

- Faculty : NIL
- Doctoral / post doctoral fellows : NIL
- Students :One of the student won university gold medal for being topper.

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
2013-14: 3
2012-13: 5
2011-12: 1
2010-11: 3

21. Student profile course-wise:

UG

Name of the Course(refer question no. 2)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
2009-13	NA	44	21	42(64.61)	21(32.31)
2008-12	NA	47	19	42(63.63)	19(28.79)
2007-11	NA	81	36	78(66.67)	34(29)
2006-10	NA	42	19	40(65.57)	19(31.14)

M. Tech (Power system Control and Automation)
PG-1:

Name of the Course(refer question no. 2)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female

2011-13	NA	13	12
2010-12	NA	12	12
2009-11	NA	18	18
2008-10	NA		

22. Diversity of Students

Name of the Course(refer question no. 2)	% of students from the college	% of students from the state	% of students from other States	% of students from other countries
UG	Nil	52/60(83%)	8/60(13%)	Nil
PG-1	3/18(17%)	13/18(68%)	2/18(10%)	Nil
PG-2	1/15	14/15	Nil	Nil

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
(Details are available in Item no. 5.2.4 of Criterion-V)

24. Student progression
(Details are available in Item no. 5.2.1 ofCriterion-V)

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	14.81%(4/27)
from other universities within the State	33.33%(9/27)
from other universities from other State	51.85%(14/27)

26. Number of faculty who were awarded Ph. D, D.Sc..and D.Litt. during the assessment period.
Number of Ph.D awardes during the assessment period: **3**

27. Present details about infrastructural facilities

a).Department Library:
number of books=308,
Lecture CDs=6,

b).Internet facilities for staff and students

Internet Services	Yes
Name of the Internet provider	V- Online
Available bandwidth	40 Mbps
Access speed	Very Good
Availability of Internet in an exclusive lab	Yes
Availability in most computing labs	Yes
Availability in departments and other units	Yes
Availability in faculty rooms	Yes

c).Total number of class rooms :7

d).Class rooms with ICT facility: Nil

e).Students' laboratories : Networks Lab , Electrical Machines Lab , Electrical Measurements Lab, Simulation Lab,Control Systems Lab Power Electronics Lab, PowerSystemsLab

f).Research laboratories:PowerSystemsLab

28. Number of students of the department getting financial assistance from College.
PG: 4 under TEQIP II

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology:

- Due to demand of the Power Electronics And Drives in the industry
- To promote the consultancy and research in the area of Power Electronics and Drives

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?

b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

- Assessment is based upon the effectiveness of the guidelines for Student feedback system. The design and effective Implementations of the guidelines are essential student feedback System.
- Two feedbacks are taken, one just after Mid-I examination and the second just after Mid-II examination. Feedback form contains 15 questions covering all aspects of delivery of a lecture

c. Alumni and employers on the programmes and what is the response of the department to the same?

Yes, Alumni member's feedback has been helping the department in modification of the curriculum relevant to the industry and incorporating in the syllabus.

31. List the distinguished alumni of the department (maximum 10)

Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position
G.SRAVANTHI	2003-07	UG	PACIFIC CORP(USA)
B.N.K.PRAVEEN	2009-13	UG	IOCL
B.SAI PRASANTH	2009-13	UG	IOCL
M.G. VISWANADH MUTNURU	2010-12	PG	TCS
A.VAMSI KRISHNA	2009-13	UG	DELHI METRO

			RAILWAYS
G.SAI MUNITEJA	2009-13	UG	(M.Tech) at IIT BOMBAY
K.DEEPIKA	2004-08	UG	Design Engr,L&T
V.SUNILKUMAR	2003-07	UG	Sr.Engr,BHEL
KAMESWARI	2007-11	UG	APGENCO
G.ADHITYA	2006-10	UG	Sr.Engr,GAIL
P.SUDESHNA	2004-08	UG	INTEL CORP(USA)

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
Student enrichment programmes conducted: **15**

33. List the teaching methods adopted by the faculty for different programmes.

i) Live experiments demonstrated in the class
ii) Topic converted into activity of students
Teaching Aid: LCD, BOARD-CHALK.

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
The Department ensures that the program objectives are met and learning outcomes are monitored based on the followingClass room tests / open book tests etc.. (teacher specific and will be announced to the class at the beginning of the semester)

- Mid semester exams
- Take home assignments
- Since these internal evaluations constitute as much as 40 percent of marks those are taken seriously by the students and prepare them towards the semester end exams which account for the remaining 60 percent
- Remedial classes are planned wherever necessary to help the slow learners.
- Laboratory performance is evaluated on an experiment by experiment basis and students are encouraged to complete during their spare time the experiments that they might have missed due to valid reasons.
- In addition, two internal laboratory exams are held prior to the semester end practical exam.
- Comprehensive Viva-Vocefor student performance at program level

Mini industrial project is jointly evaluated by industry experts and institutional leve

35. Highlight the participation of students and faculty in extension activities.

Extension activity	Duration of the program
Blood Donation awareness	1 day
Blood Donation camp	1 day
Plantation of Saplings	8 days
Pulse Polio Immunization	1 day
Observance of Communal Harmony Campaign Week and Flag Day	6 days
Observance of International White Cane Day	1day

7 KM RUN ON BEACH SAFETY	1 day
Motivational Talk by Dr. SUDDALA ASHOK TEJA	1 day
Shram Daan to create playground for the Destitute Children	22 day
Laughter therapy for the NSS Student Volunteers of GVP (09-08-2012)	1 day
Participating in Independence Day Celebrations	1 day
Observation of International White Cane Day	10 days
Promoting Hygiene and Cleanliness in canteen	13 days
Observance of International Literacy Day-Week	7 days
Observance of NSS day	1 day
Clean - Campus Habituation	23 days
Blood donation awareness and Donation camp	2 days
Motivation to wear helmet	
Awareness on Burning Issue – focusing Gang rape in New Delhi	1 day
National Voter's Day	1 day
Republic Day celebrations	
International Women's Day (08-03-2013)	
Special Camp at Anandapuram Village, Visakhapatnam Dist.	7 days
Special Camp at Chandaka, Anandapuram Mandal	7 days

36. Give details of "beyond syllabus scholarly activities" of the department. Facilitating students participation in the ongoing faculty research projects

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

S.No	Course	Accreditation status
1	B.Tech (Electrical and Electronics Engineering)-UG	Dept was accredited By National Board of Accreditation (NBA) 1st time for 5 years in 2003 2nd time for 3 year in sept. 2011
2	M.Tech (Power System Control and Automation)-PG	Applied in December 2013
3	M.Tech (Power Electronics and Drives)-PG	New programme

- NBA APPLICATION NUMBER

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

* Strengths, Weaknesses, Opportunities and Challenges should be in bulletform

1. Faculty:

In the department contains scheduled number of faculty in the respective designation besides beyond this there are **3 senior professors** who have assists in teaching, research, and consultancy. They also take special lectures to young faculty creating an environment of in house/training. Other than these senior professors the second part of the faculty is also very strong. There are **four professors with Ph. D's and industrial experience**. There are five faculty members who expect to get their doctorate within few months to few years. There are **two faculty** members working under the **scheme of QIP** furthermore the faculty

consists of members from different states and also with PG qualification from **IIT's, NIT's and USA**.

2. Laboratories:

The laboratories have been developed according to AICTE norms they are now being strengthen removing the obsolescence and replacing by modernized equipments. The following are the modern equipment that has been fastened into the laboratories.

a) Electrical machines lab
b) Power systems lab
c) Power electronics drives lab

This is being possible from the following sources of the funds

1) Funds specially provided by the college management.
2) AICTE Funds

3. Research and development:

Department is running under two PG courses.

1. Power System Control and Automation-55+ research papers have been published by the faculty member and M.Tech scholars by executing M.Tech projects so far. The department recently has been recognized by JNTUK towards an independent research centre. The department is also received an of Rs 16.63 lakhs to modernize the Power Systems lab from the AICTE.

2. Power Electronics Drives- Several research papers could be published by the faculty member and M.Tech scholars while executing M.Tech project. The department recently has been recognized by JNTUK towards an independent research centre. The department is also received an of Rs 20 lakhs from the TEQIP-II S.C.1.2 and also other grants with these grants the department have organized the following activities.

1) Special Topics in Electrical Network Theory.
2) Solar PV Systems & Energy Efficiency
3) FDP on NN& FL

The TEQIP grants are also being utilized procure the latest software's for the laboratories, projects and research work. The following are the research areas in which the dept. is actively involved

1) Reactive power management and voltage stability
2) FACTS devices
3) Renewable energy sources
4) Power system dynamics and control
5) Fuzzy logic, neural network, genetic algorithm & fundamentals of circuit analysis.
6) Power Quality

Weakness:

The total funding that is available does not seem to match the potential of the faculty. The college authorities are trying to get more funds from the student's alumni and from various funding agencies. The dept can work with more strength the funding available is increased.

Opportunities:

The dept has successfully exploited all the opportunities that are available. The following activities yet to be brought into the department

1) Register in the dept and guiding them
2) Consultancy projects which are normally not up to the mark

Challenges:

The following challenges projects are to be taken up

1. Developing an electrical smart grid in to the college.
2. Designing smart meters and embedded systems
3. To bring awareness about electrical safety and power saving to public.

39. Future plans of the department:

- To develop the dept as center of Excellence
- To have more PG programs to develop dept has a consultancy hub
- Introduce state of the art simulators such as Lab view, Multi-Sim, EHTDC.
- Modernization of the (Electrical Machines, Power electronics and Drives) Laboratories.
- Modeling of power electronics system with applications to power system / power quality issues.
- Increase the research activities of faculty in their chosen areas such as power electronics and drives, power quality, distributed power generation and other areas.
- Start research activities in areas like Power Quality, Micro Grid, and real time

E.6. INFORMATION TECHNOLOGY DEPARTMENT

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: B.Tech
   PG1: M.Tech – (Software Engineering)

3. Interdisciplinary courses and departments involved

Title(s) of the course(s)	**Other department involved**
Neural Networks	CSE, IT, EEE, ME
Neural Networks	CSE, IT, EEE, ME
Biometrics	CSE, IT, EEE

4. Annual/ semester/choice based credit system
   Semester 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	Filled/Existing	Sanctioned
Professor	03	3
Associate Professor	02	2
Asst. Professor	15	15

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,) \

S.No	Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D students guided for the last 4 years
1	Dr. M.N. Seetaramanath*	Ph. D.	Sr. Professor	Network Security	39	0
2	Dr. K.B. Madhuri	Ph. D.	HOD &Professor	Data Mining	13	0
3	Dr. M.P.K. Kishore	Ph. D.	Professor	Data Mining & Information Security/Sheaf Representation	14	0
4	Mr. R.V.V. Muralikrishna	M. Tech	Associate Professor	Field Document Summarization	10	0

5	Mr. S. Kanti Kiran	M. Tech	Associate Professor	Software Engineering	5	0
6	Ms.M.ChandraJyotsna	M. Tech	Asst. Professor	Software Engineering	5	0
7	Mrs. B. Jaya Lakshmi	M. Tech	Asst. Professor	Data Mining	8.6	0
8	Ms. A.S. Lalitha	M. Tech	Asst. Professor	Network Security	3	0
9	Mrs. K. K. Sandhya Rani	M. Tech	Asst. Professor	Computer Science Technology	5	0
10	Mr. S.Y. Pavan Kumar	M. Tech	Asst. Professor	Software Engineering	7	0
11	Mr.D.Naga Tej	M. Tech	Asst. Professor	Mining	4.5	0
12	Mr. IVS Venugopal	M. Tech	Asst. Professor	Software Engineering	6.5	0
13	Mr. P. Praveen Kumar	M. Tech	Asst. Professor	Information Technology	3.5	0
14	Mrs. Sita Kumari	M. Tech	Asst. Professor	Wireless Sensor Networks	9.9	0
15	Mr. Ch. Srikanth Varma	M. Tech	Asst. Professor	Computer Science Technology	5.5	0
16	Mr. Sagar Sathuluri	M. Tech	Asst. Professor	Information Technology	2	0
17	Mr. B. Srinu	M. Tech	Asst. Professor	Network Security	2	0
18	Mr. D. Arun Kumar	M. Tech	Asst. Professor	Data Mining	5	0
19	Mr. K.V.S.S. Prakash	M. Tech	Asst. Professor	Network Security	4.5	0
20	Mr. Anil Patro	M. Tech	Asst. Professor	Software Engineering	4.5	0

8. Percentage of classes taken by temporary faculty (if exist) – Programme-wise information
   No temporary faculty

9. Programme-wise Student-to-Teacher Ratio

   UG: 315/16=19.6
   PG1: 25/3=8.3
   1 senior professor has not been considered (DR M N Seetaramanath)

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Filled/Existing	Sanctioned
No. of academic support staff	2	2
Administrative	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.

    a) National: 2 (Rs4.98lakhs)
    b) International: Nil
    c) Total grants for ongoing projects (a+b) = 4.98lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received : NIL

13. Research facility / centre with

- state recognition : YES (Recognized by JNTU-K) along with CSE as a research center

14. Publications:

- number of papers published in peer reviewed journals (national/international): 23

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	1	--	11	11	NIL
2.	International Conference	-	-	5	NIL	1
	Total Papers	1	-	16	11	1

- Books with ISBN numbers with details of publishers

S.No.	**Name of the Department**	**Name of the Faculty Member**	**Number of Books Published**	
			Text Books	**Laboratory Books**
1.	Information Technology	Dr. MPK Kishore	2	----

- 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 : Nil
- Impact factor – range / average =0 to 2.5

15. Details of patents and income generated
Nil

16. Areas of consultancy and income generated
Nil

17. Faculty recharging strategies
- 1 faculty attended International Conference and 1 faculty attended workshop in the year 2009-2010
- 4 faculty attended different workshops, 8 attended for a faculty development program and 4 faculty went for a training program in the year 2010-2011
- 4 faculty attended various workshops in the year 2011-2012
- 4 faculty attended various Faculty Development Programs, 21 faculty attended various workshops in the year 2012-2013

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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	B.Tech. (I.T.)	70/70 (100)	0/70 (0%)
	M.Tech. (SE)	15/15 (100%)	0/15 (0%)
2010-11	B.Tech. (I.T.)	65/65(100%)	0/65 (0%)
	M.Tech. (SE)	15/18(83%)	3/18 (16.7%)
2011-12	B.Tech. (I.T.)	91/91(100%)	0/91(0%)
	M.Tech. (SE)	7/7(100%)	0/7(0%)
2012-13	B.Tech. (I.T.)	67/72(93)	5/72 (93.05%)
	M.Tech. (SE)	11/11(100%)	0/11(0%)

19. Awards / recognitions received at the national and international level by
    - Faculty - NIL
    - Doctoral / post doctoral fellows -- NIL
    - Students -- NIL

20. Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any.

    - 4 national level seminars/workshops have been organized by the department in the year 2009-2010 with the source of funding as college.
    - 6 national level seminars/workshops have been organized by the department in the year 2010-2011 with the source of funding as college.
    - 4 national level seminars/workshops have been organized by the department in the year 2011-2012 with the source of funding as college for 3 workshops and TEQIP II, S.C. 1.2 for 1 workshop.
    - 5 national level seminars/workshops have been organized by the department in the year 2011-2012 with the source of funding as collegefor 3 workshops and TEQIP II, S.C. 1.2 for 2 workshops.

21. Student profile course-wise:

UG

Name of the Course	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
2009-13	NA	60	39	(36/60) 60.00	(27/39) 69.23
2008-12	NA	69	36	(43/69) 62.32	(21/36) 58.33
2007-11	NA	43	23	(41/43) 95.35	(22/23) 95.65
2006-10	NA	35	30	(30/35) 85.71	(27/30) 90.00

PG-1:

Name of the Course	**Applications received**	**Selected**	**Pass percentage**

		Male	Female	Male	Female
2011-13	NA	10	3	(8/10) 80	(3/3)100
2010-12	NA	7	0	(6/7) 85.71	0
2009-11	NA	14	4	(14/14) 100	(3/4) 75
2008-10	NA	12	4	(11/12) 91.67	100

22. Diversity of Students

Name of the Course	**% of students from the college**	**% of students from the state**	**% of students from the states**	**% of students from the countries**
UG	N.A.	96 /97 (99%)	1(1%)	Nil
M.Tech – SE	Nil	16 (94.12%)	Nil	1 (5.88%)

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
(Details are available in Item no. 5.2.4 of Criterion-V)

24. Student progression
(Details are available in Item no. 5.2.1 of Criterion-V)

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	8 (40%)
from other universities within the State	10 (50%)
from other universities from other State	2 (10%)

26. Number of faculty who were awarded Ph.D, D.Sc..and D.Litt. during the assessment period.
Number of Ph.D awardes during the assessment period: 1

27. Present details about infrastructural facilities

a) Department Library (number of books, Lecture CDs, DVDs)
Number of Titles : 214
Number of Volumes : 370
Budget (cost of books) : Rs. 1,41,314 /-

b) Internet facilities for staff and students: 40 Mbps Internet through 100 Mbps LAN

c) Total number of class rooms: 5
d) Class rooms with ICT facility: 2
e) Students' laboratories: 4

Name of the lab	Labs Conducted
Wi-fi Lab-1	Database Management Systems Lab , Unix and Network Programming Lab.
Wi-fi Lab-2	Data Structures Lab, Operating Systems Lab, Web Programming Lab, Computer Networks/ Case Tools Lab, Multimedia Application Development Lab,
M.Tech Lab	Advanced Data Structures Lab, Advanced Testing and Case

	Tools Lab
IT Workshop Lab	IT Workshop, PC Software Lab.

f) Research laboratories: NIL

28. Number of students of the department getting financial assistance from College.

Programme	2011 -13	2012 -14	2013 -15
M.Tech	1	1	2

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

Yes,
Department meetings are conducted by head of the department, opinion and advice has been taken from faculty regarding development of new program of the syllabus and subjects, the same information is forwarded to the principal.

Internal assessment committee has constituted to discuss the prospects to start new program.
External (Stake holders, Alumni, Parents) and internal committee meetings are also held for discussion of start of new programs.

30. Does the department obtain feedback from

- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
  Through regular faculty meetings at department level, the entire process of teaching-learning and evaluation mechanisms and on the implementation of curriculum are reviewed and all the matters related to these are consolidated and will be utilized in the subsequent revisions of regulations and curriculum through BoS.

- students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
  Yes,
  The feedback collected from the students twice in a semester once after the first cycle of instructions and the second at the end on all courses through a 15 point feedback form designed for the purpose. The feedback form also contains rating of the teacher on a 5 point scale independent of the above 15 questions.
  The feedback collected from the students is analyzed and consolidated subject-wise ,semester -wise. Discrepancies if any will be brought to the notice of the teacher and necessary counseling will be done by the HoD to overcome the difficulties and for better content delivery individually. The response is also used to identify the strengths and weaknesses of the faculty both at subject level and pedagogical level and will be guided to attend faculty development programmes (and training on teaching methods) at higher institutes of repute.

Feedback from the students is also collected on the curriculum, teaching, learning and evaluation methods followed, during class committee meetings. Exit survey is conducted from the outgoing students on curriculum and the feedback obtained will be thoroughly discussed in the BoS for further refinements in the curriculum design.

- alumni and employers on the programmes and what is the response of the department to the same?
  Yes, the curriculum has been revised by considering the suggestions given by the employers and alumni.
  - K. Sudheer Reddy, Infosys
  - Malathi. S, Team Lead IBM Academic Initiative
  - Dr. B. Perraju, Vice President, Kony Labs

  Mr. Ch Srinivas --- Head of the Department – CSE , GVPCOE for women --Alumni
  the following subjects have been introduced with the suggestions made by the industry representative in BoS.
  - Big Data & Hadoop
  - Cloud Computing
  - Information Storage Systems
  - Information Storage Security and Management
  - Multi Core Programming

31. List the distinguished alumni of the department (maximum 10)

Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position
Praveen Dasigi	2001-2005	UG	Product Engineer, Rediff.com India Ltd, Mumbai
L. Srikanth	1999-2003	UG	SAP Consultant, Heiniken Corporation, Amsterdam, Europe
D. Nagendra	1999-2003	UG	Financial Analyst, Chevron Corpration, USA
L. Dharma Teja	2001-2005	UG	Sr. Software Engineer, Microsoft Corporation, USA
Rajesh K.	1999-2003	UG	Sr. Software Engineer, IBM Bangalore
Deepthi G.	1999-2003	UG	Sr. Manager , Deloitte Inc., Mumbai
Amarnath K.	1999-2003	UG	Sr. Software Engineer , TCS Chennai
Nagendra Kumar B.	1999-2003	UG	System Analyst , Infosys, Hyderabad
Udai Kiran I.	1999-2003	UG	Team Lead , Syntel Inc., Mumbai
Naga Kishore K.	2002-2006	UG	Senior Application Developer , Oracle Corporation Hyderabad

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
    Student enrichment programmes conducted: 18

33. List the teaching methods adopted by the faculty for different programmes.
    - NPTEL Videos
    - Case Study
    - Model Oriented Teaching
    - Chalk and Talk

- LCD Projectors
- Marker Boards

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Achievement of the POs following processes measured from :

- Feed-back is collected from the employers through placement cell.
- Feedback from the alumni.
- Through advisory boards constituted at institutional level.
- Through publications/presentations in conferences.
- Through interaction with parents

Achievement of the Learning outcomes is measured from following process

- Mid-term assessments are used to understand learning levels – using innovative methods like quiz, group discussions, paper presentations, etc.

35. Highlight the participation of students and faculty in extension activities.

Extension activity	Duration of the program	No.of participants	Outcomes
first special camp at Anandapuram village	25-01-2012 to 31-01-2012	46	Addressing of challenges such as awareness on ethical voting for democratic country, sanitation, HIV/AIDS, infected diseases, first aid measures, yoga for leading a healthy life, literacy. Also initiative in creating interest in studies among school children. Getting one aware of the government policies, cleanliness and how to prevent accidents
Special camp at Chandaka Village, Anandapuram Mandal, Visakhapatnam District.	22-02-2013 to 28-02-2013.	52	Exploring and awareness on effective farming methods Awareness of rural health care with special focus on CANCER Women health awareness by doctors of Gayatri Health care and medical technology Literacy drive in village

36. Give details of “beyond syllabus scholarly activities” of the department.
Facilitating students participatin in the ongoing faculty research projects

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

- First Accreditation by National Board of Accreditation for 3 Years w.e.f 27.07.2006, F.No.NBA/ACCR/229/2003 dt. 27.07.2006.
- Latest Accreditation by National Board of Accreditation for 3 Years w.e.f. 16.09.2011, Proc. File. No.11 43/2010/NBA,dt: 22.09.2011

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

- Some of the faculty are SUN certified programmers and Microsoft certified administrators.
- Established IBM center of excellence.
- Conducting IBM-DB2 certification program.
- University rank holders.
- Reasonable infrastructure.
- Regular student activities like conducting National level symposiums, publishing bimonthly magazine.
- accreditation in 2006 for three years.
- re-accredited in 2012
- Qualified, motivated and hardworking faculty.
- Good placements for eligible students.
- Emphasis given to overall personality development and communication skills of students through co-curricular and extracurricular activities.
- Expert lectures by eminent academicians and industrialists.
- MOU's with TCS , Infosys, IBM, EMC2, MICROSOFT.

Weakness:

1) Average faculty experience is low.
2) Research activities to be enhanced
3) Research laboratories to be improved

Opportunities:

1) Enhancement of Industry-Institute interaction.
2) To catch up with the latest trends in technology by establishing advanced laboratories beyond curriculum.
3) Certifications exams can be prompted.
4) To start inter-disciplinary research works.
5) To start programs for up gradation of technical skills for surrounding community.

Challenges:

1) Decline in Input quality of students due to fluctuations in market demand.
2) Difficulty to recruit more qualified faculty.

39. Future plans of the department.

1) Applying project proposals for funding agencies like AICTE.
2) Establishing Data Mining Lab.
3) Publishing quality research papers in referred journals.
4) Organizing seminars/guest lectures/workshops by Industry Experts.

Participation of faculty & staff in Faculty Development Programme in areas like cyber security, big data analytics, software testing, software delivering methodologies.

E.7. MECHANCIAL ENGINEERING DEPARTMENT

1. Name of the Department & its year of establishment
   Mechanical Engineering 1996

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

   UG: Mechanical
   PG1: CAD/CAM
   PG2: CAAD
   PG3: Thermal Engineering

3. Interdisciplinary courses and departments involved

Title(s) of the course(s)	**Other department involved**
Electrical Safety and Management	EEE, ME, ECE
Design Concept for Engineers	EEE,ECE, ME, Civil
Special Electrical Machines for Industrial Applications	EEE, ME
Reliability Evaluation of Engineering Systems	EEE, ME
Biomedical Instrumentation	ECE, ME, EEE
Neural Networks	CSE, IT, EEE, ME
Green Buildings and Infrastructure	Civil, ME
Neural Networks	CSE, IT, EEE, ME
Project Management	CSE, ME, Management
Renewable sources of engineering	ME, Civil
Disaster Management	Civil, ME, EEE
Design and Analysis of Experiments	ME, Chemical
Renewable sources of engineering	ME, Civil
Nano Technology	Chemical, ME, physics
Financial Management	Management studies, Civil, ME

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 UG/PG	semester
Non Conventional Sources of Energy	Chemical Engg Dept	UG	VII Sem
Elements of Electrical & Mechanical Engineering	Civil Engineering Dept	UG	III Sem

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Designation	Filled/Existing	Sanctioned
Professor	5	6
Associate Professor	8	9
Asst. Professor	15	18

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,) \

S. No	Name	Qualify cation	Designation	Specialization	No. of years of Exp.	No. of Ph.D students guided for the last 4 years
1	Dr. A Balakoteswara Rao	Ph.D.	Professor & Principal	Design & Production Engg. Machine Tools, Robotics	22	01
2	Dr. V. Dharma Rao	Ph.D.	Professor	Heat Transfer	34	04
3	Prof K Rama Krishna	M.Tech.	Professor	MaterialHandling &Machine Design	15	
4	Dr. B V Ramana Murthy	Ph.D.	Professor	Design	28	
5	Dr. B Govinda Rao	Ph.D.	Professor & Head	Heat Transfer and CFD	15	
6	PROF D Varada Raju	M.Tech.	Professor	Machine Dynamics	31	
7	Dr. D Srinivasa Rao	Ph.D.	Professor	Tribology	23	
8	D V N J Jagannadha Rao	M.Tech.	Assoc. Prof.	Foundry Engg., Welding	17	
9	Dr Sanjay Krishna Rao	M.E	Assoc. Prof.	Robotics , PKM	13	
10	Dr. Sanjay Kumar	PHD	Assoc. Prof.	Welding	13	
11	Dr. Y Seetha Rama Rao	Ph.D.	Assoc. Prof.	Machine Dynamics	14	
12	B Vijaya Lakshmi	M.E	Assoc. Prof.	Heat Transfer and CFD	14	
13	Dr. S Rama Krishna	Ph.D.	Assoc. Prof.	Design Composites vibrations	15	
14	K Manikya Kanthi	M.Tech.	Astt. Prof.	CAD/CAM	9	
15	S Sankar Ganesh	M.Tech.	Astt. Prof.	Design	7	
16	M Bhaskar Kumar	M.E	Astt. Prof.	Design	6	
17	S V Subrahmanyam	M.Tech.	Astt. Prof.	CAD/CAM	6	
18	B Sridhar Reddy	M.Tech.	Astt. Prof.	Adv Manuf. sys	9	
19	N. Srinagalakshmi	M.Tech.	Astt. Prof.	CIM	1	
20	I Suneetha	M.Tech.	Astt. Prof.	Design	7	
21	B Ajit	M.E	Astt. Prof.	Automobile Engg	1	
22	CH Nagasatya Kirti	M.E	Astt. Prof.	CAD/CAM	3	
23	K.Prasanthi	M.Tech.	Astt. Prof.	CAD/CAM	4	
24	M V N srujan	M.tec	Astt. Prof.	Adv	1	

	manohar	h.		manufacturing system		
25	V. Sirisha	M. Tech	Astt. Prof.	Heat trasnfer	3	
26	T S vamsi krishna	M.Tech.	Astt. Prof.	Cad/cam	2	
27	K Raghavendra	M.Tech.	Astt. Prof.	Machine desing	1	
28	P Satish	M.Tech.	Astt. Prof.	Mechanical engg	3	

8. Percentage of classes taken by temporary faculty (if exist) – Programme-wise information
   No temporary faculty

9. Programme-wise Student-to-Teacher Ratio

   UG: 18:1
   PG-1: CAD/CAM=9:1
   PG-2: CAAD= 9:1
   PG-3: THERMAL ENGINEERING = 9:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Filled/Existing	Sanctioned
No. of academic support staff	6	6
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.

    a) National: 12.0 lakhs
    b) International Nil
    c) Total grants for ongoing projects (a+b) = 12.0 lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

    a) National: 26.97 lakhs
    b) International: Nil
    c) Total grants for projects (a+b) =26.97lakhs

13. Research facility / centre with

- state recognition
  Department of Mechanical Engineering Recognized as Research Centre by JNTU, Kakinada
- national recognition: Nil
- international recognition: Nil

14. Publications:

- number of papers published in peer reviewed journals (national/international) : 24 (National 3 Int 21)

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	4	3	6	10	5
2.	National Journal	1	1	1	1	1
3.	International Conference	5	2	4	5	5
4.	National Conference	2	--	--	2	--
	Total Papers	12	6	11	18	11

- Monographs: Nil
- Chapter(s) in Books: Nil
- Editing Books: Nil
- Books with ISBN numbers with details of publishers

S.no	Name of the subject	Author name	Publisher	ISBN Number
1	Automobile engineering	Prof K Ramakrishna	PHI	978-81-203-4610-9
2	Project Management	Prof K Ramakrishna	PHI	978-81-203-3969-9

- 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
- Average=1.28
- h-index =11

* Chapter(s) in Books : Nil
* Editing Books : Nil
* Citation Index – range / average : Nil
* SNIP : Nil
* SJR : Nil
* Impact factor – range / average : Nil
* Range=0.7-2.5

15. Details of patents and income generated

Name of the faculty	Title of the Patent	Approval Number	Year of approval	Area of specialization
Prof . P.Srinivasa Rao	"FLEXIBLE CONTACT TUBE FOR ROTATION ARC WELDING"	Patent No: 206453	dt. 02/07/2004	Welding

16. Areas of consultancy and income generated

Name of the faculty	Sponsoring Agency	Title of the work	amount	Duration of the work
Dr. S. Ramakrishna and Dr. Rao Tatvarthy	NSTL, Visakhapatnam	Optimal Design of Diesel Generator Foundation	6.72 lakhs	8 months from 4th June 2012

17. Faculty recharging strategies

- Workshops/seminars/conferences attended by faculty during the Academic year 2009-2010: 3Nos
- Workshops/seminars/conferences attended by faculty during the Academic year 2010-2011: 5Nos
- Workshops/seminars/conferences attended by faculty during the Academic year 2011-2012: 11Nos
- Workshops/seminars/conferences attended by faculty during the Academic year 2012-2013: 14Nos

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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	B.Tech. (M.E.)	46/60 (77%)	14/60 (23%)
	M.Tech. (CAD/CAM)	9/10	1/10
2010-11	B.Tech. (M.E.)	65/65(100%)	Nil
	M.Tech. (CAD/CAM)	8/16	5/16
2011-12	B.Tech. (M.E.)	72/72(100%)	Nil
	M.Tech. (CAD/CAM)	6/14	8/14
2012-13	B.Tech. (M.E.)	48/57(85%	09/57(15%)

19. Awards / recognitions received at the national and international level by
    - Faculty
    - Doctoral / post doctoral fellows
      Faculty members recognized as research supervisors registered with JNTU-K

S.No	Programme
1	Prof.A.B.K.Rao
2	Dr.B.Govindarao
3	Prof.D.Srinivasa Rao
4	Prof.V.Dharma Rao
5	Prof.S.RamaKrishna

    - Students

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

2009-10: 1
2010-11: 1
2011-12: 5

21. Student profile course-wise:

UG

Name of the Course	Applications received	Selected		Pass percentage	
2009-13	NA	46	11	97	100
2008-12	NA	55	17	79	100
2007-11	NA	50	13	86	100
2006-10	NA	54	11	91	100

PG-1:CAD/CAM

Name of the Course	Applications received	Selected		Pass percentage	
2011-13	NA	07	04	57	25
2010-12	NA	11	04	100	100
2009-11	NA	13	03	85	100
2008-10	NA	7	3	70	30

22. Diversity of Students

Name of the Course	% of students from the college	% of students from the state	% of students from the states	% of students from the countries
UG	Nil	120 (100 %)	Nil	Nil
PG-1 : CAD/CAM	1(6%)	14 (88 %)	Nil	1 (6%)
PG-2: CAAD	Nil	13 (100%	Nil	Nil
PG-3: Thermal Engg	Nil	14 (100%)	Nil	Nil

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
(Details are available in Item no. 5.2.4 of Criterion-V)

24. Student progression
(Details are available in Item no. 5.2.1 of Criterion-V)

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	10 (35%)
from other universities within the State	13 (46%)
from other universities from other State	5 (19%)

26. Number of faculty who were awarded Ph.D,D.Sc.. and D.Litt. during the assessment period.
Numberof Ph.D awardes during the assessment period: 4

27. Present details about infrastructural facilities

a) Department Library (number of books, Lecture CDs, DVDs)

Number of books:220

b) Internet facilities for staff and students
Internet facility: 100 MBPS B.S.N.L leased line, MBPS LAN

c) Total number of class rooms :- 08

d) Class rooms with ICT facility :- 2No

e) Students' laboratories:
Engineering Workshop, Production Technology Lab, Thermal Engineering Lab, Machine Shop, Metrology Lab, Instrumentation Lab, Mechatronics Lab, Metallurgy Lab, CAD/CAM Lab, Heat Transfer Lab

f) Research laboratories
Rotating Arc Welding Machine, Parallel Kinematics Machines, VCR Diesel Engine, MICROSCOPE(SEM)

28. Number of students of the department getting financial assistance from College.

Programme	2011 -13	2012 -14	2013 -15
M.Tech	2	6	11

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

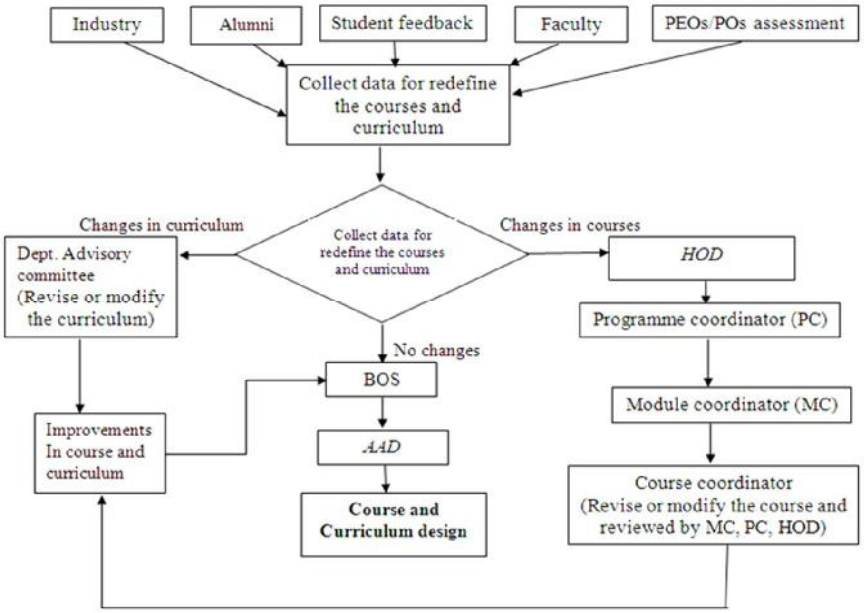
- Getting Feedback from all stakeholders like industry, parents, students and faculty
- Assessing the availability of job opportunities in industry, Research and academia
- Collecting information about emerging areas of engineering growth and development

30. Does the department obtain feedback from
- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
- students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
- alumni and employers on the programmes and what is the response of the department to the same?

➢ Feedback from students at midterm and end of the semester on the delivery mechanism of course content.
➢ Feedback from faculty and staff on the facilities helping the delivery mechanism like laboratory infrastructure, library and ICT.
➢ Feedback from industry on student performance at the time of placements
➢ Feedback from alumni on their experiences in industry and higher studies on the relevance of the curriculum and changes for future
➢ Feedback from parents on their satisfaction levels on the performance of their wards in the institution and after.
➢ Opinion drawn from industry representatives at periodical intervals during the meetings of BOS, academic advisory committee (AAD) are

recorded and used for reorganizing curriculum in line with university guide lines

- The improvements made by the universities, NITs and IITs are observed.
- Course structure is updated basing on the above facts once in four years duly incorporating the required changes.



31. List the distinguished alumni of the department (maximum 10)

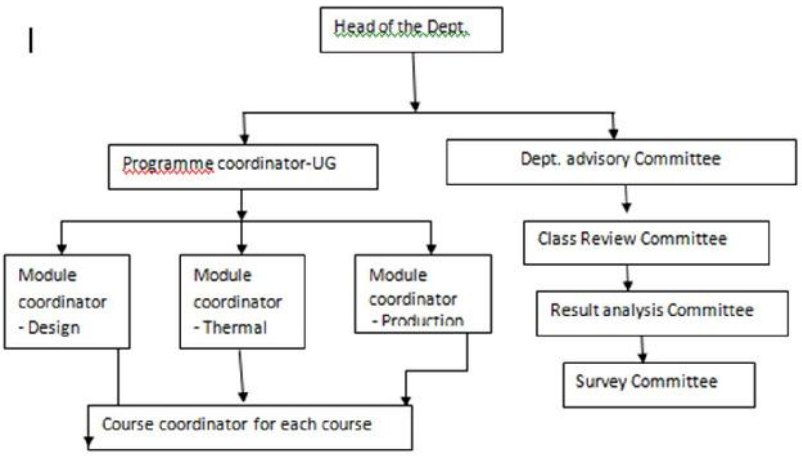
Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position
SHAIK SIRAJ	2009-2013	UG	Indian Railway , (South) Jr Engg
PAVAN KUMAR K	2005-2009	UG	Indian Railway , (North) Jr Engg
K. SANDHYA RANI	2005-2009	UG	APGENCO, Asst Engg
MANIKANTASRINIVASR D	2007-2011	UG	L&T, Grad Engg
T Jyoti	2006-2010	UG	Indian Navy,
D Sai Baba	2006-2010	UG	Indian Navy
P Bharat Kumar	1997-2003	UG & PG	Infosys
U Anand	1997-2003	UG	Indian Bank
SALADI MANJULA	2005-2009	UG	Infosys
K.V. SHIVCHARAN	1997-2003	UG	Motorola,USA
Chaitanya Dutta	2009-2013		SAIL Graduate Engg
A Ajay	2004-2006	PG	Infosys, HRA

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
    Student enrichment programmes conducted: 12
33. List the teaching methods adopted by the faculty for different programmes.

Content delivery method	Demonstration
Lecturing	Assignment
Working models	Animation
Role-play	Industrial visit
Quiz	Seminars
Group discussions	Project

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

- Recruitment of competent faculty and not in the hands of dept duly adhering to AICTE norms
- Maintaining required student- teacher ratio through regular faculty recruitment balancing attrition.
- Establishment, maintenance and up gradation of infrastructure from time to time to meet the curricular needs for the achievement of PEOs.
- Semester-wise internal reviews within the Department leading to curricular reforms during Board of Studies meetings.
- Follow up of recommendations of the Boards of Studies and the Academic Council
- Institution encourages faculty participation in faculty development programs by professional bodies and industry oriented skill development programs regularly by way of meeting expenditure and granting academic leave and OD to train the student to achievement of PEOs.
- Offer incentives in the form of cash awards, mementos to faculty and appreciation certificates, scholarships to students. The policy of incentives and the eligibility criteria is made known to all.
- Awards are also given to Staff who made on outstanding contribution to teaching, learning and research.



Academic Advisory Committee: Academic Advisory Committee consists of Program Coordinator, Module Coordinator and one faculty representative. The responsibility of the committee is see the academic performance program in line with other committees and prepare the report

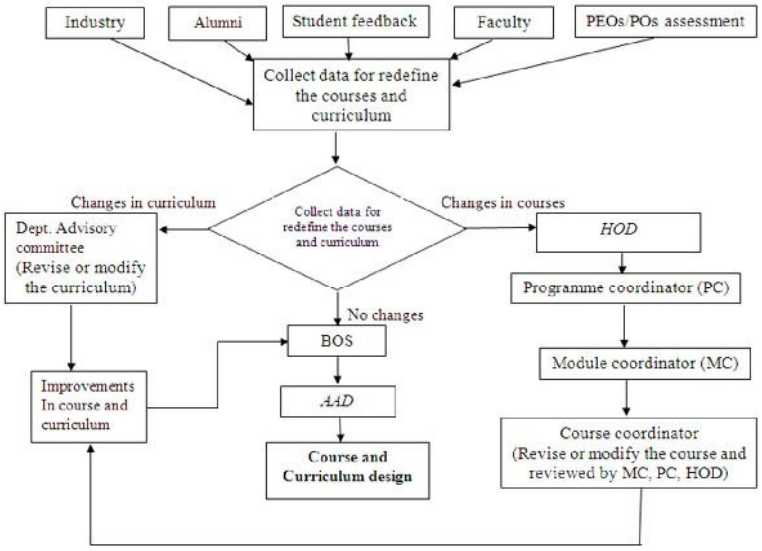
of attainment of PEOs and submit to the HOD. It interacts with course coordinators, faculty and students once in every two months to collect the data.

Class Review Committee: Class Review Committee consists of senior faculty member, and twofaculty representatives. The responsibility of the committee is see the even coverage of syllabus and no of classes held for each course and prepare the report of attainment of PEOs and submit to the HOD. It interacts with course coordinators, faculty and students once in every two months to collect the data.

Result analysis Committee: Result analysis Committee consists of senior faculty member, and two faculty representatives. The responsibility of the committee is see the academic performance program in line with other committees and prepare the report of attainment of PEOs and submit to the HOD. It interacts with course coordinators, faculty and students once in every two months to collect the data.

Survey Committee: Class Review Committee consists of senior faculty member, and two faculty representatives. The responsibility of the committee is to collect the data from different surveys like alumni survey, employer survey and course end survey about attainment of PEOs in specified format and submit to the HOD. It interacts with employers, alumni whenever and wherever possible to collect the data and send mails, once in every six months to collect the data.

Program Coordinator analyze the all POs direct/indirect assessment and attainment with help of module coordinator and course coordinator. This analyzed data can be used for revise / redefine of existing in terms of either revise the curriculum or change delivery methods/course Outcomes. The Department advisory board notices the required changes and takes approval with BOS.



35. Highlight the participation of students and faculty in extension activities.

Extension activity	Duration of the program	No. of participants	Outcomes

Observance of International Literacy Day-Week	08-09-2012 to 14-09-2012	50	This program is called rural exploration program to understand the importance of literacy.
A special Camp was organized in a nearby village part of NSS activity	25-01-2012 to 31-01-2012	20	This program is called rural exploration program to understand rural technology, biodiversity, health care, education, socio and cultural aspects of the village. Students documented their understanding and created a report out of it.

Various activities conducted by NSS Unit: where a few students from the dept actively participated

- Blood Donation awareness Programme
- Voluntary Blood Donation Camp
- Plantation of Saplings
- Pulse Polio immunization programme
- 7 KM Run on Beach Safety
- Shram Daan to create play ground for the Destitute Children
- Laughter therapy for the NSS Student Volunteers of GVP
- Observation of International White Cane Day
- Promoting Hygiene and Cleanliness in canteen
- Observance of NSS day
- Clean - Campus Habituation
- Helmet Awareness Programme
- Some of Our students have also been playing an active role in trying to understand the various societal issues and problems concerning a developing country like India. We also have the students engaged in a lot of social service activities and they have also formed themselves into service Organizations like
    - WE R 4 HELP
    - ROTARACT GVP
    - SHORTEN THE RADIUS

These organizations work with the people living in villages around the college and spread awareness regarding health, ecofriendly systems of living, and other issues of social interest so as to make a difference to the society, as part of extending their support to the downtrodden and under developed. They organize camps where old clothes, toys, books, blankets, woolen clothes are donated to the needy. They also distribute the food items purchased with the donations received

36. Give details of “beyond syllabus scholarly activities” of the department. Facilitating students participation in the ongoing faculty research projects

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.

UG Program Accredited by NBA in 2003 (F.No.NBA/CCR-229/2003 dated 10.10.2003)	B.Tech. in Mechanical Engineering
UG Program Accredited by NBA in 2008	B.Tech. in Mechanical Engineering

(F.No.NBA/ACCR-229(11)/2008 dated 19.07.2008)	
UG Program Applied for NBA Accreditation in 2013 (Application No: 309-10/07/2013 & Application No: 170-25/4/2013)	B.Tech. in Mechanical Engineering (Visit completed and result awaited)
List of PG Program Applied for NBA Accreditation in 2013 (Application No: 375-11/07/2013)	M.Tech. in CAD/CAM

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

- Well qualified and adequate faculty, Five/Six hold doctoral degrees and two are pursuing Ph.D. Programme.
- The department is working on R&D projects sponsored by the AICTE.
- Research output of the faculty is commendable.
- The department has one patent to credit.
- Course files are very well prepared, updated, and maintained.
- Ph.D. guidance
- Component of SIRC and resarch center of JNTU-K

Weaknesses

- Laboratory facilities need to be augmented for expanding research activity.
- Testing equipment should be added.
- Specific R&D budget allocation is necessary provision claimed in the college level informtion.
- Linkage with Industry needs to be strengthened.

39. Future plans of the department.

- Development of new materials for automotive industry.
- Development of flexural fatigue testing machine for testing sandwich composites.
- Development of visco-elastic material embedded in composite for noise reduction.
- Development of new bio-fuels for automobiles.
- Development of loop heat pipe for solar water heating/ air-conditioning system.
- Prediction of condition monitoring of roller bearings by using fuzzy classifier.
- Design & development of 3-DOF PKM for machining/ measurement purposes

E.8 DEPARTMENT OF COMPUTER APPLICATIONS

1. Name of the Department & its year of establishment
   Department of Computer Applications – 2004 with an intake of 60

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

   UG: Nil
   PG: 1. Master of Computer Applications

3. Interdisciplinary courses and departments involved
   Nil

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	Filled/Existing	Sanctioned
Professor	-	1
Associate Professor	2	2
Asst. Professor	9	9

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,) \

S. No	Name	Highest qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D students guided for the last 4 years
1	Mr.G.S.Mallikarjuna Rao	M.Tech, M.E	HOD & Assoc. Professor	CST & ECE	17 Years	
2	Mr. S.Ravi Shankar	MCA, MBA,GMP	Assoc. Professor	CSE	15 Years	
3	Ms.B.Ratnamala	M.Tech	Asst. Professor	CS & SE	7 Years	

4	Mr.A.Prakasa Rao	MCA	Asst. Professor	CS	7 Years	
5	Mrs.V.Lakshmi	M.Tech, MCA	Asst. Professor	CST	6 Years	
6	Mr.P.M.Kiran	M.Tech, MCA	Asst. Professor	CSE	5 Years 5 Years	
7	Mr.M.P.J.Santosh Kumar	M.Tech, M.Sc	Asst. Professor	CS & SE	12 Years	
8	Mrs.T.Swathi	MCA	Asst. Professor		7 Years	
9	Mr.P.V.V.R.Chandra Sekhar	M.Tech, MCA	Asst. Professor	CSE	15 Years	
10	Mr.M.Kishore	MCA	Asst. Professor	CS	12 Years	
11	Ms.S.Bharathi	MCA	Asst. Professor	CS	2 Years	

8. Percentage of classes taken by temporary faculty– Programme-wise information Nil

9. Programme-wise Student-to-Teacher Ratio
PG-1:16

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Filled/Existing	Sanctioned
No. of academic support staff	1	1
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.

a) National: Nil
b) International: Nil
c) Total grants for ongoing projects (a+b) =Nil

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

a) National: Nil
b) International: Nil
c) Total grants for projects (a+b) = 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) :2

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	--	--	2	--	--
2.	National Journal	--	--	--	--	--
3.	International Conference	--	3	2	1	--
4.	National Conference	--	--	--	1	--
	Total Papers	--	3	4	2	--

* 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.) : Nil
* Citation Index – range / average: Nil
* SNIP: Nil
* SJR: Nil
* Impact factor – range / average: Nil
* H - Index : Nil

15. Details of patents and income generated: Nil

16. Areas of consultancy and income generated :Nil

17. Faculty recharging strategies

    Workshops/seminars/conferences attended by faculty during the Academic year 2009-2010: **2**
    2010-2011: **4**
    2011-2012: **5**
    2012-2013: **5**

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

Academic year	Programme	Students who have done projects	
		In-house projects including interdepartmental	In collaboration with industries or institutes
2009-10	MCA	57/57 (100%)	NIL
2010-11	MCA	49/53 (96%)	4/53 (4%)
2011-12	MCA	33/42 (79%)	9/42 (21%)
2012-13	MCA	33/41 (81%)	8/41 (20%)

19. Awards / recognitions received at the national and international level by

- Faculty : Nil
- Doctoral / post doctoral fellows : Nil
- Students:

S.No.	Name of the Department	Name of the Student	Name of the Award	Awarding Organization
1	Computer Applications	Mr. T. N. V. Rajasekhar, (Roll No.10131F0018	I Prize in Talent Test NKXGEN-12	Nimaikrsna Institute, Dwarakanagar, Visakhapatnam
2	Computer Applications	1.Mr. T. N. V. Rajasekhar, (Roll No.10131F0018 2.Mr.V.Pramod (Roll No.10131F0022)	Event Name: Lakshhya"12 I Prize in Technical Quiz(Team)	Lakkireddy Balireddy Colleg of Engineering
3	Computer Applications	Mr. T. N. V. Rajasekhar, (Roll No.10131F0018	Event Name: Lakshhya"12 I Prize in Project Expo	Lakkireddy Balireddy Colleg of Engineering
4	Computer Applications	Mr.Chinna Rao.V 09131F0002	appreciation letters (Gems of TCS) and prize reward	in TCS Training
	Computer Applications	Mr.Laxmana D 09131F0005	appreciation letters (Gems of TCS) and prize reward	in TCS Training
	Computer Applications	Mr.Suneel Kumar G09131F0007	appreciation letters (Gems of TCS) and prize reward	in TCS Training
	Computer Applications	HariBrahmeswaraReddy K 09131F0008	appreciation letters (Gems of TCS) and prize reward	in TCS Training
	Computer Applications	Himabindu D 09131F0011	appreciation letters (Gems of TCS) and prize reward	in TCS Training
	Computer Applications	Praveen Kumar P09131F0028	appreciation letters (Gems of TCS) and prize	in TCS Training

			reward	
	Computer Applications	Sravan Kumar S 09131F0032	appreciation letters (Gems of TCS) and prize reward	in TCS Training
	Computer Applications	Hussain T 09131F0040	appreciation letters (Gems of TCS) and prize reward	in TCS Training
	Computer Applications	Mr.J.Gopiraju (09131F0012)	Certificate of Recognition And prize reward	in WIPRO Training

20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.
Nil

21. Student profile course-wise:
PG

Name of the Course(refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MCA (2009-2012)	46(76%)	32(69.56%)	14(30.43%)	29(90.62%)	13(92.85%)
MCA(2008-2011)	60(100%)	38(63.33%)	22(36.66%)	31(81.57%)	19(86.36%)
MCA(2007-2010)	62(100%)	44(70.96%)8	18(29.03%)	42(95.45%)	18(100%)
MCA(2006-2009)	60(100%)	41(68.33%)	19(31.66%)	38(92.685)	19(100%)

22. Diversity of Students

Name of the Course(refer question no. 2)	% of students from the college	% of students from thestate	% of students from thestates	% of students from the countries
MCA(2006-2009)	59/60	59 (100%)	---	---
MCA(2007-2010)	56/60	56(100%)	---	---
MCA(2008-2011)	51/60	51(100%)	---	---
MCA(2009-2012)	42/60	42(100%)	---	---

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Year	Competitive Exam	No. of students	Top three ranks
2012-13	GATE	2 Nos.	3515, 7000
	NET	1 No.	

24. Student progression

	Student Progrssion	Percentage against enrolled
Employed (Campus selection)	2010-2013=20 2009-2012=31 2008-2011=28 2007-2010=22 2006-2009=28	41(50%) 42(73%) 53(53%) 57(39%) 56(50%)
Employed (recruitment Other than campus)	2010-2013=10 2009-2012=08 2008-2011=12 2007-2010=20 2006-2009=14	41(24%) 42(20%) 5323%) 57(35%) 56(25%)

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	20%
from other universities within the State	80%
from other universities from other State	

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) Department Library (number of books, Lecture CDs, DVDs) Books-270
    b) Internet facilities for staff and students: Yes
    c) Total number of class rooms: 3
    d) Class rooms with ICT facility - 1
    e) Students' laboratories - 1
    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.
Nil

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?
        - With the involvement of industry, university, Alumni curriculum is designed.

b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

c. alumni and employers on the programmes and what is the response of the department to the same?

31. List the distinguished alumni of the department (maximum 10)

Name of the Alumnus	Years of Study	Degree (UG/PG)	Present Position
AVL Murty	2004-2007	PG	Business Analyst
G. Kiran Kumar	2004-2007	PG	Sr. Software Engineer
Indrasena Reddy	2004-2007	PG	Sr. Software Engineer
AV Kiran	2005-2008	PG	Sr. Software Engineer
Srinivas	2004-2007	PG	Sr. Software Engineer
V.Prasad	2004-2007	PG	Sr. Software Engineer

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
Nil

33. List the teaching methods adopted by the faculty for different programmes.

- Lecture Schedules for every subject is given to the students at the beginning of the semester.
- Use of PHP, LCD, Video Lectures (NPTEL, MIT, Stanford,UET), whenever necessary.
- Personality Development Program is being conducted for the First and second years.
- Tutorial is followed apart from the curriculum for the benefit of the students.
- Remedial classes are conducted for slow learners.
- Special attention in the form of seminars are assigned to fast learners in oreder to motivate the slow learners.

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
NA

35. Highlight the participation of students and faculty in extension activities.

Extension activity	Duration of the program	No of participants	Outcomes
Rs 20,000/- donated to the De Paul Home for the disabled	1 day	60	----
Rs. 7000/-Donated to Orphans	1 day	120	----

36. Give details of "beyond syllabus scholarly activities" of the department.
    - Mr. T. N. V. Rajasekhar, (Roll No.10131F0018) of MCA, G. V. P. College of Engineering got a I Prize in a Talent Test NKXGEN-12, organized by Nimaikrsna Institute, Dwarakanagar, Visakhapatnam on the occasion of their Institute Anniversary on 10th August, 2012 in which more than 300 students participated from 20 Engineering Colleges.
    - Mr. T.N.V. Rajasekhar, (Roll No. 10131F0018) of MCA, G.V.P. College of Engineering got a I Prize in project Expo, Organized by Lakkireddy balireddy College of Engineering, Mylavaram on 17th March2012.
    - Mr T.N.V.Rajasekhar (Roll No. 10131F0018) of MCA and Mr.V.Pramod (Roll No. 10131F0022) of MCA, G.V.P.College of Engineering got a I Prize in Technical Quiz, Organized by Lakkireddy Balireddy College of Engineering, Mylavaram on 17th March 2012.
    - Outstanding Performance of MCA (2009-2012) students in TCS and WIPRO Trainining
    - Number of students who got appreciation letters (Gems of TCS) and prize reward in TCS for their outstanding performance in training: 8
    - Mr.J.Gopiraju (09131F0012) topped among all the trainees of his batch (around 60) in Wipro. He got Certificate of Recognition and prize reward from Wipro.
    - Students Certified In "Oracle Database SQL Expert" of MCA 2010-2013 Batch: 30
    - Students Certified In "Oracle Certified Java Professional, Java SE6 Programmer"of MCA 2010-2013 Batch: **22**

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
    No

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

    Strengths:
    Placements, good students, dedicated faculty, Strong support from the management
    Weaknesses: In the admissions getting students with low communication qualities,
    Opportunities: Strong placement record, Continuous support from the management
    Challenges: Making students ready to industry

39. Future plans of the department.

    More Placements
    Quality Research Work and consultancy

E.9 DEPARTMENT OF CHEMISTRY

1. Name of the Department & its year of establishment
   Dept. of Chemistry – 1996

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
   UG: B.Tech - Common to all branches

3. Interdisciplinary courses and departments involved

S.No.	Title of the course	Name of the department involved	Programme(UG/PG)	Semester
1.	Physical Chemistry	Chemical engineering	UG	I
2.	Organic Chemistry	Chemical engineering	UG	II

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	Filled/Existing	Sanctioned
Professor	01	01
Associate Professor	01	01
Asst. Professor	04	04

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 for the last 4 years
Prof.R.Ram Babu	Ph.D	Professor	Reaction Mechanism, Cloud point Extraction	24	4
Dr.T.Manikya Sastry	Ph.D	Associate Professor	Analysis of drugs	25	1
Smt.M.R.Rajeswari	M.Phil	Assistant Professor	Reaction mechanism	9	-
SmtK.V.Nagalakshmi	M.Sc,	Assistant Professor	Micellar catalysis reactions	10	-
Ms. G.V.Harini	M.Sc	Assistant Professor	----------	2	-
Smt.M.Visalakshi	M.sc	Demonstrator	Renewable fuels, biodiesel, non edible oils	5	-

Dr.K.Rama Rao	Ph.D	Asst.Prof.	Redox Réactions	7	-
Dr.U.Sujana Kumari	Ph.D	Asst.Prof.	Solid State Chemistry	9	-

8. Percentage of classes taken by temporary faculty (if exist) – Programme-wise information NIL

9. Programme-wise Student-to-Teacher Ratio –NA

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

	Filled/Existing	Sanctioned
No. of academic support staff	1	1
Administrative	Nil	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.

a) National

Names of the faculty	Title of the project	Funded Agency, amount (in lakhs)	Date of sanction, Duration(yrs), Status
Smt.M.Rama Rajeswari	Kinetic and mechanistic studies on the oxidation of amino acids in micellar systems	UGC 4.0	17/3/2014 2-Years ongoing
Smt.K.V.Naga Lakshmi	Synthesis of new Co(III), Ni(II) complexes and their substitution reactions in reverse micellar medium	UGC 4.55	17/3/2014 2-years ongoing

b) International: Nil

c) Total grants for ongoing projects (a+b) in lakhs = 8.55

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

a) National: Nil

b) International: Nil

c) Total grants for projects (a+b) = Nil

13. Research facility / centre with state recognition: Nil

14. Publications:
    - number of papers published in peer reviewed journals (national/International) 31

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	03	01	03	01	09
2.	National Journal	03	NIL	NIL	NIL	NIL
3.	International Conference	02	-	5	NIL	1
4.	National Conference	02	01	NIL	02	01
	Total Papers	10	02	08	3	11

- Monographs : NIL
- Chapter(s) in Books : 03
- Editing Books : NIL
- Books with ISBN numbers with details of publishers

S.No.	Name of the Department	Name of the Faculty Member	Number of Books Published	
			Text Books	Laboratory Books
1.	Chemistry	Dr.K.Rama Rao	1	2

Name of the faculty	Name of Book	Details of Publisher	Year of Publication
Dr.K.Rama Rao	Engineering chemistry-I Laboratory manual-cum-record 978-81-910319-4-2	Parshva Publishers, 162, Phase-II, HSIDC, Kundli, Sonepat, Haryana-131001	2010
Dr.K.Rama Rao	Engineering chemistry-II Laboratory manual-cum-record 978-81-910319-3-5	Parshva Publishers, 162, Phase-II, HSIDC, Kundli, Sonepat, Haryana-131001	2010
Dr.K.Rama Rao	A Text book of Engineering Chemistry 978-81-907053-3-2	Maruthi Publications 3-5-1108, Maruthi complex, Narayanaguda, Hyd-500029	2013

- 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 -Nil
- SNIP -Nil
- SJR -Nil
- Impact factor – range / average =0 to 2.5
- H - Index –Nil

15. Details of patents and income generated- Nil

16. Areas of consultancy and income generated-Nil

17. Faculty recharging strategies –Nil

18. Student projects –NA

19. Awards / recognitions received at the national and international level by

- Faculty - Nil
- Doctoral / post doctoral fellows -- Nil
- Students -- Nil

20. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any. -Nil

21. Student profile course-wise: NA

22. Diversity of Students –**NA**

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations? -**NA**

24. Student progression -**NA**

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	NIL
from other universities within the State	07(87%)
from other universities from other State	1 (13%)

26. Number of faculty who were awarded Ph.D, D.Sc..and D.Litt. during the assessment period.

Number of Ph.D awardes during the assessment period: 2

27. Present details about infrastructural facilities

a) Department Library (number of books, Lecture CDs, DVDs)-**Nil**
b) Internet facilities for staff: 40 Mbps Internet through 100 Mbps LAN
c) Total number of class rooms ---- NA
d) Class rooms with ICT facility ---- NA
e) Students' laboratories --- 2

Name of the lab	Labs Conducted
Chemistry lab-1	B.Tech Chemistry lab, and OC lab
Lab-2	B.Tech Chemistry lab and PC lab

f) Research laboratories NIL

28. Number of students of the department getting financial assistance from College. -NA

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology. - NIL

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?
    Through regular faculty meetings at department level, the entire process of teaching-learning and evaluation mechanisms and on the implementation of curriculum are reviewed and all the matters related to these are consolidated and will be utilized in the subsequent revisions of regulations and curriculum through BoS.

    b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
    Yes,
    The feedback collected from the students twice in a semester once after the first cycle of instructions and the second at the end on all courses through a 15 point feedback form designed for the purpose. The feedback form also contains rating of the teacher on a 5 point scale independent of the above 15 questions.

    The feedback collected from the students is analyzed and consolidated subject-wise ,semester -wise. Discrepancies if any will be brought to the notice of the teacher and necessary counseling will be done by the HoD to overcome the difficulties and for better content delivery individually. The response is also used to identify the strengths and weaknesses of the faculty both at subject level and pedagogical level and will be guided to attend faculty development programmes and training on teaching methods at higher institutes of repute.

    Feedback from the students is also collected on the curriculum, teaching, learning and evaluation methods followed, during class committee meetings. Exit survey is conducted from the outgoing students on curriculum and the feedback obtained will be thoroughly discussed in the BoS for further refinements in the curriculum design.

    c. Alumni and employers on the programmes and what is the response of the department to the same?
    No

31. List the distinguished alumni of the department (maximum 10)- NA

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts. -NA

33. List the teaching methods adopted by the faculty for different programmes.
    - Model Oriented Teaching
    - Chalk and Talk
    - LCD Projectors
    - Marker Boards

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored? -NA

35. Highlight the participation of students and faculty in extension activities. -NA

36. Give details of "beyond syllabus scholarly activities" of the department.
NIL

37. State whether the programme/ department is accredited/ graded by other agencies. Give details. -NA

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

1) Qualified and Experienced faculty
2) Established labs for B.Tech programme

Weakness:

1) Research activities to be enhanced
2) Research laboratories to be improved
3)

Opportunities: -

1) Enhancement of Industry-Institute interaction.
2) To catch up with the latest trends in technology by establishing advanced laboratories beyond curriculum.
3) To start inter-disciplinary research works.
4) To start programs for up gradation of technical skills for surrounding community.

39. Future plans of the department.
    1. Applying major projects for funding agencies like UGC, DST etc.
    2. Establishing state of art research lab.
    3. Establishing P.G programmes
    4. Publishing quality research papers in referred journals.
    5. Organizing seminars/guest-lectures/workshops by Industry Experts.
    6. Participation of faculty & staff in Faculty Development Programmes

E.10 DEPARTMENT OF ENGLISH

1. Name of the Department & its year of establishment :**English ,1996**

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)NA

3. Interdisciplinary courses and departments involved: Nil

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 UG/PG	Semester
Reading and writing Skills (theory), English language lab and Advanced communication Skills Lab English language communication Skills (Theory) and Technical Communication and Soft Skills for MCA	All departments of B.Tech	UG	V V or VI

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

Designation	Filled/Existing	Sanctioned
Professor	---	1
Associate Professor	2	2
Asst. Professor	6	6

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Sl. No	Name	HighestQualification	Designation	Specialization	No. of YearsofExperience	No. of Ph.D.Studentsguided for thelast 4 years
1.	Dr.J.Ravindranath	Ph.D	Associate Professor, HOD	Indian Writing in English, Modern Age	20	--
2.	Dr.S.Atchuta Ramam	Ph.D	Associate Prof. & Dean (Admn.)	Indian Writing in English	35	--
3.	Mr. J. Raja Ratnam	M.A., B. Ed.	Asst. Professor	ELT	08	--
4.	Ms. D. Amrita	M.A.	Asst.	New	20	----

			Professor	Literatures		
5.	Mr. I. Rajasekhar	M. A., PGDL	Asst. Professor of English	Linguistics	5	
6.	Mr. Y. Rama Mohan	M.A., M. Phil.	Asst. Professor of English	British Literature	35	
7.	Mr. S. Venkata Ramana	M.A., M. Phil.	Asst. Professor of English	ELT	6	
8.	Mr. P.B.S. Krishnam Raju	M.A., PGDTE, M. Phil.	Asst. Professor of English	ELT	5	

8. Percentage of classes taken by temporary faculty– Programme-wise information Nil

9. Programme-wise Student-to-Teacher Ratio NA

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled NA

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.

    a) National: Nil

    b) International: Nil

    c) Total grants for ongoing projects (a+b) in lakhs = Nil

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received

    a) National: Nil

    b) International: Nil

    c) Total grants for projects (a+b) =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) – 16

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14

1.	International Journal	-	-	1	3	2
2.	National Journal	-	4	2	3	1
3.	International Conference	-	1	-	2	1
4.	National Conference	-	-	2	-	6
	Total Papers		5	5	8	10

- Monographs: Nil
- Chapter(s) in Books - 02
- Editing Books - 1
- Books with ISBN numbers with details of publishers
- 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 : Nil
- SNIP : Nil
- SJR : Nil
- Impact factor – range / average : Nil
- H - Index : Nil

15. Details of patents and income generated Nil

16. Areas of consultancy and income generated Nil

17. Faculty recharging strategies

Workshops/seminars/conferences attended by faculty during the Academic year
2009-2010: **1**
2010-2011: **1**
2011-2012: **2**
2012-2013: **6**

18. Student projects

- percentage of students who have done in-house projects including inter-departmental NA
- percentage of students doing projects in collaboration with industries / institutes NA

19. Awards / recognitions received at the national and international level by

- Faculty : Nil
- Doctoral / post doctoral fellows : Nil
- Students: Nil

20. Seminars/ Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any. Nil

21. Student profile course-wise: NA

22. Diversity of Students

Name of theCourse(refer questionno. 2)	**% ofstudentsfrom thecollege**	**% ofstudentsfrom thestate**	**% ofstudentsfrom otherStates**	**% ofstudentsfrom othercountries**
UG	N.A.	50/60(83%)	8/60(13%)	2/60(4%)
PG-1	3/18(17%)	12/18(68%)	2/18(10%)	1/18(5%)

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations? NA

24. Student progression NA

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	5/8 of Andhra university
from other universities within the State	3/8 from Nagarjuna, SVU, CIEFL

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) Department Library (number of books, Lecture CDs, DVDs) - 125
    b) Internet facilities for staff and students: Yes
    c) Total number of class rooms: NA
    d) Class rooms with ICT facility: NA
    e) Students' laboratories - 2
    f) Research laboratories: NA

28. Number of students of the department getting financial assistance from College. NA

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology. NA

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?
    Feedback through departmental discussions is taken on curriculum and teaching practices and used for self improvement by faculty concerned

    b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
    Students' feedback helps teachers for self-appraisal and corrective action

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) NA

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts. Nil

33. List the teaching methods adopted by the faculty for different programmes.
Giving handouts, poster making, Modern teaching practices such as role-plays, Group Discussions, JAM, Team Presentations and the use of ICT, audio – video aids to teach phonetics, vocabulary, grammar, technical and creative writing.

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
Through internal Mid- tests, assignments, quizzes and course evaluation

35. Highlight the participation of students and faculty in extension activities.
NA

36. Give details of "beyond syllabus scholarly activities" of the department.
Research on English literature and language and details are given under 14.

37. State whether the programme/ department is accredited/ graded by other agencies. Give details. NA

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths: Qualified and experienced staff
Weaknesses: PG programs need to be started
Opportunities: Conduct of workshops and seminars
Challenges: Generation of resources

39. Future plans of the department.

- Short term courses on communication skills and personality development of students and staff;
- To offer tailor-made courses and workshops for the needy professionals.
- Diploma courses in spoken English for non-teaching staff
- A course on Pronunciation and Accent(RP and American)
- A course on Creative Writing
- A course on Reading Fiction/Poetry/Short story
- A course on Vocabulary/Grammar for GRE, TOEFL, IELTS,CAT….

E.11 DEPARTMENT OF MANAGEMENT STUDIES

1. Name of the Department & its year of establishment :
   Management Studies / 1998

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :
   Not Applicable

3. Interdisciplinary courses and departments involved

Name of the Department	Courses Offered
Civil	Managerial Economics and Financial Analysis
Electrical and Electronics	Managerial Economics and Financial Analysis Management Science
Mechanical	Industrial Management
Electronics & Communication	Managerial Economics and Financial Analysis Management Science
Computer Science	Managerial Economics and Financial Analysis Management Science
Chemical	Management Science
Information Technology	Managerial Economics and Financial Analysis Management Science
Master of Computer Applications	Accountancy and Financial Management Management Information Systems
Infrastructure Engineering and Management (Civil)	Infrastructure Planning and Finance Management Management of Human Resources, Safety and Quality in Construction

4. Annual/ semester/choice based credit system:
   Credit base Semester System

5. Participation of the department in the courses offered by other departments

Subject	Department
Managerial Economics and Financial Analysis	Civil, EEE, Mechanical, ECE, CSE, IT
Management Science	EEE, ECE, CSE, IT, Chemical
Industrial Management	Mechanical
Accountancy and Financial Management	MCA
Management Information Systems	MCA
Infrastructure Planning and Finance Management	Infrastructure Engineering and Management (Civil)
Management of Human Resources, Safety and Quality in Construction	Infrastructure Engineering and Management (Civil)

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

	Sanctioned	Filled
Professors	01	01
Associate Professors	--	--
Asst. Professors	04	04

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name of the Faculty	**Qualification**	**Designation**	**Specialization**	**Number of years of teaching Experience**	**Number of Ph.D students guided for the last 4 years**
Prof P Venkata Rao	M.Com., MBA., Ph.D	Professor	Accounting & Taxation	18 years	4
Dr Y Aparna Rao	MBA., Ph.D	Assistant Professor	Micro Finance	7 years	-
Mr Ch S S S Kumar	B.Tech., MBA	Assistant Professor	Marketing & Finance	6 years	-
Mrs Sipra Kumari Sethi	M.Com	Assistant Professor	Advanced Accounting	3 years	-
Mrs Santhoshi Kumari	MBA	Assistant Professor	Human Resource & Marketing Management	2 years	-

8. Percentage of classes taken by temporary faculty – programme-wise information : Nil

9. Programme-wise Student Teacher Ratio :1:15

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled Nil

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.

    a) national

S. No.	Title of the Project	Funding Agency	Cost of the Project in Rs. (Lakhs)	Principal Investigator/ Co- Investigator
1	EDC	UGC	8	Prof P Venkata Rao
2	IIPC	AICTE	5.5	Dr Y Aparna Rao

    b) International: Nil

    c) Total grants received. 13.5 lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received: NIL

13. Research facility / centre with
    - state recognition
    - national recognition
    - international recognition

    } NIL

14. Publications:
    - Number of papers published in peer reviewed journals(national/International)

Sno	Academic year	National journals	International conferences	National conferences
1	2010-11	01	01	
2	2011-12			03
3	2012-13	02		02

- Monographs : Nil
- Chapter(s) in Books : Nil
- Editing Books : Nil
- Books with ISBN numbers with details of publishers

S.No	**Name of the subject**	**Author name**	**Publisher**	**ISBN Number**
1	Managerial Economics and financial Analysis	Prof J V Prabhakar Rao & Prof P Venkata Rao	Maruti Publications	978-81-907053-1-8

- number listed in International Database (For *e.g*. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Citation Index – range / average : Nil
- SNIP : Nil
- SJR : Nil
- Impact factor – range / average : Range:0.7-2.5,average=1.28
- h-index: Nil

15. Details of patents and income generated : Nil

16. Areas of consultancy and income generated :Nil

17. Faculty recharging strategies
    Workshops/seminars/conferences attended by faculty during the Academic year
    2010-11: **2**
    2011-12: **3**
    2012-13: **4**

18. Student projects
    - percentage of students who have done in-house projects including inter-departmental: Nil
    - percentage of students doing projects in collaboration with industries / institutes: Nil

19. Awards/recognitions received at the national and international level by
    - Faculty: Nil
    - Students : Nil

20. Seminars/ Conferences/Workshops organized and the source of funding (national / International) with details of outstanding participants, if any.Nil

21. Student profile course-wise: NA

22. Diversity of Student:NA

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations? NA

24. Student progression NA

25. Diversity of staff

    Percentage of faculty who are graduates of
    the same parent university 20%
    from other universities within the State 60%
    from other universities from other States 20%

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 :
    - List of Journals procured pertaining to the department:

National
• South Asian Journal of Socio Political Studies(SAJOSPS) • Entrepreneurship • Management Review • Decision Making

    - List of Journals procured pertaining to the department during the last two years
      All the journals listed above
    - Details of Books :
      Titles : 110
      Volumes: 1100

    b) Internet facilities for staff and students
    Internet facility: 100 MBPS B.S.N.L leased line MBPS LAN
    c) Total number of class rooms: NA
    d) Class rooms with ICT facility : NA
    e) Students' laboratories: NA
    f) Research laboratories (Research Equipment available) : NA

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 like 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

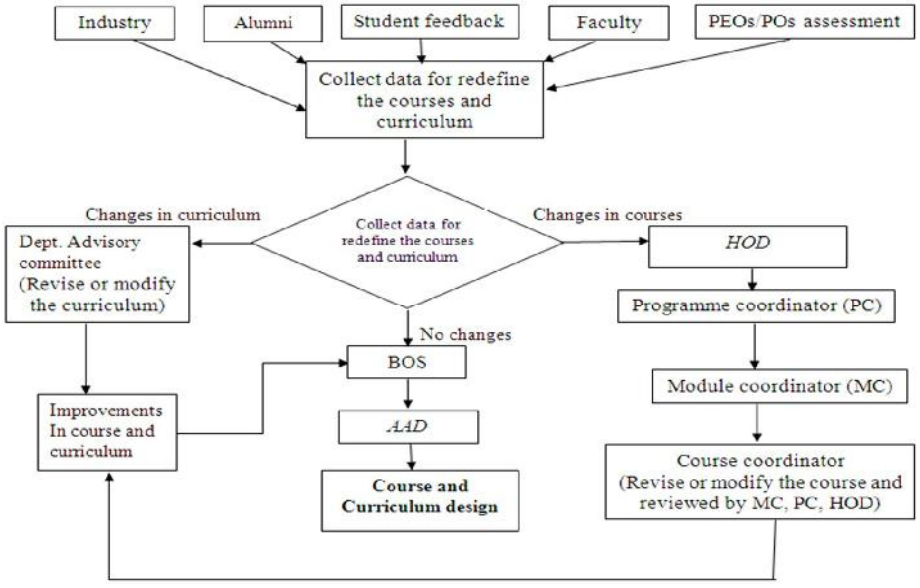
a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

c. alumni and employers on the programmes and what is the response of the department to the same?

- Feedback from students at midterm and end of the semester on the delivery mechanism of course content.
- Feedback from faculty and staff on the facilities helping the delivery mechanism like library etc
- Feedback from industry on student performance at the time of placements
- Feedback from alumni on their experiences in industry and higher studies on the relevance of the curriculum and needful changes for future
- Feedback from parents on their satisfaction levels on the performance of their wards in the institution and thereafter.
- Opinion drawn from industry representatives at periodical intervals during the meetings of BOS, academic advisory committee (AAD) are recorded and are further used for reorganizing curriculum in line with university guide lines
- The improvements made by the universities, NITs and IITs are observed from time to time

Course structure is updated basing on the above facts once in four years duly incorporating the required changes.



31. List the distinguished alumni of the department (maximum 10): NA

32. Give details of student enrichment programmes (special lectures/workshops/seminar) with external experts.: Nil

33. List the teaching methods adopted by the faculty for different programmes.

- Chalk & Black Board
- OHP
- PPT's
- Case Study's
- Group Discussions
- Seminars

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

- Conducting Mid Term Examinations
- Through Quiz Examinations
- Through Assignments
- Seminars on Case Study's

35. Highlight the participation of students and faculty in extension activities.

- Prof P Venkata Rao handles and co-ordinates Industrial Relations, Foreign Relations, Training & Placements, Alumni and Entrepreneurship Development
- Dr Y Aparna Rao coordinates Industry Academic Partnership cell and cultural activities

36. Give details of "beyond syllabus scholarly activities" of the department:

- Corporate Social Responsibility programs
- Ethics and values in business

37. State whether the programme/ department is accredited/ graded by other agencies. Give details: NAAC

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths

- Competent faculty
- Adoption of innovative techniques of teaching

39. Future plans of the department.
- To start a masters program in business management
- To start a research centre

E.12 DEPARTMENT OF MATHEMATICS

1. Name of the Department & its year of establishment :
   Mathematics & 1996

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) : NA

3. Interdisciplinary courses and departments involved**:** NA

4. Annual/ semester/choice based credit system :
   Semester based credit system

5. Participation of the department in the courses offered by other departments: NA

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/ Asst. Professors)

S. No.	Cadre	Number of faculty members required as per AICTE norms	Number of faculty members available as per AICTE norms	Actual faculty members working from the last two years as per AICTE norms
1.	Professors	3	3	3
2.	Associate Professors	2	2	2
3.	Assistant Professors	6	6	6
Total		11	11	11

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

S. No.	Name	Qualification	Designation	Specialization	Experience in Yrs.	No. of Ph.D Students guided for the
1	Dr P. Soma Raju	M.A, Ph.D	Senior Professor		43	NIL
2.	Dr V. SomaRaju	M.Sc (Tech), MS (USA), Ph.D (USA)	Senior Professor		40	
3.	Dr J V Devi	M.Sc, Ph.D	Professor	Nonlinear Analysis	23	NIL

4.	Dr R V G Ravi Kumar	M.Sc, Ph.D	Associate Professor	Algebra	12	NIL
5.	Sri. P.V.Ramana Reddy	M.Sc, M.Phil	Associate Professor	Algebra	35	NA
6.	Sri. A.R.J.Srikanth	M.Sc, (Ph.D) (CSIR-UGC NET	Asst. Professor	Algebra	7	NA
7.	Sri. N.Giri Babu	M.Sc, (Ph.D) (UGC NET qualified)	Asst. Professor	Differential Equations	8	NA
8.	Sri Ch.V.Sridhar	M.Sc., M.Phil, (Ph.D) (APSET qualified)	Asst. Professor	Differential Equations	4	NA
9.	Dr S S Ayyappa Sastri	M.Sc, Ph.D	Asst. Professor	Fixed point theory	3	NIL
10.	Sri N Ch N Suresh	M.Sc, (Ph.D) (APSET qualified)	Asst. Professor	Numerical Methods	2	NA
11.	Sri Ch. Appala Naidu	M.Sc, (Ph.D)	Teaching Assistant	Differential Equations	1	NA

8. Percentage of classes taken by temporary faculty – programme-wise information:NIL

9. Programme-wise Student Teacher Ratio:NA

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled:NIL

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.

    (a) National: 2

    (b) International: Nil

    c) Total grants for ongoing projects (a+b) = 20.43 Lakhs

    *Amount includes Two JRFs, each of Rs.16,000 per month for three years (Feb 2012 – Feb 2015)

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received: Nil
13. Research facility / centre with **:**NIL
14. Publications:

- Number of papers published in peer reviewed journals (national / International):47 (46 International and 1 National)
  National Journals: 1
  Papers presented in the international conferences:2

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	2	17	13	7	7
2.	National Journal			1		
3.	International Conference					2
4.	National Conference					
	Total Papers	2	17	14	7	9

- Monographs:1
- Chapter(s) in Books :2
- Editing Books:4
- Books with ISBN numbers with details of publishers:5
- 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 -Nil
- SNIP -Nil
- SJR -Nil
- Impact factor – range / average -Nil
- h-index -Nil

15. Details of patents and income generated:NIL

16. Areas of consultancy and income generated : NIL

17. Faculty recharging strategies :
    Number of workshops attended by faculty: 2

18. Student projects : NA

19. Awards / recognitions received at the national and international level by:NIL

20. Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any:
    2009-10=1,
    2010-11=1
    2012-13=2

21. Student profile course-wise: NA

22. Diversity of Students : NA

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?:NA

24. Student progression:NA

25. Diversity of Staff

Percentage of faculty who are graduates	
of the same parent university	Nil
from other universities within the State	90%
from other universities from other States	10%

26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period:1

27. Present details about infrastructural facilities :NA

28. Number of students of the department getting financial assistance from College. :NA

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology. :NA

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. Based on that feedback certain topics were included in new regulations w.e.f from 2013-14.

    b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
    Yes. Extra classes were conducted for slow learners.

    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) :NA

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.NA

33. List the teaching methods adopted by the faculty for different programmes.
    1. Tutorials
    2. Assignments
    3. Quiz
    4. Video Lectures
    5. Surprise Tests
    6. Projects
    7. Exhibition of Models
    8. Student Seminars
    9. Open book exam.
    10. Expert Lectures

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored? :
Learning outcomes are monitored by continuous evaluation through daily practice problems/mid exams/Assignments/quizzes/surprise test etc.

35. Highlight the participation of students and faculty in extension activities:NIL

36. Give details of "beyond syllabus scholarly activities" of the department
Some of the Faculty members are guiding MCA students for their Projects.

37. State whether the programme/ department is accredited/ graded by other agencies. Give details.:NA

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

Strengths:

- Faculty are working in Different specializations like C-algebra, Non linear analysis, Sheaf theory, Fractional differential equations, Rough sets, Fixed point theory etc.
- Three of the faculty members are recognized as supervisors for guiding Ph.D scholars registered under JNT university Kakinada
- Department Procured books of worth 3.5 Lakhs under NBHM Project.
- Team work
- All the faculty satisfies the qualifications prescribed by AICTE.

Weakness:

- Not being able to schedule time for research and seminars
- Some of the faculty need to obtain their Ph.D.
- Need to efficiently use the available resources.

Opportunities:

- For faculty to become good researchers.
- To obtain grants by applying for research projects.
- To pursue inter disciplinary research.

Challenges:

- To efficiently plan one's work so as to make time for self development in the autonomous atmosphere where the work load is heavy
- To publish at least two papers per year by every faculty.
- To obtain more research projects.

39. Future plans of the department.
To develop the research teams working in both theoretical aspects and for possible applications in the areas of:

- Computational Mathematics
- Graph Differential equation
- Fuzzy Metric Spaces
- Algebraic approach to Rough sets
- Fractional Differential Equations and stability analysis

E.13 DEPARTMENT OF PHYSICS

1. Name of the Department & its year of establishment
   Physics

2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
   UG: NA
   PG: NA

3. Interdisciplinary courses and departments involved
   NA

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	Filled/Existing	Sanctioned
Professor	1	1
Associate Professor	1	1
Asst. Professor	5	5

7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)\

S.No	Name	Highest qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D students guided for the last 4 years
1	Dr.Y.V.P.K.Raghava	Ph.D	Professor	Ionospheric Physics	23	Nil
2	Dr.S.K.Tripathy	Ph.D.	Associate Professor	Solid State Physics	21	NIL
3#	P.V.Rajeswari	M.Sc, M.Tech	Assistant Professor	Material Science	13	Nil
4	P.S.S.Appalacharyulu	M.Phil	Assistant Professor	Condensed Matter Physics	17	Nil
5	Dr.B.Nagarjun	Ph.D	Assistant Professor	Condensed Matter Physics	13	Nil
6	Hemna Prem Purohit	Msc	Assistant Professor	Electronics	3	Nil
7	Dr.R.Praveena	Ph.D	Assistant Professor	Photonics	10	Nil

went to do Ph.D under QIP

8. Percentage of classes taken by temporary faculty – Programme-wise information
   NA

9. Programme-wise Student-to-Teacher Ratio: NA

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled : NA

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.
    a) National: 4 (Rs 47.18 lakhs)
    b) International: Nil
    c) Total grants for ongoing projects(a+b) in lakhs =47.18 Lakhs

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received
    a) National: Nil
    b) International: Nil
    c) Total grants for projects(a+b) =Nil

13. Research facility / centre with: NA
    1 state recognition
    2 national recognition
    3 international recognition

14. Publications:
    number of papers published in peer reviewed journals (national / international) 13+7+2 =22

S.No	Journal/Conference	No. of Papers				
		2009-10	2010-11	2011-12	2012-13	2013-14
1.	International Journal	02+1	01+1	05	03+2+1	01
2.	National Journal					
3.	International Conference				2	1
4.	National Conference	2	4	4	6	2
	Total Papers	5	6	14	14	4

* 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.) : Nil
* Citation Index – range / average : Nil
* SNIP : Nil
* SJR : Nil
* Impact factor – range / average 2
* H - Index: Nil

15. Details of patents and income generated: Nil

16. Areas of consultancy and income generated :Nil

17. Faculty recharging strategies
Workshops/seminars/conferences attended by faculty during the Acad. year

2009-2010: **2**
2010-2011: **4**
2011-2012: **4**
2012-2013: **8**
2013-2014: **3**

18. Student projects NA
- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

19. Awards / recognitions received at the national and international level by
- Faculty
  1. Ph.D awarded to Dr.B.Nagarjun during Feb 2011
  2. Dr. R. Praveena Awards:
     - Young Scientist Award by Department of Atomic Energy-Board of Research in Nuclear Sciences (DAE-BRNS), 2013 Government of India.
     - Best poster award in the National Conference on Science, Technology and Applications of Rare Earths (STAR - 2011).

- Doctoral / post doctoral fellows
  - Post Doctoral Fellowships: 2 Months (Oct-Nov, 2008) at Heriot-Watt University, Edinburgh, UNITED KINGDOM. And 1 Year (2009-2010) Pukyong National University, Busan, SOUTH KOREA.
  - Dr.Y.V.P.K.Raghava, Dr.S.K.Tripaty, Dr.B.Nagarjun, Dr.R.Praveena recognized as Ph.D Guides by J.N.T.U.Kakinada University.

- Students: NA

20. Seminars/ Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any.

Name of the seminar/conference/workshop	National/ International	Funding Agency	Outstanding Guest Faculty	Duration
National Work shop on Thin Film Preparation and Applications	National	College	1. Prof.M. Ghanashyama Krishna, Central University Hyderbad 2. Prof. Bhatanagar, Central University, Hyderabad	22nd to 23rd March 2013

21. Student profile course-wise: NA

22. Diversity of Students

Name of theCourse(refer questionno. 2)	**% ofstudentsfrom thecollege**	**% ofstudentsfrom thestate**	**% ofstudentsfrom otherStates**	**% ofstudentsfrom othercountries**
UG	N.A.	50(83%)	8(13%)	2(4%)
PG-1	3(17%)	12(68%)	2(10%)	1(5%)

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations? NA

24. Student progression NA

25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	Nil
from other universities within the State	5
from other universities from other State	2

26. Number of faculty who were awarded Ph.D,D.Sc.. and D.Litt. during the assessment period.
    Number Of Ph.D awardes during the assessment period: 1

27. Present details about infrastructural facilities
    a) Department Library (number of books, Lecture CDs, DVDs)
    b) Internet facilities for staff and students
    c) Total number of class rooms
    d) Class rooms with ICT facility
    e) Students' laboratories
    f) Research laboratories

28. Number of students of the department getting financial assistance from College. NA

29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology. NA

30. Does the department obtain feedback NA

31. List the distinguished alumni of the department (maximum 10) NA

32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts. NA

33. List the teaching methods adopted by the faculty for different programmes.NA

34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored? NA

35. Highlight the participation of students and faculty in extension activities.NA

36. Give details of “beyond syllabus scholarly activities” of the department. NA

37. State whether the programme/ department is accredited/ graded by other agencies. Give details. NA

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department NA

39. Future plans of the department. NA

F. POST ACCREDITATION INITATIVES

The college has acquired autonomy in 2009-10 along with accreditation by NAAC. This helped in working out for an independent curriculum with the quality aspects suggested by NAAC in mind. In the process different Boards of Studies and Academic Council are constituted, and the governing body has been restructured as recommended by UGC in the autonomy guidelines. These statutory bodies are constituted with members from higher institutes of learning like NITs, IITs, IIITs and research organizations of national repute as well as leading MNCs.

A thorough survey of the curricula of some of these institutes has been made as a prelude for drawing a curriculum acceptable to the affiliating university keeping in view the vision and mission of this institution. Necessary modifications are being made from time to time for practicability through an in-depth discussion in Boards of Studies and Academic Council before regulating.

The UG programme has been introduced in a completely semester-wise system with maximum internal component of 40% recommended by UGC. The faculty has been given the freedom of content delivery with accountability in evaluation. To foster regularity among students and the gains from the study period shall be useful to the society, attendance and promotion requirements are regulated so that every student leaves the institution within the stipulated period and his knowledge does not get outdated due to delay. To infuse social responsibility and human values, community service is made a mandatory component of the UG curriculum in tune with the vision and mission of the institution. An attempt to mould project works with research and innovation has been made by involving students in the institutional research and consultancy projects as well as through a center of innovation. Industry involvement in statutory academic bodies and MoUs helped in training industry ready students.

In pursuit of UGC recommendations, the statutory bodies are reconstituted and a major revision of curriculum is brought in considering the OBE based model curriculum of AICTE while taking into account the experiences in instructing the first batch of autonomous students. Open electives are introduced in UG curriculum to keep pace with the current trends in technologicaleducation and growth.

The PG curriculum is drawn in such a way that the student is exposed to the advancements in knowledge while the project work is given an option of research or industry orientation.

Students of wide ranging financial and social background seek admission into this institution through an entrance examination and admission process of the Andhra Pradesh State Council of Higher Education according to government policies on reservation resulting in relative academic background.

To elevate the institution to be known on global academic platforms based on the academic credentials earned at the state and national level, a

successful initiative has been taken to induct students under a scheme of AICTE for PIOs (Persons of Indian Origin) and foreign nationals.

A bridge course is designed and organized for freshers before the start of the regular curriculum to lift the academic background to the required level of understanding in a professional programme. This is expected to help in correcting attitudinal and social adjustment problems also.

- In addition, student counseling is made part of the responsibility of faculty to overcome their impediments for a smooth academic transition.
- Bringing out a harmoneous conglomeration with a sole objective of learning to achieve.

The teaching, learning and evaluation are intertwined to create an environment for stress-free durable knowledge gain. Towards this end, the academic calendar for the year, the lecture schedule and the mode of evaluation in each subject are communicated to the student in advance. This keeps the student on guard in his academic programmes.

The internal evaluation is made transparent and reviewed intermittently for quality. The student feedback helped in mid-course corrections required if any as well as better delivery by the faculty. The slow learners are facilitated with remedial classes to make-up for the backlogs and complete the entire programme within the stipulated time. The quick learners are supported by encouraging them to participate in R&D and innovative projects. The learning facilities like updating the library books with new editions, a digital library and other on-line learning resources like NPTEL to enthuse the learner towards new frontiers are well taken care of. Industrial visits are organized to relate the class room to field experience as well as to promote internships of short duration.

Faculty who satisfy the sixth pay commission norms of UGC are recruited wherever and whenever vacancies arise. All assistant professors who have put in a minimum of 2 to 3 years of service are encouraged to acquire higher qualifications by sponsoring under QIP or on study leave or attend short term programmes to update themselves with current topics in order to improve their competency levels to teach new subjects as electives. Faculty who have difficulty in delivery are sponsored to attend pedagogical training at higher institutes offering such programmes on short term basis. Annual performance appraisals have been made a feature since the implementation of the sixth pay commission pay structure. Faculty are also encouraged to pursue in-house research by applying to sponsored projects and publish papers in peer-reviewed journals and conferences of repute. These projects help in involving some of the intuitive and innovative students to further the educational prospects in the impost-institutional careers. Faculty are encouraged to take up consultancy to develop R&D culture through industry contacts as well as familiarizing themselves with the current trends in practice and relating them to academics.

The evaluation process is incorporated in the hand book of curriculum and syllabi given to the students at the time of admission. It is also displayed on the college website for the benefit of other stake holders. The academic

calendar given at the beginning of the year is closely monitored and adhered. The question paper is set externally by faculty from higher institutes. The external component of 60% has been put under double valuation, viz., internal and external with a fixed permissible margin of difference when valued based on a pre-drawn scheme of valuation supplied by the external paper setter. Confidentiality in valuation is maintained through a coding and decoding process that open-up only at the time of declaration of results. The entire process of examination management is computerized with a secure software enabling to release results in time. A system of revaluation is devised to attend to the grievances of genuine students in evaluation.

Research activity on campus is encouraged with seed money for initiating innovative projects. Necessary support with infrastructure and technical manpower is provided wherever required. Senior faculty are advised to apply for sponsored projects from different funding agencies like AICTE, UGC, MHRD, DRDO, DAE etc., for additional support as well as to project the research activity at the national level. Inquisitive faculty associate themselves with national research organizations like NSTL, DAE, IMU in their projects with academic reliefs from the college.

Industry collaborations in pursuit of innovative technologies are taken-up by the faculty in the college for technology transfer. To promote good research culture faculty are deputed to IITs and other higher institutes of repute under QIP for acquiring Ph.D or interacting with their faculty through short term training programmes. Financial incentives are instituted for achievers in the form of guiding research, through patenting and publication in peer-reviewed journals and conferences as recognition of their contribution to growth of the institution. About 32 faculty are recognized as research supervisors for guiding Ph.D students by the affiliating University. A few faculty members have worked on campus for their Ph.D as external registrants under the guidance of internal faculty and were awarded degrees by different universities. The affiliating university, in view of the above, granted its research centers in each of the engineering disciplines in this college.

A center for Nano science and technology for research in thin films is established exclusively with institutional funding which subsequently attracted grants from DST through the projects proposed.

A photonics laboratory is established with the support of ADA to study the meteorological changes with a sensor at the nose of the aircraft. A miniature wind tunnel is also established as an additional facility to the photonics laboratory with college funds. In view of the research activity pursued the college is proud to be recognized by DSIR as a component of SIRC established by the parent body.

One of the faculty members was awarded a gold medal by Intel corporation for his contributory research in the field of bio-informatics. He was also given a portable Intel processor (atom kit). The faculty member is also empanelled as a member for International Society for Scientific Research &

Development's (ISSRD) Engineering Students Innovation Challenge (ESIC-2014) in particle swarm optimization.

Research activity in the college got a boost with its recognition under clauses 2(f), 12(B) of UGC act, and faculty has initiated a few minor and major research projects.

Some of the faculty has been awarded patents by national and international agencies while some more are in the pipeline.

The faculty in the institution has authored/co-authored books, which have been prescribed as textbooks by the affiliating university as well as other institutions. A few proceedings have been also brought out on the international conferences organized by the institution.

The research activity on campus prompted an internationally acclaimed academician and researcher Prof.V.Lakshmikantham of Florida Institute of Technology to transfer all his academic assets and some financial resources to establish an advanced research center. The institution gratefully acknowledged in accepting the invaluable gift by designating the center in his name.

The college offers consultancy to several governmental and non-governmental agencies in design and supervision. It is also recognized as a third party consultant for all the designs of multi-storeyed structures built within the corporation limits. Quite a few major and significant contributions are made to project the competency of the institution in delivering to the organizations like Visakhapatnam port trust, TTD, Utkal Alumina, Naval dock yard, HPCL, Chhattisgarh housing board etc.,.The returns from consultancy are shared among the faculty, staff and the institution according to a structured institutional policy. The institutional share is partly re-invested to strengthen the infrastructure in the advancement of consultancy.

The consultancy work has societal concerns also built-in the academic interests. Thus some of the projects like design of strom water drainage system, under ground cable conduits, protecting hill slopes have benefited the society through student projects under faculty supervision.

The college has an NSS unit sanctioned recently during 2012-13. During the first year of inception itself the students have been inspired by the co-ordinator in their acitivites like environmental awareness, social responsibilities, health consciousness etc., among the rural masses by organizing camps. In recognition of the activities, the infant unit is adjudged the best one among all such units under the affiliating university.

Students also participate in extension activities of NGOs Bhagavatula Charitable Trust (BCT), Rotaract. The community service is made mandatory for every under graduate student who takes admission into this institution which is measured and certified before one graduates.

The involvement of industry/corporate has benefited the institution in designing curriculum with industry specific inclusions, training for industry

readiness, enhancing placements, grabbing internships and projects etc., through a number of MoUs. The MoUs with IBM, Infosys, TCS, Microsoft to cite a few are those elevated the status of the institution among others.

The MoU with Eco-logic has put the college above others when they chose to train three batches of their internees on campus on a mutually designed curriculum.

The college administration put up all efforts to augment and satisfy the infrastructural requirements commensurate with the growth of the institution in terms of the number of programmes as well as the quantum of intake. This is evidenced by the annual approvals by AICTE and the permanent affiliation by the university. Additional facilities to cater to the needs of value added programmes offered by the institution and certifications by the industry training are provided as per the industry design..

These include updating computer hardware and enhancing internet band-width, providing additional softwares, creation of additional laboratories, adding ICT facility for enhanced learning etc.,

The college has a multi-station gym and a brand new computerised treadmill is added to it. An AC auditorium whose acoustics are re-designed and equipment renewed for better audio quality.

A health center with a qualified resident senior medical officer is available 24 x7 to attend to all first-aid problems. An ambulance is available on call for emergencies. The parent body runs a 300 bed hospital in the vicinity of the institution where a better medical care is available.

Adequate care is taken to facilitate vertical and horizontal transit of physically challenged.

The library facilities are expanded to meet the growing strength of students, faculty and their academic enthusiasm in terms of manpower, automation, reading space, new additions of text and reference books, e-resources and wi-fi connectivity. The library is connected through a consortium to other libraries under Delnet. The library committee reviews, the functioning from time to time, the feedback collected on the operations and advises to make it more user friendly.

The infrastructure is well maintained with adequate budgetary provisions for different class of infrastructure like buildings, furniture, computer hardware and other laboratory equipment. Separate wings take care of civil and electrical maintenance while transport operation and maintenance is taken care by an independent agency. A Dean infrastructure and planning looks after the entire activity of procurement and maintenance operations.

The student activities on campus are mainly spread around class rooms, laboratories and library. These are supplemented with sports and extra-curricular activities. The related responsibilities are discharged by different Deans leading academics, placement and training, administration and student affairs.

A bridge course is conducted to normalize the learning abilities of students with varied academic backgrounds and make them ready for the professional programme.

A faculty member in each dept is attached to a group of students as counselor to take care of their academic and personal difficulties in coping up with the environment. The counselors for additional support wherever necessary. The college manages a central counseling unit where experienced people render help to put the students back on track from their disturbed emotions.

Slow learners are identified through a test conducted at the beginning of the semester and advised to join a remedial system of instruction in vogue. To facilitate additional learning, library functions from 7 a.m to 7 p.m on all working days and half the time on all holidays. Free transport facility is provided to encourage students to stay beyond time table hours in pursuit of their curriculuar, co-curricular and extra-curricular goals.

The Dean placement is keenly interested in bringing more new recruiters to campus to widen the scope and increase the number of placements year by year and also is instrumental in drawing the corporate into MoUs. The placement center also organizes training programmes for the students on soft skills and personality development. An entrepreneur development cell and an IIPC are started to help the students to inculcate entrepreneurial skills.

A grievance redressal cell and a woman welfare committee are constituted to attend to the related grievances and gender sensitization activities.

The college offers financial support to the selected needy student through student sahakara scheme-“Earn while you learn”. Limited merit cum means scholarships are provided for needy students who are performing meritoriously. Some of the meritorious BPL students are offered fee concessions and free transport to the college and back. Merit prizes are given for all the top rankers from all the classes annually by accepting charities and memorials from well wishers.

All the information relevant to public is placed on the well-maintained institutional web site: www.gvpce.ac.in

An anti-ragging committee constituted with parents and students across the cross section gender wise, year wise and faculty members is effectively tackling the problem of ragging because of which the college can proudly claim itself as a ragging free campus as there are no serious issues of ragging reported in the history of the college. Different academic timings for senior and junior students, visits to hostels during night time in the initial period are some of the measures.

Special book bank scheme is available for SC, ST students. Gender sensitization measures as well as security arrangements prevent opportunities for sexual harassment and enhance protection, which are drawing more and more girl students to hostels.

The autonomous regulations are carefully drafted for streamlined progression of students. Supplemental methods are put in place for making up the backlogs by the defaulters and slow learners. This will also reduce the dropouts which are usually negligible. An annual review of results and student feedbacks infer on the corrective measures necessary for improving the student performance and progression. The institution offers coaching for GATE examination and encourages students to take CAT,GMAT etc.,

The institution facilitates the students to destress themselves through a wide range of sports and cultural activities. These facilities are maintained and improved regularly based on the feedback. Active student participation in these activities resulted in prizes on various platforms where the students exhibited their merit at inter-collegiate, inter-university and state and national levels.

Student magazines technical and non-technical are published under various fora and made available to all through central and departmental libraries.

The institution's vision and mission statementsspeak explicitly the direction in which the parent body wishes to contribute to the society from the beginning. To fulfill its desire towards attaining the goal of quality technical education with a holistic approach, it has rightly chosen a top ranking academician and a practicing civil engineering expert from an IIT as its first regular Principal. Thus a culture of participative functioning is imbibed right from inception among faculty and staff. Subsequent accreditations by NBA and NAAC with high score and conferment of autonomy in quick succession have put the institution in good stead and above most others affiliated to the same university all through.

The institution's standing in the contemporary technical education increased the demand for admissions at both UG and PG levels resulting in considerable lateral growth. To manage the growing infrastructure and student intake, the administration needed decentralization so that the organizational difficulties are minimized with speedy delivery of solutions by localizing issues. Seven Deans are created to attend to diverse activities with specific responsibilities. Financial management including responsibilities at the respective levels are further divulged to lower levels in hierarchical succession with accountability. This helped in training for higher responsibilities in future.

The Governing Body reviews the progress made and audited accounts of the previous year before fresh proposals are considered for the following year.

Feedback is obtained on the functioning of the college from different sources through student counseling, parent interaction, industry response for placements and alumni experiences after graduation to further improvement in the system.

The institutional strategies in recruitment and promotions draw several qualified academicians to serve the institution. The high retention rate evidences the same. The faculty and staff are additionally provided with

service benefits like gratuity, paid leave for career growth, leave on medical grounds, free transport and concessional medical care. Pre-proclaimed academic calendar helps to plan conveniently for personal and family activities.

An internal quality assurance cell is functioning to monitor and review the teaching learning process. Assessment of course outcomes, and programme outcomes is being carried out.

The institution is strategically located, to promote academic environment, far from the madding crowd amidst hills and valleys with undisturbed natural serenity. A qualified and experienced horticulturist is involved in developing and maintains greenery to provide a cool environment to eyes and mind alike. The college has taken its share of social responsibility in reducing carbon emission through renewable energy methods like solar and hybrid power, bio-gas generation and optimizing the use of fossil fuels wherever possible.

A center for innovation is established on the campus under the guidance of a highly competent person from industry with good leadership traits and is part of a nationwide innovation campaign. The center was successful in undertaking and completing projects with social concern. Some of the students with their innovative ideas attracted the attention of prospective enterprenuers while some others won the appreciation of legends of Indian industry like Ratan Tata, Sudha Narayana Murthy., etc in their interaction.

The practically biased curriculum introduced with a holistic approach is expected to bring out a socially conscious, community oriented technocrat with innovative approach to be useful to self, family and nation as a whole. This approach embedded in the curriculum is different from the usual practice of learning in between the walls only from the conventional chalk and talk method.

The decentralization of administration has empowered across the cadres to localise decision making while creating awareness on their responsibilities and accountabilities in participative management of the institution there by creating a sense of ownership on and emotional relation with the institution.

The above two introduced at the time of inception of the autonomy are well acclaimed as best practices of the institution by visiting dignitaries and committees over the years while suggesting the usefulness of the same for replication elsewhere.

“Growth for the sake of growth is the ideology of cancer cell”

- Edward Abbey

Spreading the ideology in education in its true sense is the motto of GVPCE(A)

G. Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) is true to the best of my knowledge.

This SSR is prepared by the institution after internal discussion, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during their visit.

Seal Signature of the Head of the Institution

Place: Visakhapatnam

Date:

SELF STUDY REPORT

CYCLE - II

Submitted to

National Assessment and Accreditation Council

COLLEGE OF ENGINEERING
(Autonomous)

GAYATRI VIDYA PARISHAD
COLLEGE OF ENGINEERING
(Autonomous)